# 4.0 PROJECT DESCRIPTION

## 4.1 SECTION ORGANIZATION

The purpose of the Project Description section is to describe the Centennial Project in a way that will be meaningful to the public, reviewing agencies, and decision makers. The "Project" is defined as development of all of the land uses and of the associated actions identified in the Project's Conceptual Land Use Plan, including all ministerial and discretionary actions required for short-term construction activities and long-term operation activities.

Section 15124 of the California Environmental Quality Act (CEQA) Guidelines (*California Code of Regulations* [CCR], Title 14) requires that an environmental impact report's (EIR's) project description contain (1) the precise location and boundaries of a proposed project; (2) a statement of objectives sought by the proposed project including the underlying purpose of the project; (3) a general description of the project's technical, economic, and environmental characteristics; and (4) a statement briefly describing the intended uses of the EIR, including a list of the agencies that are expected to use the EIR in their decision making, a list of the permits and other approvals required to implement the project, and a list of related environmental review and consultation requirements required by federal, State, or local laws, regulations, or policies. An adequate project description need not be exhaustive, but should supply the detail necessary for project evaluation.

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the CEQA Guidelines. This Project Description provides the information needed to assess the environmental effects associated with the planning, construction, and operation of the Project. The mitigation measures for the Centennial Project are listed in the Mitigation Monitoring and Reporting Program (MMRP) located in Appendix 2.0-C of this EIR.

This section is organized as follows:

**4.1 Section Organization –** A statement of purpose for the Project Description and the organization of the section.

**4.2 Project Location –** A description of the Project location, boundaries, and general site characteristics.

**4.3 Project Objectives –** A statement of the Project objectives, including overall planning goals and implementation objectives.

**4.4 Project Overview –** An overview of the Project's required entitlements (*Centennial Specific Plan,* General Plan Amendment, Zone Change, Development Agreement; Conditional Use Permits [CUPs] for Grading and Infrastructure, and Vesting Tentative Parcel Map.)

**4.5 Centennial Project Components –** A description of the various Project characteristics including the conceptual land use plan designations, overlay districts, mobility plan, parks/recreation, open space, utilities and associated

infrastructure, public services/facilities, landscape and lighting, solid waste management, technology plan, affordable housing program, and construction and grading. Implementation of the Project through buildout is addressed in the EIR.

**4.6 Phasing and Implementation –** A description of the development phasing of the Project and fiscal implementation.

**4.7 Off-Site Project Features –** A description of Project features that occur outside the limits of the Project boundary.

**4.8 Intended Uses of the EIR –** A listing of the requested Project actions to be considered by the County of Los Angeles along with permits and approvals that may be required from responsible and trustee agencies.

**4.9 References.** Includes an alphabetical listing of all references used in this section.

# 4.2 PROJECT LOCATION

The Project site consists of approximately 12,323 acres (or approximately 19.3 square miles) and is located in the northwestern portion of the Antelope Valley in unincorporated Los Angeles County and is contiguous to the southern boundary of Kern County. The Project site's western boundary is approximately one mile east of Interstate (I) 5, and State Route (SR) 138 runs through the southern portion of the Project site. The Project site is located approximately 35 miles north of Santa Clarita, 5 miles east of Gorman, 36 miles west of Lancaster, and 50 miles south of Bakersfield. The community of Gorman in Los Angeles County is adjacent to I-5 approximately four miles north of the I-5/SR-138 junction. As presented in Section 3.0, Environmental Setting, Exhibit 3-1, Regional Location, and Exhibit 3-2, Project Vicinity Map, depict the Project site in a regional and local context, respectively.

As shown on Exhibit 3-2, the Project site is immediately south of the divergence in the California Aqueduct into its East and West Branches. The West Branch of the Aqueduct runs in a north-south direction and generally bisects the Project site. The East Branch runs off-site along the northern boundary of the Project site. Quail Lake is adjacent to the Project site's southern boundary. The Project site's eastern boundary is 290th Street West. The Project site extends for approximately seven miles between its western boundary (west of Quail Lake) and its eastern boundary near 290th Street West. Elevations range from approximately 3,000 feet above mean sea level (msl) on the floor of Antelope Valley in the northeastern portion of the site to approximately 4,250 feet above msl in the northwestern portion of the property.

The Project site is generally bound by the Tehachapi Mountains to the north, and the Antelope Valley to the east; the northern edges of the Liebre and San Gabriel Mountains (Angeles National Forest) are approximately one mile to the south, and privately owned vacant land is immediately adjacent to the site to the west. The Los Padres National Forest is approximately seven miles to the west.

There are two "Not a Part" (NAP) parcels located within the Project boundaries. These two parcels are in the western portion of the Project site, encompassing 25.2 and 1.9 acres, and are owned by Southern California Edison (SCE). One of these parcels includes an Edison substation (see Section 4.5.10, Dry Utilities, for more information about this substation), and the other is vacant. Additionally, although the California Aqueduct (West Branch) and the SR-138 pass through the Project site, they are not part of the Project site nor within the Project boundaries.

# 4.3 PROJECT OBJECTIVES

Section 15124(b) of the State CEQA Guidelines requires "a statement of the objectives sought by the proposed project" (14 CCR 15124[b]). Not only is the Project analyzed in light of its objectives, but compatibility with the Project objectives is one of the criteria used in selecting and evaluating a reasonable range of Project alternatives. Clear project objectives simplify the selection process by providing a standard against which to measure project alternatives. The Centennial Project objectives are detailed below in Section 4.3.2.

## 4.3.1 PURPOSE

According to Section 15124(b) of the State CEQA Guidelines, "the statement of objectives should include the underlying purpose of the project". The underlying purpose for the Project stems from the need to develop a sustainable community in the greater Los Angeles County region that creates a balance among residential, commercial, and other employment-generating uses and institutional/public uses, all while being sensitive to the environment.

The Project is designed to be in compliance with the vision, assumptions, goals, and policies of the *Antelope Valley Area Plan* (AVAP), which was adopted by the Los Angeles County Board of Supervisors on June 16, 2015 (LACDRP 2015c). The potential implementation of the Project was known at the time of the development of the AVAP and was accounted for in the AVAP's land use and population/employment growth assumptions, as well as implementation program.

The AVAP sets forth a vision that includes the creation of opportunities for the Antelope Valley to change and grow while preserving the rural lifestyle enjoyed by current residents and support a vibrant economy. The AVAP was prepared to achieve this vision through the development of four types of environments that would facilitate the preservation of rural areas of the Antelope Valley, including:

1. Rural Preserve Areas, where residential densities would be reduced in order to protect important ecological and agricultural resources and to minimize development in very high hazard areas;

2. Rural Town Areas, where maximum residential densities and minimum lot sizes would be established to preserve rural character;

3. Rural Town Centers, where urban commercial uses would be discouraged but rural commercial uses would be incentivized; and

4. Economic Opportunity Areas (EOAs), where plans for major infrastructure development are underway that may create the need for more detailed planning activities for these areas in the future.

The AVAP identifies three EOAs, and the Project site is located entirely within the West EOA. EOAs are defined as clusters of land with higher development densities along the routes of two proposed major infrastructure projects in the Antelope Valley; the High Desert Corridor (HDC) and the Northwest 138 Corridor Improvement (NW138) Project. The West EOA is adjacent to the SR-138. This joint project (SCH No. 2013111016) between the California Department of Transportation (Caltrans) and the Los Angeles County Metropolitan Transportation Authority (Metro) proposes widening and slightly realigning SR-138. The Centennial Project complements the County's AVAP by capitalizing on the transportation infrastructure investment that State and regional agencies are bringing into the area, while still achieving the overall goal of rural preservation in the Antelope Valley.

Prior to any master-planned development approval in the West EOA, a specific plan, community plan, or other similar planning document is required to ensure orderly development. EOAs include land use designations that allow for a balanced mix of residential, commercial, and light industrial uses, while preserving the rural character and ecological resources of the surrounding areas. As such, the Project implements the requirements of the AVAP by including a balance of land uses consistent with the intent and the land use designations set forth for the West EOA in the AVAP.

### 4.3.2 OBJECTIVES OF THE PROJECT

The Project demonstrates consistency with the AVAP through the following Project Objectives:

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.

### A Healthy Community

The Project will provide the opportunity for a healthy and sustainable lifestyle for its residents and workers. Critical elements in reversing unhealthy lifestyle trends are design features that will allow children to walk or bicycle safely to schools and the placement of parks and recreational facilities near homes. The Project will provide an extensive system of community trails and greenways as well as a County multi-use (hiking, equestrian, and mountain biking) trail with connectivity to other (or non-County) proposed trails and greenways, the Pacific Crest Trail, and proposed open space. The Project includes 163 acres of public Park Overlay, which includes acreage to meet the County's Parkland Dedication Ordinance requirement through neighborhood parks, community parks, and community regional parks. The Project also includes private recreational facilities, including one or more community-wide recreation centers with pools and sports courts, among other amenities to meet the County's General Plan parkland requirement.

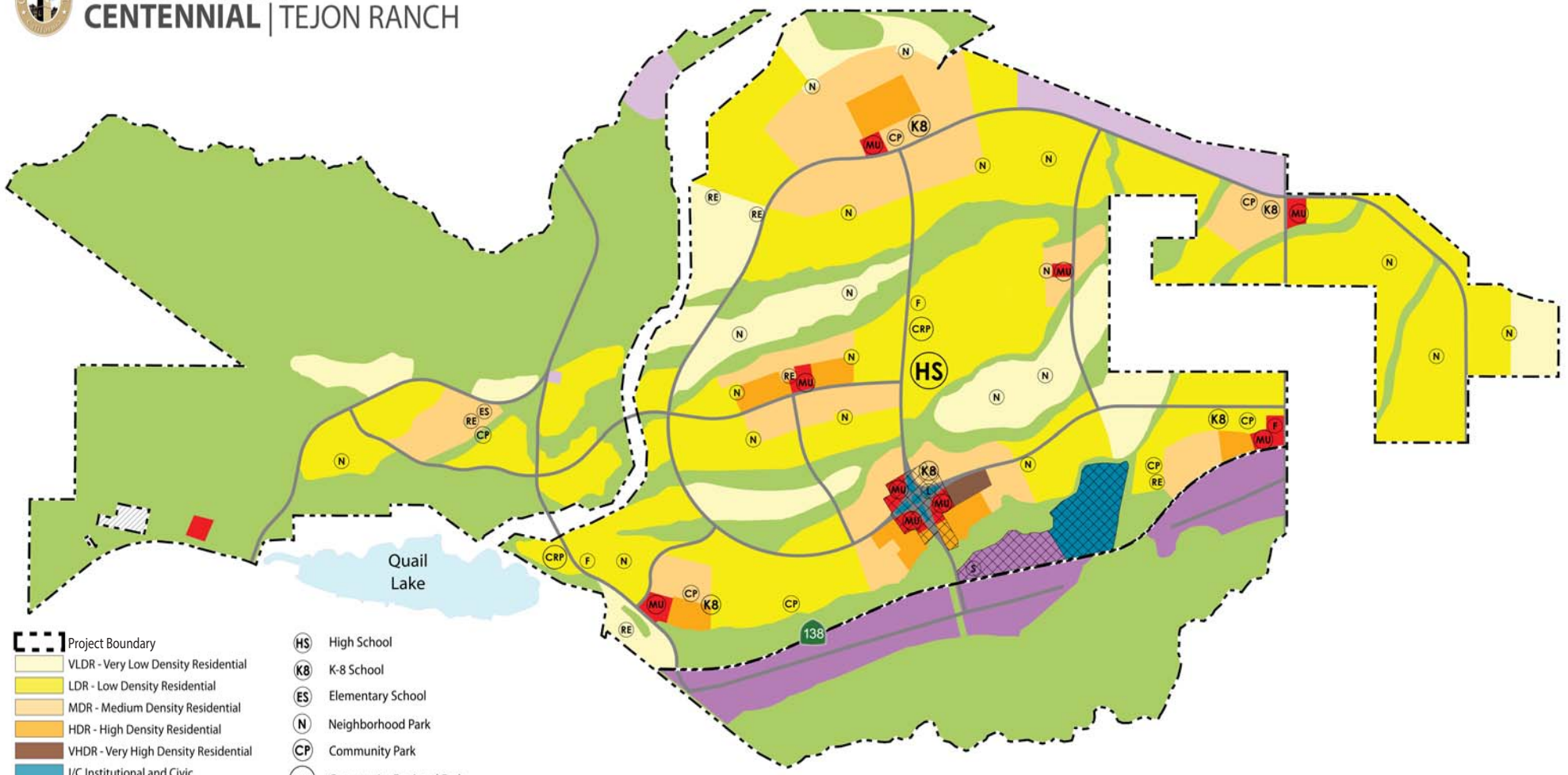
Planned uses such as schools, the library, greenways, open space, neighborhood retail, and parks will be integrated into a pedestrian-friendly network of streets that will safely and easily accommodate bicycles and pedestrians. These factors will encourage walking and bicycling within the community. Active and social infrastructure will be built into the community with the incorporation of commercial-recreation areas, parks, and greenways. This infrastructure will support programs that promote healthy lifestyles, education and lifelong learning, ranging from open space to public gathering spaces, farmer's markets, community center, and private schools and colleges, that could occur in the Project's planned commercial-recreation areas and supplement public open spaces and schools to promote community and civic engagement, and promote wellness including physical and mental health.

The Project Applicant/Developer has collaborated with the Los Angeles County Department of Public Health, the local educational/academic community, and others in an effort to optimize design and infrastructure amenities during planning efforts and to continue to encourage a healthy community. In addition, the Project Applicant/Developer will continually assess the needs of the community as a whole and the available resources in the area in order to understand its demographics and the programs its residents can use. The Project Applicant/Developer will also assess the needs of the different groups (e.g. retirees, working families, school-age children) within the Project in an effort to create programs for all groups within the community.

## 4.4 PROJECT OVERVIEW

The Project involves the development of a new community with residential, commercial, business park, recreational/entertainment, and institutional/civic uses. The Project includes open space, parks, schools, utilities, and infrastructure to support the proposed land uses and future residents. The Project's land uses (including proposed land use designations) are depicted on Exhibit 4-1, Centennial Project – Conceptual Land Use Plan. As noted in Section 4.2 above, the NAP parcels shown on Exhibit 4-1 are not owned by the Project Applicant/Developer and are not included in the Conceptual Land Use Plan.

# LAND USE
## CENTENNIAL | TEJON RANCH




- Project Boundary
- VLDR - Very Low Density Residential
- LDR - Low Density Residential
- MDR - Medium Density Residential
- HDR - High Density Residential
- VHDR - Very High Density Residential
- I/C Institutional and Civic
- U - Utilities
- C - Commercial
- BP - Business Park
- OS - Open Space
- ROW - Right-of-Way
- NAP - Not a Part
- Commerce District

- HS High School
- K8 K-8 School
- ES Elementary School
- N Neighborhood Park
- CP Community Park
- CRP Community Regional Park
- MU Mixed Use
- RE Recreation/Entertainment
- S Sheriff's Station
- F Fire Station
- L Library

Source: Placeworks 2017

# Centennial Project - Conceptual Land Use Plan

Exhibit 4-1

*Centennial Project*

N W E S

Map Not to Scale

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The primary entitlement action associated with the Project includes the adoption of the *Centennial Specific Plan,* and, as described in Section 4.8, Intended Uses of the Environmental Impact Report, additional entitlement actions include a General Plan Amendment, Zone Change to Specific Plan; Development Agreement; Parcel Map; and Conditional Use Permits (CUPs) for Grading and Project-related infrastructure. Project buildout would be implemented in phases, based on future market conditions, over an approximate 20-year period through a series of future tract and parcel maps.

As identified in Table 4-1, Centennial Project Overview, the Project site encompasses approximately 12,323 acres and would allow up to 19,333 dwelling units (du) on approximately 4,987 gross acres[1] of land designated for residential uses. Other land uses include approximately 7,363,818 square feet (sf) of Business Park uses (office, research and development, and warehousing or light manufacturing uses) on approximately 597 gross acres; and approximately 1,034,550 sf of Commercial uses on approximately 102 acres. Proposed Institutional/Civic land uses (such as schools for higher education, medical facilities, library, and other civic uses) encompass approximately 1,568,160 sf on approximately 110 acres.

The Project includes approximately 130,680 sf of Recreation/Entertainment uses (clubhouse, farmers market, childcare facilities, health clubs) on approximately 75 acres. Proposed sites for major Utility facilities that would serve the entire community (e.g., wastewater reclamation facilities, water treatment facility, water bank, materials recovery facility) encompass approximately 191 acres, and Kindergarten through 12$^{th}$ grade (K-12 schools would be located on approximately 145 acres. Approximately 5,624 acres (approximately 45.6 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. The Project also includes a vehicular and a non-vehicular circulation system.

The Project includes an integrated network of roadways, walking and biking trails to reduce automobile use and facilitate safe and efficient travel. An extensive network of sidewalks, greenway trails (approximately 13 miles), and community trails (approximately 60 miles) would link residential, schools, shopping, and employment areas. Consistent with State and regional planning objectives that focus on reducing the use of single occupancy vehicles (SOVs) for travel, the Project must meet the following mobility performance standards: (1) a minimum of 20 percent of total daily peak morning and afternoon external (e.g., commuting) trips must be completed by using non-SOV transit modes; and (2) a minimum of 30 percent of total daily internal (e.g., local) trips must be completed by using non-SOV transit modes.

1 Acreages for all categories are considered gross acreage and does not account for transitional slopes or internal slopes. Actual developable acreage may be reduced with future detailed planning.

**TABLE 4-1**
**CENTENNIAL PROJECT OVERVIEW**

| Land Use | Gross Acres | Maximum Permitted Density/Intensity | |
|---|---|---|---|
| | | Units | Square footage |
| Residential | 4,987 | 19,333 | - |
| Business Park (BP) | 597 | - | 7,363,818 |
| Commercial (C) | 102 | - | 1,034,550 |
| Institutional/Civic (I/C) | 110 | - | 1,568,160 |
| Recreation/Entertainment (R/E) | 75 | - | 130,680 |
| Utility (U) | 191 | - | - |
| Right of Way (ROW) [a] | 327 | - | - |
| School (S) Overlay | 146 | - | - |
| Open Space (OS) Overlay | 5,624 | - | - |
| Park (P) Overlay | 163 | - | - |
| **TOTAL** | **12,323** | **19,333** | |

Source: Placeworks 2017.
Note: totals may not add due to rounding.
[a] The ROW include acreage for the arterials and collectors identified in the Centennial Circulation Plan.

This EIR addresses the development of the Conceptual Land Use Plan, including all ministerial and discretionary actions required for short-term construction activities and long-term operation activities. In the future, the Project Applicant/Developer will submit applications for tentative tract maps (TTMs) and other approvals needed for the development ("future approvals"), and/or the Project Applicant/Developer may request changes in the Conceptual Land Use Plan or other aspects of the Project in accordance with Chapter 4 of the *Centennial Specific Plan.* Implementation of the Project, including subsequent County approvals, are described in Chapter 4 of the *Centennial Specific Plan.*

### 4.4.3 LAND USE PLANS

Section 5.8, Land Use, Entitlements, and Planning, provides a detailed discussion of these planning documents and goals and policies relevant to the Project.

## Regional Transportation Plan- Sustainable Communities Strategy

On April 4, 2012, SCAG adopted the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The RTP/SCS provides a plan for meeting greenhouse gas (GHG) emissions reduction targets set forth by the California Air Resources Board (CARB) through the integration of land use, housing, transportation, and environmental planning strategies. SCAG was tasked with the development of the SCS through the mandate set forth in Sustainable Communities and Climate Protection Act of 2008 (Senate Bill [SB] 375), which is expected to help California reach its GHG reduction goals in per capita transportation emissions of 9 percent by 2020 and 16 percent by 2035 (from a 2005 base year).

The RTP/SCS's Integrated Growth Forecast reflects the 2010 Census, employment data from the California Employment Development Department (EDD), and population and household data from the California Department of Finance (DOF). Discussions with local jurisdictions led to some adjustments, which resulted in SCAG's ability to obtain a consensus on the Integrated Growth Forecast to serve as the foundation for the 2012–2035 RTP/SCS.

On April 7, 2016, the SCAG Regional Council adopted the 2016–2040 RTP/SCS. The RTP/SCS combines the need for mobility with a "sustainable future" through a reduction in the amount of emissions produced from transportation sources. This would be made through the operation of low or no emission transportation systems by 2040. The 2016–2040 RTP/SCS, like the 2012–2035 RTP/SCS, includes population, household, and employment projections in Traffic Analysis Zone (TAZ) maps. TAZ projections for the area that includes the Project site, which were also reflected in corresponding figures included in SCAG's 2012 RTP/SCS (SCAG 2012a) and 2016 RTP/SCS (SCAG 2016), are consistent with the household and employment components of the Project.

## Los Angeles County General Plan

The *California Government Code* (Section 65300) requires that each City and County adopt a comprehensive, long-term General Plan that provides a blueprint for the growth and development of the jurisdiction. The General Plan is implemented through the zoning and subdivision processes and other subordinate land use entitlements and approvals. The *County of Los Angeles General Plan* "Update 2035" *(General Plan)* was approved by the Los Angeles County Board of Supervisors (Board) on March 24, 2015 and adopted by the Board on October 6, 2015. The *General Plan* became effective on November 6, 2015.

The *General Plan* provides the policy framework and establishes the long range vision for how and where the unincorporated areas of the County will grow; it establishes goals, policies, and programs to foster healthy, livable, and sustainable communities. The *General Plan* is the foundational document for all 11 community-based Area Plans in the County. The purpose of an Area Plan is to establish standards and criteria that are responsive and tailored to the unique conditions in a specific community, and which are also consistent with the general countywide provisions. The Project site is located in the area covered by the AVAP, which is a component of the *General Plan,* and was adopted by the Board on June 16, 2015*.* The AVAP became effective on July 16, 2015 (LACDRP 2015c).

The Project includes internal roadways which are required to be added to the General Plan Circulation Map, and thereby requires a conforming General Plan amendment since this internal roadway circulation information was not known and could be approved for inclusion in the County Highway Plan (filling in internal project roadways to Figure 7.3 in the General Plan) until the CEQA review process is completed and the Project entitlements (including the amendment to Figure 7.3) is approved by the County.

## Antelope Valley Area Plan (AVAP)

An Area Plan sets forth goals and policies to achieve the communities' shared vision of how growth and development should occur into the future. The AVAP's vision is centered on the

preservation of the rural lifestyle and rural character of the region. As previously discussed, the AVAP describes four types of environments, including Rural Preserve Areas, Rural Town Areas, Rural Town Centers, and EOAs. EOAs are adjacent to major infrastructure projects being planned by State and regional agencies, which would bring opportunities for growth and economic development in the vicinity of these projects.

The Project site encompasses the majority of the land within the designated West EOA and is also adjacent to the SR-138. SR-138 runs in a general east-west direction through the southern section of the site and is a currently a two-lane highway, but the California Department of Transportation (Caltrans) is proposing to widen and realign SR-138 into a four- to six-lane highway through and near the site, as part of its comprehensive Northwest 138 Corridor Improvement Project. As such, the Project anticipates and would complement the planned SR-138 improvements, as intended by the West EOA.

The Project is consistent with and proposed to implement a development that meets the requirements of the AVAP by including a balance of land uses set forth within the West EOA. Allowed land use designations in the West EOA include:

- Residential 5 (H5) – Maximum density of 5 residential units for each 1 net acre
- Rural Land 1 (RL1) – Maximum density of 1 residential unit for each 1 gross acre
- Rural Land 2 (RL2) – Maximum density of 1 residential unit for each 2 gross acres
- Rural Land 10 (RL10) – Maximum density of 1 residential unit for each 10 gross acres
- Rural Land 20 (RL20) – Maximum density of 1 residential unit for each 20 gross acres
- Conservation (OS-C)
- Rural Commercial (CR)
- Mixed Use – Rural (MU-R)
- Light Industrial (IL)

Exhibit 4-2a, Antelope Valley Area Plan Land Use Designations, illustrates the land uses for the Project site. Per the AVAP, current land use designations on the Project site include H5: Residential 5 (0–5 du/net acre); OS-C: Open Space Conservation; CR: Rural Commercial; RL1: Rural Land 1 (1 du/1 gross acre); IL: Light Industrial; RL2: Rural Land 2 (1 du/2 gross acres). The AVAP requires that prior to any master-planned development approval in the West EOA, a specific plan, community plan, or other similar planning document is required to ensure orderly development.

The Project is consistent with the land use designations of the AVAP and no General Plan Amendment to change the land use designations for the site is required. The Project Applicant/Developer's Project application was deemed complete on May 31, 2008; therefore, the potential implementation of the Project was known by the Los Angeles County Department of Regional Planning (LACDRP) and was accounted for in the development of the AVAP. As such, the potential benefits and impacts associated with the Project

KERN COUNTY

RL20
OS
RL1
CR
W
IL
H5
RL10
RL2
P

Project Boundary
Economic Opportunity Area

**Antelope Valley Area Plan Land Use Designations**

- RL1 - Rural Land 1 (1 du / 1 gross ac)
- RL2 - Rural Land 2 (1 du / 2 gross ac)
- RL10 - Rural Land 10 (1 du / 10 gross ac)
- RL20 - Rural Land 20 (1 du / 20 gross ac)
- H5 - Residential 5 (0-5 du / net ac)
- H9 - Residential 9 (0-9 du / net ac)
- CR - Rural Commercial
- MU-R - Mixed Use - Rural
- IL - Light Industrial
- P - Public and Semi-Public
- OS-NF - Open Space National Forest
- OS-C - Open Space Conservation
- OS-PR - Open Space Parks and Recreation
- OS-BLM - Bureau of Land Management
- W - Water

Source: County of Los Angeles Department of Regional Planning (June 2015)

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# Antelope Valley Area Plan Land Use Designations

Exhibit 4-2a

*Centennial Project*

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implementation as reflected on the AVAP Land Use Policy Map, is considered within the AVAP and within the AVAP's EIR and are further considered in this EIR.

The Project includes the development of nine Villages that will each contain a mix of land uses that enable residents to live near schools, shopping, neighborhood businesses and services, civic buildings, medical facilities, and employment centers. The Project includes a mix of housing options within each Village, ranging from apartment homes close to the Town Center to single-family homes in lower-density areas. A full range of light industrial, business, and other commercial uses are planned that are intended to yield a broad range of employment opportunities, from retail services to large corporate employers. The opportunities for employment diversity increase the overall economic sustainability of the Project and the West EOA.

In support of the AVAP's prioritization for the preservation of natural open space resources, development in areas of significant biological value would be minimized and there would be no disturbance or development within the designated Significant Ecological Area (SEA) on the Project site.

AVAP designates the Project site as within the West Economic Opportunity Area (EOA); AVAP also requires approval of a Specific Plan for a new master planned community in this EOA. Further, the Land Use Map includes an SP overlay designation over the site. In compliance with the County's Specific Plan requirements and State law, the *Centennial Specific Plan* includes the location of the Project's internal circulation network of roadways. Some of these internal roadways that meet the criteria for being included in the Antelope Valley Area Plan Highway Plan (Map 3.1 of the Antelope Valley Area Plan, which includes major highways, secondary highways, limited secondary highways, parkways, and expressways). Amending Map 3.1 of the Antelope Valley Area Plan and Figure 7.3 of the County General Plan is being proposed to fill in the above roadways that are interior to the Project site, consistent with AVAP's requirement for a Specific Plan for a new master planned community in this EOA. The Project remains consistent with the AVAP as described above, and no text amendments to the AVAP or County General Plan are proposed.

In support of the AVAP's goal of reducing single-occupancy vehicle use, the Project includes alternatives to automobile travel (e.g., public transit, bicycle network, and pedestrian system) that would minimize traffic, pollution, and greenhouse gases. Efficient use of land and a balance of uses that result in a jobs/housing balance would reduce single-occupancy automobile travel and vehicle miles traveled.

### 4.4.4 ZONING

The Los Angeles Zoning Code is adopted by ordinance and promotes the implementation of the County General Plan. Zoning regulates permitted and prohibited land uses and establishes development standards for land uses. Exhibit 4-2b, Antelope Valley Area Plan Zoning, illustrates the zoning for the Project site. Current zoning on the Project site includes O-S: Open Space; A-1-2: Light Agricultural – Two Acre Minimum Required Lot Area; RPD: Residential Planned Development; CPD-DP: Commercial Planned Development – Development Program; and MPD-DP: Manufacturing Industrial Planned Development –

Development Program. The Project site is designated on the AVAP zoning map as within the West EOA.

As discussed in Chapter 8, Plan Implementation, of the AVAP, the preparation and adoption of a specific plan or similar planning document is required for property within the West EOA before any development of five or more residential dwelling units, any commercial use, any industrial use, or any combination thereof can be approved. The AVAP further clarifies the requirements for the specific plan:

> In order to allow for more flexibility in the future detailed site design of specific neighborhoods in this area, a Specific Plan for a project in the West EOA may be allowed to convert the areas designated as Residential 5 (H5) to General Commercial (CG) or Public and Semi-public (P) designations without amending this Area Plan, so long as the resulting residential densities do not exceed those provided for by this Area Plan and no change in unmitigated significant impacts occurs. The Specific Plan may also include provisions for the conversion of residential to commercial areas, provided the amount of planned commercial building square footage does not result in any new unmitigated significant impacts. The Specific Plan shall also stipulate that these provisions (i.e., converting residential to commercial or other designations) are subject to a traffic study that confirms that no new unmitigated significant traffic impacts will occur.
>
> Overall, land use adjustments within designations are permitted as part of a Specific Plan provided that the adjustments: 1) do not increase the total number of developable acres, dwelling units or square footage; 2) increase the total amount of open space and do not decrease the total amount of natural open space; and 3) do not result in new unmitigated significant impacts.

As set forth in Chapter 2, Land Use, of the AVAP, a Specific Plan is an Overlay on the Land Use Policy Map. As such, a "Specific Plan Overlay" must be placed on the Land Use Policy Map for an adopted specific plan. To implement the Project, a zone change to "Specific Plan" is proposed for the entire Centennial Project site, as depicted on Exhibit 3-2, Project Vicinity Map. The development standards and land use designations described in the *Centennial Specific Plan* will apply to the site upon adoption of the *Centennial Specific Plan* rather than the zoning standards established by Title 22 of the Los Angeles County Code. Topics not addressed by the *Centennial Specific Plan* shall be governed by the rules and regulations of Title 22 of the Los Angeles County Code.

Since a Specific Plan would be adopted for the site, the Project would be consistent with the County's Hillside Management Areas (HMA) Ordinance and no Hillside Management conditional use permit (CUP) is needed. The Project's Hillside Design Guidelines in Appendix 1-B of the Specific Plan would be consistent with the County's Hillside Design Guidelines by (1) locating development outside HMAs to the extent feasible; (2) locating development in the portions of HMAs with the fewest hillside constraints; and (3) using sensitive hillside design techniques tailored to the unique site characteristics. However, proposed grading on the site would exceed 100,000 cubic yards and a CUP would be needed pursuant to Section 22.56.217 of the Los Angeles County Code. The Project also requires a CUP for approval of

KERN COUNTY

A-2-2
O-S
RPD
A-1-2
CPD-DP
C-RU
MPD-DP
W

Project Boundary
Economic Opportunity Area

**Antelope Valley Area Plan Zoning**

- A-1-2 - Light agricultural
- A-2-2 - Heavy agricultural
- C-M - Commercial manufacturing
- C-RU - Rural commercial
- CPD-DP - Commercial planned development
- M-1 - Light manufacturing
- MPD-DP - Manufacturing--industrial planned
- O-S - Open space
- R-3 - Limited multiple residence
- RPD - Residential planned development
- W - Watershed

Source: County of Los Angeles
Department of Regional Planning (July 2015)

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# Antelope Valley Area Plan Zoning

Exhibit 4-2b

*Centennial Project*

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Project-related infrastructure, including roadway circulation system, gas, telephone, cable and internet and electric lines within road right-of-way, a water system including domestic and recycled water tanks and pipelines and accessory booster pumps and storage ponds, sewage disposal pipelines and waste water reclamation facilities, water banks, water wells, flood control and drainage facilities, water treatment facilities, wireless communication facilities, green waste composting, solid waste and materials recovery facilities and recycling centers and an electrical substation.

### 4.4.5 CENTENNIAL SPECIFIC PLAN

The *California Government Code* establishes the authority for cities and counties to adopt specific plans either by resolution as policy or by ordinance as regulation. Specific plans are customized regulatory documents established to provide a framework for the planning and development of multi-use projects. They provide more focused guidance and regulations by detailing the permitted uses of specific areas. They describe a project's purpose, vision, and features and present the project description including type and distribution of land uses (which constitutes zoning, infrastructure plans, development standards, and implementation measures).

The *Centennial Specific Plan* is a regulatory document that would be considered for adoption by either resolution (as policy) or by ordinance by the Board of Supervisors. Upon adoption of the *Centennial Specific Plan*, the development standards and zoning of the *Centennial Specific Plan* become the zoning for the site. (Chapters One through Four of the *Centennial Specific Plan*—including Appendices 1-A, 1-C, and 1-D—would be adopted by ordinance, and Appendix 1-B, 2-A, and 2-B of the *Centennial Specific Plan* would be adopted by resolution.)

A statistical summary of the *Centennial Specific Plan* is provided in Table 4-2, Centennial Specific Plan Statistical Table. The *Centennial Specific Plan* has organized the development into nine "Villages" as well as areas designated as Public Facilities, Civic, and Business Park (described below and in Section 2.1 of the *Centennial Specific Plan*). A detailed description of the Project components outlined in various sections of the *Centennial Specific Plan* (including graphic representations) is provided in Section 4.5, Centennial Project Components, including the subsections noted below. Specific Plan implementation procedures are also described in Chapter 4 of the Specific Plan.

4.5.1 Project Design Features
4.5.2 Conceptual Land Use Plan
4.5.3 Vesting Tentative Parcel Map
4.5.4 Conceptual Land Use Plan and Development Standards
4.5.5 Mobility Plan
4.5.6 Parks/Recreation
4.5.7 Natural Resources/Open Space
4.5.8 Integrated Water Resources Management Approach
4.5.9 Water-Related Utilities and Infrastructure
4.5.10 Dry Utilities
4.5.11 Green Development Program
4.5.12 Public Services/Facilities

4.5.13 Landscape, Fuel Modification, and Lighting
4.5.14 Solid Waste Management Plan
4.5.15 Communication Based Technology Plan
4.5.16 Affordable Housing Program
4.5.17 Grading and Construction

**TABLE 4-2**
**CENTENNIAL SPECIFIC PLAN STATISTICAL TABLE**

| Land Use | Gross Acres | Dwelling Units | Square Feet |
|---|---|---|---|
| **Village 1** | | | |
| *Residential* | | | |
| Very Low Density | 89 | 126 | – |
| Low Density | 371 | 1,210 | – |
| Medium Density | 36 | 234 | – |
| High Density | 23 | 255 | – |
| Commercial | 13 | – | 141,570 |
| Recreation/Entertainment Overlay | 50 | – | 87,120 |
| School Overlay | 15 | – | – |
| Park Overlay | 38 | – | – |
| Right-of-Way | 26 | – | – |
| **Subtotal** | **661** | **1,825** | **228,690** |
| **Village 2** | | | |
| *Residential* | | | |
| Low Density | 313 | 930 | – |
| Medium Density | 139 | 873 | – |
| High Density | 45 | 480 | – |
| Commercial | 10 | – | 98,010 |
| Recreation/Entertainment Overlay | 4 | – | 6,970 |
| Park Overlay | 12 | – | – |
| Right-of-Way | 29 | – | – |
| **Subtotal** | **552** | **2,283** | **104,980** |
| **Village 3** | | | |
| *Residential* | | | |
| Medium Density | 155 | 972 | – |
| High Density | 58 | 600 | – |
| Very High Density | 18 | 300 | – |
| Commercial | 30 | – | 294,030 |
| Institutional/Civic | 8 | – | 139,392 |
| School Overlay | 15 | – | – |
| Park Overlay | 3 | – | – |
| Right-of-Way | 33 | – | – |
| **Subtotal** | **320** | **1,872** | **433,422** |

**TABLE 4-2**
**CENTENNIAL SPECIFIC PLAN STATISTICAL TABLE**

| Land Use | Gross Acres | Dwelling Units | Square Feet |
|---|---|---|---|
| **Village 4** | | | |
| *Residential* | | | |
| Very Low Density | 295 | 410 | – |
| Low Density | 168 | 560 | – |
| Recreation/Entertainment Overlay | 10 | – | 17,424 |
| Park Overlay | 9 | – | – |
| Right-of-Way | 12 | | |
| **Subtotal** | **494** | **970** | **17,424** |
| **Village 5** | | | |
| *Residential* | | | |
| Very Low Density | 87 | 116 | – |
| Low Density | 454 | 1,495 | – |
| Medium Density | 427 | 2,709 | – |
| High Density | 52 | 555 | – |
| Commercial | 9 | – | 87,120 |
| School Overlay | 15 | – | – |
| Park Overlay | 22 | – | – |
| Right-of-Way | 35 | – | – |
| **Subtotal** | **1,101** | **4,875** | **87,120** |
| **Village 6** | | | |
| *Residential* | | | |
| Very Low Density | 207 | 286 | – |
| Low Density | 283 | 1,080 | – |
| Medium Density | 44 | 279 | – |
| Commercial | 5 | – | 54,450 |
| School Overlay | 60 | – | – |
| Park Overlay | 34 | – | – |
| Right-of-Way | 14 | – | – |
| **Subtotal** | **647** | **1,645** | **54,450** |
| **Village 7** | | | |
| *Residential* | | | |
| Very Low Density | 80 | 112 | – |
| Low Density | 235 | 845 | – |
| Medium Density | 51 | 324 | – |
| High Density | 16 | 165 | – |
| Commercial | 16 | – | 163,350 |
| Recreation/Entertainment | 5 | – | 8,712 |
| School Overlay | 15 | | |

**TABLE 4-2**
**CENTENNIAL SPECIFIC PLAN STATISTICAL TABLE**

| Land Use | Gross Acres | Dwelling Units | Square Feet |
|---|---|---|---|
| Park Overlay | 12 | – | – |
| Right-of-Way | 12 | – | – |
| **Subtotal** | **443** | **1,446** | **172,062** |
| **Village 8** | | | |
| *Residential* | | | |
| Very Low Density | 69 | 96 | – |
| Low Density | 738 | 2,450 | – |
| Medium Density | 46 | 297 | – |
| Commercial | 10 | – | 108,900 |
| School Overlay | 15 | – | – |
| Park Overlay | 19 | – | – |
| Right-of-Way | 20 | – | – |
| **Subtotal** | **917** | **2,843** | **108,900** |
| **Village 9** | | | |
| *Residential* | | | |
| Very Low Density | 88 | 124 | – |
| Low Density | 335 | 1,090 | - |
| Medium Density | 65 | 360 | – |
| Recreation/Entertainment Overlay | 6 | – | 10,454 |
| School Overlay | 10 | – | – |
| Park Overlay | 13 | – | – |
| Utility | 3 | – | – |
| Right-of-Way | 14 | – | – |
| **Subtotal** | **534** | **1,574** | **10,454** |
| **Land Use Areas Not Within a Village** | | | |
| Commercial | 9 | – | 87,120 |
| Institutional/Civic | 102 | – | 1,428,768 |
| Business Park | 597 | – | 7,363,818 |
| Open Space | 5,624 | – | – |
| Utility | 188 | – | – |
| Right-of-Way | 132 | – | – |
| **Subtotal** | **6,652** | **–** | **8,869,453** |
| ***Totals*** | ***12,323*** | ***19,333*** | ***10,097,208*** |
| Source: Placeworks 2017 | | | |

# 4.5 CENTENNIAL PROJECT COMPONENTS

## 4.5.1 PROJECT DESIGN FEATURES

The Project has been planned with design elements called Project Design Features (PDFs). The Project Applicant/Developer has planned the Centennial Project to include the design elements listed as PDFs listed in each section; these PDFs have been incorporated into the Project to prevent the occurrence of or to reduce the significance of potential environmental effects. Because PDFs have been incorporated into the Project, they do not constitute mitigation measures as defined by CEQA. However, if the PDFs have mitigation value to reduce a potentially significant impact, then a corresponding mitigation measure (MM) has been prepared to ensure the implementation of the measure through the Mitigation Monitoring and Reporting Program (MMRP). The PDFs are generally described in this section, and are specifically itemized and numbered within each topical issue addressed in Section 5.0 (i.e., Sections 5.1 through 5.21) of this Draft EIR.

## 4.5.2 CONCEPTUAL LAND USE PLAN

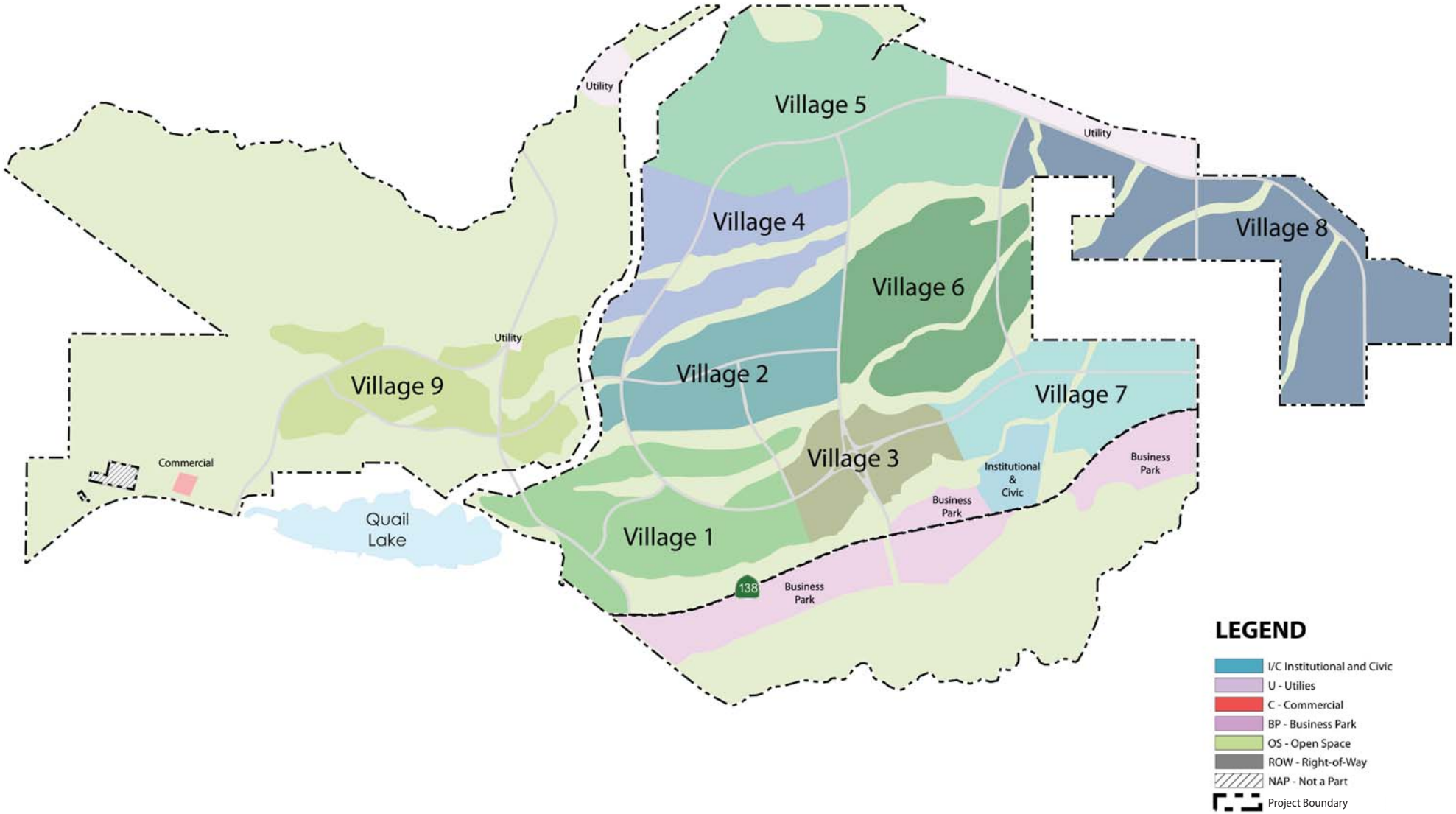
Exhibit 4-1, Centennial Project – Conceptual Land Use Plan, depicts the Project boundary and conceptual-level locations and distributions of the proposed land uses, as well as the main roadways throughout the Project site. The Conceptual Land Use Plan provides one possible interpretation of site development in compliance with the AVAP, and is the basis for the environmental analysis set forth in this EIR.

The Project has been designed to respect the existing landforms and to consider the topography, elevation, presence of the Aqueduct, major roadways, drainages, and biologically sensitive areas. As such, development has been organized into nine "Villages" as shown in Exhibit 4-3, Centennial Project – Villages and Core Areas. Villages 1 through 8 are located east of the West Branch of the California Aqueduct and Village 9 is located west of the Aqueduct.

The Villages have been designed to incorporate the main principles of "Smart Growth". Smart Growth is a movement in land use and transportation planning that formally began in the early 1990's. It promotes compact, transit-oriented, walkable, bicycle-friendly communities, including "Complete Streets" and mixed-use neighborhoods and with a range of housing choices. Smart Growth emphasizes the connection between preservation of open space and smaller community footprints. Medium- to very high density development is generally included in the central area of each Village, and the density of development progressively lowers with increased distance from core areas, called the Village Core, Town Center or Neighborhood Center[2]. The Town Center of Centennial is located in Village 3, and is the "downtown" area of the Project. Villages 1, 2, 5, and 7 have a Village Core. Villages 6, 8, and 9 have a Neighborhood Center. As shown in Exhibit 4-3, Villages and Core Areas, 100 percent of all residential development (i.e. total number of dwelling units) will be located within ¼

[2] A Village Core/Town Center/Neighborhood Center areas are defined by having a combination of uses, including retail, office, civic, and higher density residential, that are supported by adjacent residential areas that transition out to low density development. These areas vary in size and intensity, and generally extend two blocks in any direction from the activity center of each core including the block (or blocks) containing some mixed-use development.

VILLAGES OF CENTENNIAL
CENTENNIAL | TEJON RANCH




Source: Placeworks 2017

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# Centennial Project – Villages and Core Areas

Exhibit 4-3

*Centennial Project*

N W E S

Map Not to Scale

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mile walking distance of a park, trailhead, club house or other public amenity; and an 80 percent average, but no less than 50 percent of residential units will be located within ½ mile of a Village Core or the Town Center. Village Cores will have a public gathering space (e.g., square or plaza) of 10,000 sf or more, with street frontage on at least one side and at least two points of access from a sidewalk, trail, or other pathway. The Town Center shall have a public gathering space of 1 acre or more, with street frontage on at least two sides. Additionally, 30 percent of Village 3 residential units will be within the Town Center; and 15 percent of the residential units within Villages 1, 2, 5, and 7 will be within the Village Core.

Residential land uses are designated as either Very Low Density Residential (VLDR), Low Density Residential (LDR), Medium Density Residential (MDR), High Density Residential (HDR), or Very High Density Residential (VHDR). Other land uses in the Villages include Commercial (C) and Institutional/Civic (I/C). Overlays in the Villages include the Recreation/Entertainment Overlay (R/E), School Overlay, and Park Overlay. Designated land uses that are excluded from the Villages acres include Open Space (OS), Business Park (BP), Right-of-Way (ROW), and Utility (U).

Exhibit 4-1, Centennial Project – Conceptual Land Use Plan also depicts the current alignment of SR-138, which runs adjacent to the Business Park land use in the southern portion of the Project site and is excluded from the Project boundary.

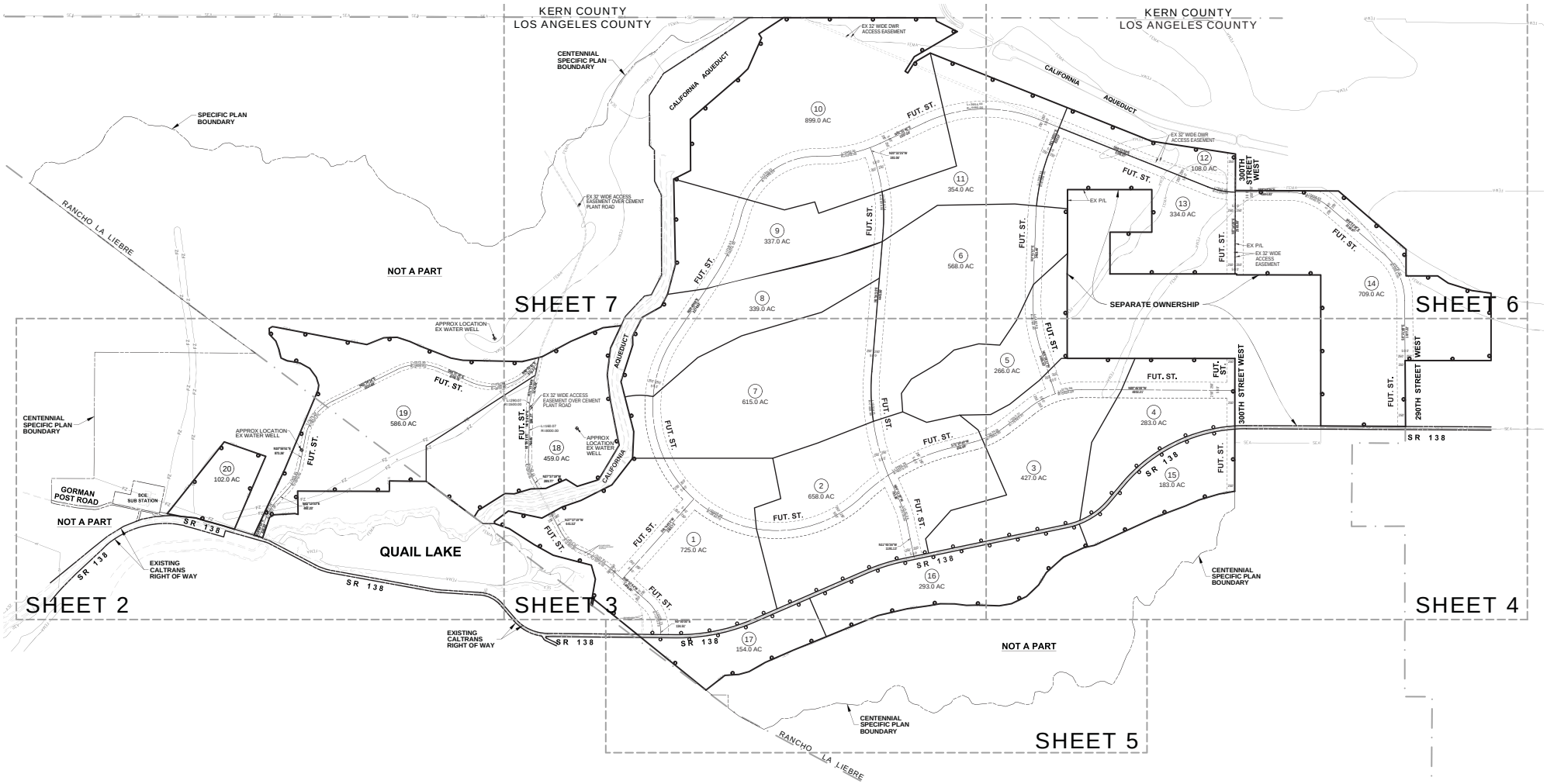
### 4.5.3 VESTING TENTATIVE PARCEL MAP

To facilitate the overall phasing of Project development, the Project Applicant/Developer proposes to subdivide the entire 12,323-acre property into 20 parcels through Vesting Tentative Parcel Map (VTPM) No. 060022. The minimum parcel size on VTPM No. 060022 is 102 acres. Exhibit 4-4, Centennial Project – Vesting Tentative Parcel Map No. 060022, depict the proposed subdivision, which may correspond to future TTMs. The VTPM is intended to create parcels that can be used for finance and conveyance purposes only. Construction of residential and nonresidential buildings will require further subdivision of the large parcels created by the VTPM, as well as other subsequent land use permits and approvals.

### 4.5.4 CONCEPTUAL LAND USE PLAN AND DEVELOPMENT STANDARDS

The Conceptual Land Use Plan (also referred to herein as the Land Use Plan), as shown in Exhibit 4-1, was developed to create a self-sustaining community through the development of various land use designations. The *Centennial Specific Plan* establishes development standards to regulate minimum lot areas and average lot widths, building setbacks, height limits, and landscaping and parking requirements for each permitted land use designation. Table 2-16 of the *Centennial Specific Plan* (Land Use Matrix) provides a detailed breakdown of uses that are permitted; that are permitted under a substantial conformance review process; that are permitted with a ministerial or discretionary interim use permit; or that are permitted with a conditional use permit.[3] The complete list of uses that may be permitted in each land use designation, as presented in the Land Use Matrix, is extensive but includes the following general categories: residential, agricultural, public and semi-public,

3 Uses not listed in Table 2-16 of the *Centennial Specific Plan* are not permitted unless approved through the administrative processes outlined in Chapter 4, Administration and Implementation.




Source: Psomas 2017

# Vesting Tentative Parcel Map No. 060022

## Exhibit 4-4

*Centennial Project*

N W E S

Map Not to Scale

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commercial, open space/recreation, manufacturing, light industrial, accessory, interim, and temporary. Section 4.6 of the *Centennial Specific Plan* provides information on guidelines for adjustments, transfers, and conversions that respond to the needs to maintain the goals of the Project, subject to County approval.

The Land Use Plan, development standards and permitted and conditional uses are summarized below and are discussed in detail in Section 2.2.1, Land Use Designations and Development Standards, of the *Centennial Specific Plan*. The number of dwelling units by residential land use designation described in the following discussion is based on the *Centennial Specific Plan,* as summarized in Table 4-2, Centennial Specific Plan Statistical Table. For reference, Land Use designations can be found on Exhibit 4-1, Centennial Project – Conceptual Land Use Plan.

## Residential Land Uses

### *Very Low Density Residential (VLDR)*

As detailed in Table 4-2, Centennial Specific Plan Statistical Table, the *Centennial Specific Plan* proposes a total of 1,270 Very Low Density Residential (VLDR) units throughout the Project area. The VLDR designation provides for larger lot, single-family detached (fee lot) homes ranging in density up to and including 2.0 du/gross acre (du/ac) of land. The lot area is a minimum of 10,000 sf when non-clustered and 5,250 sf when clustered. The *Centennial Specific Plan* would allow for a maximum building height for a home or garage of 40 feet, and of 17 feet to 35 feet for a second unit, in the VLDR designation. For non-clustered/clustered development (shown as #/# feet), respectively, the minimum front yard setback is 40/20 feet to habitable structure or to front entry garage, 33/25 feet to a habitable structure on a cul-de-sac or knuckle, 35/25 feet to covered porch, 40/20 feet to a front entry garage, and 15/10 feet to a front or side entry garage. Side yards for lots located adjacent to a public street (corner lot) are a minimum of 20 feet from the lot line. The minimum side yard setback to habitable structure is 15/10 feet; to a covered porch is 10/5 feet; to a front- or side-entry garage is 15/10 feet, to the front entry of a garage in the rear half is 10/5 feet, and to a corner lot is 20/15 feet. The minimum interior side yard setback to a habitable structure or second unit is 30/15 feet, and to a front entry garage (no second unit) is 15/10 feet.

Second units, also known as accessory dwelling units,, Living Suites or "granny flats" (collectively, "ADUs") on the same lot, are allowed in this designation, subject to the overall maximum building site coverage. The total number of allowable ADUs must be specified in, and will be approved as part of the processing of, each Tentative Tract Map application, ADUs are subject to the applicable design standards in the Specific Plan. The second units may be detached or attached to the primary unit or garage and must meet setback requirements for habitable structures. As described in the Table 2-3 in the *Centennial Specific Plan*, VLDR (less than or equal to 2 du/ac), second units shall comply with Section 22.20.105 of the *Los Angeles County Code (as it may be amended) and applicable state law.* Under the Specific Plan, reconfiguring an existing single family home to create an ADU is permissible and does not create a new dwelling unit or new parcel, and cannot be sold separately from the single family lot; instead, an ADU is a building space configuration for the single family home allowed on this lot. No new environmental impacts occur as a result of the ADU configuration

option, since variations in household occupancy (e.g., the number of adults and children allowed in each household) always exist and are taken into account in the average household size estimates evaluated in this EIR. There is also no basis for estimating whether or when an ADU would be built by any given homeowner, and CEQA does not require speculation. Without regard to whether a state density bonus is ever used on the Project site, the total number of dwelling units, inclusive of all product types, cannot exceed the maximum number of 19,333 dwelling units.

The VLDR land use designation is typically located in areas with slopes generally ranging from 15 percent to 25 percent and is intended to provide a transition between the development and adjacent natural hillside areas. Development in the VLDR-designated areas is required to conform with the hillside development criteria contained in Section 3.13.7, Hillside Preservation and Section 3.1.1, Grading Goals and Guidelines, of the *Centennial Specific Plan*), which encourages the use of contour landform grading techniques in order to maintain a natural appearance.

### *Low Density Residential (LDR)*

The Project includes 9,660 Low Density Residential (LDR) units that are intended to provide a buffer between more intense residential and commercial/retail development in the core areas and the open space areas on the Project site. The LDR designation provides for single-family detached homes on lots with a minimum area of 3,000 sf. ADUs are allowed on single-family detached LDR parcels or lots, and ADUs are not considered a separate unit (e.g., are on the same legal parcel or lot and cannot be independently sold). The density for this land use category ranges from two to seven du/ac. Other products typically associated with a condominium map or plan may occur within the LDR residential designation—such as single-family detached cluster, cottage, 2-pack, and single family attached, duplex, triplex, and townhome—are allowed so long as the density within the total area as shown in Exhibit 4-1, Centennial Project – Conceptual Land Use Plan, falls within the LDR residential designation range of two to seven du/ac. Residential architectural styles vary, with at least 25 percent of homes incorporating rear-entry (alley loaded), side-entry, split, or front-entry garages located in the rear of the lot.

The *Centennial Specific Plan's* development standards allow a maximum building height of 40 feet. The minimum front yard setback permitted is 15 feet with a provision to allow a shorter setback (10 feet) when a front- or side-entry garage is used or in the case of alley-loaded residential product design. The minimum interior side yard setback is either five feet or there is no setback where one side of the structure is placed on the lot line. Side yards for lots located adjacent to a public street (corner lot) are a minimum of ten feet from the lot line. The minimum rear yard setback is 15 feet to a habitable structure or second unit, 10 feet to a garage in the rear, and 3 feet to an alley-loaded garage.

### *Medium Density Residential (MDR)*

The Project includes 6,048 Medium Density Residential (MDR) units that are generally within walking distance of the commercial uses, schools, and services provided in the Village Cores. The MDR designation is intended to provide for mostly single-family attached units

but also some tradition and non-traditional arrangements of single-family detached housing types at a density of 7 to 15 du/ac. Detached homes may either be part of a subdivision map providing fee lots for each unit or may be constructed as part of a condominium map or plan on a single large lot or multiple large lots. ADUs are allowed on single-family detached MDR parcels or lots, and ADUs are not considered a separate unit (e.g., are on the same legal parcel or lot and cannot be independently sold). The minimum lot area for the MDR designation is 2,000 sf.

Typical detached housing types proposed for this designation include single-family homes with zero lot line or reciprocal easements (such as cottage homes or 2-pack), alley loaded (garage in rear), motor court cluster, and green court cluster configurations. Typical attached housing types proposed for this designation include single family detached cluster, cottage, and 2-pack, and single-family attached, townhome, duplex, and triplex. Examples of these product types are provided in Appendix 2-B of EIR Appendix 4.0-A, which is not intended to provide an all-inclusive list. Products may range in density, both as low as 0 du/ac and higher than 15 du/ac, so long as the density within the total area as shown in Exhibit 4-1, Centennial Project – Conceptual Land Use Plan, falls within the MDR residential designation range of 7 to 15 du/ac.

Building heights, whether for detached or attached units, are restricted to 40 feet. The minimum street frontage for fee lots only is 30 feet for a straight street, 25 feet for a cul-de-sac or knuckle, 25 feet for a flag lot with a shared driveway, and 20 feet for a flag lot with a single entry. The minimum front yard setback is 10 feet to a habitable structure, 5 feet to covered porch, 18 feet to a front-entry garage, 5 feet to a front-entry garage on a private driveway, and 5 feet to a side-entry garage The minimum interior side yard setback would be zero or five feet to a habitable structure, five feet to a covered porch, three feet to a garage in the rear half, and ten feet where adjacent to a public street or lot line. All front/side setback requirements for dwelling units on private driveways are measured from the back of the curb. The minimum rear setback is 10 feet to the habitable structure or front-entry garage in the rear half, 3 feet to alley-entrance garage, and 15 feet to habitable structure or front-entry garage in the rear half at the edge of open space or a trail. The minimum building separation is 30 feet front to front, 20 feet from rear to rear, and 10 feet from side to side of habitable structures.

### *High Density Residential (HDR)*

The Project includes 2,055 High Density Residential (HDR) units. The HDR land use category is proposed in the Village Cores adjacent to commercial and employment areas. The HDR designation provides for a wide range of single-family or multi-family attached residential products at densities ranging from 15 to 25 du/ac. The minimum lot area for the HDR designation is 0.5 acre. Typical attached housing types provided in this designation include rowtown, garden court, greencourt, town/flat, and apartments. Other single family attached products that may be provided in this designation are duplex, triplex, and townhomes. Examples of these product types are provided in Appendix 2-B of EIR Appendix 4.0-A.

A maximum building height of 50 feet is allowed under this land use designation. The minimum front yard setback is 10 feet to habitable structure; 5 feet to covered porch; and

18 feet to front-entry garage on a public street. The minimum interior side-yard setback is 10 feet, 5 feet to front-entry/alley-loaded garage in rear, and 10 feet adjacent to a public street or lot line. The minimum rear-yard setback is 3 feet to the alley-loaded garage. The minimum building separation is 10 feet side to; 20 feet rear to rear; and 30 feet front to front of habitable structures.

### *Very High Density Residential (VHDR)*

The Project includes 300 Very High Density Residential (VHDR) units. The VHDR designation is intended to provide for attached residential dwelling units within or close by the Town Center at densities of 25 to 50 du/ac. Typical housing types provided in this designation include multiple-story apartments with a variety of parking arrangements, including remote carports, tuck under, podium and wrap. Other single-family attached products that may be provided in this designation are townhomes, rowtown, garden court, green court, and town/flat. The minimum lot area in the VHDR designation is 1.0 acre.

The VHDR designation establishes a maximum building height of 80 feet and a minimum usable common open space coverage of 10 percent with. The minimum front yard setbacks adjacent to a public street must be ten feet to habitable structure and five feet to covered porch; setback for a private driveway is measured from the back of the curb. The minimum side-yard setback is ten feet to a habitable structure or adjacent to a public or private street or lot line. The minimum rear setback is ten feet to a habitable structure or three feet to an alley-served garage. The minimum building separation is 10 feet side to side; 20 feet rear to rear; and 30 feet front to front of habitable structures.

Table 4-3, Summary of Residential Development, provides the breakdown of the proposed residential units by Village and by residential land use category.

**TABLE 4-3**
**SUMMARY OF RESIDENTIAL DEVELOPMENT**

| Village | Residential Land Use | Gross Acres | Dwelling Units |
|---|---|---|---|
| **Village 1** | | | |
| | Very Low Density | 89 | 126 |
| | Low Density | 371 | 1,210 |
| | Medium Density | 36 | 234 |
| | High Density | 23 | 255 |
| | **Subtotal** | **519** | **1,825** |
| **Village 2** | | | |
| | Low Density | 313 | 930 |
| | Medium Density | 139 | 873 |
| | High Density | 45 | 480 |
| | **Subtotal** | **497** | **2,283** |

**TABLE 4-3**
**SUMMARY OF RESIDENTIAL DEVELOPMENT**

| Village | Residential Land Use | Gross Acres | Dwelling Units |
|---|---|---|---|
| **Village 3** | | | |
| | Medium Density | 155 | 972 |
| | High Density | 58 | 600 |
| | Very High Density | 18 | 300 |
| | **Subtotal** | **231** | **1,872** |
| **Village 4** | | | |
| | Very Low Density | 295 | 410 |
| | Low Density | 168 | 560 |
| | **Subtotal** | **463** | **970** |
| **Village 5** | | | |
| | Very Low Density | 87 | 116 |
| | Low Density | 454 | 1,495 |
| | Medium Density | 427 | 2,709 |
| | High Density | 52 | 555 |
| | **Subtotal** | **1,020** | **4,875** |
| **Village 6** | | | |
| | Very Low Density | 207 | 286 |
| | Low Density | 283 | 1,080 |
| | Medium Density | 44 | 279 |
| | **Subtotal** | **534** | **1,645** |
| **Village 7** | | | |
| | Very Low Density | 80 | 112 |
| | Low Density | 235 | 845 |
| | Medium Density | 51 | 324 |
| | High Density | 16 | 165 |
| | **Subtotal** | **382** | **1,446** |
| **Village 8** | | | |
| | Very Low Density | 69 | 96 |
| | Low Density | 738 | 2,450 |
| | Medium Density | 46 | 297 |
| | **Subtotal** | **853** | **2,843** |
| **Village 9** | | | |
| | Very Low Density | 88 | 124 |
| | Low Density | 335 | 1,090 |
| | Medium Density | 65 | 360 |
| | **Subtotal** | **488** | **1,574** |
| | ***Totals*** | ***4,987*** | ***19,333*** |

Source: Placeworks 2017

## Commercial Land Uses

### *Commercial (C)*

The Project includes 1,034,550 sf of Commercial (C) uses on 102 gross acres. It is estimated that approximately 2,913 employment opportunities would be created by such uses. This land use is intended to provide for the retail commercial, office and service needs of the community. The commercial designation is intended to accommodate commercial centers or freestanding buildings that are designed to minimize impacts on adjacent residential uses and to complement the physical character each village.

A maximum floor area ratio (FAR) of 0.70 is allowed with a minimum FAR of 0.20. The maximum building height for a habitable structure allowed is 120 feet, with an additional 10 feet allowed above the maximum for non-habitable structures. Minimum front setbacks allowed are 50 feet to the SR-138 right-of-way (edge of pavement), 10 feet to the front without parking, and 50 feet with perpendicular front parking, 15 feet to the side, and 25 feet to the rear. The Centennial Project also proposes development standards for outdoor display, outdoor dining, outdoor storage, and landscape coverage; it also restricts the locations of certain uses.

### *Business Park (BP)*

The Project includes 7,363,818 sf of Business Park (BP) uses on 597 gross acres. Business parks are primarily concentrated along SR-138, which is the major east-west transportation corridor. The BP designation is intended to provide for research and development (R&D), light industrial, manufacturing, professional office, private educational and trade schools, hotels, and the smaller commercial services required to support these uses. It is estimated that approximately 14,513 employment opportunities would be created by such uses. If hotel(s) are developed, approximately 300 additional employment opportunities would be provided.

A maximum FAR of 1.0 is allowed with a minimum FAR of 0.25. The smallest sized BP project that can be submitted as a Tentative Tract Map is five acres. The maximum building height for a habitable structure allowed is 150 feet, with an additional 10 feet allowed above the maximum for non-habitable structures. Minimum front setbacks allowed are 50 feet to the SR-138 right-of-way (edge of pavement), 10 feet to the front without parking, 50 feet with perpendicular front parking, 25 feet to the side, and 25 feet to the rear where adjacent to non-BP use or a public road. Setbacks apply to public streets or lot lines. The Centennial Project also proposes development standards for outdoor display, outdoor dining, outdoor storage, and landscape coverage; it also restricts the locations of certain uses.

## Other Non-Residential Land Uses

### *Institutional/Civic (I/C)*

The Project includes 1,568,160 sf of Institutional/Civic (I/C) land uses on 110 gross acres. This designation accommodates higher education facilities, postsecondary schools,

hospitals/medical centers, libraries, and other public/institutional safety facilities. It is estimated that approximately 4,608 jobs would be created by such uses. Institutional development requirements will be determined on a case-by-case basis through the development review process. Issues that may affect development requirements include compatibility with surrounding uses and adjacent structures. Proposed public facilities are further discussed in Section 4.5.10, Public Services/Facilities.

The requirements for this land use designation are to be determined on a case-by-case basis through the development review process depending on the type of use proposed. Structures in the designation have 50-foot minimum front, rear, and side setbacks from habitable structures to SR-138 (from edge of roadway); these can include fencing, fencing or a solid wall as well as landscaping as a screen is required. The minimum front setback from all other public streets is ten feet. The minimum side or rear setback from adjacent to non-institutional uses is 25 feet. The maximum building height is 75 feet.

### *Open Space (OS)*

The Project's Open Space (OS) designation includes 5,624 acres of land that would remain as permanent open space, including significant drainages, sensitive habitat areas, and steep slopes. This designation also encompasses significant drainages that are referred to as drainage corridors. Public access and improvements to the drainage corridors will be limited to trails, habitat enhancement, and flood control improvements. This designation allows for passive recreation uses such as hiking, picnicking, an interpretive (educational) center or nature center, and continued grazing in certain areas, as discussed in Natural Resource/Open Space Management Plan (see Section 3.13 of EIR Appendix 4.0-A). The permitted and conditionally permitted uses for the OS designation are contained in Table 2-16, Land Use Matrix, in Section 2.2.7, Permitted and Conditional Uses of the *Centennial Specific Plan* (see EIR Appendix 4.0-A). The maximum height for habitable structures in the OS designation is 40 feet. The larger Open Space areas are located south of SR-138 and in the northwestern portion of the Project area. There would be limited public access to these areas in an effort to protect the natural resources present. The OS designation is intended to preserve and/or enhance the natural features and resources in Oso Canyon and the oak woodlands and oak communities south of Oso Canyon and south of SR-138.

### *Utility (U)*

The Project includes approximately 191 gross acres designated for Utility (U) uses located along the northern portion of the Project site and also on the west side of the West Branch of the Aqueduct. This designation provides a location for necessary public infrastructure facilities, including but not limited to wastewater reclamation facilities, water recharge facilities, recycled water storage, solid waste facilities, water treatment facilities, materials recovery facilities, recycling centers, and maintenance yards for the County of Los Angeles Departments of Public Works and Parks and Recreation. In the event that the public or semi-public use of mapped facilities is terminated, alternative uses that are compatible with the surrounding development, in keeping with community character, are permitted, as set forth in Section 4.0 Administration and Implementation of the *Centennial Specific Plan*.

As specified in Section 2.2.8, General Development Standards, of the *Centennial Specific Plan,* U-designated uses are sited to be compatible with adjacent properties through use of site planning, architectural design, and use types in addition to features such as landscaped areas, walls, and similar border features to make the development adequately buffered. The minimum front, rear, and side setback under the Utility land use designation is 30 feet. The maximum height allowed is 55 feet.

### *Right of Way (ROW)*

The Project's Right-of-Way (ROW) designation includes 327 acres of land that would be required to develop the Project's internal roadway system of arterials and collectors, as depicted on the Conceptual Land Use Plan (see Exhibit 4-1).

## Overlays and Zones

The Project includes several Overlays and Zones applied throughout the Project site. These are described in Section 2.2, Land Use Plan, of the *Centennial Specific Plan* and are intended to either address specific environmental conditions on the Project site or the potential for mixed-use development within the Commercial areas. Overlays and Zones have additional requirements that must be followed in addition to the Development Standards discussed above.

### *Centennial Commerce District (CCD) Overlay*

Portions of Village 3 and nearby Business Park and Civic/Institutional development areas make up the Centennial Commerce District (CCD). This district, which can also be thought of as a central business district, is the core of business activity for Centennial. Consistent with the Metrics of the Specific Plan, the majority of office space, shall be planned near the Town Center, as well as in the Business Park, and the Institutional/Civic designated areas located north of SR-138.

Uses in the CCD include Commercial (C), Mixed-Use (MU), Residential (MFR and HDR), Business Park, and Institutional/Civic. The CCD Overlay also includes a proposed transit hub. This land use mix is the foundation for a strong commercial base and institutional uses, such as a medical center or center for higher education, all of which will be supported by nearby residential development.

### *School (S) Overlay*

The Project includes seven public school sites (five K–8, one K–5 and one high school) in the School (S) overlay. The specific design and student capacities of the school facilities are subject to Title 5 of the *California Government Code,* which contains standards for school site selection, site planning, and construction of school facilities in the State of California. The locations of school sites take into consideration the standard requirements of Title 5. Approximately 146 gross acres have been set aside to accommodate schools. Potential school sites are further discussed in Section 4.5.13, Public Services/Facilities and Section 5.15, Education.

A K–8 school would be developed in the first phase of site development to be available at the first occupancy of the Project; decisions regarding the location and configuration of this school would ultimately be made by the Gorman Joint School District. The K–8 school is initially intended to serve grades through-K–12, then revert to a K–8 school once the high school that is able to adequately serve grades 9 through 12 has been constructed on the Project site and is operational. With the consent of the Gorman Joint School District, the Antelope Valley Union High School District (AVUHSD) students will be housed in the first school.

The second and subsequent K–8 schools are be constructed subject to the terms of the mitigation agreement with the Gorman Joint School District, and the timing depends on the rate of Project development and actual demand for school facilities, as determined by the Gorman Joint School District. It is anticipated that one high school would provide sufficient capacity to accommodate anticipated high school students. The high school is expected to open in compliance with school district mitigation agreements; however, the actual implementation timing of school facilities depends on the rate of Project development and actual demand for school facilities, as determined by the AVUHSD. As identified in the *Centennial Specific Plan,* any rejected school site shall revert to residential land use at the density of the surrounding residential designation; however, the maximum number of units allowed by the *Centennial Specific Plan* would not be exceeded.

### *Park (P) Overlay*

The Project includes 163 acres of Park Overlay, which would include neighborhood parks, community parks, and community regional parks that would be dedicated to the County of Los Angeles in a fully developed condition. In addition to the 163 acres of Park Overlay, the Project would also provide pocket parks (public and private); private commercial recreation facilities; private community recreation facilities (e.g., in multi-family complexes); and the regional hiking trail.

Per the Los Angeles County General Plan, neighborhood parks are typically between three and ten acres and are located to serve surrounding neighborhoods within a 1/2-mile radius. Neighborhood parks are intended to provide the daily recreation needs of children as well as residents within the immediate vicinity of the park.

Community parks are typically 10 to 20 acres, and serve several neighborhoods within a 1 to 2-mile radius, and are intended to provide a wide variety of active and passive recreation activities, including group activities that may not be feasible in a neighborhood park. Community parks typically provide neighborhood-level facilities, such as tot lots, barbeque areas, and informal play areas (open lawn areas), combined with other types of community-serving facilities, such as sports parks with athletic fields, soccer, softball, tennis and basketball courts, community/centers, cultural/interpretive centers, and other specialty uses. Community parks also incorporate trails and picnic facilities for more limited, passive use and scenic enjoyment. The parks are located adjacent to, and connected by, the Centennial trail system in order to facilitate connectivity among open space elements, as shown on the Land Use Plan.

Community regional parks are typically 20 to 100 acres, and have a service radius of 20 miles. Amenities for community regional parks can include sports facilities, a jogging exercise course, informal open play areas, children's playground equipment, group picnic areas, barbecues, public restrooms, a concession building, recreation offices, maintenance buildings, and on-site parking areas. Community regional parks may also have one or more of the following features: multiple sports facilities, an aquatics center, a fishing lake, a community building and gymnasium, and scenic views and vistas.

As shown in Exhibit 4-1, there is a combined total of 30 neighborhood, community, and community regional parks proposed for the Project, which equate to the 163 acres of Park Overlay. Because this designation is an overlay, the sizes, distribution of each park type, and location that would ultimately be developed in consultation with the County may vary from the conceptual land use plan, but would remain a total of 163 acres. The minimum front, rear, and side setback is 30 feet to a habitable structure, and the maximum building height is 45 feet. Proposed park uses are further described in Section 4.5.6. Section 5.14, Parks and Recreation, describes the impact analysis related to the parks proposed within the Project.

### *Recreation/Entertainment (R/E) Overlay*

The Centennial Specific Plan's Recreation/Entertainment (R/E) Overlay includes approximately 75 gross acres and accommodates a variety of potential recreational uses, including a clubhouse with pool/spa and other recreation facilities, restaurants, golf course, ancillary pro shop and administrative offices, greenhouse/nursery areas, childcare facilities, fitness and health clubs, convenience markets/general stores or farmer's market/fresh fruit and vegetable stands, wine and beer tasting rooms, and community gardens. The western Recreation/Entertainment Overlay area would be sited on both sides of the Cement Plant access road and would include a portion of the Oso Canyon Drainage. The eastern area is in the southeastern portion of the Project site, north of SR-138.

Minimum front, rear, and side setbacks for would be 30 feet to a habitable structure, except for along SR-138 where the minimum setback would be 50 feet. The maximum permitted building height would be 55 feet, with an additional 15 feet for architectural features such as towers, roof peaks, and parapets. Should a golf course be developed within the R/E Overlay, it would be required to meet the certification standards of Audubon International's Cooperative Sanctuary Program or equivalent standards. Any use built in the R/E Overlay would be required to comply with appropriate regulations associated with significant drainages, as further described in Section 5.7, Biological Resources.

### *Mixed-Use (MU) Overlay*

The Mixed-Use (MU) Overlay is an optional designation for uses within the Commercial areas. The MU Overlay is intended to allow for a combination of commercial, office, and residential uses in either vertically or horizontally (uses side by side) integrated projects, as an optional land use in select Commercial areas. Such a mixture in the same area enhances the vitality of businesses, creates an active street life, and offers additional housing types. This overlay may be applied to all or portions of the designated area. The MU Overlay allows for a live/work/environment; adds diversity and walkability to the Village Cores; and

reduces reliance on the automobile and the associated costs of energy and pollution. The overall design of Commercial areas may include a "main street" atmosphere with on-street parking; wider sidewalks; safe and convenient pedestrian and vehicular access into and around the area; quality streetscape features; attractive storefronts; integrated sign programs; public plazas; courtyards; and architecture that creates a strong indoor/outdoor relationship.

The *Centennial Specific Plan* proposes a minimum 0.25 FAR and maximum 2.0 FAR for commercial uses where the MU Overlay is applied. The front setback would be 10 feet minimum without parking; however, if there is perpendicular parking in the front, then the setback would be 50 feet minimum. The side and rear setbacks would be ten feet minimum; however, no minimum rear or side yard setback applied between adjacent vertical mixed-use development. The maximum building height for habitable structures, which includes parking structure heights, would be 60 feet; and the maximum building height for non-habitable structures, including towers and other architectural elements, may be extended an additional 10 feet for a total maximum height of 70 feet. Setbacks would apply to public streets or lot lines. The maximum residential density would be up to 50 du/ac so long as the maximum number of residential units within the village is not exceeded. The *Centennial Specific Plan* also proposes development standards for open space (10 percent minimum), outdoor display, outdoor dining, outdoor storage, separation of commercial and residential uses, sound attenuation, and parking design.

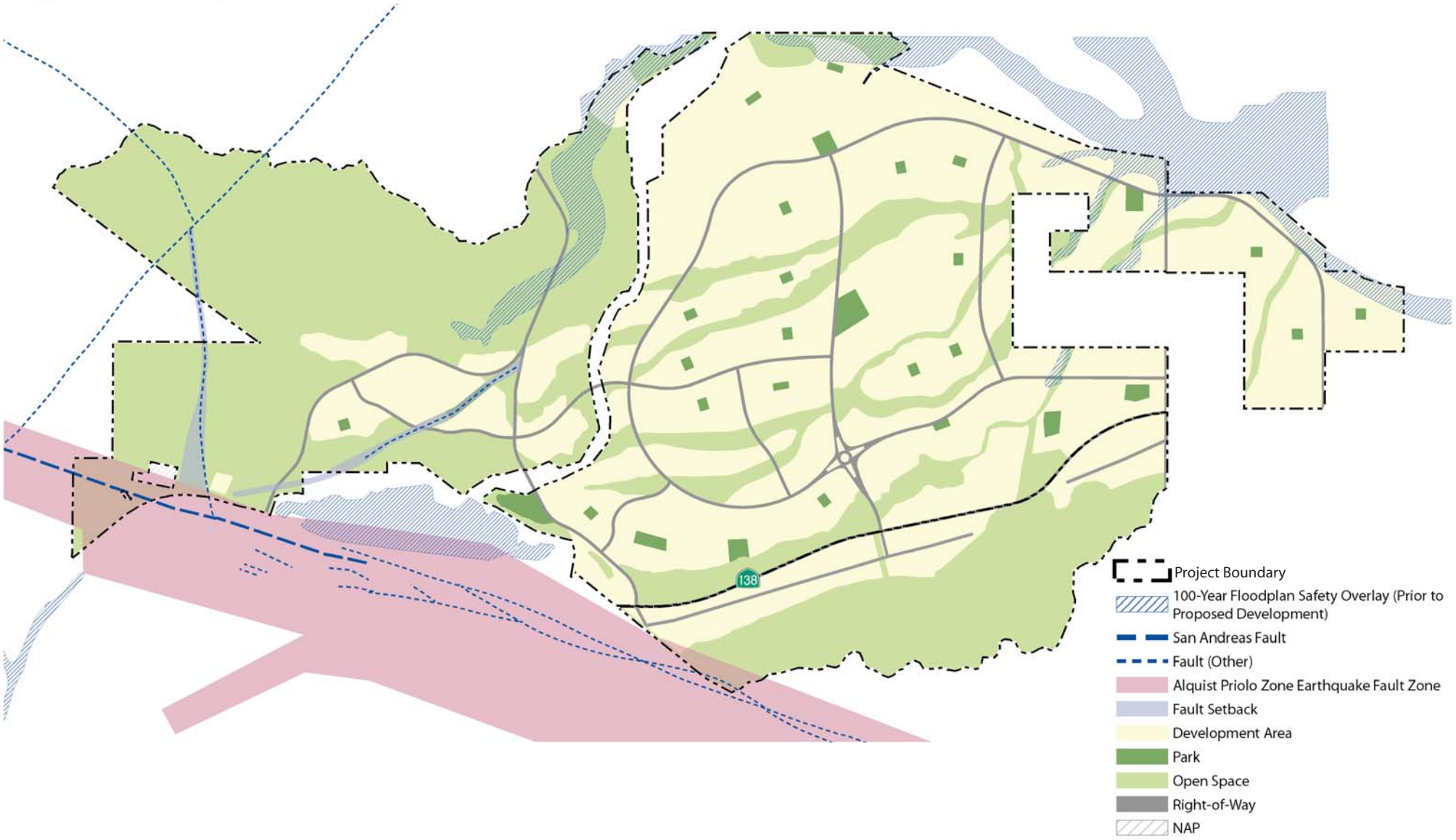
### *Potential Civic Site (CI) Overlay*

An overlay for a potential civic building is also shown at the Town Center (see Figure 3-30, Conceptual Public Services Plan of the Specific Plan), which reflects the Metrics of the Specific Plan for the Town Center to include a site for a potential civic building on approximately two acres of land; the civic site shall be located adjacent to the Town Center's public gatherspace; and the civic site shall be shown as an overlay on the Land Use Plan map and its potential location depicted on the tract map.

### *Floodplain Safety Zone*

The Floodplain Safety Zone is described in Section 2.3.1 of the *Centennial Specific Plan.* The intent for the Floodplain Safety Zone (100-year floodplain), as shown on Exhibit 4-5, Centennial Project – Safety Zones, is to identify the areas with potential for flooding prior to the development. Existing regulations applicable to development within potentially flood-prone areas to protect public safety, promote public health, and minimize economic loss would apply. This zone applies to areas that the Federal Emergency Management Agency (FEMA) considers to have a special flood hazard or that the Flood Insurance Administration has or will define in their Los Angeles County Flood Insurance Study. Because these areas have special building requirements set forth by governing agencies, new construction within these areas "shall be subject to the provisions of the County Code relating to construction materials and methods, elevation and flood proofing, and utility standards" (Placeworks 2017). Flood hazards identified on the Project site would be mitigated through the drainage

# SAFETY OVERLAY DISTRICTS
## CENTENNIAL | TEJON RANCH




Source: Placeworks 2016

## Centennial Project – Safety Zones

Exhibit 4-5

*Centennial Project*

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Map Not to Scale

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concepts and hydrology review. Additional discussion of the hydrology is presented in Section 5.2, Hydrology and Flood.

### *Geologic Safety Zone*

The Geologic Safety Zone is described in Section 2.3.2 of the *Centennial Specific Plan* and is depicted on Exhibit 4-5, Centennial Project – Safety Zones. An overlay for the fault setback zone and Alquist-Priolo Zone was created in an effort to provide greater public safety by establishing review procedures and setbacks for areas that are subject to potential surface fault rupture. The areas within the currently designated Alquist-Priolo Earthquake Fault Zones and within new fault hazard areas (identified as part of the site-specific geotechnical investigations conducted during environmental review of the Project site) have been given the Geologic Safety Zone designation. Additional discussion of the seismic conditions present on site is presented in Section 5.1, Geotechnical.

Section 2690 of the *California Public Resources Code* specifies that no human-occupied structures can be located within an Alquist-Priolo-designated Earthquake Fault Zone unless specific investigations prove these areas to be free of active faulting. The San Andreas Fault, which crosses the southwestern most tip of the Project site, is located within a designated Alquist-Priolo Earthquake Fault Zone.

To promote avoidance of fault-related hazards, the *Centennial Specific Plan* requires a minimum setback of 100 feet in each direction from faults determined to be active. The Geologic Safety Zone delineates a zone with a setback of 100 feet in each direction from the 2 active on-site faults as a conservative measure and includes the location of the Alquist-Priolo Earthquake Fault Zone for the San Andreas Fault. The width of the setback may be reduced to 50 feet with the concurrence of the County of Los Angeles Department of Public Works, based on more specific evidence of fault activity from further trenching that would be performed as part of the site development process.

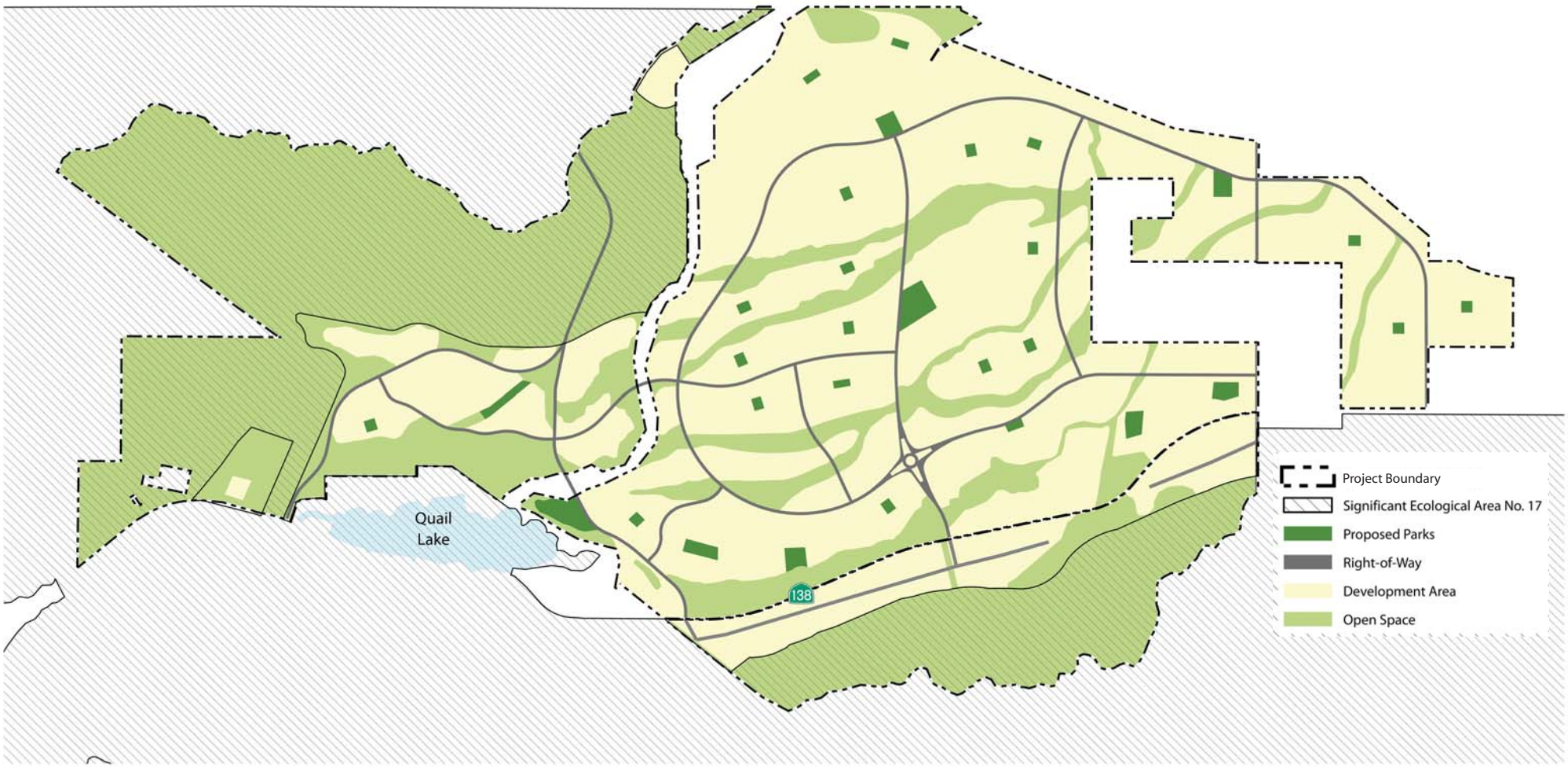
### *Significant Ecological Area Zone*

The Significant Ecological Area (SEA) Zone is described in Section 2.3.3 of the *Centennial Specific Plan* and is depicted on Exhibit 4-6, Centennial Project – Significant Ecological Area Zone.

The SEA designation does not confer protection or preservation nor does it prohibit development. Instead, it requires additional review by the Significant Ecological Area Technical Advisory Committee (SEATAC); SEATAC reviews development proposals according to specified design compatibility criteria in order to ensure heightened consideration of the biological resources that contribute to the long-term sustainability of the SEA. The SEA Overlay's purpose is to ensure that the portions of the site within an SEA designation are appropriately considered as part of Project development.

A portion of SEA No. 17, San Andreas, is located on the Project site. SEA No. 17 encompasses a small portion of the western Tehachapi foothills then stretches in a southeasterly direction to include Quail Lake; the northern foothills of Liebre and Sawmill Mountains; large portions of Portal Ridge; Leona Valley; Ritter Ridge; Fairmont and Antelope buttes; Anaverde Valley;

# SIGNIFICANT ECOLOGICAL AREAS
**CENTENNIAL** | TEJON RANCH




Source: Placeworks 2016

## Centennial Project – Significant Ecological Area Zone

## Exhibit 4-6

*Centennial Project*

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and Lake Palmdale. This SEA was designated to support a unique mosaic of plant communities, flora, and fauna representing a transitional area between the Mojave Desert, the Transverse Range, and the Tehachapi Mountains; it provides a wildlife movement linkage between these mountain ranges. This SEA No. 17 incorporates two former SEAs (i.e. SEAs 58 and 59). The Project would not include any development within the SEA No. 17.

### 4.5.5 MOBILITY PLAN

The Project's Mobility Plan includes four sections: (1) Performance Standards; (2) Street/Trail Design; (3) Urban Design, Planning, Land Use; and (4) Transportation Demand Management Program. The Mobility Plan for Centennial is an integral part of the Land Use Plan and provides for an integrated network of roadways, walking and biking trails to reduce automotive use and facilitate safe and efficient travel.

The Mobility Plan also requires the formation and funding of a Transportation Management Agency (TMA) prior to the issuance of the first occupancy permit. The TMA is responsible for monitoring the form of travel, or transit modes, used by the people who live and work in Centennial. Consistent with state and regional transportation, air quality and greenhouse gas planning objectives that focus on reducing the use of single occupancy vehicles (SOVs) for travel, Centennial must meet the following mobility performance standards: (1) a minimum of 20 percent of total daily peak morning and afternoon external (e.g., commuting) trips must be completed by using non-SOV transit modes; and (2) a minimum of 30 percent of total daily internal (e.g., local) trips must be completed by using non-SOV transit modes.

The TMA is responsible for conducting travel mode surveys and implementing transportation demand management (TDM) measures as required to verify the achievement with these minimum mobility performance standards. The Mobility Plan strives to achieve the following objectives:

- Reinforce and serve the Land Use Plan;
- Ensure the development of a "complete streets" network;
- Provide an environment that encourages for the use of alternative modes of transportation;
- Provide options to reduce vehicle trips and emissions by linking effective travel demand management with transportation systems and parking policies; and
- Provide an aesthetically pleasing environment that is consistent with the Specific Plan goals and still meets the required Centennial mobility objectives.

## Mobility Performance Standards

Reducing demand for single occupancy vehicle use is one of the eight Guiding Policies in the 2016-2040 RTP/SCS. California's landmark Sustainable Communities and Climate Protection Act of 2008 includes multiple provisions to reduce SOV use within the State (c.f. Cal. Gov't Code Sections 65081 (d), (f) and (i)(4)) The Centennial Mobility Plan is also consistent with AVAP's Chapter 3: Mobility Element goals and policies (1.1, 1.3, 1.4, 1.5, 2.1,

2.2, 2.4, 2.5, 3.3, 3.4, 4.2, 4.3, 6.9, 7.5, 8.1, 8.2, 9.2, 9.3, 9.4, 10.4, 10.5, 10.7, 10.8, 11.3, 11.5). There is a broad consensus that encouraging non-SOV transportation options, such as walking, biking, carpools, bus and train travel, alternative work schedules, and telecommuting is essential to reduce congestion, improve air quality, and address climate change as well as promoting healthy living and affordable housing.

Consistent with these well-established objectives, Centennial must achieve the following external and internal trip mobility performance standards for non-SOV transit:

- External Trip Mobility Performance Standard: External trips refer to travel either into or out of Centennial. These are trips with either an origin within and destination outside, or an origin outside and destination within Centennial. These trips are primarily associated with employment-related travel and reach their highest levels during morning and afternoon peak commute periods. Centennial must ensure that a minimum of 20 percent of all peak morning and afternoon external trips use non-SOV transit modes, such as carpools, transit, telecommuting, or alternative work schedules.

- Internal Trip Mobility Performance Standard: Internal trips refer to travel that occurs within Centennial. These are trips with both origins and destinations within Centennial. These trips typically include shopping, recreational, employment, and educational-related travel. Centennial must ensure that at least 30 percent of all internal trips use non-SOV transit modes, such as walking, biking, carpools, or local transit.

## Street/Trail Design

The Mobility Plan proposes a multi-modal transportation system with various components (Roadways, Transit, Bicycle, and Pedestrian) and is designed to provide safe and efficient mobility throughout the community. Centennial will implement a system of complete streets and multi-mode, non-motorized transportation facilities consistent with the California Complete Streets Act of 2008 and in accordance with applicable County policies. The objective of complete street design is to provide safe, efficient and accessible mobility for all motorized and non-motorized users, including motorists, cyclists, pedestrians, and transit riders. Non-motorized transportation planning elements are integrated into the Centennial Circulation Plan to encourage non-automotive transit modes, including the following design criteria:

- Small- to medium-sized streets and blocks that allow for shorter walking distances to retail, parks, schools, and other destinations;
- Facilities that make walking, cycling and transit use safe, comfortable, attractive, and efficient transportation options;
- Parking behind buildings to encourage walking in retail areas along street frontage;
- Streetscapes designed as public spaces to promote social interaction and physical activity;

- Context sensitive design to respect adjacent land use types and neighborhood character and aesthetics

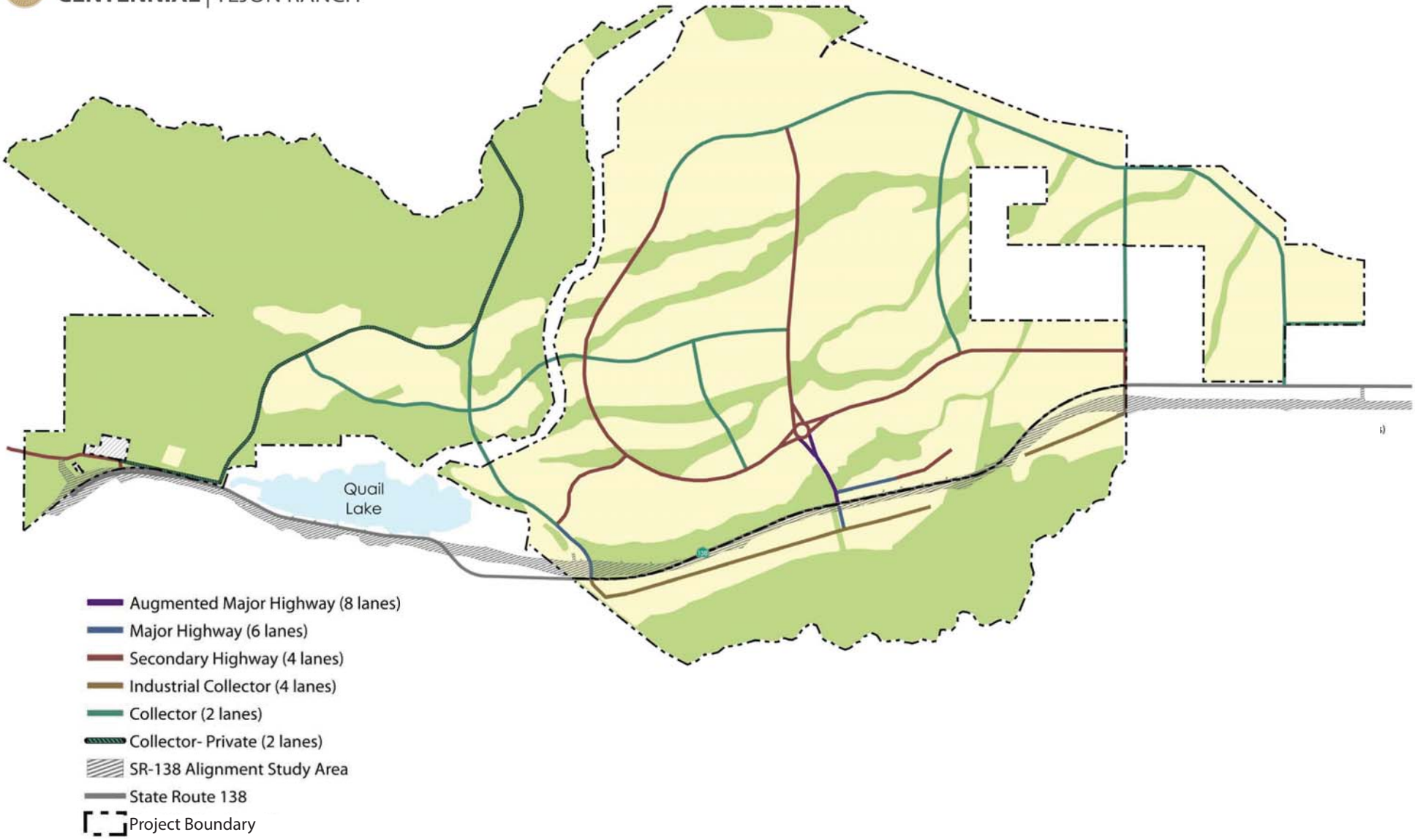
### *Roadway Classification*

The Project's Circulation Plan is provided in Exhibit 4-7, Centennial Project – Circulation Plan, and contains a hierarchy of roadways (each with a specific function), consistent with the County Subdivision Code. The circulation system has been designed to accommodate all users, the estimated vehicular traffic volumes, and the roadway function in relation to the part of the community that is being served. Therefore, based on roadway characteristics, different roadways would have different median widths, parking, sidewalk widths, bicycle amenities, and landscaped areas. As proposed, the Project's system of roadways is designed to effectively distribute vehicular, bicycle, and pedestrian traffic. The five categories of roadways are discussed below.

- ***Major and Secondary Highway.*** Roadways designed for the highest volume of use include Major and Secondary Highways. A Major Highway generally consists of six to eight lanes and Secondary Highways typically consist of four lanes. All Centennial roadways that are classified as a highway will be constructed with a raised median.
- ***Collectors.*** Collectors are designed for moderate levels of use and include two to four lanes with varying cross-sections. Designated Centennial Collector roadways conform with the County collector classifications and also may include additional special design features such as wider parkways or raised medians for landscaping. The Industrial Collector classification features four lanes with or without a raised median and will also be constructed with Class II Bike Lanes.
- ***Local and Private Roadways.*** Local and private two-lane roadways are designed to serve the lowest volume of use and vary in design in accordance with the presence or absence of allowed parking. Local and private road residential, commercial and business park serving cross-sections are also variable to reflect different patterns of automobile and truck traffic.

For any gated community approved, certain roads that meet County standards for a "private and future street" could be incorporated, with controlled access and would be maintained by an HOA as long as the roads remain private streets. Please refer to Section 3.2, Mobility Plan, of the *Centennial Specific Plan* for conceptual roadway cross-sections. There are a number of different sections featured within the basic roadway categories; the two-lane local roadways, in particular, have several variations, each of which would be deployed according to the characteristics of the area being served. Table 4-4 provides a summary of the Roadway Standards for the *Centennial Specific Plan*.

# CIRCULATION PLAN
## CENTENNIAL | TEJON RANCH




Source: Placeworks 2017

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## Centennial Project – Circulation Plan

## Exhibit 4-7

*Centennial Project*

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**TABLE 4-4**
**CENTENNIAL PROJECT ROADWAY STANDARDS**

| Description | Right-of-Way (ft) | Lanes | Raised Median | Class II Bike Lane | Parking |
|---|---|---|---|---|---|
| 8-Lane Major Highway | 150 (max) | 8 | Yes | No | No |
| 6-Lane Major Highway | 136 (max) | 6 | Yes | Yes | No |
| 4-Lane Secondary Highway | 116 (max) | 4 | Yes | Yes | No |
| Collector 1-with Median | 84 | 2 | Yes | Yes | No |
| Collector 2-with Bike Lane | 63 | 2 | No | Yes | No |
| Collector 3-with Parking | 63 | 2 | No | No | Yes |
| Industrial Collector | 94 | 4 | Yes | Yes | No |
| Local Street | 56 | 2 | No | No | Yes |
| Private Driveway-Alley | 26 | 1 | No | No | No |
| Private Driveway-Alley with Crown | 26 | 2 | No | No | No |

Opt.: Optional

[a] Bike lanes can either be Class I, II, or IV.

[b] Secondary is a 4-lane roadway; Limited Secondary is a 2-lane roadway.

Source: Placeworks 2017

### *Intersection Controls*

Intersection controls will be provided to safely and efficiently manage vehicular and non-vehicular traffic throughout the community. Major Highways use features such as, but not limited to, traffic signals, separated bike lanes and crossings (e.g. bridges and tunnels) at intersections and limited access is provided between signalized intersections.

Modern roundabouts are used at certain secondary and collector road intersections where four-lane and two-lane or two two-lane roadways connect. All roundabouts within the project will be designed to help traffic flow better while making sure all pedestrian and bike crossings are well marked and safe. Roundabouts also may be landscaped to increase aesthetic values. Several figures in the Specific Plan illustrate configurations for roundabout design. Other intersections within the community will be controlled with features such as, but not limited to, stop sign and yield sign controls. As shown on Exhibit 4-7, in addition to the intersections proposed on the Project site, two new intersections are proposed with SR-138, as discussed further below.

### *Traffic-Calming Measures*

Traffic-calming measures are roadway designs that control excessive speeds and ensure compatibility with multiple users, such as emergency-service vehicles, pedestrians, joggers, and cyclists. Traffic-calming design measures that may be incorporated into the street improvement plans the following:

- Narrower street widths.

- Roundabouts in place of traditionally controlled intersections.
- Speed tables (long, raised speed humps with a flat section in the middle and ramps on the ends, sometimes referred to as flat top speed bumps or raised crossings).
- "Bulb-outs" or curb extensions at intersections to narrow the pedestrian's crossing distance and restrict roadway width.
- Raised intersections and/or raised crosswalks where the roadway is raised vertically as with speed tables.
- Chokers that narrow the roadway at mid-block and facilitate mid-block pedestrian crossings.
- Chicanes or lateral shifts that result in a narrower street width while also providing space for on-street parking or landscaping on alternate sides of the street.
- Textured pavement and cul-de-sacs.

Traffic calming and control measures associated with any gated residential community would include an entry guard-house with gates or a card-entry control system. Traffic-calming measures are appropriate in many situations and when incorporated into new construction, will result in a roadway system that is accommodating to all users. Design details should be coordinated with those responsible for managing the street system (e.g., Department of Public Works, Fire Department, law enforcement, and paramedics). The actual location and specific traffic-calming measures would be incorporated into street improvement plans as part of the subdivision map approval process.

## Urban Design, Planning, Land Use

Centennial's unique land planning has created an urban design integrated throughout each Village to allow people to work, live and play without having to drive to experience them. Centennial has been designed with a metrics that will guide all development that occurs within the Project. The following design criteria will reinforce the goals of the Mobility Plan:

- An 80 percent average, but no less than 50 percent of all residential units located within one-half mile of a Village Core or Town Center that includes retail and services uses;
- All residential units located within a 5-minute walk (0.25 mile) of a park of 10,000 sf or more, trailhead, clubhouse, or other public amenity;
- Parks located within a 5-minute walk (0.25 mile) of 80 percent all residential units;
- All neighborhoods within each village connect to each other via a network of trails;
- An extensive network of sidewalks, greenway trails (approximately 13 miles), and community trails (approximately 60 miles) that link residential, schools, shopping, and employment areas;
- Two underpasses and one overpass bridge crossing over SR-138 to facilitate both pedestrian and bike access to employment area.

- High-density residential uses located adjacent to commercial centers and a Mixed-Use Overlay areas permits residential uses in commercial centers.
- Implementation of a community intranet system (Section 3.9 of the Specific Plan) to reduce demand for automobile travel to obtain information, provide easily accessible information to facilitate telecommuting and non-automotive transit mode use.

### *Bikeways*

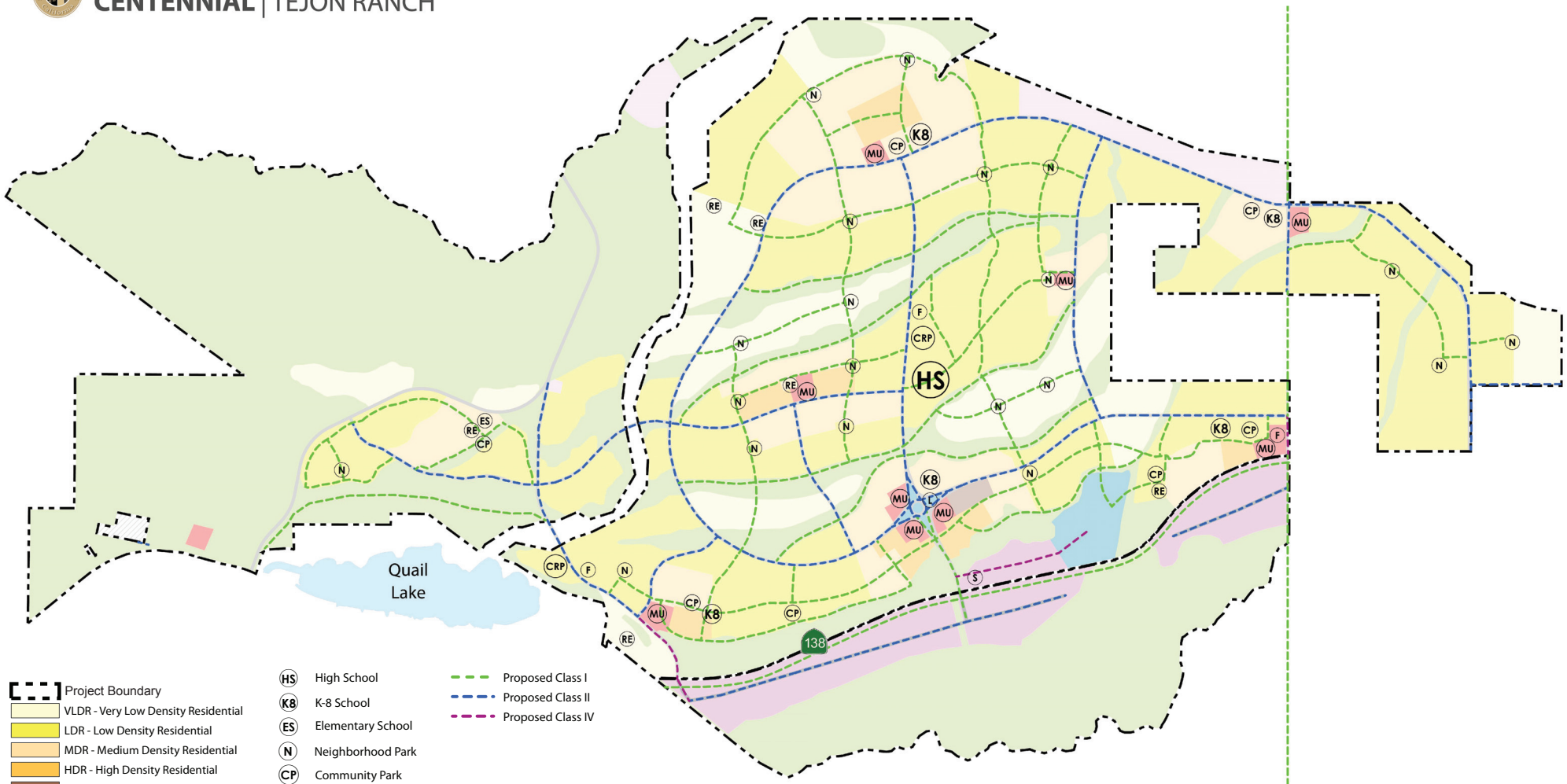
The Project contains a non-vehicular circulation system that consists of bikeways and pedestrian access/trails. A system of bikeways would serve the community, as shown in Exhibit 4-8, Centennial Project – Conceptual Bicycle Plan. The following types of bikeways would be provided:

- *Bike Path (Class I Bikeway/Multi-Use Trail).* A bike path (multi-use trail) that provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians, with cross-flow minimized. These bikeways are found in community and greenway trails (described below).
- *Bike Lane (Class II Bikeways).* A bike lane that provides a striped lane for one-way bike travel on a street or highway (refer to the roadway standards provided in Table 4-4, Centennial Project Roadway Standards, and the roadway cross-sections provided Section 4.7). When roadways contain additional rights-of-way, a painted or physical separation may be included to buffer bicyclists from automobiles and transit. This buffered design is commonly referred to as an Enhanced Class II Bikeway.
- *Bike Route (Class III Bikeway).* A bike route that provides for shared use with motor vehicle traffic and routes that are marked with appropriate signage. Painted shared lane markings on pavement, commonly referred to as sharrows, may also be incorporated into Class III bikeways.
- *Protected Bike Lane (Class IV Bikeway).* A protected bikeway (cycle track) that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. Cycle tracks vary in configuration, but consistently provide a physical separation from motor vehicle traffic through such means as raised medians, on-street parking, bollards, or elevated pathways. They may be one-way (one direction on each side of the street) or two-way (both directions side-by-side on one side of the street). The buffers shown for Class IV bikeways may be raised to provide additional safety for cyclist and vehicular traffic.
- *Trails.* Community, Greenway, and Regional trails within Centennial provide for shared use trails by bicycle, pedestrian, and in some cases equestrian activities.

It is important to note that the designation of bikeways by class should not be construed as a hierarchy in which one is better than the other. Each class of bikeway has its appropriate application based on context.

Pedestrian amenities throughout the community include specific allocations of land to greenway and community trails (described in Section 3.11.7, Trails Plan of the *Specific Plan*) so that pedestrians can circulate throughout the community. The pedestrian system is

# BICYCLE PLAN
## CENTENNIAL | TEJON RANCH




Project Boundary
VLDR - Very Low Density Residential
LDR - Low Density Residential
MDR - Medium Density Residential
HDR - High Density Residential
VHDR - Very High Density Residential
I/C Institutional and Civic
U - Utilities
C - Commercial
BP - Business Park
OS - Open Space
ROW - Right-of-Way
NAP - Not a Part

HS High School
K8 K-8 School
ES Elementary School
N Neighborhood Park
CP Community Park
CRP Community Regional Park
MU Mixed Use
RE Recreation/Entertainment
S Sheriff's Station
F Fire Station
L Library

Proposed Class I
Proposed Class II
Proposed Class IV

Source: Placeworks 2017

# Centennial Project – Conceptual Bicycle Plan

# Exhibit 4-8

*Centennial Project*

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Map Not to Scale

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designed to avoid roadway crossings to the extent feasible. Sidewalks will be provided on all streets. Additionally, two underpasses and one overpass bridge crossing will be constructed to cross the SR-138 to facilitate both pedestrian and bike access to employment centers.

## Transportation Demand Management

Transportation demand management refers to strategies that increase mobility efficiency by discouraging SOV trips, encouraging non-SOV transit modes, and by reducing auto trips during peak periods. TDM measures include increasing non-SOV travel options, providing incentives and information to encourage travel behavior changes, and by reducing the physical need to travel through telecommuting and other online and remote media. Potential future mobility innovations that could further reduce inefficient transit modes and associated emissions, such as intelligent transit systems (ITS) technologies, have been discussed in the 2016-2040 RTP/SCS.

A Transportation Management Association (TMA) will adaptively manage compliance with the Centennial internal and external mobility performance standards by conducting transit mode surveys and other appropriate monitoring activities. Additional TDM measures will implemented by the TMA as may be required to ensure that minimum of 20 percent of total daily peak morning and afternoon external trips and a minimum of 30 percent of total daily internal trips are completed by using non-SOV transit modes. The TMA will be a non-profit entity that is formed and funded prior to the issuance of the first occupancy permit for Centennial. Other TMA activities include the following:

- Coordinate with regional and local transit providers to develop transit service for Centennial;
- Provide transit fare media for all transit service providers and end users;
- Support the formation of vanpools/carpools and rideshare matching databases;
- Develop transit affordability measures and/or incentives;
- Prepare custom transit itineraries for larger employers;
- Provide transit route maps and schedules;
- Required employee commute reduction programs for employers with 250 or more employees;
- Conduct transit network meetings/workshops; and
- Monitor transportation-related technological developments for potential deployment in Centennial.

Street network transit facilities will be developed in conjunction with the Project's transportation demand management (TDM) program and will include the following:

- Partner with Antelope Valley Transit Authority to provide bus service within Centennial and to the rest of the Antelope Valley.

- Partner with Santa Clarita Transit Authority to provide bus service within Centennial and to the rest of the Santa Clarita Valley.
- Partner with Kern Transit to provide bus service between Centennial and the neighboring communities of Tejon Mountain Village, Tejon Ranch Commerce Center and Grapevine to the north.
- Provide ride-share program, on demand pick up, shuttle service or similar methods to employment, commercial and residential areas of Centennial.
- Identify locations for transit centers in proximity to village cores and employment centers such as business park and institutional/civic land uses.

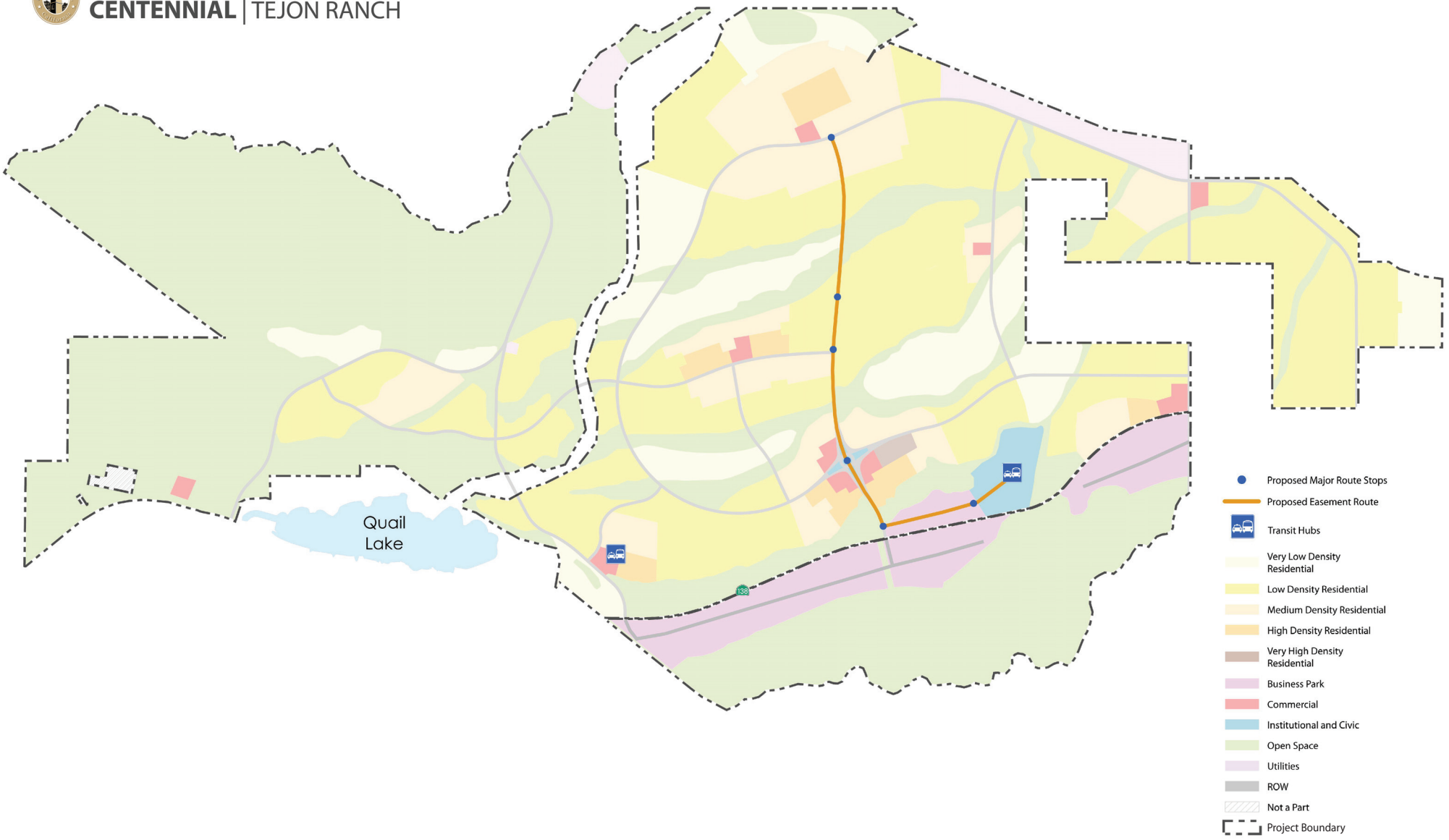
The Project includes a comprehensive system of public transit and other forms of transportation that provides alternatives to the automobile through a coordinated network of public transit routes, bikeways, and pedestrian trails. The Project would accommodate local (internal) and external trips, as described below.

- ***Local Backbone and Feeder System.*** A transit route easement no less than 25 feet wide shall be reserved in the CCD (connecting the Town Center, BP and I/C areas) and also run northerly connecting to the Village 5 Core. At buildout, a local backbone route along the major north/south collectors would be provided connecting from SR-138 to the northern end of the Project site. This backbone route would be supplemented by feeder lines that loop through the Project (local transit routes). The transfer locations along the backbone route would provide connectivity to the local system (shown on Exhibit 4-7). The exact route alignments and operational characteristics are conceptual at this time and would be determined as the community builds out. The local transit system would operate more as a demand-responsive system, at least initially.

  As with other unincorporated areas of Los Angeles County, funding for the local transit system would come from a combination of Proposition A and property taxes. The operation of this transit service may be contracted with an existing service provider, or a newly formed operator serving Centennial may be established. The decision of either establishing a new operator or contracting with an existing operator would be made by Los Angeles County Department of Public Works.

- ***External Trips.*** As shown in Exhibit 4-9, Centennial Project- Conceptual Transit Plan, two transit centers are proposed to be located north of the SR-138 and would be connected by the backbone transit system traveling through the site. The transit centers would cater to a variety of transportation activities and would include other compatible uses allowed on site (e.g., business park, retail services, institutional and civic uses). The centers would provide convenient access to public bus transportation, carpooling, park and ride, special charter operations, and/or similar types of activities related to local or off-site transit usage. An information center would be an important part of the services offered. The primary objective of such centers is to provide focal and gathering points for a variety of private and public transportation activities, all of which reduce dependency on the private automobile.

# TRANSIT PLAN
## CENTENNIAL | TEJON RANCH




Source: Placeworks 2017

## Centennial Project – Conceptual Transit Plan

## Exhibit 4-9

*Centennial Project*

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The transit centers are intended to be accessible for both Centennial residents and residents of nearby communities.

Commuter service may be provided by Santa Clarita Transit, Antelope Valley Transit, or a combination of both. It is envisioned that commuter service from Centennial would be integrated with existing services provided by these operators and would connect Centennial to existing Metrolink service, future high speed rail service, and employment centers throughout the region. These centers would, at least initially, be used to promote carpooling and vanpooling until such time as ridership justifies commuter service. The majority of the operating costs for this service would come from farebox revenues (i.e., fares from the riders). Existing commuter service provided by Antelope Valley Transit recovers approximately 90 percent of its operating cost from farebox revenue. It is anticipated that, at buildout, Centennial would be able to approach similar numbers from farebox revenue. The short fall in operating cost would be covered through Proposition A and/or property tax revenue. A bus storage and maintenance facility would be provided in future phases of development, if necessary. The location would be determined at a later phase; however, it is anticipated that this type of facility would be accommodated within areas designated for Institutional land uses. There is sufficient land available within these areas to accommodate such a facility.

- ***Pedestrian Access/Trails.*** Pedestrian amenities are proposed throughout the community and include specific allocations of land to sidewalks and greenway trails. The trails system is comprised primarily of a County multi-use (hiking, equestrian, and mountain biking) trail and a system of community trails within the street right-of-way that can also be used as a bike path, as trails within the greenways (also considered bike paths), and as Class II Bicycle Lanes. The trail system would connect residential neighborhoods to commercial, employment, school, parks, civic, and institutional land uses.

  Exhibit 4-10a, Centennial Project – Recreation and Trails Plan shows the Project's non-vehicular circulation system components, including the two underpasses and one overpass bridge crossing will be constructed to cross the SR-138 to facilitate both pedestrian and bike access to employment centers.

  - *Greenway Trails.* These are improved trails within greenways that traverse the Project site. Greenway trails are located along the edges of the Open Space and residential designations. The trails may be constructed of poly-pavement, decomposed granite, soilcrete, asphalt, concrete, or other pervious surface. Signs would be posted along trails cautioning against disturbing any sensitive drainages. The cross-section for a typical greenway trail is provided in Exhibit 4-10b, Centennial Project – Greenway Trails.
  - *Regional Trail.* A regional multi-purpose trail extending across the Project site, connecting to the town of Gorman through the residential development on the west side of the Specific Plan area across SR-138 and across the BP designation in the southern portion of the site and ultimately connecting to the realigned Pacific Crest Trail. In the open space areas, this trail will be a porous surface

RECREATION PLAN
CENTENNIAL | TEJON RANCH


Source: Placeworks 2016

# Centennial Project - Recreation and Trails Plan

Exhibit 4-10a

*Centennial Project*

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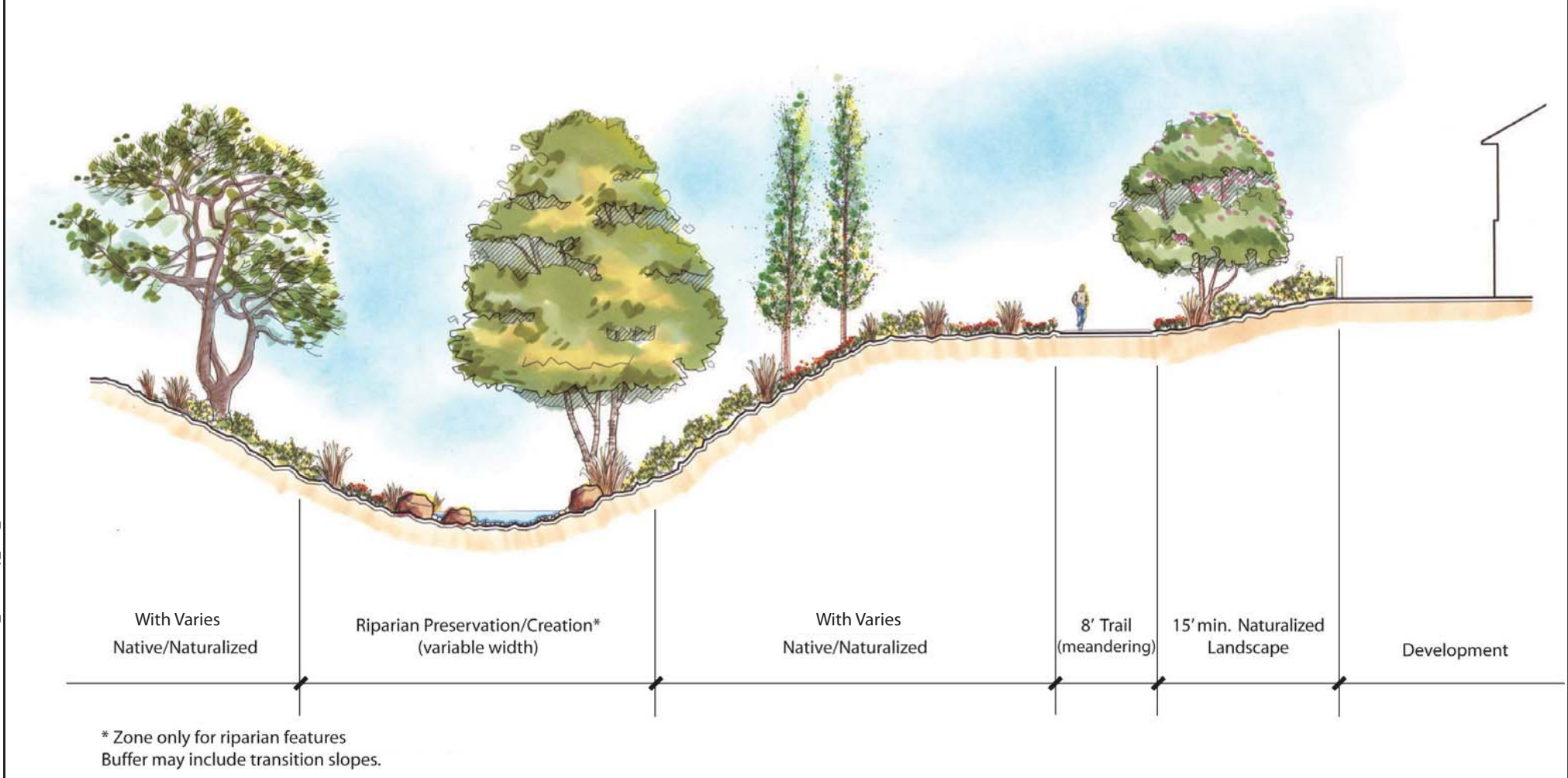
Typical Greenway Trail (along Open Space/Drainage)




Source: Placeworks 2015

# Centennial Project – Greenway Trails

Exhibit 4-10b

*Centennial Project*

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trail, such as decomposed granite. It will be a minimum of eight feet wide and will accommodate pedestrians and cyclists, as well as equestrian use.

- *Community Trails.* The Project will include the development of community trails, in addition to the greenways, that would be a minimum of eight-foot-wide and be shared bike and pedestrian paths, conceptually located adjacent to the backbone road system. These trails are shown on Exhibit 4-10a, Centennial Project – Recreation and Trails Plan. A cross-section is depicted on Exhibit 4-10c, Centennial Project – Typical Community Trail.

Also, Pacific Crest Trail (PCT), which is designated as a National Scenic Trail that traverses approximately 2,650 miles through 3 states (California, Oregon, and Washington) will be relocated to the west side of 300th Street West, which travels through the Project site. This realignment is not a part of the Project, but is assumed to be the future alignment for evaluation purposes in this EIR. Cross-section graphical depictions of these trails are included Section 5.14, Parks and Recreation.

## National Cement Plant Road Re-Alignment

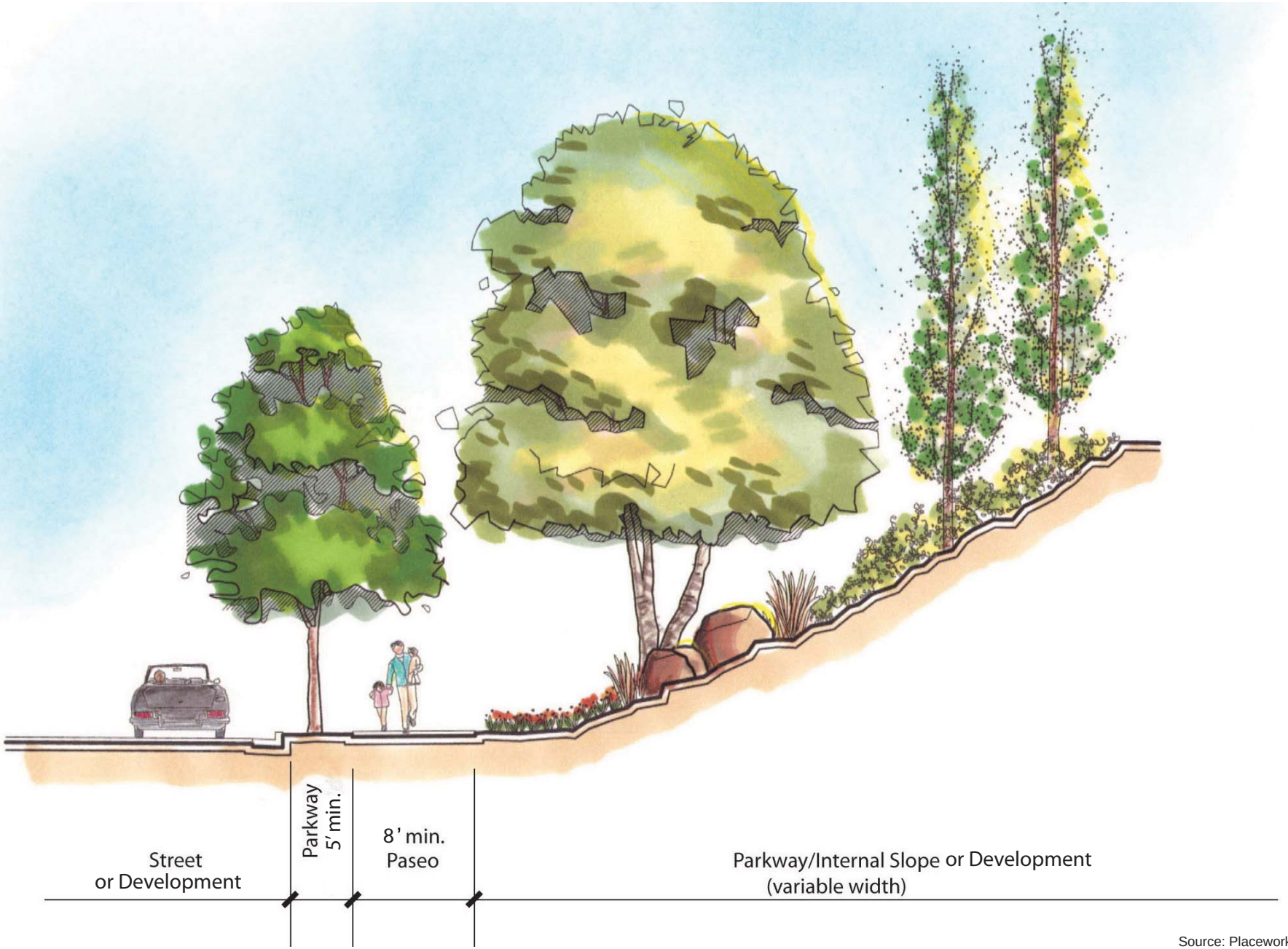
The current alignment of National Cement Plant Road traverses from the off-site National Cement Plant in Kern County, through off-site open space areas in Los Angeles County, through the Project area and over the West Branch of the Aqueduct, ultimately connecting to SR-138. A portion of the roadway alignment within the Project boundaries is planned to be re-aligned through the Project site to access the SR-138 from the western side of Quail Lake rather than from the current connection on the east side of Quail Lake. This realignment serves the purpose of providing a shorter route of access for the cement trucks to the I-5, eliminates concrete truck travel over the bridge that crosses the West Branch of the Aqueduct, and eliminates cement truck traffic from traversing through one of the entrances to the Project site. The proposed re-alignment of National Cement Plant Road will be consistent with Caltrans' SR-138 intersection spacing requirements.

The re-alignment of the National Cement Plant Road will occur entirely within Tejon-owned property within Los Angeles County. The new alignment will intersect with SR-138 on the western side of Quail Lake. Intersection improvements (e.g. deceleration lane, an acceleration lane, turn pocket) would be constructed within the Caltrans right-of-way to allow for safe ingress/egress to the re-aligned National Cement Plant Road from SR-138, as discussed in Section 4.8, Off-Site Project Features.

Upon completion of the re-alignment, Project-related traffic would use the remaining portions of the existing National Cement Plant Road, which currently connects to SR-138 just east of Quail Lake and the Quail Lake Skypark, as one point of access into the Project site.

## Intersection Improvements at State Route -138

In anticipation of necessary regional improvements, Caltrans has prepared a Project Study Report/Project Development Support (PSR/PDS) for the NW138 Project that addresses the long-term alignment and right-of-way needs of SR-138 between I-5 and SR-14. There is no implementation schedule in the PSR/PDS for the improvements along SR-138. A portion of




Source: Placeworks 2015

# Centennial Project – Typical Community Trail

Exhibit 4-10c

*Centennial Project*

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Caltrans' SR-138 study area and proposed re-alignment traverses the Project site, as depicted on Exhibit 4-7, Centennial Project – Circulation Plan.

Caltrans is the lead agency for the completion of the Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) for the NW138 Project. Metro is a funding partner and is responsible for transportation improvements in Los Angeles County. Together, Caltrans and Metro have identified specific roles and responsibilities, and with delegated authority from the Federal Highway Administration (FHWA), Caltrans will ensure that the Final EIS/EIR is in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). As such, all aspects of the re-alignment and any other improvements to the SR-138 would be analyzed under the NW138 Project EIR/EIS. The NW138 Project environmental document considers a No Build Alternative and three other alternatives (Metro 2014).

Build (2040) Alternative 1 improvements would include modifying the exiting SR-138 roadway into freeway (six-lane divided) and expressway (four-lane divided) sections, including changing the alignment in some areas. The portion of SR-138 between 300th Street West and I-5, which is applicable to the Project site, is envisioned by Caltrans to be a 6-lane divided freeway that includes a 22-foot median. As show on Exhibit 4-7, Centennial Project – Circulation Plan, the proposed future alignment of the NW138 Project Alternative 1 is depicted as a "Caltrans Study Area", which includes land owned by Caltrans within their right-of-way as well as land owned by Tejon Ranch, LLC. Build (2040) Alternative 2 considers the construction of an Expressway/Limited Access Conventional Highway. Caltrans also considered the implementation of a Transportation System Management (TSM) Alternative. Specified sets of improvements were analyzed as part of the build alternatives and included mainline widening, connector improvements, access type and intersection control treatments. The Transportation Analysis Report (TAR) also listed additional access types and control treatment options for the build alternatives. The analysis of the additional options is documented in the Supplemental Intersection Control Evaluation report (ICE Report).

The Centennial Project site has three existing intersections with SR-138: Gorman Post Road, the Cement Plant Road (identified as private road by Caltrans), and 300th Street West. Alternative 1 would involve a grade-separated undercrossing of the SR-138 at all three intersections. It is noted this would result in the largest SR-138 right-of-way among the alternatives. However, it does not include additional right-of-way for the inclusion of potential future commuter rail services (Metro 2015). If additional consideration of a rail component is pursued by Metro, it would require additional right-of-way that is outside of the currently depicted Caltrans Study Area, and would be outside of the scope of the Caltrans EIR/EIS.

Alternative 2 improvements would modify the existing SR-138 roadway into expressway (six and four-lane divided) and limited access conventional highway (four-lane) sections, including changing the alignment in some areas. Alternative 2 would involve a grade-separated undercrossing at Gorman Post Road, and at-grade intersections at Cement Plant Road and 300th Street West. The Transportation System Management (TSM) Alternative would provide operational improvements without adding capacity or access restrictions,

and would widen the shoulder through the majority of the corridor. This alternative would also provide a curve correction to a stretch of SR-138 immediately east of Quail Lake near the Ridge Route intersection.

Because the ultimate implementation of SR-138 is unknown, the Project depicts the current alignment of SR-138 on the Land Use Plan as being an "off-site" feature. For the purposes of this EIR analysis, all Caltrans right-of-way property up to the existing edge pavement of the SR-138 is considered to be "on-site", whereas all existing paved areas of the SR-138 are considered "off-site" (see Exhibit 4-21, Centennial Project – Off-Site Project Components).

The Project will have five intersections that interface with SR-138. The connection of the proposed realigned National Cement Plant Road to SR-138 on the west side of Quail Lake, and the intersection of 290th Street West, are discussed as "off-site" improvements in Section 4.8, Off-Site Project Features below. The remaining three intersections include: slight relocation of the existing intersection of National Cement Plant Road with SR-138 approximately 580 feet to the east; a new connection with SR-138 in the central portion of the site near the main Town Center in Village 3; and the existing roadway connection with SR-138 at 300th Street West. Each of these five intersections would require roadway improvements, including the construction of acceleration/deceleration lanes and turning pockets within the Caltrans right-of-way. Improvements associated with these intersections are anticipated in this EIR and are based on the current SR-138 alignment.

The draft NW 138 EIR/EIS, TAR and ICE Report do not identify a preferred alternative and Caltrans has deferred the selection of a preferred alternative to the Final EIR/EIS. Caltrans has also reserved the right to determine the specific preferred intersection control based on the traffic and safety data at the time the improvements occur. Thus, depending on the timing of the implementation of the realigned SR-138; the timing of the implementation of the Project; and which Caltrans alternative is chosen, the ultimate connection requirements for Project roads to SR-138 may need additional future CEQA analysis in conjunction with future phases of development. All construction activities within Caltrans right-of-way would be closely coordinated with Caltrans, subject to their review and design standards, and subject to their approval.

## Bridges Over West Branch of the Aqueduct

In addition to the existing National Cement Plant Road bridge, the Project includes the construction of one new bridge over the West Branch of the Aqueduct. These are discussed further below in Section 4.7, Off-Site Project Features, because the California Aqueduct is not a part of the Project site. The new and existing bridge would span the width of the Aqueduct and would not interfere or intrude into the Aqueduct itself; however, construction activities on both bridges may require some grading within California Department of Water Resources (DWR) property adjacent to the West Branch. Bridge widths would be designed to accommodate the travel lanes identified on each highway classification and would have a separate road deck for the travel lanes on each side of the roadway median. A sidewalk area would be provided at the outer edge of each bridge section and would be wide enough to accommodate pedestrian and bicycle use. A raised barrier would be provided between the

travel lanes and greenways for protecting pedestrians. Aesthetically enhanced traffic barriers would be provided along both sides of each bridge structure.

### 4.5.6 PARKS/RECREATION

Under the Parks and Recreation Plan, the Project devotes approximately 163 gross acres to Park Overlay, which would include public neighborhood parks, community parks, and community regional parks. In addition, 75 acres is designated Recreation/Entertainment, which would include private recreation facilities. The Project includes a County multi-use trail, that would connect to the realigned Pacific Crest Trail, and a system of community trails within the street right-of-way that can also be used as a bike path, as trails within the greenways (also considered bike paths), and as Class II Bicycle Lanes. The trail system would connect residential neighborhoods to commercial, employment, school, parks, civic, and institutional land uses. Section 5.14 of this EIR describes in detail how the Project satisfies the requirements of the *General Plan* and the County's Parkland Dedication Ordinance, located in Title 21 of the *Los Angeles County Code.* Exhibit 4-10a, Centennial Project – Recreation and Trails Plan, depicts the conceptual location of park uses.

There are three types of public parks that would be developed as part of the Project and dedicated to the County (neighborhood, community, and community regional), which are described above in the description of Park Overlay. In addition to the 163 acres of public parks, there are additional recreation amenities that would be developed including pocket parks (public and private), private commercial recreation facilities, private community recreation facilities (e.g., in multi-family complexes), and the County multi-use. The County multi-use trail and greenway trail system are described further below. Designated open space areas would also provide the Project area with passive and/or active recreational opportunities.

Pocket parks are typically less than ½-acre, and the intent is to provide an average of one 10,000-sf pocket park per 200 units. Amenities for pocket parks can include both active and passive features, such as (e.g., children's play apparatus, picnic areas, fountains and seating areas) depending on the community's setting and need. Pocket parks may be developed as both public and private parks, but do not count towards to Project's parkland obligation. Pocket parks would be privately owned, but open to the public, and would be maintained by the Homeowner's Association (HOA), Landscape and Lighting Maintenance District (LLMD), or other similar entity. Community gardens are edible gardens that can stand alone or be a component within a park. View Parks are another form of pocket park. Their purpose is for passive recreation like picnicking and the enjoyment of scenic vistas of the mountains and surrounding open space that frame Centennial.

Neighborhood parks are typically between three and ten acres and are located to serve surrounding neighborhoods within a ½-mile radius. Amenities can include informal open play areas, children's play apparatus, picnic facilities and barbeques, and sports fields.

Community parks are generally 10 to 20 acres and serve several neighborhoods within a 1- to 2--mile radius; they are intended to provide a wide variety of active and passive recreational activities, including group activities that may not be feasible in a neighborhood

park. Amenities can include those provided for neighborhood parks as well as group picnic areas with overhead shelters, lighted sports fields, basketball and tennis courts, concession buildings, maintenance buildings, on-site parking areas, and information kiosks.

Community regional parks are typically 20 to 100 acres and have a service radius of 20 miles. Amenities for community regional parks can include a jogging exercise course, informal open play areas, children's play apparatus, group picnic areas with overhead shelters, barbecues, lighted sports fields, basketball courts and tennis courts, information kiosks, public restrooms, concession buildings, recreation offices, maintenance buildings, and on-site parking areas. Community regional parks may also have one or more of the following features: multiple sports facilities, an aquatics center, a fishing lake, a community building and gymnasium, and scenic views and vistas.

Private commercial recreation facilities and private community recreation facilities could include pools, sports courts, workout equipment, crafts, meeting rooms, ballrooms, food service exclusive to a clubhouse, and banquet facilities, among other amenities. Other private recreational facilities could include a clubhouses for active adult communities and small recreation centers for multi-family developments that could include a pool, a cabana, a meeting room and a kitchen, among other uses. The private recreation facilities would provide a varied array of amenities. No specific locations for the commercial or community recreation facilities have been identified; locations would be determined as part of each future tract map.

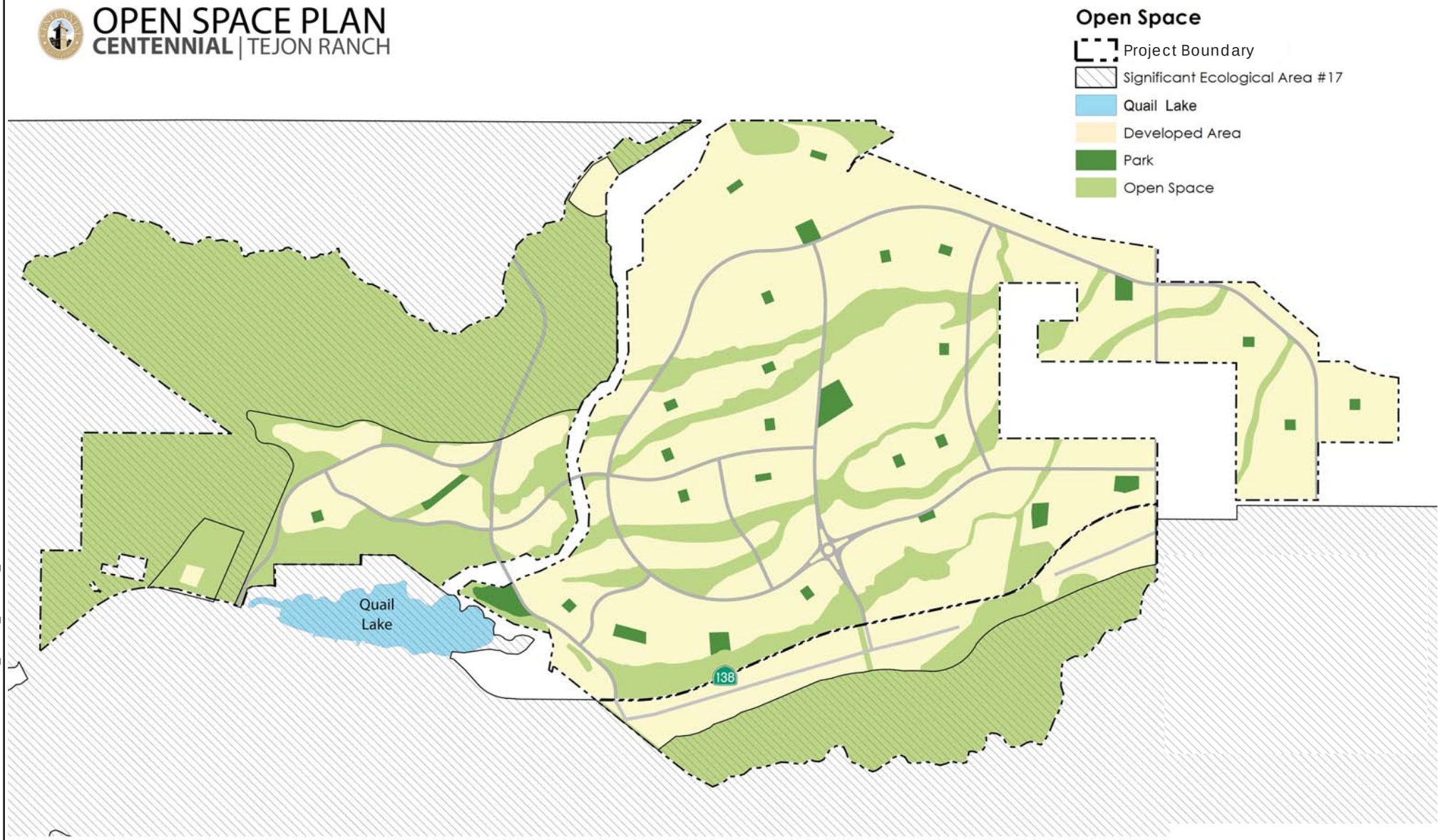
### 4.5.7 NATURAL RESOURCES/OPEN SPACE

## Natural Resources/Open Space Management Plan

The preservation and management of natural resources is an important component of the Project. The Open Space Management Plan (OSMP), as described in Section 3.13 of the *Centennial Specific Plan,* provides a set of standards by which the biological and natural resources in the Project area would be managed during the short-term construction activities and the long-term life of the Project. This Plan governs the Open Space designation areas within the Project site boundaries (see Exhibit 4-11, On-Site Open Space/Mitigation Area); specifies which land is to be protected; and discusses how the protected land (e.g. greenways, transition areas, hillsides, and wildfire modification zones) are to be maintained. The Plan governs the provisions of the oak tree resources program, recreation and access, riparian and other types of habitat enhancement or restoration, and long-term management of the open space.

The Project has been designed to preserve areas of higher biological value. As a result of this effort, all 3,861 acres of the County of Los Angeles' San Andreas Significant Ecological Area (SEA 17) that fall within the Project site boundaries are avoided. Preservation of these SEA lands provides a layer of protection for a unique assemblage of plant and wildlife populations known to occupy the area. The preservation also protects local wildlife movement on and off-site because these areas are positioned contiguous to off-site open space areas, thereby providing a larger total area of continuous preserved open space for local wildlife to use as habitat and for movement. No Project development would occur within SEA 17.

OPEN SPACE PLAN
CENTENNIAL | TEJON RANCH




Source: Placeworks 2016

# Centennial Project – On-Site Open Space/Mitigation Area

Exhibit 4-11

*Centennial Project*

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Map Not to Scale

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The Project requires that some drainage corridors be modified to incorporate necessary flood-control or water quality features; whenever possible, these modifications will incorporate "naturalized features" to blend the improvements into the natural appearance of unmodified areas. In addition, implementation of the Project would avoid or minimally impact riparian resources along sensitive drainages. Of the 12,323 acres within the Project site, approximately 5,624 acres would be included in the Open Space land use designation. Of the 5,624 acres of designated Open Space, approximately 5,116 acres (42 percent of the total Project site) are intended to (1) remain in their original natural condition; (2) be restored; and/or (3) be enhanced by weed abatement, fencing, and native species planting, among other means. Of this amount, approximately 3,861 acres are designated as SEA 17 to be preserved in perpetuity within the Project site boundaries.

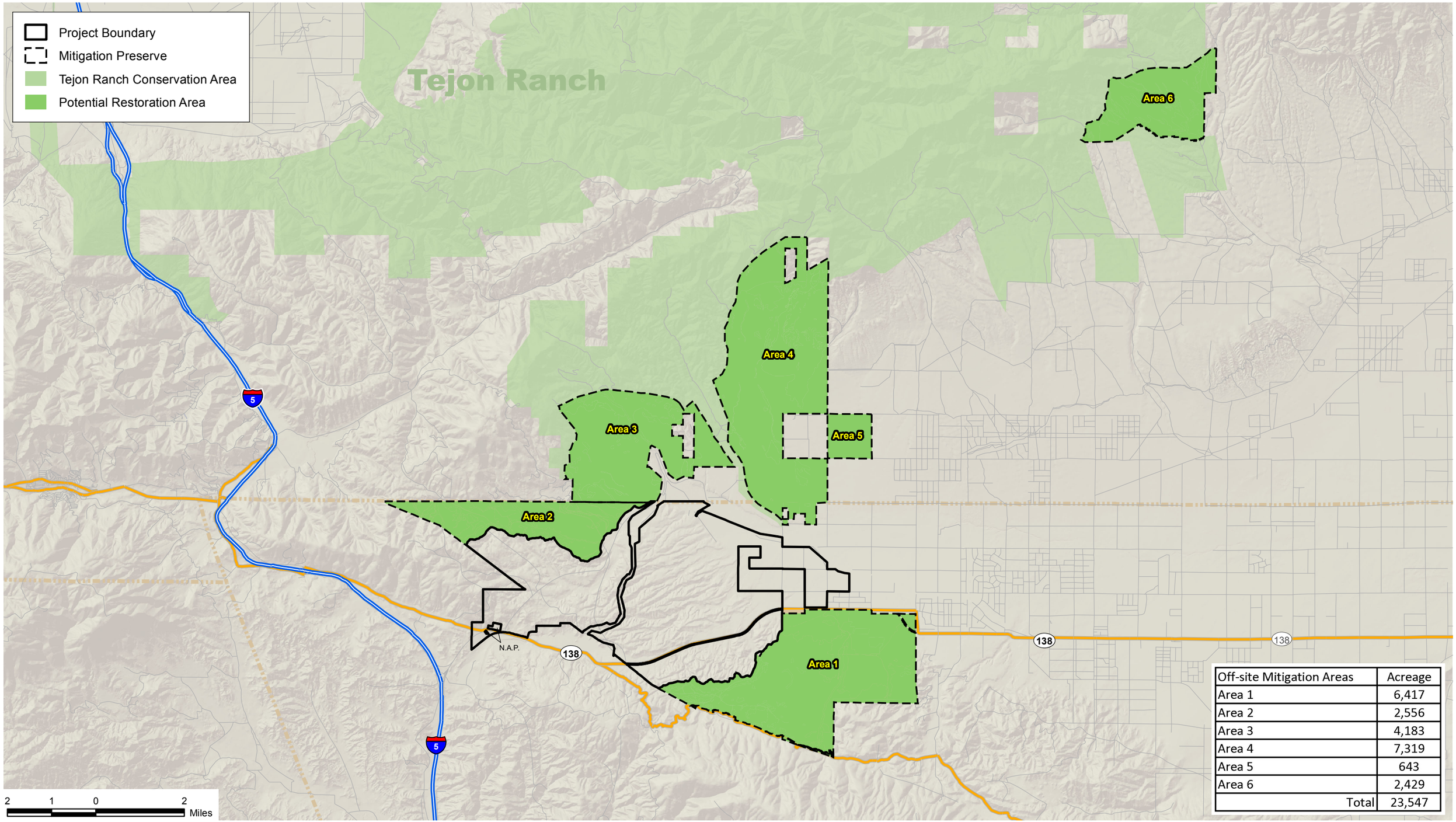
Additionally, approximately 23,547 acres of off-site areas would be set aside for preservation to mitigate impacts to biological resources, as discussed further in Section 4.7, Off-Site Project Features and depicted in Exhibit 4-12, Centennial Project – Off-Site Mitigation Preserve. The Developer would provide a conservation easement for both the 3,861 on-site preserved acres and the 23,547 off-site preserved acres to ensure preservation of the total 27,412-acre open space preserve in perpetuity. Importantly, contained within this 23,547 acres of off-site preservation are approximately 8,935 acres of SEA 17 lands, which contain high-value biological resources.

Therefore, when considering the amount of preserved on-site and off-site lands (i.e. 27,412 acres) compared to the total disturbed/developed areas within the Project site boundaries based on the Grading Plan (i.e., 7,751 acres), almost 3.5 times as much land would be preserved as would be developed.

## Grassland Mitigation Plan

The lands designated as Open Space (OS) on-site are generally divided into two large areas: the northwest portion of the Project site and the southeastern portion of the site. The area in the northwestern part of the site is comprised primarily of Oso Canyon, which includes a blueline stream and foothills/canyons with slopes of 25 percent or greater. The southeastern portion of the site contains similar vegetation and associated biological resources.

Grazing would occur within the OS designation. Grazing operations would be directed under the provisions of the Grassland Mitigation Plan, which is a component of the Mitigation Preserve Management Plan and/or the Ranch-Wide Management Plan (which is being prepared by the Tejon Ranch Conservancy); grazing would include temporary and long-term activities, possibly in perpetuity if determined necessary to maintain grassland values based on the Grassland Mitigation Plan (refer to Mitigation Measure [MM] 7-10 in Section 5.7, Biological Resources). The Grassland Mitigation Plan would preserve and manage existing native grasslands to ensure their sustainment in perpetuity. The Plan is intended to be a dynamic program that allows for incorporation of new restoration and enhancement treatments over time to determine the optimum methods of treatment for management and restoration of native grassland communities.




| Off-site Mitigation Areas | Acreage |
|---|---|
| Area 1 | 6,417 |
| Area 2 | 2,556 |
| Area 3 | 4,183 |
| Area 4 | 7,319 |
| Area 5 | 643 |
| Area 6 | 2,429 |
| Total | 23,547 |

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# Off-Site Mitigation Preserve

Exhibit 4-12

*Centennial Project*

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## Other Relevant Plans

### *Tejon Ranch Conservation and Land Use Agreement (TRCRWA)*

On June 17, 2008, Tejon Ranch Company (TRC) entered into a Conservation and Land Use Agreement (Agreement) with Audubon California, the Endangered Habitats League, Natural Resources Defense Council, Planning and Conservation League and Sierra Club (Resource Groups) and the nonprofit Tejon Ranch Conservancy (Conservancy). Known as the Tejon Ranch Conservation and Land Use Agreement (TRCRWA), the Agreement allows TRC and its development partners to pursue approvals for development of portions of the Tejon Ranch (Ranch), including the Project, without opposition from the Resource Groups, while providing for the designation of Project open spaces and the dedication or sale of conservation easements over approximately 240,000 acres, or approximately 90 percent, of the 270,000-acre Ranch. Additionally, the Project Open Space Preserve includes areas of off-site preservation lands within Tejon Ranch lands. Areas 1 and 2 are located within Los Angeles County and include a total of 8,973 acres, as depicted in Exhibit 4-12, Centennial Project – Off-Site Mitigation Preserve. In total, the Off-site Mitigation Preserve includes 23,547 acres of off-site property that will be used to mitigate for Project-related biological impacts.

**Dedicated Conservation Areas.** The TRCRWA permanently protects approximately 145,000 acres through a series of phased dedications of conservation or other open space easements. Approximately 30,000 acres of the dedicated conservation areas are adjacent to or near the Project site. Dedications are phased to correspond to development approvals for the Project.

**Purchased Conservation Areas.** TRC provided options for the Resource Groups to purchase development rights, through acquisition of conservation easements, for five separate areas of the Ranch, totaling an additional 62,000 acres. The acquisition of the five conservation easements was completed in March 2011. Three of these areas, or approximately 20,000 acres, are located near or adjacent to the Project site.

**Project Open Space Areas.** The TRCRWA set aside approximately 33,000 acres within proposed development areas on the Tejon Ranch as prescribed open space areas. Some of this open space would be located within the Centennial Project boundaries, if approved, as shown on Exhibit 4-11, Centennial Project – On-Site Open Space/Preserve Area. Of the 12,323 acres within the Project site, approximately 5,624 acres would be included in the Open Space land use designation, and approximately 3,861 of the open space acres are designated as SEA 17 to be preserved in perpetuity within the Project site boundaries.

**Pacific Crest National Scenic Trail.** The TRC is working with the Conservancy, the US Forest Service and the Pacific Crest Trail Association to provide an approximate 10,000-acre easement on conserved lands to realign a 37-mile segment of the Pacific Crest National Scenic Trail through the Ranch. The majority of the realigned trail is located adjacent to the Project site and the nearby conserved lands described above. The siting and construction of this trail is subject to compliance with environmental review and other applicable laws.

The following uses for the conserved lands are also provided for in the Agreement:

> **State Park.** The Resource Groups and TRC agreed to work with the Conservancy and the California State Parks Department to create a state park within the conserved lands.
>
> **University of California Natural Reserve.** TRC agreed to work with the Conservancy and the University of California (UC) Natural Reserve System to determine whether portions of the conserved lands may be viable for a future UC Natural Reserve sponsored by University of California in Los Angeles as well as how the Conservancy and the UC Natural Reserve could partner on research projects in the Conservation areas.

The conserved lands identified above are managed pursuant to a Ranch-Wide Management Plan (RWMP) prepared by the Conservancy. The Conservancy bylaws provide for a 12-member board consisting of four members appointed by the Resource Groups, 4 members appointed by TRC and 4 independent members jointly appointed by the Resource Groups and TRC during the first 3 years and by the Conservancy Board thereafter. The Conservancy has hired experienced staff and consultants with expertise in land trust administration, conservation biology and open space land management.

The Conservancy updates, monitors and enforces implementation of the RWMP on conserved lands subject to conservation, preservation, mitigation and enhancement measures, as required under applicable law or imposed by federal, State or local agencies as part of any permit or approval for the Ranch or projects within the Ranch. The Conservancy manages and monitors natural resource conservation, preservation and mitigation measures required under applicable law or imposed by federal, State or local agencies as part of any permit or approval on conserved lands, including those associated with the Project. The Conservancy holds all conservation easements required by such permits or approvals.

Funding for the Conservancy is assured through a combination of advances from TRC and payment of conservation fees collected at the time of qualifying initial sales and resales of certain residential lots and units within the development projects. Conservancy activities are subject to all applicable federal, State and local laws and regulations.

### 4.5.8 INTEGRATED WATER RESOURCES MANAGEMENT APPROACH

Planning and engineering of the Project incorporates watershed management principles and related infrastructure and water resources planning into a comprehensive integrated water resources management approach as described below. A description of proposed infrastructure/facilities for the water-related components of the Project is presented in Section 4.5.9.

The concept of the integrated water resources management is defined as “a process, which promotes the coordinated development and management of water, land and related resources” (Rahaman and Varis 2005). The Project has been designed to optimize the use of currently available water resources and those generated by the Project's operations so as to

minimize its impact on potable and non-potable water resources. Incorporation of the Centennial Green Development Program requires reduced potable water consumption through the use of drought-tolerant or native plants in greenways, transition areas, and rights-of-way; low-flow showerheads, faucets and toilets; intelligent irrigation devices; and recycled water use primarily for landscape irrigation. Additionally, the Project's water resource management infrastructure for wastewater treatment, recycled water, flood control/drainage, water quality, hydromodification control, and sediment management are integrated to create a cohesive infrastructure system that minimizes the Project's effects on the environment.

For example, the Project includes two wastewater reclamation facilities for the tertiary treatment of all wastewater generated by Project uses. This recycled water will be delivered throughout the Project site for non-potable uses (e.g., irrigation), thereby reducing the Project's demand for imported water and groundwater resources. The Project will also use its underground aquifers to bank imported water supplies available but not needed during average and wet years to provide for Project uses in dry years. The Project's flood control/drainage and water quality facilities have been designed in such a way that they can increase groundwater recharge, thereby increasing the amount of groundwater available for Project uses and decreasing the Project's need for imported water resources. As a result of this integrated approach, the Project will be able to rely on its groundwater and wastewater resources, as well as its Green Development Program requirements to reduce the demand for imported water from the State Water Project (SWP) that the Project would otherwise create, and will be more protective of its natural drainages and sensitive habitats.

The key objectives of the integrated water resources management approach are listed below.

- Promote water conservation by
    - Minimizing water use.
    - Minimizing use of imported water supplies.
    - Maximizing water reuse.
- Promote Water Supply Reliability by
    - Providing potable water from a variety of sources (e.g., SWP water, groundwater, other non-SWP supplies, banked water) to address dry year conditions.
    - Purchasing surplus SWP water in years when it is available for storage in local water banks.
    - Monitoring water usage to ensure conservation benefits are achieved.
- Protect water quality on site and off site.
- Balance hydrologic factors by
    - Maintaining macro-drainage patterns on site and
    - Avoiding hydrologic impacts.
- Promote reliability of structural systems.

Consistent with the County's CEQA Initial Study Checklist, the following topics are typically addressed separately in EIRs: water quality/runoff, wastewater generation and treatment, water supply, and flood control/drainage. Therefore, this Centennial Project EIR considers these topics separately in Sections 5.4, 5.19, 5.18 and 5.2, respectively. However, to recognize the environmental benefits that would result from implementation of the Integrated Water Resources Management Approach, each of these sections in this EIR also includes a description of how the traditional CEQA analysis topic contributes to the Integrated Water Resources Management Approach. These descriptions are provided below.

## Water Supply Overview in Antelope Valley

### *Mandatory Water Conservation*

Governor Brown declared a State of Emergency on July 15, 2014, resulting in the State Water Board adoption of Resolution No. 2014-0038 prohibiting several activities, including (1) the application of potable water to outdoor landscapes in a manner that causes excess runoff; (2) the use of a hose to wash a motor vehicle except where the hose is equipped with a shut-off nozzle; (3) the application of water to driveways and sidewalks; and (4) the use of potable water in non-recirculating ornamental fountains. The State Water Board resolution also directed urban water suppliers to implement the stage of their water shortage contingency plans that impose mandatory restrictions on outdoor irrigation of ornamental landscaping or turf with potable water and report monthly water production information to the State Water Board.

On April 1, 2015, Governor Brown signed Executive Order (EO) B-29-15, which contains a total of 31 directives–the primary requirement being a 25 percent statewide water reduction in potable urban water use through February 28, 2016, as compared to the amount used in 2013. EO B-29-15 required the State Water Resources Control Board (SWRCB) to impose restrictions to achieve the 25 percent reduction, and is directed to consider the relative per capita water usage of each water supplier's service area, as reported monthly to DWR. Those areas with high per capita use were required to achieve proportionally greater reductions than those with low use.

In May 2016, the Governor issued EO B-37-16, which continued the requirement for monthly reporting of water conservation levels versus 2013 use but allowed each urban water supplier to set its own target customized to fit its unique conditions. Following this EO, the State Water Board adopted a revised emergency regulation which extends restrictions on urban water use through January 2017. Under the new regulation, last year's state-mandated conservation targets are being replaced with locally determined measures established under a self-certification approach ("Stress Test"). The Stress Test requires each water supply agency to ensure a three-year supply assuming three more years of drought conditions. Water agencies that would face shortages under three additional dry years are required to meet a conservation standard equal to the amount of shortage.

### *Antelope Valley Groundwater Adjudication Judgment and Physical Solution*

The Antelope Valley Groundwater Basin is regulated in accordance with a Court-approved adjudication Judgment and Physical Solution entered in December 2015 in the consolidated complex proceedings commonly known as the "Antelope Valley Groundwater Cases". In 2005, the Judicial Council of California consolidated several related lawsuits (Judicial Council Coordination Proceeding No. 4408) which were assigned to the Hon. Jack Komar in the Santa Clara County Superior Court (Case No. 1-05-CV-049053). Four trial phases were completed in the proceeding, including the determination of the adjudication basin boundaries (phase 1); the determination that all of the basin is hydrologically connected for adjudication purposes (phase 2); the determination that the basin is overdrafted and that the total sustainable yield, including native groundwater and return flows, is approximately 110,000 afy (phase 3); and the determination of groundwater production amounts for parties to the proceedings during 2011 and 2012 (phase 4).

A "physical solution" refers to agreed-upon or judicially imposed resolution of conflicting groundwater claims. The Judgment and Physical Solution adopted for the Antelope Valley establishes a regional watermaster to regulate groundwater use consistent with applicable law and the total sustainable yield of the basin under the auspices of the court. As of January 2016, all groundwater users in the basin are required to begin a 7-year "rampdown" period during which groundwater production will be reduced to levels consistent with the total sustainable yield of approximately 110,000 afy. Among other provisions, the Judgment and Physical Solution allows for interbasin groundwater transfers subject to watermaster approval; water banking in accordance with storage agreements with the watermaster; the production of return flows from imported water use within the Antelope Valley; the production of return flows from imported water use in the watershed surrounding the basin subject to watermaster approval; and the carryover and storage of unused groundwater allocations (see Section 5.18.3, "Antelope Valley Groundwater Basin"). The Judgment and Physical Solution approved by the court is attached as Appendix 5.18-D.

### *Model Water Efficient Landscape Ordinance*

In response to the governor's Drought Executive Order (B-19-15) the State DWR updated the Model Water Efficient Landscape Ordinance (MWELO), which was adopted by the State on July 15, 2015. This ordinance will effectively reduce water use for new landscaping and among other things, it effectively limits the use of turf in residential landscapes to 25 percent of the total landscaped area, and prohibits the use of turf in non-residential landscapes, except where irrigated with recycled water. Agencies have until February 1, 2016, to adopt this model ordinance or a similar ordinance and must start reporting on implementation and enforcement of the ordinance by December 31, 2015, and then by January 31 in subsequent years. The impact of this new MWELO will be reduced water demands in nearly all new and renovated landscapes, with the exception of areas irrigated with recycled water, as any area over 500 square feet must comply with the ordinance.

## Water Supply/Demand Element

Section 5.18, Water Resources, of this EIR includes a summary of the Water Supply Assessment (prepared pursuant to Senate Bill [SB] 610) for the Project. Key principles of the Centennial Water Supply/Demand element of the Management Strategy are:

- To comply with SB 610.
- To maximize water conservation.
- To maximize use of recycled water.
- To minimize use of SWP supplies,
- To incorporate water banking to provide supplies for Project demand during single and multiple dry year conditions.
- To provide water supplies from multiple sources, including local groundwater, recycled water, Antelope Valley - East Kern Water Agency (AVEK) water, banked water, return flows, and other purchased water supplies from outside the AVEK service area in order to increase water supply reliability in years of normal or average hydrology, as well as single- and multiple-dry year conditions.[4]

Demand for water supplies purchased from outside the AVEK service area would be minimized through water conservation, including using low flow and ultra-low flow fixtures; installing smart irrigation devices; planting drought-tolerant or low-water usage landscaping; and maximizing water reuse. Smart irrigation controller devices include but are not limited to (1) rain gauges or sensors attached to a dwelling unit with a controller that would shut off in a rain event and (2) controllers that receive real time data from weather stations and adjust irrigation quantities accordingly. Smart irrigation controller devices can be manipulated on site or by the Internet. Water use in the Project area would be reduced substantially over more traditional developments, and wastewater generated would be recycled for use in landscape irrigation throughout the community.

The Centennial Water Service Plan was created with Southern California's specific water challenges in mind. As described above, the Water Plan includes a mandatory water conservation program that uses a variety of techniques to minimize potable water demand; it also uses multiple sources of water such as local groundwater, SWP supplies from AVEK, surplus imported water when available, banked water, and recycled water for non-potable uses.

The Project site is within the AVEK service area; however, it is not currently within the boundaries of a retail water utility. Centennial Founders, LLC has requested the Golden Valley Municipal Water District (GVMWD or District) Board of Directors to consider annexing the Project area and operating the Project's proposed potable water, recycled water, and wastewater facilities. The GVMWD is a California municipal water district formed and operated under Section 71000 of the *California Water Code.* The District's service area

4 Banked water is water purchased from within the AVEK service area during times of surplus for use in recharging the aquifer. Other purchased water is purchased from outside the AVEK service area.

encompasses approximately 12.5 square miles and is adjacent to the Project's western boundary (GVMWD 2011). GVMWD currently operates approximately 20 municipal water service connections and a wastewater treatment facility for the unincorporated community of Gorman.

The GVMWD qualifies as a Water Supply Assessment (WSA) preparer for the Project under Section 10910(b) of the *California Water Code.* If the Project is annexed into the jurisdiction of the GVMWD, it is proposed that the GVMWD would become the operator of the potable and recycled water systems servicing the Project. Once the Project is annexed into the GVMWD, the District will become a public water system as defined by Section 10912(c) of the *California Water Code,* as a result of supplying water to the Project. Annexation of the Project into the GVMWD service area would require approval by the Los Angeles County Local Agency Formation Commission (LAFCO) and would occur after the certification of this EIR.

The GVMWD adopted a WSA on May 18, 2011, for the Project that separately analyzes the water supplies required the full planned buildout of the Project and for implementation of the first phase of Project implementation. In the adopted WSA, full buildout was assumed to occur at the end of the 20th year of the Project, which is also reflected in the analysis shown in Table 5.18-16 in Section 5.18, Water Resources. The Project timing assumptions used in the WSA are conservative because the Project's construction and market absorption are likely to occur over a longer period than 20 years. If the Project's buildout occurs over more than 20 years, surplus supply will be available for potential banking until the first Project phase is developed and buildout water demands become available.

The adoption of a WSA does not create a right or entitlement to water service or impose, expand, or limit any duty concerning the obligation of a public water system to provide certain service because the lead agency has a separate (from the water provider's WSA) and independent obligation to assess the sufficiency of water supplies for the Project. The WSA is included in the Project EIR for consideration by the County in accordance with Section 10911(b) of the *California Water Code* (See Appendix 5.18-A). The GVMWD or an alternate qualified public utility district (collectively, "PUD") would serve as the Public Water Purveyor and would provide water service to the Project.

Subject to the factors described in the WSA and Section 5.18 of this EIR, Project water demand (potable and non-potable) will be met by utilizing several different supplies, including: (1) water currently banked at the existing TRC Water Bank (2) AVEK SWP Table A water supplies available to the Project; (3) previously purchased water supplies loaned to the AVEK; (4) new imported SWP water from transfers of SWP Table A Amounts from SWP contractors located outside the Antelope Valley and purchased from AVEK; (5) recycled water generated by the collection and tertiary treatment of Project wastewater; (6) return flows generated by Project imported water use that infiltrates into local groundwater; and (7) groundwater. To provide needed reliability through all water-year types, portions of the water derived from imported sources, and potentially recycled water, will be banked in local aquifers in wetter years or when surplus supplies are available.

The Project includes a "total water management" plan with a specific water budget (a conservative estimate of water demands) and a water supply strategy that identifies secure water sources to serve this demand over the long term. The amount of water obtained from each source may vary from year to year depending on availability, cost, demand and other factors, but the mix of sources is designed to ensure that adequate water for Project demand would be available under all conditions and circumstances. The storage (or "banking") of water in the groundwater basin would provide for increased reliability during dry years. The total water management plan also includes water conservation and water reclamation strategies to minimize water demand. The analysis of water for the Project is located in Section 5.18, Water Resources, of this EIR.

## Wastewater/Recycled Water Resources Element

The Wastewater/Recycled Water Resources Element of the Centennial Management Strategy focuses on recycling and reusing all wastewater generated within the community. Two key principles of the Centennial Wastewater/Recycled Water Resources Element of the Management Strategy are summarized below and described in Appendix 5.2-H of the EIR:

- Maximize water reuse; and
- Minimize use of imported water.

Two wastewater reclamation facilities (WRFs) would be constructed (one to the west and one to the east of the West Branch of the Aqueduct) to provide tertiary treated recycled water for community landscaping throughout Centennial. The first WRF would be constructed on the east side of the Aqueduct and would be operational at the time of Project occupation. No temporary package plant is anticipated. Seasonal storage ponds would be provided at the WRF East to store recycled water during periods of lower demand (e.g., during winter months) for use during high-demand periods (e.g., during summer). Approximately 4.62 million gallons per day (mgd) of wastewater will be produced at Project buildout, which will result in a recycled supply of approximately 4.16 mgd (4,660 afy). Approximately 40 percent of the Project's total annual water demand at buildout will be met by using recycled water. The analysis of wastewater for the Project is located in Section 5.19, Wastewater, of this EIR.

## Flood Control and Drainage

The County has traditionally required development projects to analyze hydrologic conditions on a Project site from both a pre-development and post-development perspective. These analyses have focused on the volumes and flow rates of storm water runoff before and after proposed development to ensure that downstream properties are not negatively affected. Drainage concepts are required to demonstrate the locations and sizing of necessary storm water facilities (e.g., debris basins, infiltration and retention/ detention basins, flood-control structures) to address the requirement that downstream areas would not be negatively affected by Project runoff.

As an integral component of the Project's integrated water resources management approach, the drainage concept will comply with County requirements by considering the potential

negative effects of increased impervious areas on the environmental resources in on-site and downstream drainages (hydromodification). Hydromodification considerations control the basin size and type of facility required. Under the integrated water resources management approach, hydrology and flood-control considerations are addressed through compliance with Low Impact Development (LID) standards, source-control best management practices (BMPs), and treatment-control BMPs throughout the Project. The hydromodification BMPs for the Project would be consistent with County requirements for new development set forth in Section 8 – Hydromodification Impacts of the County LID Standards Manual and the Project will comply with all applicable storm water and sediment management requirements. As future tract maps are prepared for Project land uses, drainage concepts will be submitted for County approval as part of the tract map review process.

The potential hydromodification effects of the sequential phased development and buildout of the Project have been evaluated through the engineering design of the drainage features in the drainage concept in this EIR. As the first phase of development is implemented, adjustments to the traditionally required structures would be incorporated, as needed, in order to avoid downstream impacts to natural drainages and to create groundwater recharge potential. These adjustments, or Project Design Features (PDFs), incorporate flow-duration control basins (e.g., infiltration basins) and balance flow and sediment impacts using grade-control and in-stream flow structures to demonstrate that downstream natural systems would not be negatively impacted by the flood-control and drainage system improvements serving the proposed development. Similar features would be implemented in subsequent phases.

Providing flow-duration control basins, as designed in the drainage concepts, provides mechanisms for avoiding hydrologic source loading impacts to creek systems on the Project site. Under more traditional approaches in which only in-stream protection measures are provided, downstream erosion impacts can occur. Only through strategic placement of in-stream flow structures and flow-duration controls can impact avoidance be achieved. Implementation of the proposed system and facilities exceeds current County requirements. Furthermore, the facilities and structures associated with flood control and drainage that are not maintained by the Homeowners Association (HOA) would be operated and maintained by the PUD (after annexation) or, if annexation does not occur as related to facilities and structures associated with flood control and drainage, by a company regulated by the California Public Utilities Commission (CPUC), a Community Services District (CSD), or other agency approved by Los Angeles County (the Maintenance Entity) and agreed to by the Project Applicant/Developer.

The use of the integrated water resources management approach also addresses sediment management within the hydromodification analysis, as it recognizes that sediment loss can contribute to increased erosion potential in downstream areas. This approach encourages the use of sediment-carrying flow-through techniques, thereby reducing the number of traditionally required debris basins and providing for a more balanced sediment transport and control system within Centennial. The key principles that have been used in developing the sediment management elements of the drainage concept are:

- Avoiding development alterations to natural conditions whenever possible;

- Minimizing impacts from sediment management systems when avoidance is not possible; and
- Mitigating any impacts that remain after avoidance and minimization techniques have been implemented.

The analysis of hydrology for the Project is located in Section 5.2 of this EIR.

## Water Quality

Typically, water quality considerations in development projects focus on compliance with the Standard Urban Stormwater Management Plans (SUSMP) which, for most of Los Angeles County, were established under Municipal Separate Storm Sewer Systems (MS4) permits. SUSMPs address water quality and drainage issues by specifying design standards for structural- or treatment-control BMPs that infiltrate/treat storm water runoff and control peak flow discharge. The MS4 Permit requires Project-specific SUSMP documents to describe how the BMPs incorporated into the Project demonstrate compliance with applicable storm water quality standards in receiving waters. Water quality/infiltration basins are proposed to serve as storage/treatment for storm water runoff in the major and minor greenways.

Approximately 93 percent of the Project site is within the jurisdiction of the Lahontan Regional Water Quality Control Board (Lahontan RWQCB); this area is not covered by an MS4 Permit due to the lack of development in the area. The remaining approximately 7 percent of the Project site is within the jurisdiction of the Los Angeles Regional Water Quality Control Board (Los Angeles RWQCB); an MS4 permit has been approved by the Los Angeles RWQCB and is applicable to the portion of the site under the Los Angeles RWQCB's jurisdiction. Although the MS4 Permit for Los Angeles County and related SUSMP requirements are not valid in the Lahontan RWQCB portions of the Project site, in the absence of an MS4 Permit for the Lahontan RWQCB, they have been utilized as the controlling analysis standard for the entire Centennial Project site. Furthermore, the facilities and structures used to address water quality issues that are not maintained by the HOA will be operated and maintained by the PUD (after annexation) or, if annexation does not occur as related to facilities and structures used to address water quality issues, by a CPUC-regulated company, a CSD, or other entity approved by Los Angeles County (the Maintenance Entity) and agreed to by the Project Applicant/Developer.

Additionally, the integrated water resources management approach used in planning and designing Project infrastructure proactively addresses water quality through the application of Low Impact Design (LID) principles on a macro-scale throughout the Project site. The overall result of the water quality components of the drainage system design would exceed applicable water quality design requirements. A description of proposed water quality treatment features is provided below under the "Drainage Plan" discussion. Refer to Section 5.4, Water Quality, for an analysis of the water quality impacts of the Project and additional discussion regarding the Project's compliance with the Los Angeles County LID Ordinance.

## 4.5.9 WATER-RELATED UTILITIES AND INFRASTRUCTURE

### Water Service Plan

The Project includes a domestic (potable) water supply system, including water treatment, storage and distribution systems (collectively, "Potable Water System"). The design, construction, and operation of the Potable Water System would be required to comply with standards set by the California Division of Drinking Water (DDW) and Los Angeles County Department of Public Works. The Project site is currently not within the boundaries of a retail water purveyor. As noted above, Centennial Founders, LLC has requested the GVMWD Board of Directors to consider annexing the Project area and operating the Project's proposed potable water, water recycling, and wastewater facilities. Either the GVMWD or a PUD will provide service to the Project.

After completion of the proposed annexation, the Project's water and wastewater systems would be owned and operated by the PUD, including the wastewater collection, treatment, and recycled water systems. Additionally, annexation of the Project area could allow PUD to own and maintain facilities and structures used to address flood control, drainage, and water quality issues. Annexation of the Project into the PUD service area would require approval by the Los Angeles County Local Agency Formation Commission (LAFCO) and would occur after the certification of this EIR.

If the PUD does not annex the Project site, a company regulated by CSD, or other agency approved by the County (the Maintenance Entity) and agreed to by the Project Applicant/Developer will be established, that will own, operate, and maintain the water, sewer, recycled water and storm drain facilities (including the water quality treatment and hydromodification control facilities) on the Project site. The Maintenance Entity will be funded through a rate-payer system imposing fees on the Project properties/service customers.

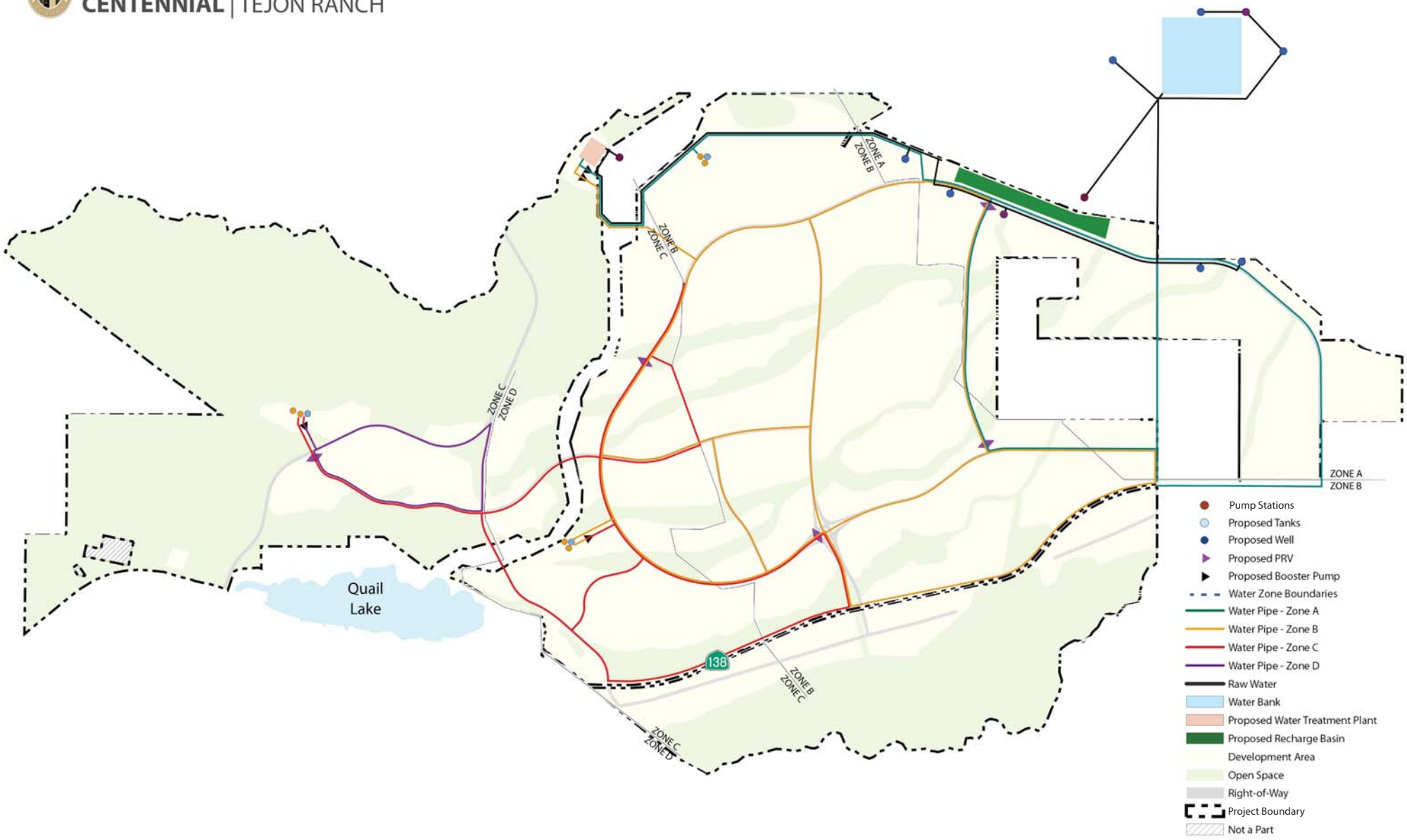
#### *Existing and Proposed Water Facilities*

There are two existing aboveground water storage tanks on the Project site. One water storage tank is located in the southwestern portion of the Project site. The second tank is located in the northwestern portion of the Project, near Oso Canyon; a water well is also in this location. These existing facilities would be removed as part of the Project.

The planned domestic water facilities are depicted on Exhibit 4-13, Centennial Project – Conceptual Domestic Water System, and include the following items: a water treatment facility, storage tanks, booster pump stations, pressure-reducing stations, infiltration basins/water bank, groundwater extraction wells, and distribution lines. The potable water distribution system requires four pressure zones; each zone would provide an appropriate water pressure to meet peak demand and County-required fire flow requirements.

- ***Water Treatment Facility.*** As shown on Exhibit 4-13, the water treatment plant (WTP) would be constructed just west of the West Branch of the California Aqueduct and would tie into the backbone potable water distribution pipelines. A new turnout

# CONCEPTUAL DOMESTIC WATER SYSTEM
**CENTENNIAL** | TEJON RANCH




Source: Placeworks 2017

## Centennial Project – Conceptual Domestic Water System

Exhibit 4-13

*Centennial Project*

N W E S

Map Not to Scale

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on the West Branch has been constructed by the DWR, which is owned and managed by AVEK. The locations of the Project WTP, the West Branch turnout, and the primary connecting pipelines between these facilities are identified in Exhibit 4-13. The WTP would be sized to treat the full maximum daily potable water demand of the Project. The Project's buildout potable water demand of 6,788 afy will be augmented by 4,577 afy of recycled water used primarily for outdoor landscaping use. Total Project water demands, including potable and recycled, will be approximately 11,365 afy, with a per capita water use of approximately 177.5 gpcd. It is expected that the WTP would be constructed in stages as the Project site builds out. The WTP would treat the incoming water using three processes common to most community-scale water treatment plants: coagulation and settling of impurities; filtration; and disinfection. The specific technologies to be used would be determined during design of the WTP; the output quality of the water from the WTP would meet all applicable drinking water standards. The WTP would be constructed of concrete and steel materials and would generally be at or below grade, with a few structures (e.g., filters, tanks, administrative areas) having maximum heights roughly between 30 and 40 feet. Security fencing, night lighting, and landscape screening would be provided along the perimeter of the WTP site.

- ***Storage Tanks.*** Consistent with County requirements, the amount of domestic water storage is based on operational storage at 40 percent of a maximum day's demand plus 2 times the average day demand, which is equivalent to one maximum day (or a total of 2.8 times an average day) plus fire flow storage (which varies depending on the land uses within each zone). As shown on Exhibit 4-13, the domestic storage demand for the Project would require implementation of potable water tanks at three locations. The tanks at these sites would be closed and constructed of reinforced concrete or steel and would be located and designed to be screened from view by most Project residents. The tanks would have a maximum height of approximately 32 feet. One or more of the following techniques would be used to accomplish this screening:
    - partially or fully burying the reservoir.
    - constructing a berm around the perimeter of the reservoir.
    - providing landscape screening that is compatible with the adjoining areas.
- ***Booster Pump Stations.*** The water system includes three booster pump stations to feed distribution lines to water tanks that supply water to the four different water pressure zones. One booster station at the water treatment plant would have pumps pumping to both Zones A and B; one booster station would pump from Zone B to C; and one station would pump from Zone C to D. The locations shown for these facilities are preliminary, but would generally be constructed in graded areas adjacent to roadway rights-of-way or on reservoir sites; specific locations would be determined during detailed system design. The final design for the booster pump stations would be determined during preparation of the final design plans for the water system, and it is expected that each would be above ground. The booster pump stations would be designed to minimize operating noise and would be enclosed in buildings. These

buildings would be screened from the view of proposed residences with landscaping and/or walls.

- ***Pressure-Reducing Valves.*** Five pressure-reducing valves would be located where needed to transfer water from higher zones to lower pressure zones in order to increase system reliability. The locations shown for these facilities are preliminary, but would generally be constructed in graded areas adjacent to roadway rights-of-way; specific locations would be determined during detailed system design. These valves are typically constructed below ground and are housed in vaults ranging in size between four and six feet wide by eight to ten feet long with a double door access from the top.
- ***On-Site Water Bank/Infiltration Basin Area.*** An approximate 100-acre water banking facility will be designed, permitted, financed, and constructed by the Project along the northern edge of the site to provide additional water recharge capacity. The on-site bank will also facilitate the periodic rotation of infiltration or extraction between the TRC Water Bank and the on-site bank to avoid potential impacts to the local aquifer. A transmission pipeline will extend from an existing East Branch turnout located at approximately the intersection of 320th Street West and the California Aqueduct, and will be routed along the southern edge of the bank to allow for delivery to recharge ponds within the facility. The turnout will be upgraded and managed in accordance with the turnout operating and maintenance agreements between AVEK and the DWR. The on-site water bank will also be able to obtain water from a turnout located on the West Branch of the California Aqueduct. A series of contoured infiltration basins separated by a network of berms and overflow weirs will be constructed to receive and infiltrate the water. The on-site water bank's soil and storage characteristics are similar to those of the existing TRC banking facility and will have the capacity to infiltrate and store approximately 7,200 afy. There is at least 161,000 acre-feet of unused aquifer storage within 0.5 mile of the proposed on-site and the existing TRC Water Bank facilities (GEI 2010, 2005). The on-site water banking facilities are depicted in Exhibit 4-13.

  Groundwater depths would also be monitored around the perimeter of the infiltration basin to ensure the depth to groundwater is maintained at acceptable levels from the surface and excessive sub-surface mounding does not occur.
- ***Wells.*** Up to nine groundwater wells would be located within the Project site for extraction of previously banked imported water; groundwater level monitoring; recovery of return flows from on-site irrigation by capturing water that infiltrates into the surface and migrates into a well's cone of influence; and groundwater extraction (approximately 1,250 gallons per minute capacity per well) from the underlying aquifer for use in the Project's potable water supply system. The new wells would be installed in phases to match the domestic water demands of the Project. As part of the water supply verification required at the TTM stage, the specific pumping capacities of each well would be determined during detailed design studies as detailed infrastructure plans are developed. The wells would supply potable water to distribution lines and storage tank components of the Domestic Water System, as depicted on Exhibit 4-13.

Of the nine possible groundwater wells proposed to serve the Project, two are existing wells (TRC Well 98 and TRC Well 106); up to seven would be new on-site wells identified as Centennial Extraction Well (CEW)-1, CEW-2, CEW-3, CEW-4, CEW-5, CEW-6, and CEW-ALT. The existing on-site TRC Well 98 would be renamed CEW-8, and the existing off-site TRC Well 106, located adjacent to the Tejon Ranch Water Bank, would be renamed CEW-7. Based on the hydrogeologic studies of the underlying aquifer performed to date as part of the Project, it was determined that a total of eight wells would be needed (including existing and new wells), assuming the need to supply peak day demand entirely from groundwater with one well out of service; this would be considered a worst-case scenario in the event that potable water cannot be supplied by the California Aqueduct. Although the hydrogeologic studies indicate the need for a total of eight wells, the conceptual groundwater well system identifies nine total well locations to ensure the provision of adequate water supplies to the Project. Accordingly, the analysis assumes that CEW-ALT would be installed in addition to, rather than as an alternate to, the other new well locations.

The installation of production wells involves (1) drilling and installing an approximate 14-inch diameter casing to a depth of 800 to 1,000 feet below ground surface; (2) installing sanitary seals; (3) developing and testing the well by pumping; and (4) then equipping the well with an aboveground pump and installing electrical and control equipment contained within an enclosed structure with an approximate 12 foot by 16 foot footprint and which is approximately 12 feet to 14 feet in height. The well housing structure would have a flat, or nearly flat, roof with skylights for pump removal, if necessary. Depending on the water quality at each well site, there may or may not be a need for treatment at the well. If water quality meets drinking water standards per Title 17 and Title 21 of the *California Code of Regulations*, there may be disinfection at the well site and the water would then be discharged directly into the water distribution system. In this event, the groundwater is expected to be treated with chlorine (in the form of sodium hypochlorite, commonly referred to as bleach or chlorine bleach), which would be stored in a 500-gallon tank at the well site.

This aboveground tank and associated chlorine feed system would be housed in a separate, adjacent, 10-foot by 12-foot structure, up to approximately 12 feet to 14 feet in height, sharing one common wall with the well housing structure. Depending on factors such as well capacity, groundwater production rates, and water quality, it is estimated that a 500-gallon tank would need to be re-filled approximately every 2 weeks. It should be noted that while sodium hypochlorite is classified as a hazardous material, it has been commonly and safely used throughout California as an effective means of disinfecting water. As such, the type, form, and concentrations of material proposed for use at the wells is not unusually dangerous or uncommon. However, if further treatment is required (i.e., beyond disinfection), both the disinfection and further treatment would not take place at the well locations but at the proposed on-site water treatment plant.

- ***Distribution Lines.*** The proposed water distribution system includes potable and non-potable water lines ranging in size from approximately 8 to 30 inches to be constructed primarily within the proposed roadways.

## Wastewater Service Plan

A Conceptual Wastewater Service Plan has been prepared as part of the Project and is illustrated in Exhibit 4-14, Centennial Project – Conceptual Wastewater System. Two wastewater reclamation facilities (WRFs) will be required and constructed in accordance with Title 22 of the *California Code of Regulations* and the PUD's or the Maintenance Entity's criteria. Title 22 specifies California's Wastewater Reclamation Criteria (WRC), and all recycled water in the state must meet or exceed these standards. The specifications outlined in Title 22 apply to the treatment process by setting performance standards for removal efficiencies and overall effluent water quality. Title 22 also (1) establishes process-monitoring programs that set the type and frequency of water quality monitoring; (2) requires preparation of facility operations plans; and (3) requires the incorporation of necessary reliability features into the design of the treatment facility.

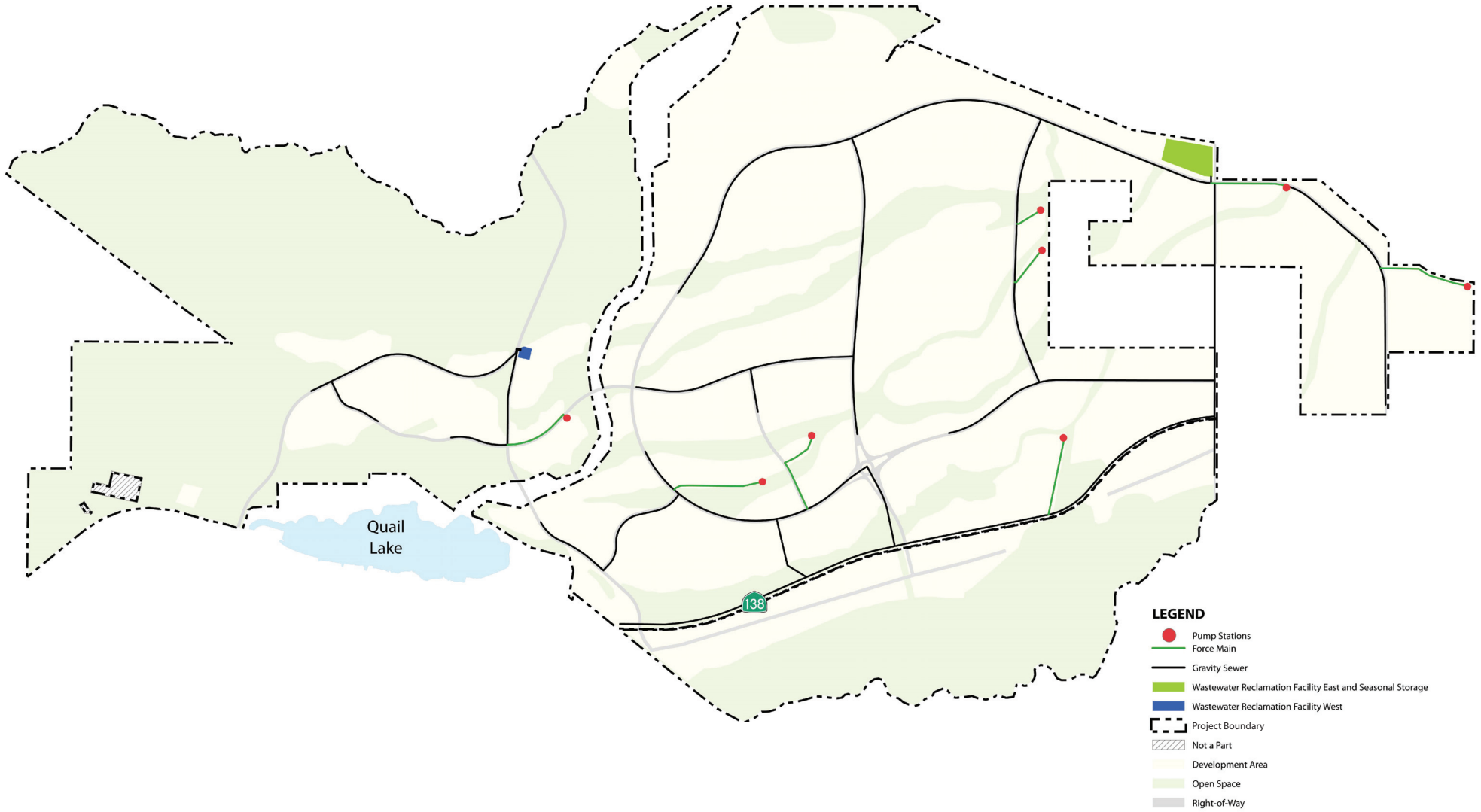
Wastewater treatment would occur at two permanent on-site WRFs and would consist of primary, secondary, and tertiary treatment processes; in order to avoid crossing the Aqueduct with raw sewage pipelines, one WRF would be located west of the Aqueduct (WRF West) and one would be located east of the Aqueduct (WRF East). Both WRFs are proposed in locations that allow wastewater to generally flow by gravity to the WRF for treatment. The treated effluent from the two WRFs would be supplied to the recycled water distribution system to meet irrigation demands throughout the Project site, as well as some indoor uses such as wastewater and cooling uses in the business park.

The WRFs would be operated and maintained by the PUD (after annexation) or, if annexation does not occur, by a CPUC-regulated company, a CSD, or other agency approved by Los Angeles County (the Maintenance Entity) and agreed to by the Project Applicant/Developer.

Construction of WRF East would occur first and would be operational upon site occupancy. The facility would be expanded in phases, as required to treat the wastewater flows generated by occupied land uses. WRF East, intended to serve the wastewater treatment and wastewater reclamation (i.e., production of recycled water) needs for the initial phase of development on the Project site east of the Aqueduct and would have a design capacity of approximately 4.28 mgd. This facility is proposed for development on a site near the northeastern corner of the Project site, just west of 300$^{th}$ Street West, as shown on Exhibit 4-14.

Property located to the east of 300$^{th}$ Street West at the northern edge of the Project boundary, which is currently designated as Low-Density Residential, could serve as an alternate location for the WRF East. If the facility were to be located within a 23-acre site at this location, the environmental impacts discussed in this Draft EIR would remain largely unchanged, and may be reduced for some topical areas. For instance, due to topographical differences between the Specific Plan's proposed Utility designated area and the property located east of 300$^{th}$ Street West, the eastern site would be able to receive more wastewater via gravity flow and would require one less pumping station as a result, thereby also slightly reducing energy demands. However, this location would require a General Plan Amendment to change the current AVAP designation of RL2 (Rural Land for 1 dwelling unit per 2 gross acres) to Utility. The current AVAP Land Use designation for the Specific Plan's Utility land

# CONCEPTUAL WASTEWATER SYSTEM
## CENTENNIAL | TEJON RANCH

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## Centennial Project – Conceptual Wastewater System

Exhibit 4-14

*Centennial Project*

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use is the IL- Light Industrial. The Utility land use is proposed to contain the following facilities: WRF East, groundwater infiltration basins, MRF/TS, composting and green waste facilities, and maintenance yards/animal control. Potentially moving the WRF East and some of the facilities listed above to this alternate 23-acre property would not present land use compatibility concerns and would be similar to the juxtaposition of the currently proposed land uses.

Recycled water storage capacity at buildout would need to be approximately 1,000 acre-feet with the majority of that provided within the WRF East site and some in lakes on the Project site. The WRF would be constructed of concrete and steel materials that would generally be at or below grade, with a few structures (e.g., administrative/lab facilities, secondary treatment digesters, sludge centrifuges, and filtration facilities) having maximum heights of approximately 30 to 40 feet. Security fencing, night lighting, and landscape screening, if needed, would be provided along the perimeter of the WRF East site. Sludge generated by both WRF West and WRF East would be sent to a suitable off-site landfill or would be transported to a fertilizer conversion site for reuse.

WRF West would serve the subsequent phase of Project development located to the west of the Aqueduct; it would have an approximate capacity of 0.34 mgd and is proposed to be located on an approximate 3.0-acre site, also shown on Exhibit 4-14. Recycled water from WRF West would be pumped directly to the Zone C recycled water tank located nearby, west of the Aqueduct. WRF West would be constructed of concrete and steel materials that would generally be at or below grade, with a few structures (e.g., administrative/lab facilities, secondary treatment digesters, sludge centrifuges, and filtration facilities) having maximum heights of approximately 30 to 40 feet. Security fencing and night lighting would be provided along the perimeter of the WRF West site.

The Project also includes a wastewater collection and conveyance system that would primarily consist of 8- to 18-inch lines to be constructed within the proposed roadways. Areas such as those near WRF East would require larger diameter gravity trunk sewers (up to 27-inches in diameter) due to flatter slopes and the higher combined volumes of flow.

Approximately eight small sewer lift stations would be required to pump the wastewater from development areas against uphill grades to locations where they could flow by gravity to the WRFs. The locations of the pump stations are discussed further in Section 4.7 and are shown on Exhibit 4-14, Centennial Project – Conceptual Wastewater System. Pump stations would be sized to accommodate peak flows and would be equipped with backup emergency power generators. Force mains from the pump stations would be sized depending upon the pumping capacity of the station.

Pump stations would generally be below ground. They may be fitted with either submersible pumps in a wet well or standard motors in a pump house above the wet well. If a pump house building is required, it would be designed to blend architecturally with adjacent structures. Landscape screening may also be provided. For a submersible pump installation, a metal cabinet would be provided at ground level to house the electrical and pump control equipment. Both types of pump stations would be provided with an emergency generator and automatic transfer switch to provide continued operation in the event of an electrical

power failure. Access driveways and parking areas would be provided for maintenance activities.

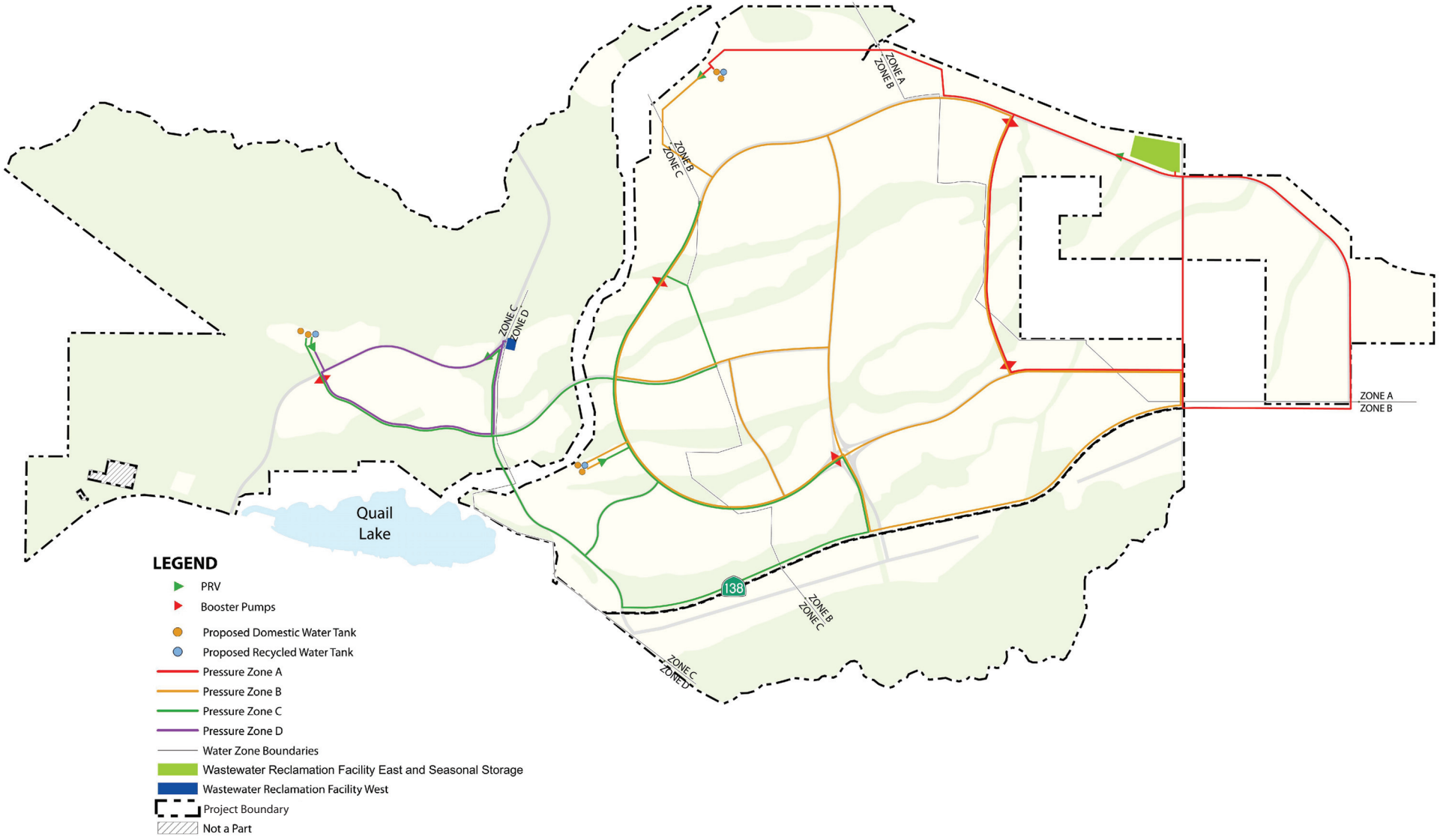
## Recycled Water

The tertiary treated effluent (recycled water) from the WRFs discussed above would be used primarily to meet the Project's non-potable water needs, including community-wide landscape components. At full buildout, recycled water will be used for (i) 100 percent of the commercial, business park, institutional, school, hotel, park, and slope outdoor irrigation demand; (ii) outdoor irrigation demand within 50 percent of the total very low and low density residential lot landscaped area; and (iii) wastewater and cooling use within the proposed business park except where prohibited by applicable law for particular types of areas or uses (e.g., employee cafeterias). Exhibit 4-15, Centennial Project – Conceptual Recycled Water System illustrates the conceptual recycled water system. In addition to providing a source of non-potable water for large-scale irrigation needs, the recycled water program would avoid the need to dispose of treated effluent. This is a common practice in California and is recognized as a sound water conservation practice. Additionally, this process is in compliance with State Water Resources Control Board Resolution No. 2009-0011, Recycled Water Policy (adopted on May 14, 2009), which is intended to increase the use of recycled water from municipal wastewater sources (SWRCB 2009). A description of the components of the recycled water system is included below.

As shown on Exhibit 4-13, each of the three on-site domestic water tank sites would also provide space for a water storage tank for recycled water for a total of three recycled water storage tanks. The capacity of the recycled water tanks would be approximately half the capacity of the domestic water supply tanks since they do not need to have fire flow or emergency storage. However, they would be approximately the same height (e.g., 32 feet above grade) as the domestic water tanks with which they would be co-located. In addition to the storage tanks, the recycled water system includes the distribution facilities listed below.

- ***Booster Pump Stations.*** The proposed recycled water system includes five booster pump stations to feed distribution lines to recycled water storage tanks that would supply recycled water to the four water pressure zones. There would be one large pump station supplying recycled water from the WRF East site to Zone A; one pump station from Zone A to B; one pump station from Zone B to C; one pump station from Zone C to D; and a pump station from the WRF West to Zone C. The locations shown for these facilities are preliminary, but would generally be constructed in graded areas adjacent to roadway rights-of-way; specific locations would be determined during detailed system design. The physical characteristics of the booster pump stations for recycled water would be the same as those described for the domestic water system.
- ***Seasonal Storage.*** Seasonal storage ponds are proposed for the majority of the seasonal storage requirement within the WRF East site (refer to Exhibit 4-14). These ponds would be uncovered; would be lined to prevent infiltration; and would be used to temporarily store recycled water during winter months (when irrigation demand

# CONCEPTUAL RECYCLED WATER SYSTEM
## CENTENNIAL | TEJON RANCH

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## Centennial Project – Conceptual Recycled Water System

## Exhibit 4-15

*Centennial Project*

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is low) for use later that year during higher demand periods (e.g., summer). These storage ponds would have security fencing and lighting. In addition to the ponds at the WRF East site, surplus recycled water could also be stored in the lakes within the project during winter months. A total seasonal storage capacity of approximately 1,000 acre-feet is proposed for the Project, which would be provided at the WRF East site and on-site lakes.

## Drainage Plan

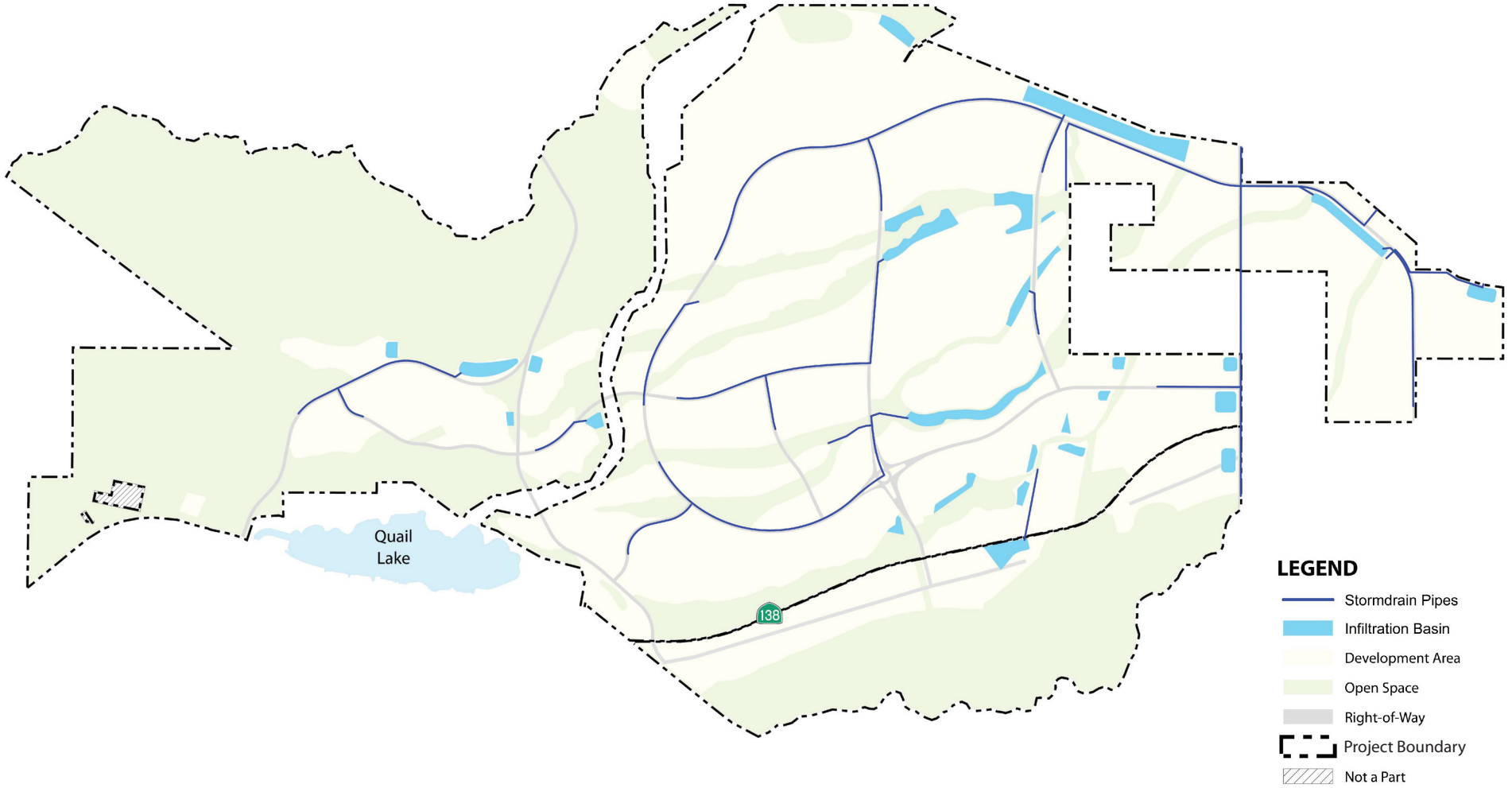
As illustrated in Exhibit 4-16, Centennial Project – Conceptual Drainage and Flood Control System, the flood-control system incorporates three storm water management methods for flood and storm water control. These methods include: on-site water quality and infiltration basins; underground storm drainage facilities; and use of natural drainage courses. Natural drainage courses would be used whenever possible; however, some locations provide no alternative other than constructed channels or underground facilities. In these circumstances, surface runoff would be intercepted and conveyed by a network of storm drains.

Water quality and infiltration basins are proposed for use as storage and/or treatment facilities for storm water runoff in greenways and in some natural water courses. Many of the existing natural drainages throughout the Project site are incised and highly erodible. As a result of these conditions, many of the natural drainages proposed to be incorporated into the storm water drainage system may require modification. It is the intent of the backbone storm water drainage plan to restore drainages to a naturalized[5] condition while taking into account public safety requirements and public recreational objectives. Traditional flood-control techniques use reinforced concrete or grouted rock riprap to minimize erosion while maximizing the volume of flood flows carried by the drainage. As a part of the Project, "naturalized features" (e.g., the use of buried-bank stabilization are proposed where necessary to protect against erosion. Buried bank stabilization uses soil cement, concrete, or riprap and is buried beneath the existing banks of a river to provide a functional backstop that resists scouring, which could pose a threat to infrastructure. Upon completion of construction, the soil placed on top of the bank stabilization is replanted with native vegetation to return the disturbed area to a more natural condition.

Soft bottom culverts and pipe or box culverts would be provided to convey storm water flows beneath planned roadways In future phases of development, road crossings of drainage courses would be accomplished using conventional reinforced pipe or box section culverts with inlet and outlet head walls and rock riprap energy dissipation at the downstream outlets of each culvert. Soft-bottom culverts would typically be constructed where roads cross planned greenways that contain natural channels. The Project*'s* Land Use Plan depicts road crossings of greenways and natural channels, including existing culvert crossings, which will be retained as part of the Project. Refer to Exhibit 4-1 for the Conceptual Land Use Plan.

5 Naturalized, in this sense, is a habitat that was disturbed and has been restored with the characteristics of an unaltered, natural state.

# CONCEPTUAL DRAINAGE SYSTEM
## CENTENNIAL | TEJON RANCH

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Centennial Project – Conceptual Drainage and Flood Control System — Exhibit 4-16

*Centennial Project*

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Conventional culvert crossings may range in size from 48-inch diameter pipe to the equivalent of double 120-inch diameter pipes. Soft-bottom culverts could range in size from a single 15-foot-wide and 10-foot-high culvert to double culverts that are each 30 feet wide and 15 feet high. The final size and configuration would be determined during final engineering following tentative map approval for that part of the development. During development of future tentative maps, additional culverts may be identified and would be incorporated into the drainage concept design at that stage.

Implementation of the Project would require permits/agreements from governmental agencies having jurisdiction over these drainages. This may include permits/agreements with U.S. Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), and/or either or both the Regional Water Quality Control Boards (RWQCBs) with jurisdiction over the site (i.e., Los Angeles or Lahontan).

As specified in the Project*'s* Floodplain Safety Zone, proposed development would not encroach upon the designated 100-year floodplain. No habitable structures would be permitted within the 100-year flood level in accordance with Los Angeles County policies to protect public property and safety and in conformance with the Federal Emergency Management Agency (FEMA) requirements/policies. As part of the Project, a Conditional Letter of Map Revision (CLOMR) will be submitted to the Federal Emergency Management Agency (FEMA) to revise the FEMA Floodplain boundary and to demonstrate that habitable uses are not proposed within the FEMA Floodplain. Please also refer to Section 5.2, Hydrology and Flood, for more detailed information.

### 4.5.10 DRY UTILITIES

Exhibit 4-17, Centennial Project – Dry Utilities Plan, identifies existing dry utilities within and adjacent to the Project site, as well as dry utilities proposed as part of the Project, including electric, natural gas, telephone and wireless telecommunications, and cable television. As shown, existing on-site dry utilities include (1) Southern California Edison (SCE) electric lines running north-south to the Oso Pumping Plant and National Cement Plant, which include lines that run southwest to northeast across the Project site connecting to the lines feeding the Oso Pumping Plant and National Cement Plant, as well as electricity lines running east-west along SR-138; (2) an AT&T underground telephone line running northwest to southeast across the western portion of the Project site; (3) a SoCalGas line that runs north-south immediately west of the Project site; and (4) fiber-optic lines installed by Quest Communications, which are adjacent to the I-5. In addition, although not a part of the Project site (i.e., off-site), SCE's Bailey Substation is located on an SCE-owned parcel in the southwestern corner of the Project site (i.e., although not a part of the Project, it is surrounded by the Project on all sides). A high-pressure natural gas main is located adjacent to SR-138. Currently, the dry utilities in proximity to the Project site are limited in terms of their servicing capacity. Following is a discussion of the dry utilities proposed to be implemented as part of the Project. The analysis of dry utilities for the Project is located in Section 5.20 of this EIR.

# DRY UTILITIES PLAN
## CENTENNIAL | TEJON RANCH


Source: Placeworks 2016

# Centennial Project – Dry Utilities Plan

# Exhibit 4-17

*Centennial Project*

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## Electricity

SCE serves approximately 14 million customers within a 50,000 square mile service area that covers Central, Coastal, and Southern California and would serve the Project site. Electric service is available through SCE facilities, as regulated by the California Public Utilities Commission's (CPUC's) Tariff Rules 2, 15, and 16. SCE has both transmission and distribution facilities located within and near the Project site. Existing conditions and proposed improvements to the substations and electric lines are described in detail below.

### *Substations*

SCE maintains one existing substation (known as the Bailey Substation) in the immediate vicinity of the Project site, located north of SR-138 in southwestern corner of the Project site. As shown on Exhibit 4-17, the substation is located on an SCE-owned parcel—the "Not a Part" (NAP) parcel immediately north of SR-138—and is therefore considered "off site". This substation currently serves as a transmission-only substation (220 kilovolt [kV]/66 kV) and is not currently equipped for distribution (12 kV) capability.

SCE also maintains the existing Gorman distribution substation, located approximately 3.6 miles northwest of the Project site along Gorman Post Road. This substation is equipped for distribution voltage and serves as the primary electric distribution facility in the Project area. It is from this facility that the existing 12-kV lines extend east along Gorman Post Road toward and within the Project site. The current capacity of the existing 12-kV facilities extending from the Gorman Substation along SR-138 can accommodate approximately 300 dwelling units. Therefore, the provision of electric service beyond the initial units developed in the first phase of Project implementation would require additional capacity through infrastructure improvements.

As discussed further in Section 4.7, Off-Site Project Features, two options were developed for bringing the additional capacity to serve the western portion of the Project site: (1) upgrading the existing Bailey Substation located on an SCE-owned parcel within the southwestern corner of, but not part of, the Project site or (2) upgrading the Gorman Substation and retrofitting existing overhead transmission lines to handle the higher load.

Provision of electrical service to the remainder of the Project would ultimately require a new substation, currently named the "Centennial Substation", in addition to the upgraded Bailey or Gorman substation. The Centennial Substation would be located in the vicinity of 300$^{th}$ to 310$^{th}$ Street West either north or south of SR-138, as described further below (refer to Exhibit 4-21).

<u>Centennial Substation</u>

SCE has indicated that the electricity demand anticipated from Project implementation would require construction of a new substation (the Centennial Substation) in the eastern portion of the Project site. The proposed substation would be constructed on an approximate 4.5-acre site. The Centennial Substation would be located in the in the vicinity of 300$^{th}$ to 310$^{th}$ Street West either north or south of SR-138. The Centennial Substation would be an unmanned, 66/12/6.9 kV, 28 Mega Volt Ampere (MVA), Substation Automated Station (SAS)

Automated Station. The complete equipment specifications of the Centennial Substation are summarized in Table 4-5, Centennial Substation Equipment Specifications.

The substation pad would be surfaced with ¾-inch crushed untreated rock with a depth of four inches and graded to be level with the surrounding lots. A Landscape Plan for the substation would be prepared by a Licensed Landscape Architect and would include an eight-foot-high, architect-designed block wall surrounding the substation topped with security barbed wire that would be mounted on the substation side of the wall. The area around the substation would be landscaped to shield views of the substation structures and equipment from surrounding areas.

The existing 66 kV lines (overhead or underground) along SR-138 would be extended to the proposed Centennial Substation site. This substation would convert the incoming 66 kV to outgoing 12 kV/6.9 kV, which would then be distributed to the Project site. The extension of the 66 kV facilities would either be in or out of the proposed roadways. SCE would require easements or joint-use easements for these facilities. The 12 kV/6.9 kV distribution facilities would be extended underground within the roadways. Transmission and distribution lines over the rest of the Centennial site are discussed below.

The Centennial Substation would have both security and maintenance lighting. The security lights would be low-intensity, photo-sensor-controlled lights integrated into the landscape and the architectural design of the substation; they would be in operation from dusk until dawn. Maintenance lighting would consist of high-pressure sodium lights located in the switchracks, around the transformer banks, and in areas of the substation yard where maintenance activities may occur during nighttime hours. All maintenance lighting would be controlled by a manual switch and would normally be in the off position. The substation's equipment and structures would be grounded in accordance with current SCE standards, and ground grid calculations would be based on soil resistivity measurements taken by SCE. Animal-control features would also be installed in accordance with current SCE standards.

The existing 66-kV lines (overhead or underground) along SR-138 would be extended to the proposed Centennial Substation site. This substation would convert the incoming 66 kV to outgoing 12 kV/6.9 kV, which would then be distributed to the Project site. The extension of the 66-kV facilities would either be in or out of the proposed roadways. SCE would require easements or joint-use easements for these facilities. The 12-kV/6.9 kV distribution facilities would be extended underground within the roadways. Transmission and distribution lines over the rest of the Centennial site are discussed below.

**TABLE 4-5**
**CENTENNIAL SUBSTATION EQUIPMENT SPECIFICATIONS**

| Equipment | Description |
|---|---|
| 66 kV Low Profile Steel Switchrack | • Consists of 7 bays:<br>  o 2 positions for lines<br>  o 1 bank position<br>  o 1 bus tie<br>  o 3 spare positions<br>• 600 feet, 1-1,590 kcmil ACSR for operating and transfer buses<br>• Control cable trench to MEER building<br>• Measurements: approx: 10′H X 64′W X 126′L |
| Transformer Bay | • One 28 MVA transformer with isolating disconnects, surge arresters, and neutral CTs.<br>• Measurements: approx. 10′H X 41′W X 78′L |
| 12 kV Low Profile Switchrack | • Consists of a 7-position rack<br>• 600 feet, 3.5-inch, IPS EH AL for operating and transfer buses<br>• Control cable trench to MEER building<br>• Measurements: approx. 15′H X 21′W X 108′L |
| Capacitor Banks | • One 12 kV capacitor bank at 4,800 kVAR<br>• Measurement: approx. 17′H |
| Mechanical-Electrical Equipment Room (MEER) | • Measurements: 36′ x 20′ (720 sf)<br>• Equipped with air conditioning and all standard equipment:<br>  o Control and relay panels<br>  o Battery chargers<br>  o Communication equipment<br>  o Telephone and fiber optic communication<br>  o Local alarms |
| kV: kilovolts; kVAR: kilovolt ampere reactive; kcmil: thousand circular mils; ACSR: aluminum conductor, steel-reinforced; MVA: megavolt ampere; CTs: current transformers; IPS EH AL: international pipe standard extra heavy aluminum; MEER: mechanical-electrical equipment room; sf: square feet.<br>Source: SCE 2007c. | |

### *Transmission and Distribution Lines*

SCE maintains overhead 66-kV transmission lines and 12-kV distribution lines running parallel along the north side of SR-138. Additionally, there are distribution lines that extend northeast from the existing Bailey Substation area to the Oso Pumping Plant and north from SR-138 along National Cement Plant Road to the National Cement Plant. The existing lines to the Oso Pumping Plant run through the Open Space north of Oso Canyon.

As shown on Exhibit 4-17, the Project would involve the installation of new dry utility corridors consisting of joint and sole electric, natural gas, telephone, and cable television

facilities within the roadway rights-of-way. The new systems would be installed underground within proposed roadways and would be constructed in advance of the land uses that require the facilities in order to ensure that the Project's electrical needs are met as the site develops. It would be necessary to install a distribution transformer at the Bailey Substation to carry sufficient load to the Project. The extension to the Project could be overhead on the existing pole line paralleling the north side of SR-138 or by way of a temporary pole line constructed within the Project limits around the north side of Quail Lake to reach the initial development phases of the Project.

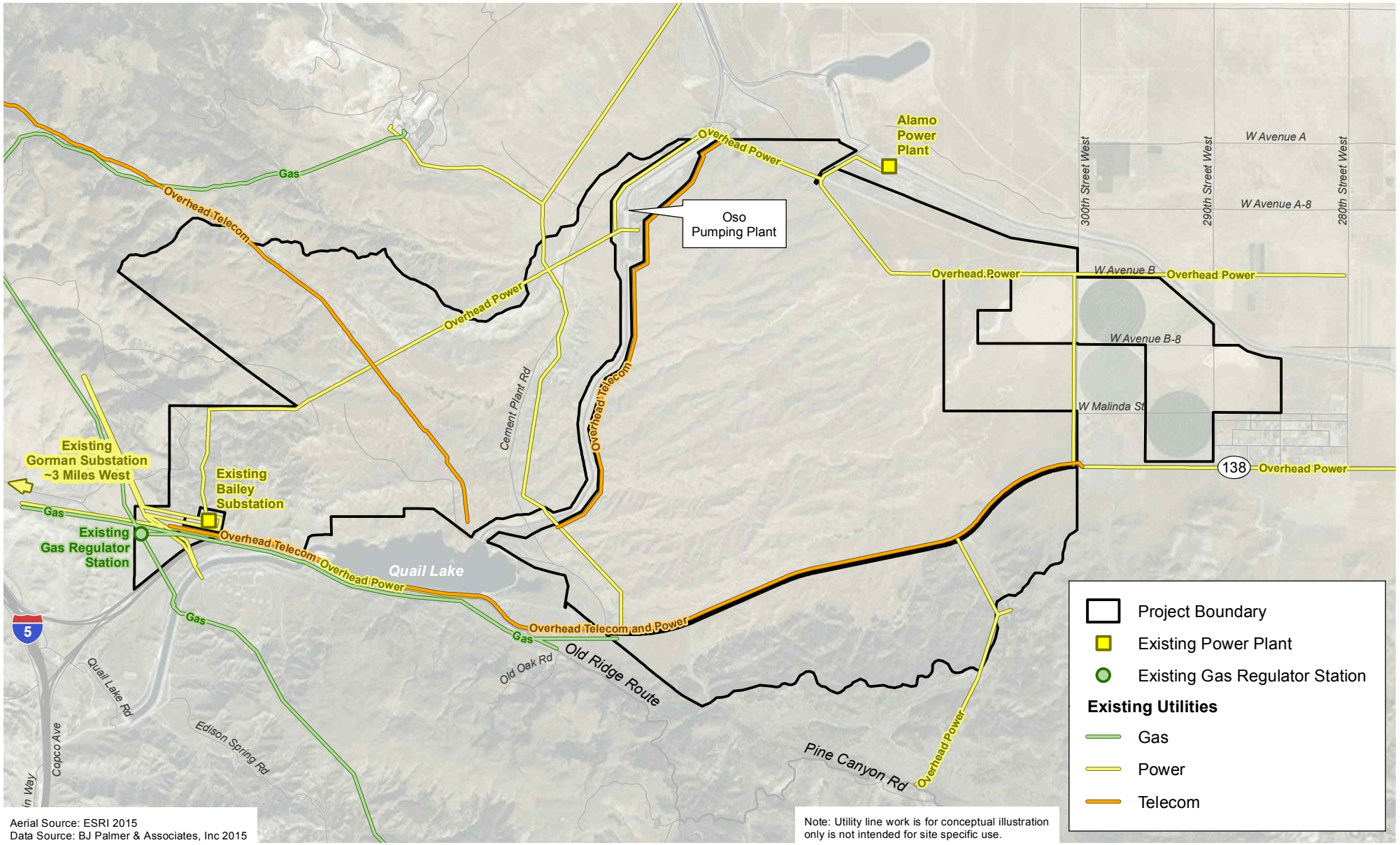
Once the boundary of the initial phase of development is reached, any overhead facilities would be placed underground and run throughout the Project site. As the Project develops on the west side, the temporary overhead lines would be placed underground to accommodate the construction phasing. The new utility corridors would be installed underground within proposed roadways and would be constructed in advance of the land uses that require the facilities in order to ensure that the Project's electrical needs are met as the site develops. The timing for engineering, construction of these facilities, and the specific facilities' locations and sizing have been coordinated with SCE. The proposed electrical distribution system would be developed on the Project site to supplement and, in the case when electricity generation exceeds Project demands, sell power back to the regional electrical grid.

Implementation of the Project would also involve the removal, relocation, and/or realignment of the existing 66-kV and 12-kV electricity lines that extend along SR-138 and within the Project site. The existing electricity lines along SR-138, or portions of these facilities, could remain in place, be relocated, or be placed underground. The existing 66 kV lines that extend from the Bailey Substation and run northeast within the Project site may be relocated and/or segments may be placed underground (which would require an easement). The existing 66-kV lines are shown on Exhibit 4-18, Known Major Utilities in Project Area. Furthermore, there are existing distribution lines for local distribution that run parallel to 300th Street West on the western side of the street. The Centennial Substation discussed above would be required in the area of 300th to 310th Street West along SR-138. Approximately 4.5 acres would be required for this site.

## Gas

SoCalGas would provide natural gas service to the Project site. SoCalGas is also regulated by the CPUC and provides natural gas service to much of the Southern California region. Natural gas service is available through SoCalGas facilities, as regulated by the CPUC's Tariff Rules 20 and 21.

There are existing SoCalGas gas lines within and near the Project boundary; however, none are located within the Project development area. There is one high-pressure gas main in the vicinity. It is a 33-inch diameter, north-south running gas transmission line (Line 225) within a SoCalGas-owned easement that originates at SR-138 just east of the I-5. A six-inch high-pressure distribution line branches from Line 225 and travels east to serve the National Cement Plant. Existing natural gas service to the Project site is available through a medium-pressure gas distribution main in SR-138, which branches from Line 225 and travels east to

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# Known Major Utilities in Project Area

Exhibit 4-18

*Centennial Project*

N W E S

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the Quail Lake area (SCGC 2006). These facilities are shown on Exhibit 4-17, Centennial Project – Dry Utilities Plan. Additional, various-sized, medium-pressure gas distribution mains are located in and around SR-138 in the Project vicinity, and are shown on Exhibit 4-18.

The Project's demand for natural gas service would be served by tapping into an existing high-pressure main and constructing a sub-surface regulator station and run distribution medium pressure and/or transmission high pressure to and through the Project site. This will be determined in the future as part of the Project planning and implementation process. Regardless, natural gas service would be provided to the Project site via a series of transmission and distribution gas mains that would be installed within the roadway rights-of-way. Due to gas line installation requirements, transmission main extensions would be in separate trenches within proposed roadways. Distribution main extensions would be installed within the proposed utility corridors (shown on Exhibit 4-17). Some of these transmission and distribution mains may parallel each other in the same roadway. It may be necessary to extend a high-pressure line to and within the Project site for the placement of a series of future regulator stations.

Future phases of development may require the tapping of the transmission high pressure main and construction of a sub-surface regulator station along SR-138 to augment transmission and run distribution medium pressure and/or transmission high pressure to and through the Project site. Gas distribution efficiency and operating integrity require that the gas mains are looped. As the Project develops, the mains may be tied to each other for pressure stabilization. Regulator stations can be within roadway rights-of-ways or on private property within an easement. An underground extension of gas facilities will need to be constructed along Gorman Post Road from the proposed regulator station to the Project's westerly entrance, where it would follow the route along with electricity and telephone within the Project around the north side of Quail Lake. The main could also be extended along SR-138, just outside the right-of-way, easterly to the initial construction phases of the Project.

Specific standards to promote energy efficiency and to minimize future energy demand in residential, commercial, school, and civic structures are described in Section 2.2.7, Performance Standards, of the *Centennial Specific Plan* (see Appendix 4.0-A).

## Telephone

AT&T is a national provider of voice and data telecommunications services and currently serves the Project area; as such, they provided the information contained in this section. Telephone service is available through SBC/AT&T facilities as regulated by the CPUC's Tariff Rule 15. Several other communications companies (such as MCI World Com, Rapid Cable, and Quest Communications) operate existing underground fiber optic systems adjacent to I-5 for regional services.

The AT&T Central Office is responsible for providing service to the Project area and is located north of the Project site in Lebec. Underground and overhead fiber optic (fiber) and twisted pair (copper) distribution facilities are located within the Project site (refer to Exhibit 4-17).

A Litespan 2000 unit is located on Gorman Post Road, approximately 14,000 feet northwest of the Project site's west boundary. The Litespan 2000, a digital loop carrier, is a telecommunications system that carries telephone signals from a central office to subscribers in the local loop using digital signals as the transport mechanism. This structure's usage is based on the high-capacity circuit needs of the National Cement Plant and was installed in anticipation of future growth in the area. AT&T has aboveground telephone lines and underground facilities adjacent to I-5.

To extend telephone service to the Project site, telephone fiber or cabling would be provided in the proposed backbone systems. The preliminary extension of telephone lines would occur along Gorman Post Road in the current franchise area entering the Project site at its most westerly entrance. This new extension would involve retrofitting and replacing the current overhead system that extends from the Frazier Park area to Gorman, and then to the Project site, using the existing poles. The Project would be developed as a "full fiber" project, with the extension of fiber lines (as opposed to cable lines) to all homes on the site.

This would include placing fiber from AT&T existing facilities either overhead on the existing pole line along SR-138 or a temporary overhead/underground line within the Project limits line along the north side of Quail Lake, along with electrical facilities, to service the initial phases of development. Several telephone fiber pedestals would be placed throughout the Project allowing for a complete fiber system to be constructed, allowing for fiber to the home, including high speed service capabilities. Placement and location of these future facilities will be determined during development. However, they are typically placed out of roadway right-of-way on private property within an easement. AT&T would plan for a substructure system that would allow for this service. To support the development of the Project as "full fiber", additional fiber from existing AT&T facilities would either be placed overhead on the existing pole line along SR-138 or on a temporary overhead/underground location within the Project limits line along the north side of Quail Lake, along with electrical facilities, to service the initial phases of development. Several telephone fiber pedestals would be placed throughout the Project allowing for a complete fiber system to be constructed allowing fiber to the home, including high speed service capabilities. These new fiber facilities would be in addition to existing copper/fiber facilities currently in place (BJ Palmer 2015).

The determination of whether these additional facilities are needed and the locations of the telephone fiber pedestals or other AT&T facilities would be determined in the future as part of Project planning and implementation. In addition, AT&T has stated that upgrading the Central Office in Lebec would be necessary and would involve internal upgrades to distribution facilities, which would expand the Central Office's service capacity and meet the overall Project demand (BJ Palmer 2015).

The required off-site telephone system Project features are described in Section 4.8.3. Retrofitting the existing facilities outside the Project site would include re-cabling the existing pole line and/or placing a new underground substructure system to support the facilities capable of servicing the Project. This line extension would be conducted within the existing roadway and is currently the responsibility of the utility; however, the physical environmental impact associated with off-site telephone facility upgrades are addressed as part of the Project in this EIR.

The Project would also accommodate wireless communication facilities, including antennas (mounted on buildings or stand-alone structures) and equipment shelters. These facilities would be designed to blend with the surrounding environment. Using "stealth design" techniques, antennas can be mounted on buildings; placed within tall architectural features such as a clock tower, steeple, or entry signage; or strategically placed among a cluster of trees of similar height to render them invisible to the casual observer. Standards for wireless equipment are outlined in Section 2.2.7(Q) of the *Centennial Specific Plan.*

## Cable and Internet

There are no existing cable television (CATV) facilities located within or immediately adjacent to the Project area. CATV service is a free-enterprise system and is open to competition. Local service providers in the vicinity of the Project site include CalNeva Broadband (formerly Rapid Cable) and Time Warner Cable. CalNeva Broadband is a national CATV provider that serves customers in California and throughout the country. CalNeva Broadband currently provides service to the City of Gorman and has indicated a willingness to expand services to the Project site (BJ Palmer 2015). Time Warner Cable's closest facility is in Castaic, and the company does not currently plan on extending service further to the north. At this time, the cable provider may be CalNeva Broadband or some other provider.

The closest existing CATV trunk and/or distribution facilities are CalNeva Broadband facilities and are located in Gorman, approximately four miles northwest of the Project site. CalNeva Broadband's plant is located north of the Project site in Frazier Park, which is approximately eight miles west-northwest of the western boundary of the Project area.

As shown on Exhibit 4-17, cabling for cable services would be provided as part of the on-site main utility corridors for dry utilities. The extension of CATV lines would proceed from the nearest location of service from whichever provider is chosen. If CalNeva Broadband is chosen, extension of their facilities would include a trunk system (overhead and/or underground) from Gorman to the Project. Extension onto the site would follow the route along with electricity and telephone lines within the Project limits around the north side of Quail Lake. Facilities could also be extended along the SR-138 roadway overhead on the existing pole line easterly to the initial construction phases of the Project. As part of Project development, CATV service connections would be stubbed to each property line. The CATV provider would extend fiber facilities providing phone, video, data, and high speed internet access.

The required off-site cable system Project features are described in Section 4.7.3. Section 4.5.16, Technology Plan, describes how the Project would provide community-wide networking and other broadband options to provide internet access to Centennial residents and businesses.

## 4.5.11 GREEN DEVELOPMENT PROGRAM

The Centennial Green Development Program encompasses a range of sustainable development practices that have been incorporated into the Project at all phases of site development, from land use planning to long-term resource conservation. The purpose of

the Green Development Program is to integrate sustainable practices into the development of the Project from the beginning, taking advantage of the new community from its inception. The selection of development practices in the Green Development Program has been tailored to reflect the environmental conditions at the Project site and the range of proposed land uses.

Centennial's Green Development Program encourages environmentally sustainable development in two ways:

- First, in addition to satisfying all mandatory measures of the CALGreen Code, all residential and non-residential development within the Specific Plan shall be required to satisfy the measures necessary to achieve CALGreen Tier 1 then currently applicable.
- Second, this Green Development Program includes additional measures for Centennial that exceed applicable state, regional and local requirements, including but not limited to exceeding 2016 CALGreen Tier 1.

With this approach, development of the Project will meet and exceed the mandatory standards of the CAL Green Code, CAL Green Tier 1, and the requirements of the County's "Green Building Ordinances" existing on the date of adoption of the *Centennial Specific Plan.* Therefore, as stated in Section 4.2 of the *Centennial Specific Plan,* Appendix 1-B shall apply instead of the County's Green Building Ordinances.

If the County adopts new or additional County-wide regulations applicable to environmentally sustainable development after the adoption of the *Centennial Specific Plan,* then such new or additional regulations shall apply, subject to the right of an applicant to demonstrate the functional equivalency of the Centennial Green Development Program's required measures or suggested BMPs pursuant to the procedures set forth in Section 4.2 of the *Centennial Specific Plan.* In addition, as industry continues to innovate in "green building" and "sustainable communities" means and methods, the Project Applicant/Developer will have the opportunity to present new or improved technologies that achieve functionally equivalent outcomes of the program's required measures or additional measures, or otherwise help attain the applicable Green Development Program standard for review and approval by the Director of the appropriate County department(s). In some cases, the program anticipates the flexibility desired for new innovations, as requirements are described in general terms to allow for the incorporation of new technologies as they are developed. Minor changes to the Green Development Program that reflect improvements in the program or incorporation of new standards or technologies will not require a Specific Plan amendment. Revised laws and regulations, such as more stringent energy and water conservation standards, are also anticipated to be adopted over the buildout period for the Specific Plan. The flexibility to address revised technologies and innovative practices, as well as evolving legal mandates, makes implementation measure flexibility integral to Centennial's Green Development Program.

Sustainable and resiliency features will be incorporated in the design from the earliest stages to provide benefits for builders, future occupants, and the community. Many sustainable design principles have no or minimal cost impacts if incorporated early. Any costs can

frequently be offset through reducing construction costs and providing long-term operations and maintenance savings. For example, passive solar design and energy efficient building construction can reduce heating, ventilation and air conditioning (HVAC) system size requirements and lower utility bills. Reduced energy consumption costs may also increase a homebuyer's ability to afford a better home loan, through programs such as the federally recognized energy efficient mortgage program. Energy efficient housing is more affordable to own and occupy when recurring energy consumption costs are lower.

The Green Development Program is organized into three major components: (1) Green Planning and Infrastructure Measures; (2) Green Building Measures (i.e. Energy Efficiency; Water Efficiency and Conservation; Material Conservation and Efficiency; and Environmental Quality; and (3) Innovation and Adaptation Measures.

These categories are not mutually exclusive. In fact, there is significant overlap among categories because sustainability practices often take into account multiple systems, the interrelationships among ecological co-benefits, and environmental, and economic factors. Some measures may appear redundant or repetitive. However, a comprehensive approach to creating a sustainable community recognizes, acknowledges, and celebrates the overlap and interconnectedness of green and sustainable community development practices and allows for context-sensitive solutions that achieve Green Development Program objectives. For example, drought-tolerant landscaping relates not just to water conservation but also has a role to play in natural drainage systems and green infrastructure.

## Green Planning and Infrastructure Measures

The Project has been designed with a mix of land uses and density to help minimize the need for internal combustion automobiles and maximize pedestrian, bicycle and low speed vehicle (LSV) access. This Green Development Program category includes planning level principles, such as the fact that most larger private sector employers are located along SR 138, and have an east-west elongation to facilitate the design of north–south oriented buildings that incorporate passive solar design. The Project's Greenways have been planned community-wide to serve the multiple purposes of off-street transportation, preservation of native habitat, and a water filtration and recharge system for stormwater runoff in conjunction with water features that may be used to capture water for aquifer recharge.

These sustainable community design features are designed to work in tandem with the objectives of smart growth, multi-purpose function, connectivity, and utilization of natural processes. The Project incorporates green infrastructure and related methods for watershed management to improve water quality, conserves water, and reduces runoff volumes as well as peak flows and durations. In addition to these direct benefits to the watershed, and reduced climate impacts, implementing such methods also benefits the quality and preservation of biological habitat, provides energy conservation by reducing the heat island effect of typical land development, and provides for visual amenities that enhance the Project's aesthetics.

## Green Building Measures

### *Energy Efficiency*

This part of the Green Building Program requires all residential and nonresidential development to implement energy conservation measures that will exceed the 2016 California Building Energy Efficiency Standards (Title-24) by 15 percent for all residential projects and 10 percent for non-residential projects. Energy conservation techniques, including efforts to increase building efficiency, also result in the reduction of carbon dioxide emissions, a major contributor to global climate change. Through techniques such as maximizing solar orientation of streets and buildings, increasing the use of natural daylight, creating a tight, well-insulated building, installing appropriately sized and high-efficiency HVAC systems, and strategically placing trees and other shading devices, the Project can achieve a substantial reduction in total energy use. In addition, to decrease the Project's dependence on carbon-based fuel consumption, a minimum of 50 percent of the anticipated electrical energy demand at build out (i.e. household, business, civic/institutional, recreational, and public facilities) shall be met by onsite renewable energy, and charging stations will be provided throughout the Project area.

### *Water Efficiency and Conservation*

This part of the Green Building Program includes measures to promote water conservation, and water reuse to net minimize consumption of water. The incorporation of native and/or drought tolerant non-invasive species, and the use of energy efficient appliances and water-wise landscaping irrigation systems that minimize water use are among the measures required to substantially reduce the amount of valuable water resources that are used by and that flow into and out of the community.

### *Material Conservation and Efficiency*

This part of the Green Building Program includes measures to promote recycling and reduce the amount of solid waste produced within the Project. For example, The Project is required to divert 100 percent of soil during grading activities, and at least 70 percent of non-hazardous construction and demolition waste, away from landfills to recycling or salvage or current County standards. In addition, the Project has an operational waste diversion goal of 75 percent. The implementation of recycling programs (such as dedicated collection areas in commercial buildings and separate containers for residential units), and the management of green waste are but a few areas in which the Project can substantially reduce the amount of waste produced by the community and reduce the environmental impact of development pursuant to the *Specific Plan*.

### *Environmental Quality*

This part of the Green Building Program includes measures to provide a safe and healthy living environment inside and outside of homes and buildings. Materials and actions that improve indoor air quality, respect circadian sensitive lighting design to enhance the health and comfort of homes, and maximize daylighting and natural ventilation are critical to good community health and well-being.

### *Innovation, Adaptation and Resiliency*

Technological advances and emerging practices and services related to sustainable community development and green building are rapidly advancing; as is the legal framework for removing barriers to innovation (e.g., with clear standards for recycled water), creating incentives for green practices and facilities (e.g., with continued federal and state support for distributed energy generation models such as rooftop solar), and changing public and private sector practices influencing longstanding transportation and employment behaviors (e.g., with on-demand car services and telecommuting). Continued technology innovations such as autonomous vehicles and battery-assisted bicycles and scooters, as well as continued public sector support for green practices that reduce greenhouse gas emissions and conserve water, and new private sector service models including flexible work hours and locations, are expected to continue.

This Innovation and Adaptation component allows development pursuant to the *Centennial Specific Plan* to comply with applicable legal standards and to adapt to changing technologies and practices by substituting alternate measures for those identified in Table 1-B-1 that achieve equal or greater environmental benefits, and that do not result in any new significant adverse environmental impacts. Changes to legal standards, for example, are likely to include additional requirements to reduce greenhouse gas emissions. technology are inherently difficult to predict and account for, it is possible for example that improved and more cost-effective electricity storage technology may make it more feasible for "net zero" electricity importation at residential and commercial structures. It is also foreseeable that predicted advances in autonomous vehicle technology make private ownership of cars less prevalent among homeowners and employees, which could reduce the need for parking at residential and commercial buildings while increasing the need for a centralized parking and autonomous vehicle servicing facilities. It is also possible that future drone or other delivery technology could reduce the need for "brick and mortar" retail goods establishments in village centers, while changes in work practices may increase the desirability of shared work spaces and service/food-based retail uses in village areas. The Innovation and Adaptation component is intended to address these and other potential changes in laws, technologies, and practices.

Innovation and Adaptation measures would be proposed by the Project Applicant/Developer for County approval in the same development review process steps included for the corresponding measures included in Table 1-B-1. Specifically, proposed Innovation and Adaptation changes relating to Green Planning and Infrastructure measures will be proposed as part of tentative and final mapping, site plan review, and infrastructure permitting. Proposed Innovation and Adaptation changes relating to Green Building measures will be proposed as part of building permit, conditional use permit, and occupancy permit approvals. Compliance with (and enforcement of) approved Innovation and Adaptation measures will be managed in the same monitoring and enforcement procedures applicable to Table 1-B-1 Measures.

## Green Development Program Process

Builder participation in the Green Development Program is mandatory. Required measures apply to all buildings except multi-family residential which have separate requirements as noted in the Centennial Green Development Program. To allow maximum flexibility in the application of sustainable design practices by individual developers, any residential

development in the Project that achieves certification by the National Association of Home Builders for compliance with the National Green Building Standard or certification by the U.S. Green Building Council for performance under the Leadership in Energy and Environmental Design (LEED) – Homes Rating System will be considered consistent with the intent of the Green Development Program for the building portion of the Project, so long as such certification otherwise exceeds the mandatory residential requirements of the CAL Green Code in effect on the date of application for a building permit and the measures required to achieve Cal Green Tier I as described in the 2016 version of the Cal Green Code. Any commercial development in the Project (as defined within a business park, light industrial, or commercial land use designation) that is awarded a LEED Silver Certification or better will be considered consistent with the Program, so long as such certification otherwise exceeds the mandatory nonresidential requirements of the CAL Green Code in effect on the date of application for a building permit and the measures required the achieve Cal Green Tier 1 as described in the 2016 version of the Cal Green Code. The comprehensiveness of these certification programs guarantees, for their respective types of development, the achievement of a high minimum standard equivalent to CAL Green Tier 1 and the unique measures otherwise required by Table 1-B-1 of the *Centennial Specific Plan.* (see Appendix 2-A of EIR Appendix 4.0-A).

A complete description of the Centennial Green Development Program, including a listing of all development practices and the specific components are provided in Appendix 1-B of the *Centennial Specific Plan* (Appendix 4.0-A of this EIR). Additionally, each analysis in Section 5.0 (i.e., 5.1–5.21) of this EIR includes Project Design Features (PDFs) based on the Green Development Program, if applicable, that list the required development practices germane to that environmental topic and a brief explanation of how these practices would reduce the Project's impact compared to a more traditional development. However, unless specifically indicated the environmental impact analysis in each section of this EIR does not take quantitative credit for the potential mitigating effects of achieving the performance standards of the Green Development Program or implementing the required measures and suggested BMPs of the Green Development Program. For example, unless noted, Green Development Program measures that reduce greenhouse gas emissions are not given quantitative credit as emission reductions in the Climate Change analysis. Implementation of the Centennial Green Development Program is also discussed in Chapter 4 of the *Centennial Specific Plan.*

## 4.5.12 PUBLIC SERVICES/FACILITIES

The Project reserves sites for schools, parks, and recommends and permits locations for a library, sheriff, and fire stations to serve future residents and employees. Exhibit 4-1, Centennial Project –Conceptual Land Use Plan, shows the conceptual location of the proposed public facilities described below.

### Fire and Emergency Service

Fire protection service is provided to the Project site by the Consolidated Fire Protection District of Los Angeles County, commonly known as the Los Angeles County Fire Department

(LACFD). The nearest station (Fire Station No. 77) is located at 46833 Peace Valley Road in Gorman, west of the I-5 and SR-138 interchange.

As shown on Exhibit 4-1, the Conceptual Land Use Plan includes conceptual site locations for up to four new fire stations in the Project area. The number of on-site fire stations and their general locations were determined through preliminary consultation with the LACFD and were based upon the projected increase in population to be served, types of development proposed, geographic distribution of proposed land uses, circulation system, and projected response times to calls from the Project site. According to the Insurance Service Office (ISO), using a Fire Suppression Rating Schedule (FSRS), a five-minute response time is typically the standard for adequate fire protection. The new fire stations would provide 5-minute response times to 90 percent of fire calls from the Project site. This is consistent with the LACFD's goal of a five-minute or less response time at Project buildout within the Centennial Project. Ultimately, the LACFD would approve the final station site locations. The Project permits or conditionally permits fire stations within most land use designations by providing adequate flexibility to meet County siting criteria. Precise locations for all fire stations would be established when future tract maps are processed.

The Project would construct up to three medium stations and one large station on the Project site. A medium station would consist of an approximate 10,000-square-foot (sf) building on an approximate 1.25-acre lot. A large station consists of an approximate 15,500-sf building on an approximately 4.00-acre lot. The large station lot is sized to also accommodate training facilities for fire fighters. It should be noted that fire station size requirements are continually modified to meet federal, State, and local requirements. The actual square footage of each fire station would be determined by the LACFD at the time of Project development.

Staffing requirements for all new fire stations mandate a minimum of a four-person engine company. The first fire station would be opened in conjunction with the occupancy of the 1,000$^{th}$ residential unit. The timing of development of this fire station will be coordinated between the Project Applicant/Developer and LACFD. The timing for the construction of the remaining fire stations will be established by the LACFD and the Applicant, depending upon the phasing of the remainder of the Project development.

As required under the LACFD Developer Fee Program, the Project Applicant/Developer is required (1) to pay fees as annually updated in the County Developer Fee Program for the purchase of land for fire station sites and construction of fire stations and (2) to provide for certain equipment. The Project Applicant/Developer is responsible for providing land for on-site fire stations and for constructing, furnishing, and equipping the stations to the LACFD specifications and requirements. The improvements would meet all applicable State and County fire codes and ordinances. Specific provisions of the agreement between the Project Applicant/Developer and LACFD would be determined in future negotiations. It should be noted that this EIR addresses the potential environmental impacts associated with construction and operation of the fire stations within the Project site.

The existing heliport located at the site for the existing Fire Station 77 will continue to be located at the site and remain operational. The existing heliport at Fire Station 77 would be

operational for refueling and patient pick up and could be used to scoop water from Quail Lake for brush fire protection. On site, a fire hydrant system would be constructed to fight fires within the development area. Refer to Section 5.16, Fire and Law Enforcement Services, for a discussion on fire and emergency services.

## Law Enforcement Service

The Santa Clarita Valley Station of the Los Angeles County Sheriff's Department (LASD) is responsible for providing general law enforcement to the Project site, while the California Highway Patrol (CHP) provides traffic control. The closest Sheriff's Station is located near the intersection of Magic Mountain Parkway and Valencia Boulevard, at 23740 Magic Mountain Parkway in Valencia, approximately 35 miles south of the Project site. Currently, emergency and priority response times to the Project area exceed the optimal response times.

The Project would provide for one on-site Sheriff's station. Prior to development of this permanent Sheriff's station, the LASD would operate a temporary station (e.g., store front station) in the first phase of Project development. This store front Sheriff station would be developed and fully operational prior to issuance of the first certificate of occupancy and be located in the first retail center the first phase of Project development. Once the permanent Sheriff's station is constructed, the store front station will be closed. The permanent Sheriff's Station would be constructed prior to occupation of any future phases that could not be adequately served by the temporary station, in accordance with the needs and timing of the LASD and Project Applicant/Developer.

The CHP may need to increase staffing levels, adjust boundaries, and purchase new equipment in order to address the increased demand for services created by the Project. However, implementation of the Project would not require new or physically altered CHP facilities to maintain acceptable service ratios, response times, or other performance objectives (Miler 2016). Refer to Section 5.16, Fire and Law Enforcement Services, for a discussion on law enforcement services and the CHP.

## Schools

The majority of the Project site is located within the jurisdiction of the Gorman Joint School District (Gorman District) and a portion of the Project site at the eastern end of the site is located in the Westside Union School District (WUSD). These districts provide public elementary and junior high/middle school education (grades Kindergarten through 8$^{th}$ [K–8]). The Project site is also located within the Antelope Valley Union High School District (AVUHSD), which provides high school education (grades 9–12).

To accommodate the demand for educational facilities created by future Centennial residents, the Project reserves sites through a "Schools" land use designation for five K–8 schools, one K-5 school and one high school. The proposed school sites are centrally located in the Villages and are generally adjacent to parks and minor and major greenway systems that offer pedestrian trail linkage. The School (S) Overlay on Exhibit 4-1, Centennial Project –Conceptual Land Use Plan, identifies the preliminary locations for the school sites reserved

in the Project site; however, final school site locations would be determined at when future tract maps are processed and in coordination with the respective school districts. Final locations would comply with the Project's intent of connecting schools to pedestrian trails and locating them close to parks.

The reservation of school sites through a land use designation would allow the Gorman District, the WUSD, and the AVUHSD to acquire the sites and provide school facilities. The Project Applicant/Developer would either pay required Senate Bill 50 (*California Government Code,* Section 65995) developer fees to the respective school districts, or enter into an agreement with the school districts to facilitate the financing, construction, and operation of new school facilities in the Project site to ensure the timely provision of schools corresponding to the Project's phased development. Although construction of the schools may be the responsibility of the respective school districts, this Draft EIR addresses environmental impacts associated with construction and operation of schools on site.

### *K–8 School Sites*

Five K–8 school sites are anticipated to be constructed on the Project site. The K–8 school sites would each occupy approximately 15 acres. The first school will be built and operational prior to the first certificate of occupancy. Therefore, it is anticipated that the K–8 school (initially a K–12 facility, see below) would be opened by the Gorman District at occupancy of the first residential units. The planned approach is to initially construct a kindergarten through Grade 12 campus (K-12) in order to provide public school accommodations at all education levels at Project opening. As Project buildout occurs, this school would revert to a K–8 school when the high school is constructed. Eventually, other K-8 schools would be constructed as needed, including a smaller K-5 school that would be constructed west of the Aqueduct. The actual timing of school facilities implementation would depend on the rate of Project development and the actual demand for school facilities, as determined by the Gorman District and the WUSD.

The K–12 school option would be accommodated on a school site within the physical impact area identified for the Project and evaluated in this EIR. The off-site school option (attendance of Project residents at the existing off-site Gorman Elementary School until the first on-site elementary school is built) would be available to accommodate students up to the school's normal operating capacity.

### *High School Site*

One high school site is proposed within the Project site. The high school site would have a minimum of 60-net useable acres per the agreement with AVUHSD. The high school site would accommodate between 2,850 and 3,350 students. As previously discussed, the proposed interim K-12 campus would ensure public school accommodations at all education levels during the initial phase of Project implementation.

The opening of the high school facility would depend on the rate of Project development and actual demand for high school facilities, as determined by the AVUHSD. In the interim, a grades K–8 and grades 9–12 joint-use campus is proposed to provide public school

accommodations at all education levels. Students from the Project also would have the option of attending Quartz Hill High School (by busing through AVSTA) or applying for an interdistrict transfer to attend the El Tejon Unified School District's Frazier Mountain High School, which is located approximately ten miles northwest of the site. Frazier Mountain High School had 286 students in 2015-2016 and has capacity for additional students (ETUSD 2016). The El Tejon Unified School District also allows interdistrict transfers subject to approval of the student's home district (ETUSD 2015). It should be noted that this interim option would be for a short time until the first grades 9 through 12 school is operational.

## Library

The Project includes a public library in the Town Center, which would be part of the County of Los Angeles Public Library (County Library) system. The Project Applicant/Developer would provide the land; construct the library; and would provide all furniture, fixtures, equipment, and materials for this library. The area where the library site is conceptually located in the Land Use Plan is of adequate size and in a location that addresses the County's library siting requirements, including related parking. Providing for a proposed library facility of this size and materials would exceed the projected demand based on the County Library's planning guidelines for the projected population of the Project.

While the location is conceptual and may change as determined in coordination with the County Library, the proposed inclusion of a library on the Project site is definitive. The Project proposes a public library that would be on an approximate 2.5-acre site at the Town Core. The Library would be completed and operational on a date mutually agreed to between the County Librarian and the Project Applicant/Developer, taking into account the demands on library services within and adjacent to the Project site. The library will be developed in accordance with current County library guidelines. The exact location, facility design, and phasing of the proposed permanent library would be determined by the County Library during subsequent levels of Project approval.

Flexibility is a key concern of the library staff to ensure that space within the library can be changed as the needs of the community change such as the need for more computer stations. Other components of priority for the County Library are the inclusion of meeting rooms, technology, and construction of an appropriately sized facility to serve the community.

Library services, such as access to online databases and reference materials, would also be provided via internet services to increase access and use of library resources. Schools, residences, and businesses would be "connected" through the community intranet system, as described in Centennial's Technology Plan (refer to Section 3.9 of the *Centennial Specific Plan*).

## Maintenance Yards and Animal Control

Project demand for the maintenance of future County-owned facilities and infrastructure would be met by the provision of land for two on-site maintenance yards and the payment of fees and taxes that fund these services. The maintenance yards will operate as a joint use service yard and will include both a road maintenance yard and a maintenance yard for

parks. The County may also construct, equip, and operate a permanent new animal control facility adjacent to the maintenance yards, if such a permanent facility is needed in the Project area.

The County will construct, equip, and operate a permanent animal control facility when, in the judgment of the County, such a permanent facility is required. The land will be provided through an irrevocable offer for dedication of the property from the Project Applicant/Developer or subdivider. This facility will consist of up to approximately 5,000 square feet of space including office space; dog kennels (up to a total of 54); a cat room (with up to 40 cages); a veterinary medical suite; storage space; and required parking. It may also include a facility to house farm animals and reptiles.

During the initial development of the Project, the County may provide modular units to temporarily house lost and abandoned animals on the land set aside for the County's future permanent facility. Alternately, should the permanent site not be available to accommodate the modular units, the Project Applicant/Developer may contract with Shelter on the Hill, a Humane Society, or another entity acceptable to the County, to provide temporary animal shelter facilities. The temporary animal shelter will be located in Shelter on the Hill's facilities in Lebec or in other facilities located near the Project site. The operator of the off-site Animal Control Facility would be required under the agreement to provide the services stated below to Centennial for five years after the issuance of a certificate of occupancy for the 2,000$^{th}$ residential unit.

This facility will provide the following services: (1) temporary shelter to lost, injured, and abandoned dogs and cats identified by the County Animal Control during patrols of Centennial; (2) temporary shelter for dogs and cats relinquished by their owners; (3) information and referrals to the public regarding local veterinarians that perform spaying and neutering of pets; (4) the same level of basic medical care and treatment of dogs and cats that are impounded from Centennial that is offered to other animals that are being boarded at the this off-site facility; and (5) the ability to temporarily quarantine up to two dogs through a segregated, single-occupancy kennel run. If an animal is not redeemed by its owner from the temporary facilities after ten days or more, the animal may be moved to (and shall be accepted by) the Los Angeles County Castaic Animal Control facility for potential adoption. The County Department of Animal Care and Control shall respond to patrol calls requested by Centennial residents with respect to lost, injured, abandoned, or dangerous animals until the permanent facility is established.

## 4.5.13 LANDSCAPE, FUEL MODIFICATION, AND LIGHTING

### Landscape Plan

The Landscape Plan is a major component in Centennial's infrastructural concept. The Project area has been grazed for more than a century, and the predominant vegetation type on the Project site consists of grasslands. The Landscape Plan seeks to establish regionally appropriate "urban forests" within Centennial. The primary landscape objective is to preserve the Project site's natural beauty and resources; to maintain the historical agrarian character of the region; and to create the look and feel of a rural small town that meets the

everyday needs of the community. The Landscape Plan is structured to reflect the uniqueness of the Project site's varied topography and habitats while providing a uniform treatment of landscape components. Differing elements of the plant palette would be used for variety depending on the landscape purpose. The predominant landscape theme along the streetscapes would feature natural and rural settings that could include a blend of trees to provide themes that resemble groves and orchards; vineyards; wildflowers; and grasslands.

A thematic treatment is to be used at main entryways to identify neighborhoods and other significant land uses or major intersections. The Landscape Plan is divided into the following two components: open space and developed areas. Additionally, as part of the integrated water resources management approach for protecting water quality, a Landscape Management Plan is identified as a project design feature and will be implemented for common area landscaping on the Project site that includes a planting plan; procedures for removing non-native vegetation and planting native vegetation; fertilizer guidelines; and Integrated Pest Management (IPM). IPM is a strategy that focuses on long-term prevention or suppression of pest problems (i.e., insects and diseases) through a combination of techniques including using pest-resistant plants; biological controls; cultural practices; habitat modification; and the judicious use of pesticides according to treatment thresholds, when monitoring indicates pesticides are needed because pest populations exceed established thresholds. The Landscape Management Plan and a discussion of its general components are identified in Section 5.4, Water Quality.

### *Open Space Zones*

Open space consists primarily of a native, undisturbed vegetation zone; a transition zone (for transition slopes); a greenway zone; and a natural drainage zone. Fuel modification requirements may apply to some portions of any of these zones.

***Native Zone.*** This zone includes only native vegetation. The native zone may include areas selected for restoration with native vegetation and biological mitigation (as detailed in Section 5.7, Biological Resources). Select areas of the native zone may also continue to be managed using historical seasonal patterns of grazing, where allowed.

***Greenway Zone.*** The greenway landscaping zones typically contain existing drainage features or unique topographic features. Elsewhere in the greenway zone, there may also be transition zones, which shall be treated as described below. The overall goals of the landscaping concept in the greenway zone are resource conservation (preservation) and enhancement and establishing an appropriate natural setting for drainages to increase ecological values. Plants in the major greenway zone outside of the natural drainage zone should be chosen so that they will not interfere with those efforts. The major greenways may also be used for stormwater management. The stormwater management facilities should be designed and planted where possible to blend with the natural setting of the greenway zone.

Greenways are a multipurpose area that can be found throughout the Project site, providing conservation areas and stormwater management where necessary. They are a

combination of manufactured and conserved open space and can be landscaped in a variety of ways depending on use. For example, they may contain areas for stormwater overflow, educational nature displays, and seating areas along the trails. Trails are typically meandering and are intended to provide a shorter connection to village centers and recreational amenities providing an alternative to using a car. Although potentially varied, the landscaping in this zone shall be primarily native or utilize similar drought-tolerant plant material and shade trees with the goal of being self-sustaining in most locations. Drifts of native and or drought-tolerant wildflowers and perennial grass-dominated meadows should be used to enhance paths that will be used by bicyclists and pedestrians.

***Transition Zone.*** The transition zone, an area between the native zone and developed areas, is graded and may contain a fuel modification zone. Landscaping in this zone must be dominated by native and/or drought-tolerant, trees, shrubs and ground cover, also taking into consideration fuel modification requirements, which include plants that are inherently fire resistant. The goal of the transition zone is to seamlessly blend the native landscape with the human-made environment. This process results in a landscape that is identified in various figures in the Landscape Plan as "naturalized."

***Natural Drainage Zone.*** The natural drainage zones are areas where major drainage features shall be preserved and/or restored within the developed area of the Project site. Only the natural drainage zones are subject to the requirements of the Landscape Plan. The extent of drainage preservation and/or restoration, as well as the plant material chosen for this zone, must be consistent with the mitigation measures set forth in Section 5.7, Biological Resources.

***Developed Areas***

Developed areas consist of all man-made features in the Project, including the neighborhoods, parks, shopping, and commercial areas. Within this man-made environment are common unifying landscape zones such as the streetscape and internal slopes that are manufactured. The common goal of these zones is to (1) use regionally appropriate plant species and conserve resources by using native and drought-tolerant species; (2) plant minimally for maximum impact (e.g., shade); (3) group plants according to water requirements (hydrozones); and (4) use smart irrigation practices (such as low-volume spray heads and drip irrigation). Using native or drought-tolerant plant species would also minimize the need for soil amendments and the energy to integrate them. A Plant Palette and Prohibited Plant Species list are provided in Sections 3.4.3 and 3.3.4, respectively, of the *Centennial Specific Plan* and have been prepared in consultation with the County Biologist to determine which species should be selected according to the conditions within Centennial sites. The plant palette and design is tailored to the Project site's unique environmental conditions and allows for both native and adopted species of pines, oaks, willows, cottonwoods, grasses, spring and fall colors, and a wide range of tree forms. Ultimately, the Landscape Plan would help to define the visual character of the community by balancing planting in selective landscapes while leaving open other natural landscapes in their original conditions.

## Fuel Modification Plan

The Los Angeles County Fire Department designates land in Los Angeles County according to wildfire susceptibility; the Project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ), which means it is highly vulnerable to wildfires (Los Angeles County Code, Title 32 [Fire Code]). The default fuel modification setback standard within a VHFHSZ area is 200 feet from the closest structure; however, some flexibility is permitted where characteristics of land within a VHFHSZ do not warrant such large setback requirements. Since the Project site is predominantly characterized by annual grassland habitat and most of the proposed developed area on the Project site is characterized by low combustible vegetation, an alternative compliance of a 100-foot setback from a structure is likely more appropriate for the majority of the site. However, in some instances, an alternative compliance of a 150-foot setback from the structure may be appropriate, especially in cases where a number of trees are in the immediate vicinity of lots but are at a grade uphill from the lots. In addition, MM 3-9 (see Section 5.3, Hazards and Fire Safety) requires that new property owners be informed of their individual responsibilities for maintaining fuel modification zones on their property, either via the Covenants, Conditions, and Restrictions (CC&Rs) or disclosure statements. While this proposed Fuel Modification Plan has been reviewed by the Fire Department and represents a probable scenario, a final determination of the fuel modification setbacks for each lot will not be made until building permits are issued.

Within each setback requirement are three possible zones with associated landscape characteristics, namely Zone A, Zone B, and Zone C. The general characteristics of each zone are described later in this section. The recommended distance requirements for each zone are described below:

For areas with a 200-foot setback, the distance requirements would be as follows:

1. Zone A extends 20 feet from the edge of any combustible structure, accessory structure, appendage, or projection.
2. Zone B extends from the outermost edge of Zone A to 100 feet from the structure (or 80 feet from the outermost edge of Zone A).
3. Zone C extends from the outermost edge of Zone B to 200 feet from the structure (or 100 feet from the outermost edge of Zone B).

For areas with a 150-foot setback, the distance requirements would be as follows:

1. Zone A extends 20 feet from the edge of any combustible structure, accessory structure, appendage, or projection.
2. Zone B extends from the outermost edge of Zone A to 50 feet from the structure (or 30 feet from the outermost edge of Zone A).
3. Zone C extends from the outermost edge of Zone B to 150 feet from the structure (or 100 feet from the outermost edge of Zone B).

For areas with a 100-foot setback, the distance requirements would be as follows:

1. Zone A extends 20 feet from the edge of any combustible structure, accessory structure, appendage, or projection.
2. Zone B extends from the outermost edge of Zone A to 50 feet from the structure (or 30 feet from the outermost edge of Zone A).
3. Zone C extends from the outermost edge of Zone B to 100 feet from the structure (or 50 feet from the outermost edge of Zone B).

According to the *Fuel Modification Plan Guidelines,* the revised *California Public Resources Code* (Section 4291), and the *California Government Code* (Section 51182) defensible space guidelines, a Fuel Modification Program consists of 3 zones that are within an approximate 200-foot buffer and that are subject to partial or total replacement of the native or ornamental vegetation with drought-tolerant and fire-retardant plants. The actual width of each zone can vary from one site to another depending on the ability to provide acceptable clearance distances and concurrence from the County Fire Department and the County of Los Angeles Department of Regional Planning.

- ***Zone A*** is a minimum 20-foot setback zone; it is in closest proximity to the habitable structures and is irrigated. Most vegetation in this zone is limited to groundcover, green lawns, and selected ornamental plants. This zone requires regular vegetation trimming, a well-maintained irrigation system, and the removal and replacement of dead and dying plants.
- ***Zone B*** is the irrigation zone that provides defensible space for fire suppression forces. This setback zone may extend up to 100 feet from the habitable structure. Some native or existing vegetation may remain if spaced according to the *Fuel Modification Plan Guidelines* and are free of dead wood. The maintenance requirements are the same as for Zone A.
- ***Zone C*** is the thinning zone and is designed to slow the rate of wildfire spread, reduce flame lengths, and minimize the intensity of the fires prior to reaching irrigated areas. This zone allows for predominantly existing vegetation with the removal of undesirable plant species. Natural vegetation is thinned by reduced amounts as the zone moves away from the development.

Fuel modification is generally not recommended by the County Fire Department for areas outside a project boundary due to problems inherent with enforcing regulations on adjacent property and the potential for confusion regarding the responsibility for fuel-modification areas outside legal ownership. Consequently, the County Fire Department recommends the implementation of alternative modes of wildfire hazard protection, such as alternative means and methods that can be implemented on site to attain a comparable level of wildfire protection. According to the *Fuel Modification Plan Guidelines,* these alternatives may include, but are not limited to (1) increasing the width of the setback or irrigated zones to reduce thinning zone dimensions; (2) enhancing fire protection construction techniques (including indoor fire sprinkler systems); (3) adjusting structure orientation; and/or (4) constructing non-combustible fencing material (LACFD, Prevention Bureau, Forestry Division, Brush Clearance Section 1998). Therefore, in areas where a 200-foot buffer cannot

be accommodated on site, a comparable level of wildfire protection must be provided through a combination of these means and methods; however, all fuel modification will be outside the SEA boundary.

## Lighting Concept

Plans for street lighting, trail lighting, and accent lighting would be created at the final street and/or landscape plan level for each phase of the Project. Lighting would be designed to enhance the safety of vehicular, bicycle, and pedestrian flows and be concentrated at intersections and crosswalks. Light sources would be directed downward and shielded from streets and adjoining properties. Lighting for streets, public facilities (such as ball fields), and commercial areas would be used appropriately to minimize visual nuisances and maximize safety. General development standards for Project lighting are identified in Section 2.2.8(P) of the *Centennial Specific Plan.* The Project would be consistent with the County's Rural Outdoor Lighting District Ordinance.

In addition, the Project*'s* Green Development Program (Appendix 1-B of EIR Appendix 4.0-A) includes a section with required measures that establish environmentally sensitive lighting standards for all proposed lighting (e.g., street and security lighting) within the Project (see Table 1-B-1 of the *Centennial Specific Plan's* Appendix 1-B). These measures would be enforced through the HOAs and would include requirements for shielding exterior lighting and limiting the hours, height, direction, and lumens of outdoor lighting.

The lighting concept would be designed to limit light trespass while providing effective nighttime visibility. By minimizing light spillover, the environmentally sensitive lighting standards would preserve nighttime skies and community aesthetics, reduce indirect impacts to surrounding residential uses and wildlife, and conserve natural resources. The lighting concept would be designed to maintain a dark night sky while providing effective nighttime visibility.

# 4.5.14 SOLID WASTE MANAGEMENT PLAN

The Project's Solid Waste Management Plan has been developed in accordance with the Los Angeles County Source Reduction and Recycling Element (SRRE) and California Department of Resources Recycling and Recovery (CalRecycle) (formerly the California Integrated Waste Management Board) policies regarding reducing, reusing, and recycling solid waste, as outlined in the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), AB 341, AB 1826, and SB 1383. With implementation of the Solid Waste Management Plan, 75 percent of solid waste generated from Project operation would be diverted from landfills. The analysis of the Project's solid waste impact can be found in Section 5.17, Other Public Services, of this EIR. The Solid Waste Management Plan has many interrelated components, which are described further below.

## Community Education

A comprehensive waste diversion and educational program for residents would be created and implemented. The first purchaser of each residential unit and Centennial's residential

renters shall be given educational or instructional materials that will describe what constitutes recyclable and hazardous materials, how to separate recyclable and hazardous materials, how to avoid the use of hazardous materials and what procedures exist to collect such materials. Educational materials shall be passed to consecutive buyers through the HOAs and rental agreements and will be available on the community intranet.

## Waste Collection and Recycling

A comprehensive residential and commercial curbside recycling program would be implemented that includes automated trucks; the "three-bin system" (or other appropriate waste-reduction system), which provides separate receptacles for yard waste such as leaves and tree trimmings (and possibly food waste, per property's hauler); recyclables; and permitted, nonrecyclable and noncompostable solid waste; a pick-up program for fall leaves, used motor oil, paint products, Christmas trees, electronics and appliance waste, and other household hazardous waste; and regular pick up of cardboard from commercial areas.

Semi-annual "exchange days" are planned to be organized, publicized, and paid for by the HOA. Under this scenario, large dumpsters (including those for green waste only) would be brought into the neighborhoods for a weekend where the community members will be able to exchange with their neighbors items they no longer want. Homeowners would then be motivated to do spring cleaning and major yard trimming while neighborhood volunteers monitor the dumpsters to make sure they are used efficiently and that only authorized waste is discarded in them.

Construction waste would be managed with the use of recycling bins for glass, metals, paper, wood, plastic, green waste, and cardboard. The collected materials would then be sent to existing recycling and/or processing facilities.

## Materials Recovery Facility/ Transfer Station (MRF/TS)

The Project Applicant/Developer will set aside a minimum of 5 acres for a future Materials Recovery Facility/Transfer Station (MRF/TS) that includes a household hazardous waste permanent collection and reuse center and allows for mulching/composting operations. The site will be located in a suitable location with the capacity to manage the nonhazardous solid waste and household hazardous waste generated by the Centennial Project at buildout. The Project Applicant/Developer will prepare and grade the site, and install basic mainline infrastructure fronting the property prior to the issuance of any occupancy permits associated with the first phase of Project implementation. Specifically, the Project allows an MRF/TS, hazardous waste collection center, solid waste conversion technology facilities, and transformation facilities in the Utility land use designation.

The Developer will continually encourage a waste management company to build these facilities on this build ready site. The CC&R for the future MRF/TS site will require the land to be set aside for the MRF/TS in perpetuity. The MRF/TS would allow for all recyclable material to be sorted and compacted for shipment to an off-site recycling processing facility. This process would transfer an early step of the solid waste management process (sorting) from the public to materials recovery professionals. It is expected that, if the MRF/TS is constructed, it would occur after the first phase of Project implementation. Prior to this

facility's construction and operation, if built, waste would be disposed of at a municipal solid waste landfill, as described in Section 5.17, Other Public Services.

## Composting and Green Waste Facilities

At a minimum, green waste would be separated by Project occupants in separate green waste bins through the three-bin or other waste-reduction system discussed above. Collection and/or a mulching and composting facility would be incorporated into an MRF/TS with the goal of a 100 percent diversion of green waste from landfills. The landscape plan and turf limits are, in part, designed to reduce the amount of green waste generated by the Project and to reduce the demand for irrigation. Green waste is a resource that can be shredded, chipped, and composted to be used as ground cover in the community at low or no cost to residents. To encourage at-home compositing, the County offers free workshops, which can be conducted at the Smart Gardening Learning Center to be built as part of this Project, to teach residents techniques and benefits of compositing and offers discounted compost bins. Green waste can also be composted with sludge produced by the wastewater treatment plant and sold as fertilizer. In addition to encourage at-home composting, composting facilities provide environmental benefits at a regional level. Also, there are components of the Green Development Program that relate to green waste management, above and beyond the Solid Waste Management Plan.

## County Smart Gardening Learning Center

The Los Angeles County Department of Public Works operates 10 Learning Centers equipped with educational and demonstration materials designed for Smart Gardening workshops. Each center has various backyard and worm composting bins and drought-tolerant plants. Some include grasscycling demonstrations to show how easy and beneficial grasscycling can be.

The Project includes a County Smart Gardening Learning Center within the Project area, which would be part of the County of Los Angeles Smart Gardening system. The Project Applicant/Developer would provide the land; construct the learning center; and would provide the furniture, fixtures, equipment, and materials for this learning center according to the Development Agreements between the County and the Developer. The area where the leaning center site must address the County's Smart Gardening Learning Center siting requirements, including related parking.

The Project proposes a Smart Gardening Learning Center that would be on an approximate 4,000 sf site. The learning center would be completed and operational on a date mutually agreed to between the County Smart Gardening Program Manager and the Project Applicant/Developer. The learning center will be developed in accordance with current County Smart Gardening Learning Center guidelines. The exact location, facility design, and phasing of the proposed center would be determined by the County Smart Gardening Program during subsequent levels of Project approval.

## Household Hazardous Waste Collection

Household hazardous waste and less commonly disposed materials (such as electronics and appliances) would have special pickups or disposal locations and may also be accepted by an MRF/TS year-round. Prior to the facility's construction and operation, or if an MRF/TS is not constructed, waste would be sent to a facility that accepts household hazardous waste, as discussed in Section 5.17, Other Public Services.

## 4.5.15 COMMUNICATION BASED TECHNOLOGY PLAN

Technological advances such as Wi-Fi connectivity, Bluetooth, fiber optic lines, and satellite systems to name a few have been integrated into everyday life via smart phones, tablets, computers and the like. Being "connected" has become a necessity for businesses and residents. The technology vision for Centennial is to connect the community, businesses, and homes with advanced but economically feasible infrastructure and services that are seamless, transparent, and easy to use. The Project would be constructed so that it can accommodate changes to the technology industry in years to come. The Technology Plan includes the following four core components that will be refined and expanded as needed to reflect the inevitable shifts in technology and the changing needs of customers:

- Connected Homes: Home builders in Centennial are encouraged to provide enhancements such as smart home features that allow residents to connect to appliances, HVAC, door locks, security systems, thermostats, internet, lights, sprinkler systems, etc. Residential development must also comply with the Green Development Program, Appendix 1-B, which includes many technology features that also offer more sustainable alternatives. The Master Developer must assure there is adequate infrastructure to ensure every home can be a "smart" home.
- Connected Businesses: Commercial builders must provide enhanced automated systems that comply with the Green Development Program, Appendix 1-B, which includes many technology features that also offer more sustainable alternatives. Connected and smart, office and manufacturing space is demanded by the market. The Master Developer must assure that there is adequate infrastructure to ensure that every business can be located in a "smart" building.
- Connected Transportation Options: The Master Developer is required to provide connected infrastructure such as synced traffic signals, automated parking meters, and technology driven transportation options as discussed in Section 3.3 Mobility Plan.
- Connected Institutional and Civic Centers: Developers of uses such as a medical center, higher education facilities, libraries, schools, etc. are encouraged to provide automated building systems and connectivity for integration of smart technology and community building.

## 4.5.16 AFFORDABLE HOUSING PROGRAM

The Project Applicant/Developer has designed an Affordable Housing Program that provides Very Low-, Low-, and Moderate-Income affordable housing opportunities in several housing categories, including for-sale units and/or rental units. It is anticipated that most affordable units would be single-family attached, multi-family, and mixed-use units; this would allow for higher density residential uses that can provide affordable sales and rental rates to lower income households. The housing types provided would appeal to different types of citizens including renters, first-time homeowners, and senior citizens.

The proposed Centennial Affordable Housing Program is consistent with the goals of the current 2014–2021 Housing Element of the *County of Los Angeles General Plan.* The Housing Element was adopted on February 4, 2014, by the County of Los Angeles Board of Supervisors. This Element was certified by the State Department of Housing and Community Development (HCD) on April 30, 2014.

It is anticipated that Centennial's Affordable Housing Implementation Plan (Appendix 3-C of EIR Appendix 4.0-A) will be included as part of the proposed Development Agreement under consideration between the County and the Project Applicant/Developer. The Plan details the provision of very low-, low-, and moderate-income affordable housing opportunities. The Affordable Housing Implementation Plan is based on the implementation criteria found in the Affordable Housing Program and provides an overview of the affordable housing options proposed as part of the Project. Consistent with the goals of the *County of Los Angeles General Plan's* Housing Element, it is anticipated that affordable units would include a mix of affordable housing products.

The Project will include a minimum of 10 percent of the dwelling units (approximately 1,933 dwelling units throughout the Project site if fully implemented) as affordable units, per the Centennial Affordable Housing Implementation Plan. While the number of affordable homes per community will be adjusted through the approval process for the tentative tract maps, the total number of affordable homes proposed within Centennial will not be less than 10 percent of the total development.

The Centennial Affordable Housing Implementation Plan utilizes the same affordability criteria as does the County of Los Angeles with respect to the economic definitions of moderate, low, and very low incomes.

According to the Centennial Affordable Housing Implementation Plan, at buildout, affordable housing opportunities would be distributed throughout the Project site as follows:

- ***Very Low-Income Units.*** 387 dwelling units (20 percent of the affordable housing units) would be for very low-income (50 percent of the Los Angeles County median income) households.
- ***Low-Income Units.*** 483 dwelling units would be for low income (25 percent of the affordable housing units) households with incomes greater than 50 percent but less than 80 percent of the Los Angeles County median income.

- ***Moderate-Income Units.*** 1,063 dwelling units (55 percent of the affordable housing units) would be for households within incomes equal to or less than 120 percent of the Los Angeles County median income.

All very low income (less than 50 percent) and low income (50 to 80 percent) affordable units would likely be developed as rental units. Moderate income units would likely be a mix of rental and for sale units. The proportion of very low, low income, and moderate income units in each development phase will be provided in approximately the same proportion as their respective ratio to the total to ensure the distribution of affordable units throughout the Project, with the exception of Villages 1, 4, and 9.

Home buyers of affordable units would be eligible to receive a percentage of any appreciation with respect to the value of their property over time, depending upon the homebuyer's length of ownership; all affordable rental homes will maintain affordable monthly rents for a minimum of 30 years.

Per the Centennial Affordable Housing Implementation Plan, annual Affordable Housing Reports will be submitted to Los Angeles County Department of Regional Planning until such time as it is demonstrated that the goals identified in the Plan have been achieved.

## 4.5.17 GRADING AND CONSTRUCTION

Grading for the Project would occur in phases over an approximate 20 year timeframe, with all earthwork ultimately balanced on site. Grading for one phase with an approved tentative tract map may extend into adjacent phases that may or may not be covered by an approved tentative tract map and require the import or export of soils among phases, but earthwork within the Project boundary would achieve an overall earthwork balance. Project implementation requires a total approximately 100 million cubic yards (cy) of cut and fill. Overexcavation and remedial grading for contaminated soils is not anticipated. However, the conceptual grading plan is gross, and estimated cut and fill quantities are conceptual.

Earthwork for development on each side of the Aqueduct as well as on each side of the SR-138, would be balanced within each area. Consequently, given the large scale of the Project, grading of a particular tract map may be undertaken in phases. The limit of a grading phase may extend beyond the limits of a particular final unit map or tract map boundary in order to achieve a phased grading balance. An interim Hydrology Report will be prepared for each phased grading area, and required drainage devices will be provided to support the phased grading.

For analysis purposes, it is estimated that on-site cut and fill is expected to occur at an average daily rate of 40,000 cy, with a daily maximum on-site cut and fill of 100,000 cy during grading activities, which would be ongoing during Project buildout. As construction progresses, it is likely that various construction stages would occur at the same time (grading, vertical construction, and off-site infrastructure installation). Assumptions regarding use of construction equipment during the construction phases are outlined in Section 5.11, Air Resources.

The preliminary slope analysis of the Project site is provided on Exhibit 4-19a, Centennial Project – Slope Analysis, with the majority of the Project site with a less than 25 percent slope. As shown on Exhibit 4-19a, the majority of the areas with the greatest slopes are located south of SR-138 or along the western portion of the site, within areas proposed as Open Space. The proposed Master Grading Plan and rough elevations for the entire Project site are provided on Exhibit 4-19b, Centennial Project – Conceptual Grading Plan. Approximately 56 percent of the Project site would be graded. The Grading Plan takes into consideration the natural terrain of the area; avoids the steepest slopes; and preserves the most significant natural features., as discussed in further detail in the Specific Plan Section 3.3, Conceptual Grading Plan, and Appendix 1-B, Hillside Design Guidelines.

Grading techniques for the manufactured slopes within the Project site are identified in Section 3.2.1, Grading Goals and Guidelines, of the *Centennial Specific Plan.* Generally, permanent manufactured slope banks would be constructed at a gradient not greater than 2:1 (horizontal to vertical); cut slopes would not exceed 2:1. Exceptions may be made in the case of rock or natural outcroppings, or as otherwise approved by the Los Angeles County Department of Public Works. To the extent feasible, exposed manufactured slopes would be subject to contour grading to approximate natural slopes. Existing landforms may be recontoured, as necessary, to provide a smooth and gradual transition to graded slopes while preserving the basic character of the site. Graded slope faces would be revegetated to blend with the surrounding terrain where appropriate. Other erosion-control measures would be implemented as part of the required measures to be approved with grading plans submitted to the County of Los Angeles Department of Public Works.

Blasting may be required in areas where grading cuts extend into bedrock material that cannot be ripped with a single shank ripper.

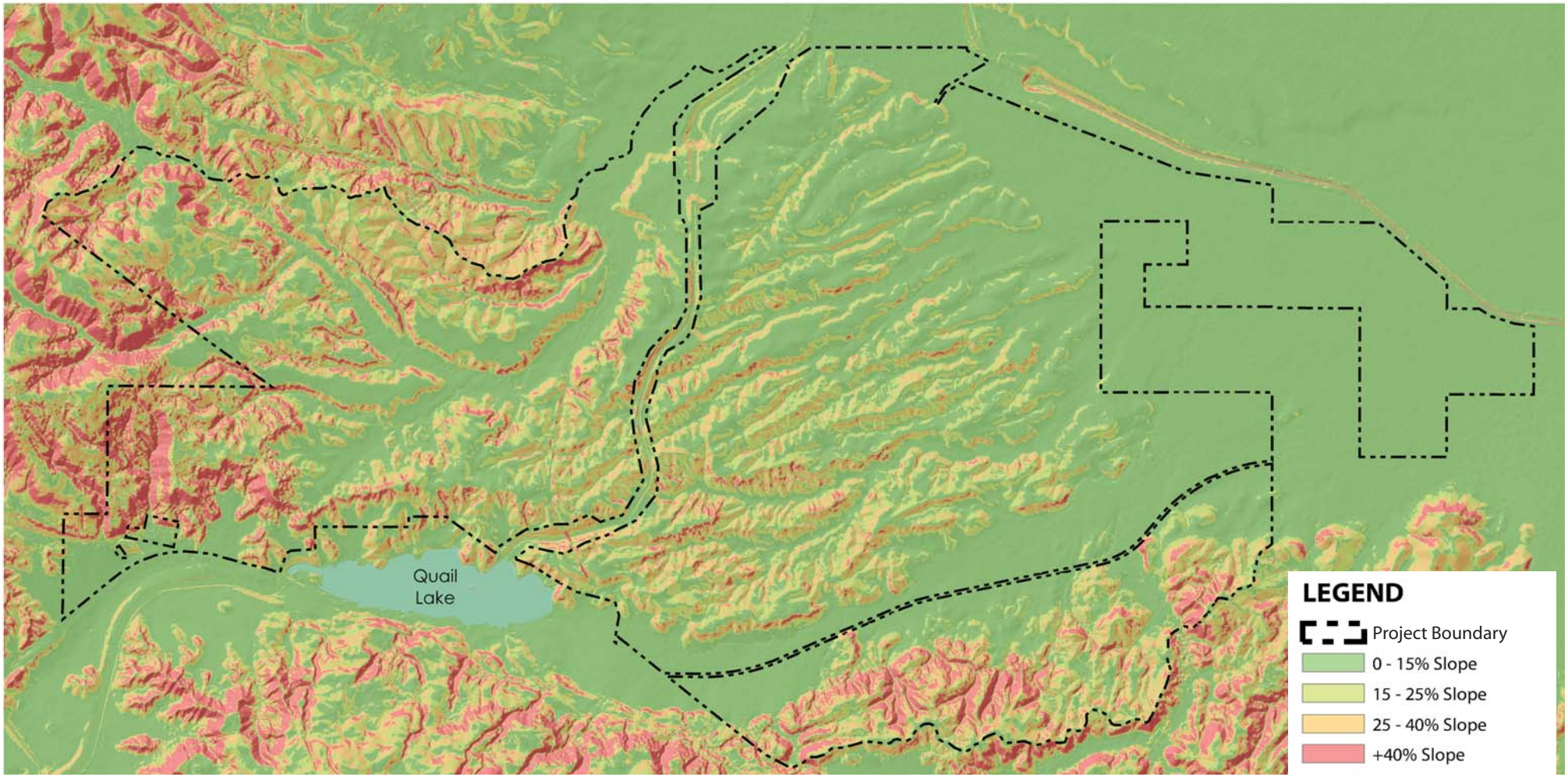
# 4.6 PHASING AND IMPLEMENTATION

## 4.6.1 LAND USE PHASING

The Centennial Phasing Plan provides an organizational framework to facilitate development while assuring provision of infrastructure and the public facilities necessary to support Project development. A conceptual phasing plan is provided in Exhibit 4-20, Centennial Project – Conceptual Phasing Plan. As shown, the Project is proposed to be developed in ten phases. Buildout of the Project would generally follow this sequence of phasing; however, some permanent and temporary infrastructure would be needed in locations that do not follow this phasing plan precisely. The basic phasing mechanism is the tentative tract map.

The phasing program is for informational purposes only and may be revised by the Project Applicant/Developer without a Specific Plan Amendment, subject to County approval during the tentative tract map process and *Centennial Specific Plan* requirements. Any changes in the Project must comply with CEQA requirements and the Development Agreement. The actual timing of development would be based on (1) the state of the economy; (2) market demand for uses on the site; and (3) the timing of regional and off-site infrastructure

# SLOPE MAP
## CENTENNIAL | TEJON RANCH




Source: Placeworks 2015

Centennial Project – Slope Analysis

Exhibit 4-19a

*Centennial Project*

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Map Not to Scale

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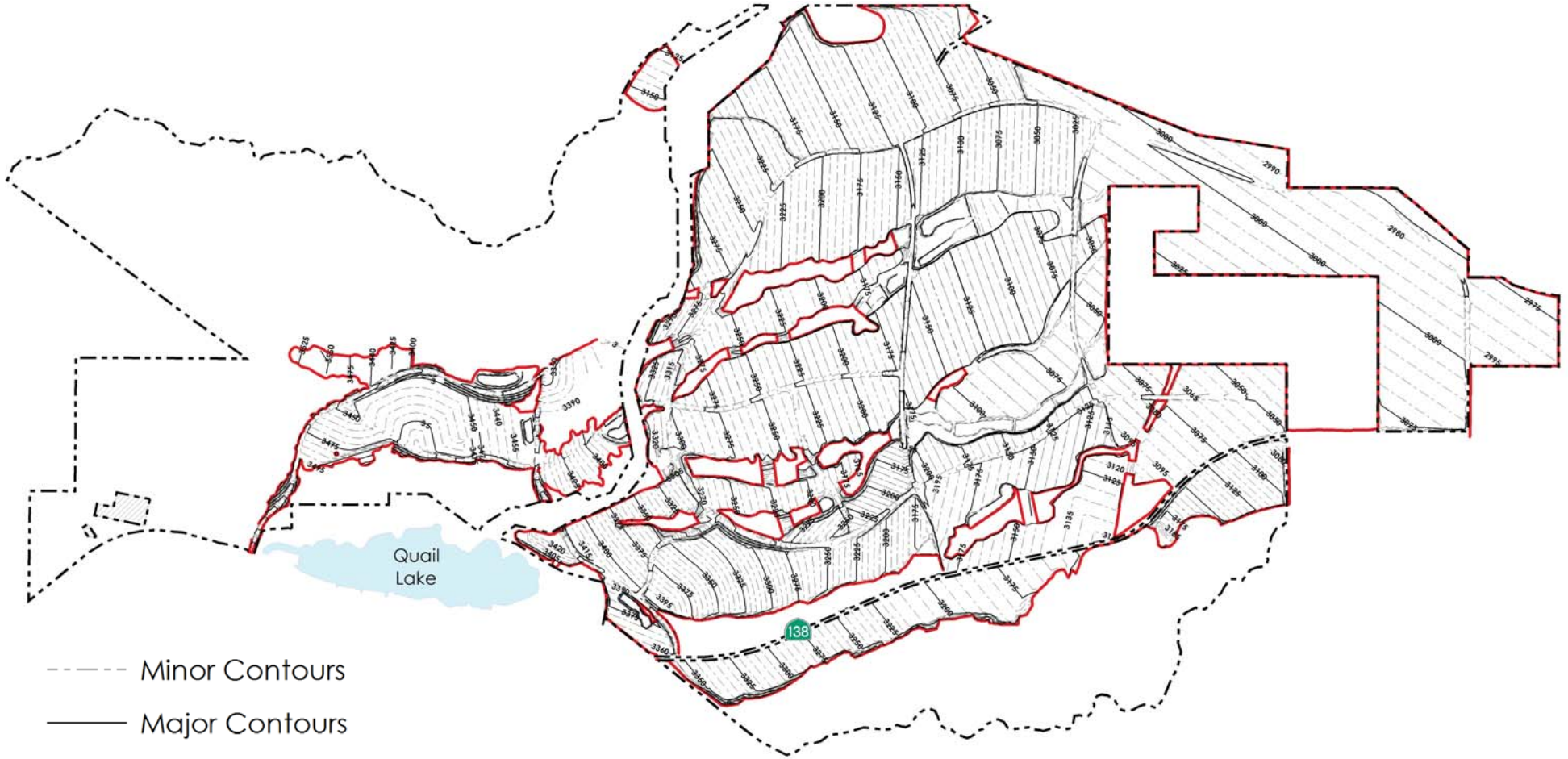
# CONCEPTUAL GRADING PLAN
**CENTENNIAL** | TEJON RANCH




Source: Placeworks 2015

## Centennial Project – Conceptual Grading Plan

## Exhibit 4-19b

*Centennial Project*

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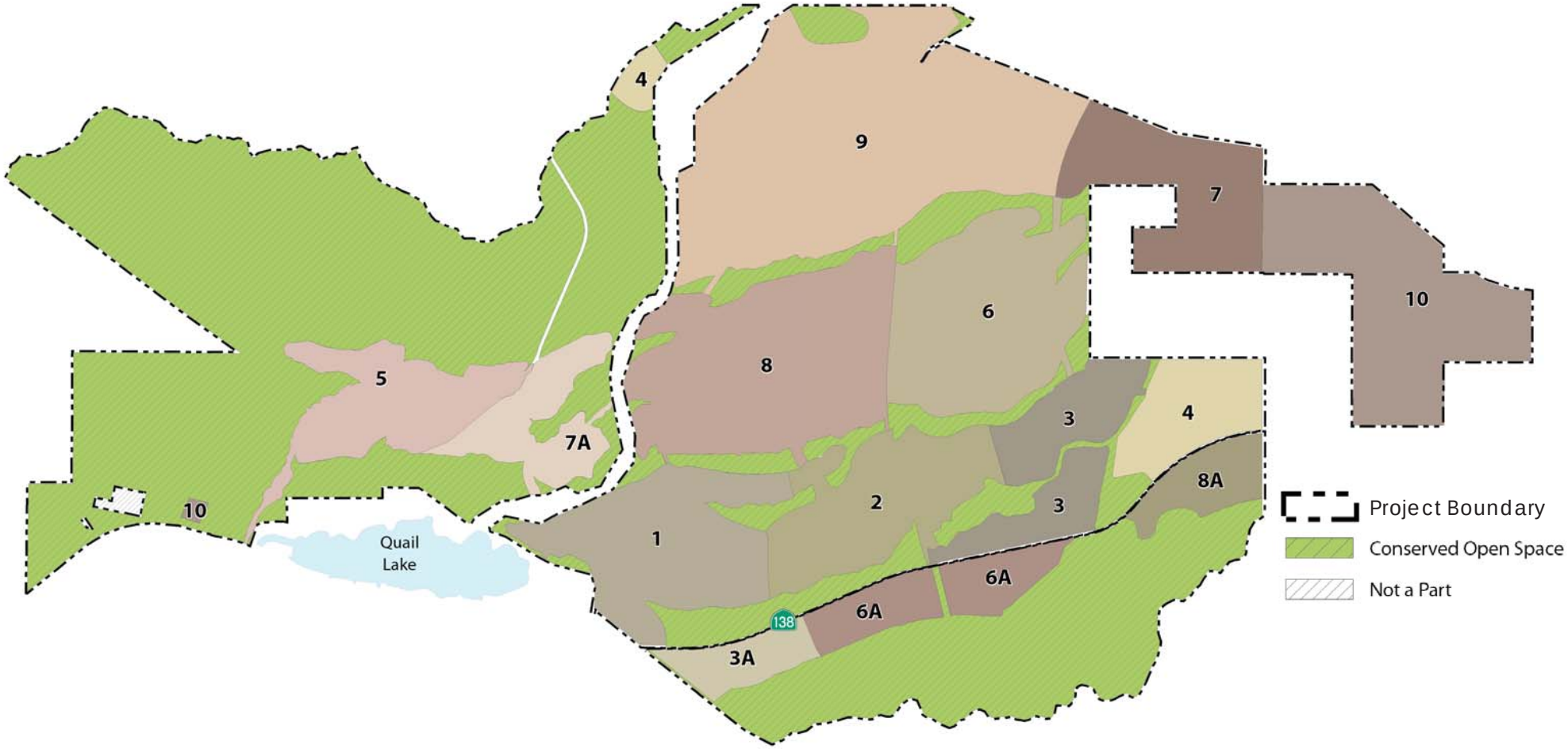
# PROJECT PHASING
## CENTENNIAL | TEJON RANCH




Source: Placeworks 2016

## Centennial Project – Conceptual Phasing Plan

## Exhibit 4-20

*Centennial Project*

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Map Not to Scale

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conditions and needs. Development of the Project site can be expected to extend over a 20-year time frame.

### 4.6.2 FISCAL IMPLEMENTATION

Several different methods are available to fund the construction and ongoing maintenance of infrastructure needed to serve the Project. The most likely method of financing would be through the establishment of a Community Facilities District under the provisions of the Mello-Roos Communities Facilities Act of 1982. Such a district is formed to finance designated public services and capital facilities by levying special taxes in a project area. In this case, the special tax lien recorded on each individual property on the Project site could be used to fund capital costs. Other sources of Project-generated revenue include but are not limited to property taxes, sales tax, gasoline taxes, other district assessments, and business license fees.

### 4.6.3 FIRST PHASE OF DEVELOPMENT

The first phase of development on the Project site will require development and implementation of future Tentative Tract Maps (TTMs). As the implementing mechanisms for Project uses, the TTMs demonstrate a more precise and specific level of detail compared to what is described in the Conceptual Land Use Plan. While there may be discrepancies in actual unit counts and land use acres between the Project and the details set forth in future TTMs, the TTM land uses will stay within the limits established under the *Centennial Specific Plan.* The first phase of development will include permanent and temporary uses, major infrastructure, public services, and roadway/circulation improvements, as discussed below.

The first phase of development will ensure that all services and infrastructure components are of sufficient size and capacity to serve the early residents and occupants (e.g., schools, roadways, public park maintenance, and utilities). The timing of any interim facility and its relationship to permanent facilities are described below.

Facilities included in the first phase of development will be designed as permanent facilities, with the exception of the store front LASD station and the temporary placement of high school students within the first school, which will revert to K-8 when the High School is constructed. The initial facilities will be sufficient for early residents. However, these facilities may be relocated and consolidated in larger facilities as part of future development phases. If future development phases are delayed or do not occur, however, the initial facilities will continue to provide permanent services and infrastructure.

## Public Service Facilities

The public service facilities described below are proposed within the first phase of Project development.

### *Schools*

A K–8 school would be developed in within the first phase of Project development to open at the first occupancy of the Project; decisions regarding the final school location and configuration would ultimately be made by the Gorman Joint School District (Gorman District). With the consent of the Gorman District, the Antelope Valley Union High School District (AVUHSD) will also use the first school for high school students. The K–8 school is initially intended to serve grades kindergarten through 12, then revert to a K–8 school once the high school has been constructed on the Project site and is operational. The four other K–8 schools and one K–5 school are to be constructed subject to the terms of the mitigation agreement with the Gorman District, and the timing depends on the rate of Project development and actual demand for school facilities, as determined by the Gorman Joint School District and Westside Union School District (WUSD).

This first school may also include preschool classrooms and, with the cooperation of the Antelope Valley Community College District, junior college classes could be accommodated in the evenings. This combined campus would ensure public school accommodations at all education levels based on school needs assessments and student enrollment for the first phase of Project development.

Temporary modular classrooms may be used at the existing and proposed schools to accommodate students prior to the construction of permanent facilities. If temporary modular school facilities are utilized in the early years of this combined K–8 and 9–12 campus, then the Project Applicant/Developer will post a bond in an amount sufficient to complete construction of a combined K–8 and 9-12 school campus with permanent, non-modular structures.

High school students at the Project also have to option to be bussed to Quartz Hill High School or attend the El Tejon Unified School District's Frazier Mountain High School. Transfer requests would be handled by the AVUHSD based on their transfer procedures and would take into account the then-current capacity of existing high schools.

### *Fire Protection and Law Enforcement Services*

Fire services and emergency response for fire incidents during the initial development phases of the Project would be provided from Fire Station 77, located at 46833 Peace Valley Road in Gorman, which is currently staffed with a three-person engine company. This station would serve the Project until such time that the 1,000th dwelling unit is built on the site, at which time the first on-site fire station shall be operational. It is anticipated that up to four fire stations will ultimately be developed on the Project site.

Prior to development of a permanent Sheriff's station, the LASD will operate out of a temporary store front station until the permanent station is required to be developed. The ultimate location and timing for implementation of a permanent station would be determined by the LASD in coordination with the Project Applicant/Developer and would be dependent upon the development rate on the Project site and its location. The store front facility for the LASD would be properly outfitted in accordance with applicable occupancy requirements and would be fully operational prior to the issuance of the first occupancy permit to ensure that response times to the site for emergency and non-emergency calls

would be within the County guidelines. If no future phase development occurs, the LASD would permanently operate out of the temporary store front facility.

### *Parks*

The Project would provide abundant and varied on-site recreational amenities in an area that currently has little local parkland, including public (i.e., State or federal owned or County-dedicated and maintained) and private (i.e., Homeowner's Association or other privately maintained) parks and other recreation amenities. The Project would include approximately 183 acres of Park uses, which includes private and public neighborhood parks, community parks or sports park facilities, and private pocket parks; community recreation center(s); private recreation facilities associated with multi-family residential developments; planned open space; a system of community trails and greenways; and a regional hiking trail.

The parks will be open to the public, including residents of Centennial and neighboring communities, and will be improved in accordance with schematic designs approved by the Department of Parks and Recreation. Also, all parks will be developed consistent with the Conditions of Approval recommended by the Department of Parks and Recreation and/or as approved by the Planning Commission and/or the County Board of Supervisors as part of approval of the TTMs or per the Development Agreement.

Parks will be constructed within each phase of development to ensure that the acreage and condition of parks available when new residents move in meet County requirements for per capita parkland. Specifically, the Conditions of Approval stipulate that Centennial is financially responsible for developing these parks. Also, Centennial will enter into a Park Development Agreement (PDA), post bonds, and submit a Park Delivery Schedule for the community park prior to clearance of the first TTM containing housing.

### *Maintenance Yards*

Land for maintenance yards for the Los Angeles County Department of Public Works and the Department of Parks and Recreation will be provided adjacent to the permanent wastewater reclamation facility site constructed in the first phase of development. Maintenance yards will operate as a joint use service yard and will include both a road maintenance yard and a maintenance yard for parks. The County will be responsible for the construction and operation of the maintenance yards.

### *Animal Control Facility*

The County plans to construct, equip, and operate a permanent new animal control facility adjacent to the maintenance yards described above when, in the judgment of the County, such a permanent facility is required. As discussed above, during the initial build out of the Project, the County may provide modular units to temporarily house lost and abandoned animals on the land set aside for the County's future permanent facility. Alternately, should the permanent site not be available to accommodate the modular units, the Project Applicant/Developer may contract with Shelter on the Hill, a Humane Society, or another entity acceptable to the County, to provide temporary animal shelter facilities. The

temporary animal shelter will be located in Shelter on the Hill's planned facilities in Frazier Park or in other facilities located near the Project site.

## Infrastructure and Utilities

The infrastructure and utilities facilities discussed below are proposed within the first phase of Project development:

### *Roadway/Circulation*

New roads will be constructed on-site and SR-138 will be improved to provide roadway access to the Project site. For the first phase of Project development, new roads will be timed and constructed per the Conditions of Approval approved by the County so that adequate access will be provided to all new land uses at Centennial.

### *Electricity, Communications, Natural Gas*

All on-site dry utilities will be constructed within public rights-of-way (e.g., roadways) on the Project site will be permanent facilities designed to adequately serve the first Project occupants. The Project includes conditions and specifications for assuring adequate distance and capacity of these on-site dry utilities.

Off-site dry utility upgrades and connections are likewise designed to provide permanent and adequate service for the first phase of Project implementation. Electricity service will be provided from the Gorman and/or Bailey Substations. Existing overhead lines along SR-138 and Gorman Post Road, as well as the lines running from the Bailey Substation to the northwest within the site, will be upgraded to handle anticipated loads. These may be relocated; they may remain overhead; or they may be placed underground. Natural gas will be piped in via the existing high pressure gas main along Gorman Post Road west of the Project site or the SR-138. Communication services will be provided by AT&T by extending telephone lines along Gorman Post Road and may require an upgrade of the Central Office facility in Lebec if fiber-optic connections to the Litespan 2000 cabinet[6] are impacted. A cable television service provider has not yet been identified.

### *Potable Water, Recycled Water, Wastewater, and Storm Water*

Water-related utilities and infrastructure will be designed and sized to permanently serve the first phase of Project implementation. The phasing for anticipated wet utility improvements are summarized below.

- Potable water will be primarily from groundwater wells. Well water will be combined with water received from the existing State Water Project (SWP) Aqueduct via turnouts on the East and West Branch, and combined well water and SWP water will be treated in an on-site water treatment facility. It is expected that three groundwater

6 Litespan 2000 system is an optical network (SONET)-based next-generation digital loop carrier (NGDLC) that provides both ATM-based Digital subscriber line (DSL) and time division multiplexing (TDM)-based narrowband/wideband services from the same plug-in channel unit slots. Litespan supports multiple voice switch Interface types simultaneously from the same Litespan common control (Alcatel-Lucent 2013).

wells would be needed to serve the first phase of Project implementation, with the remaining up to six wells (including existing and new on- and off-site wells) brought online during future phases of implementation. However, which of the existing and new on- and off-site wells would be used to serve the first phase of Project implementation would be determined while the TTMs are being prepared. Therefore, to provide a conservative analysis, the EIR assumes that the three well locations serving the first phase of Project implementation would include three new, off-site wells at the Tejon Ranch Water Bank. All water treatment, storage and distribution pipeline infrastructure must be designed to be in place, and permanent, as part of the approval process for each future TTM.

- Recycled water is produced from the tertiary treatment of wastewater (sewage), and will be used for outdoor irrigation. Recycled water production will begin concurrently with the operation of the wastewater reclamation facilities. The wastewater reclamation facilities include pumps, tanks, piping, and related equipment. Recycled water distribution piping will be constructed to deliver recycled water for outdoor landscaping. Any excess recycled water would be delivered to a planned sod/nursery site for future development phase landscaping needs and/or used for construction grading and dust control. All sewage and recycled water facilities must be designed to be in place, and permanent, as part of the approval process for each future TTM.
- Storm water runoff is managed at a neighborhood and regional scale with a variety of water quality management measures, including detention and retention basins. All storm water management measures must be designed to be in place, and permanent, as part of the approval process for each future TTM.

# 4.7 OFF-SITE PROJECT FEATURES

The Project would require the implementation of off-site features consisting of roadway improvements and connections and upgrades to existing off-site utility systems. Exhibit 4-21, Centennial Project – Off-Site Project Components, depicts the locations of the off-site features. This graphic shows off-site utility improvements in green, as depicted on the legend.

## 4.7.1 ROADWAY IMPROVEMENTS

As previously discussed, Caltrans and Metro are proposing the Northwest 138 Corridor Improvement (NW138) Project that addresses the long-term alignment and right-of-way needs of SR-138 between I-5 and SR-14. There is no implementation schedule for the NW138 Project; however, the draft EIR/EIS for the proposed improvements was made available for public review in July 2016.

A portion of SR-138 within the Caltrans study area traverses the Project site, and this portion of the alignment is proposed for improvements/expansion. The current alignment of the SR-138 is depicted on Exhibit 4-1, Centennial Project – Conceptual Land Use Plan. A potential future alignment for SR-138 is depicted on Exhibit 4-7, Centennial Project – Circulation Plan. However, Caltrans has deferred the selection of a preferred build alternative and has also

Project Boundary
Off-Site Project Components

Water line transmission and wells at Tejon Water Bank

Water line and access road to Water Treatment Facility

Alternative water line and access road to Water Treatment Facility

New Bridge

Expanded existing bridge

Utilities

Utilities and intersection improvements with SR-138

Utilities and intersection improvements with SR-138

W Avenue A
W Avenue A-8
W Avenue B
W Avenue B-8
W Malinda St
300th Street West
290th Street West
Quail Lake
138
Old Ridge Route

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# Centennial Project – Off-Site Project Components

Exhibit 4-21

*Centennial Project*

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reserved the right to determine the specific types of intersection controls at the time the improvements occur.

The NW 138 EIR/EIS includes an environmental analysis of all components of the proposed SR-138 improvements and all short-term and long-term environmental impacts of the improvements; no additional analysis within this Centennial Draft EIR is required for any needed clearances associated with the SR-138. Since the timing of the SR-138 improvements are unknown and since the ultimate implementation of the improvements cannot be assumed, the Centennial Project and this Draft EIR assume the current alignment of the SR-138 is the baseline condition for Project implementation.

The Project involves five intersections with the SR-138. Two of these intersections are considered "off-site", as they are not surrounded on both sides by the Project site. These two off-site intersections include the proposed re-alignment of the National Cement Plant Road at the western edge of Quail Lake and the intersection of 290th Street West with the SR-138. All five of the intersections with the SR-138 will require construction within Caltrans right-of-way. The construction of acceleration and deceleration lanes, turn pockets, and signalized traffic lights at each intersection could be required for Project implementation. Additionally, two underpasses and one overpass bridge crossing over SR-138 would be constructed to facilitate both pedestrian and bike access to employment centers.

Wet and dry utility facilities would cross beneath the paved areas of the SR-138 and would encroach into Caltrans right-of-way and/or otherwise require future coordination with/approval from Caltrans for construction of actual improvements at various locations. Additionally, storm drainage crossings would be constructed at intermediate locations to accommodate the existing and proposed drainage systems. Other intermediate utility crossings may be required to accommodate final designs for both dry and wet utilities. Where feasible, these utility crossings would be grouped together at common crossing locations. Additional encroachments beyond those listed may occur to accommodate installation of required infrastructure.

Tejon Ranch has already contributed or will contribute fair-share funds to provide the following roadway improvements and mitigations:

- Contribute fair-share to planned freeway mainline improvements for the following segment:
    - Between SR-14 and Calgrove Boulevard (add 1 truck lane in the northbound direction and two truck lanes in the southbound direction).
- Contribute fair-share to implement operational improvements, such as intersection lane restriping and/or Intelligent Transportation Systems (ITS) at the following locations:
    - Hasley Canyon Road/Sedona Way Interchange
    - Magic Mountain Parkway Interchange
- Contribute fair-share to re-stripe intersection lanes at the following locations:
    - SR-126 Interchange

  - McBean Parkway Interchange
- Contribute fair-share to planned freeway mainline improvements for the following segments:
  - Between Rye Canyon Road and McBean Parkway (Add one high occupancy vehicle (HOV) in lane each direction)

The environmental impacts of these improvements have already been considered in other environmental documentation pursuant to CEQA, and the impacts of these facilities does not require additional analysis in this EIR. These improvements are provided as disclosure for activities associated with Project implementation.

### 4.7.2 AQUEDUCT CROSSINGS AND WATER INFRASTRUCTURE

Off-site groundwater wells are expected to be required within the existing Tejon Ranch Water Bank in Kern County as a result of the Project, and that water would require conveyance through the construction of new water pipelines from Kern County to the Project site, as shown on Exhibit 4-21, Centennial Project – Off-Site Project Components. The proposed off-site wells would not involve modifications to existing roadways, nor would they require new roadways. Connecting the Tejon Ranch Water Bank wells to the Project site would require trenching for water pipelines to connect the wellheads to the "untreated wellhead pipelines" to be installed along 300th Street West and a crossing of the California Aqueduct.

The system of wellhead pipelines would convey all pumped groundwater requiring disinfection/treatment to the proposed on-site water treatment plant located near the West Branch of the California Aqueduct, where it would be treated and then delivered directly to the Project's water distribution system or blended with State Water Project (SWP) water, which would also be treated at that same location. The wellhead pipelines would range from 12 inches to 30 inches in diameter; they would be installed at a depth of approximately 4 to 5 feet deep via trenching the length of the pipe; they would be installed slightly deeper if required to safely cross under existing utility lines or underground structures.

The proposed off-site well locations would be accessed via the existing dirt or decomposed granite (DG) roads serving the Tejon Ranch Water Bank. It is anticipated that one daily visit to each well location would be necessary for maintenance and monitoring purposes. The visiting personnel would park on the existing access road near the well location. Also, each proposed well would be equipped with a System Control and Data Acquisition (SCADA) system to enable remote monitoring and control.

The Project would require four crossings of the California Aqueduct, including the wellhead pipeline crossing of the East Branch of the Aqueduct. As discussed in Section 4.8.2, the Project would require an Encroachment Permit from the California Department of Water Resources (DWR) for the new and expanded bridge crossings of the Aqueduct and for the crossing of potable and recycled water pipes. The pipelines may extend over or under the Aqueduct, depending on DWR's requirements and the specific engineering conditions at each crossing location.

Crossings of the California Aqueduct would all be considered off-site impacts because the Aqueduct is not a part of the Project site. Aqueduct crossings are discussed below.

- An expansion to the existing National Cement Plant Road bridge crossing. The bridge would maintain its existing alignment, but would be widened to accommodate pedestrian/bicycle access. Water and recycled water pipelines would be either attached to the bridge structure or would cross beneath the Aqueduct.
- A new bridge crossing would be constructed that would be wide enough to accommodate vehicular travel and pedestrian/bicycle access. Water and recycled water pipelines would be either attached to the bridge structure or would cross beneath the Aqueduct.
- Trenched at-grade crossing of the Aqueduct south of the Oso Water Treatment Plant. At this location, the Aqueduct is underground. Therefore, water pipeline extensions from the Water Treatment Plant to the portions of the Project site located to the east of the Aqueduct would require trenching across the subterranean Aqueduct. If DWR prefers to avoid a crossing in this area of the Aqueduct, then an alternative would be to install the water pipelines from the water treatment plant southerly along the western boundary of the Aqueduct within the DWR property to ensure avoidance of the SEA No. 17. Once the pipeline(s) are far enough south to avoid the SEA, then the pipelines would be continued on site and would cross the new bridge crossing to provide water supplies to the portions of the Project site located to the east of the Aqueduct.
- Attachment of wellhead water pipeline to or beneath the existing 300th Street West bridge crossing of the East Branch immediately north of the Project site. No other changes to the existing bridge structure would be required.

### 4.7.3 CONNECTIONS TO EXISTING OFF-SITE DRY UTILITIES

Implementation of the Project would require the extension of off-site utilities to connections with on-site utilities. Exhibit 4-21, Centennial Project – Off-Site Project Components, depicts the locations of off-site utility improvements in green, as depicted on the legend. As described further below, SCE electrical and telephone extensions would be constructed on the north side of SR-138 in the vicinity of Quail Lake. It is possible that the SCE electrical lines would be buried in the off-site stretch near Quail Lake for the purpose of maintaining the aesthetics of the area. A utility corridor would also be required within the right-of-way of 300th Street West as it traverses both on-site and off-site. This would likely contain both wet and dry utilities, including but not limited to sewer, recycled, water, storm drain, electrical, cable television, and telephone.

The physical environmental impacts of these off-site features are addressed as part of the Project analyzed in this EIR. To the extent feasible, off-site utilities would be extended through existing streets; however, utility placement in currently undisturbed areas would also be required. Construction of the utility extensions would be coordinated with the respective utility providers. A description of proposed off-site utility connections is included below.

- ***Electricity.*** Through coordination with SCE, two options were developed for bringing the additional capacity to service the western portion of the Project site: (1) reconfiguration of the existing Bailey Substation located off site along the property's western boundary and (2) upgrading the Gorman Substation and reconstructing the existing overhead transmission lines to handle the higher load. In either event, the improvements would occur entirely on lands owned by SCE, not on the Project site. No existing off-site facilities other than those discussed herein would require upgrades or retrofitting to provide adequate electrical service to the Project site.

  At this time, upgrade of the Bailey Substation is considered the more likely solution; however, both options will continue to remain viable until later stages of the site development process subsequent to the CEQA process. If the Bailey Substation is upgraded, no upgrades to the Gorman Substation or other off-site facilities will be necessary to serve the first phase of Project implementation.

  According to the *Dry Utilities Analysis: Centennial* prepared by BJ Palmer & Associates (BJ Palmer 2015) and included as Appendix 5.2-A, and communications with SCE (Peterson 2007; SCE 2007a, 2007b, 2007c), the improvements to the Bailey Substation would be contained within the parcel of land owned by SCE and would not extend onto the Project site. The Bailey Substation is a transmission-only substation, and is currently not configured for the voltage distribution required to service the Project. The site of the Bailey Substation is large enough for the required reconfiguration. Reconfiguration would include the placement of a large transformer to take transmission voltage (66 kV) and convert it to distribution voltage (12 kV). Distribution voltage would then be extended to the Project site on the existing overhead pole line along SR-138, or routed northerly overhead or underground around Quail Lake within the Project limits. This location would provide sufficient electric power capability to service the first phase of Project implementation.

  The Gorman Substation, located approximately 3.6 miles northwest of the site, is currently configured for distribution voltage. However, this substation would require the addition of one or more additional transformers and reconstruction of the existing overhead power lines along Gorman Post Road from the substation to the Project site. At a point just west of the Project boundary, the overhead facilities would either run along SR-138 or would take the northerly route around Quail Lake.

- ***Natural Gas.*** The initial gas facilities for the first phase of Project implementation would be provided by tapping into the existing high pressure gas main along Gorman Post Road west of the Project site. It would be necessary to construct a gas regulator station at this location for distributing pressure and/or extending a high pressure line to and within the Project site for the placement of a series of future regulator stations. A gas regulator station is a system of valves that could include two at one location (switching between the two while one or the other is under maintenance). The space required is approximately 75 feet by 30 feet and the facilities are below ground. Regulator stations can be within roadways or on private property within an easement. Future phases of development may require the tapping of the transmission high pressure main along SR-138 for the extension of transmission and/or

distribution main extensions into the Project. SoCalGas would determine the timing for this station's development through an assessment of system operational needs.

- ***Telephone.*** The preliminary extension of telephone lines would occur along Gorman Post Road in the current franchise area, entering the Project site at the most westerly entrance, or continuing overhead along the pole line along SR-138. This new extension would involve retrofitting and replacing the current overhead system that extends from the Frazier Park area to Gorman, and then to the site (described previously). This would involve use of the existing poles; no physical impacts would occur. AT&T would extend the facilities/lines within existing or proposed road right-of-way areas whenever possible. When not possible, easements would be obtained for facilities placed on private property within the Project site. Any permits or authorization required for the extension of telephone service to the Project site would be the responsibility of AT&T.

  Additionally, development of the Project could also impact off-site fiber-optic connections to the Litespan 2000 cabinet and require an upgrade of the existing Central Office facility in Lebec involving an internal extensive upgrade to expand the Central Office's service capacity. AT&T's implementation of necessary expansion and upgrades that would support the Project would not create significant physical impacts since all such improvements would occur within existing facility structures.

- ***Cable Television.*** Although a cable television service provider has not yet been identified, development of the Project could impact off-site cable television lines near the Service Provider's plant or distribution facilities and may require an upgrade of existing facilities. The extension of these facilities to the Project site would be conducted by the Service Provider.

### 4.7.4 MITIGATION AREAS

In addition to off-site improvements to infrastructure the Project requires the preservation of off-site lands to compensate for impacts to biological resources as, described in Section 5.7, Biological Resources. These mitigation areas are depicted in Exhibit 4-12, Off-Site Open Space Mitigation Preserve. Of the 5,624 acres of designated Open Space within the Project site, approximately 5,116 acres (42 percent of the total Project site) would be ungraded/unimpacted. Of this amount, approximately 3,861 acres are designated as SEA 17 to be preserved in perpetuity within the Project site boundaries. A study of adjacent lands identified 6 areas which, when combined with the approximately 5,116 acres of on-site open space mitigation areas, would provide sufficient land and biological resources to implement mitigation strategies to fully mitigate Project impacts related to biological resources.

Areas 1 and 2 are located in Los Angeles County, and Areas 3–6 are located in Kern County, northeast of the Project area. In Los Angeles County, Area 1 consists of approximately 6,417 acres and is located adjacent and immediately east of the southeastern corner of the Project area. Area 2 consists of approximately 2,556 acres and is located adjacent and contiguous to the northwestern portions of the Project area. The area in the northwestern part of the site is comprised primarily of Oso Canyon, which includes a blueline stream as well as foothills and canyons with slopes 25 percent or greater. Vegetation in this area consists mainly of oak

woodland and grassland vegetation. The south-southeastern portion of the site contains similar vegetation and associated biological resources.

In Kern County, Area 3 consists of 4,183 acres and Area 4 consists of 7,319 acres. Area 5 consists of 643 acres and is a square-shaped parcel, immediately east of Area 4 and northeast of the Project site. Area 6 consists of 2,429 acres and is located on the northern slope of the Antelope Valley, farthest to the northeast of the Centennial Project site.

The combined off-site open space preserve area amounts to approximately 23,547 acres of mitigation lands. As previously discussed in Section 4.5.7, these six areas would be preserved in perpetuity to allow for preservation and implementation of mitigation strategies.

The Natural Resources/Open Space Management Plan includes both on-site and off-site mitigation areas. Approximately 5,116 acres of open space is available for use as on-site mitigation and off-site mitigation areas total 23,547 acres, for a combined total of 28,663 acres of preserved open space resulting from Project implementation.

# 4.8 INTENDED USE OF THE EIR

Pursuant to Section 15121 of the State CEQA Guidelines, an EIR is primarily an informational document intended to inform the public agency decision makers and the general public of the potentially significant environmental impacts of a project. The decision makers must consider the information in an EIR before taking action on a Project.

A project is proposed by a project applicant; however, an EIR is prepared by or under the direction of the lead agency. The lead agency is the public agency with the primary responsibility for approving a project. Responsible Agencies (public agencies that have a level of discretionary approval over some component of a Project) may rely upon the EIR prepared by the Lead Agency (14 CCR 15096).

The County of Los Angeles is the lead agency, and the responsible and trustee agencies listed below are expected to use the information in this EIR for consideration of approvals related to and involved in the implementation of this Project.

## 4.8.1 COUNTY OF LOS ANGELES

The discretionary actions listed below have been analyzed as part of this EIR.

- ***Adoption of the Centennial Specific Plan.*** The Project Applicant/Developer is requesting the adoption of the *Centennial Specific Plan.* A detailed discussion of the *Centennial Specific Plan* is provided in Section 4.5 above. As previously noted, the *Centennial Specific Plan* would regulate development through the Land Use Plan, the Land Use Matrix (including permitted uses), and the development standards and regulations in conjunction with Titles 21 and 22 of the Los Angeles County Code. The *Centennial Specific Plan* is a regulatory document that would be considered for adoption by either resolution (as policy) or by ordinance, by the County of Los Angeles Board of Supervisors. Upon adoption of the *Centennial Specific Plan*, the

development standards and zoning of the *Centennial Specific Plan* become the zoning for the site. Chapters 1 through 4 of the *Centennial Specific Plan* would be adopted by ordinance. A copy of the draft *Centennial Specific Plan* is located in Appendix 4.0-A of this EIR.

Several appendices to the *Centennial Specific Plan* are also requested to be adopted by the County by ordinance or resolution. Appendix 1 to the *Centennial Specific Plan* includes two appendices that would be adopted by ordinance: Appendix 1-A, *Definitions* and Appendix 1-D, *Standard Centennial Subdivision Map Notes*. While it is anticipated that Appendix 1-D will be adopted by ordinance at this time, the County may decide to adopt Appendix 1-D by resolution at the time of Project approval. Appendix 1-B, *Green Development Program*, and Appendix 2-A and 2-B, would be adopted by Resolution. Under either scenario, the Regional Planning Commission, or the Board of Supervisors if the Regional Planning Commission's decision is appealed, would seek to incorporate the standard subdivision map notes governing development of the Project on each approved tentative map subdividing a portion of the Project Site.

Specifically, the *Centennial Specific Plan* will achieve the County's Low Impact Development (LID) Ordinance and LID Manual requirements for increasing groundwater recharge, enhancing water quality, and preventing degradation to downstream natural drainage courses through the use of infiltration Best Management Practices (BMPs). Future LID plans required for the Project will comply with the provisions of the *Centennial Specific Plan's* Centennial Stormwater Management System Design Requirements and Drainage Plan, which will serve as the LID standards for those projects in lieu of the specific provisions of the LID Manual.

- ***Approval of Zone Change, Los Angeles County Zoning Ordinance*.** The Project Applicant/Developer is requesting a Zone Change from O-S (Open Space), A-1-2 (Light Agricultural – Two Acre Minimum Required Lot Area), RPD (Residential Planned Development), CPD-DP (Commercial Planned Development – Development Program); and MPD-DP (Manufacturing Industrial Planned Development – Development Program), to SP (Specific Plan). Approval of the zone change and concurrent adoption of the *Centennial Specific Plan* would establish the Specific Plan's land use categories as the underlying zoning. Additionally, and as described in Section 5.7, Biological Resources, the Project requires the preservation of both on-site and off-site lands to compensate for impacts to biological resources. On-site mitigation areas, totaling approximately 5,116 acres, would be zoned "Specific Plan", consistent with the rest of the Project site.
- **Approval of General Plan Amendment to AVAP and County Highway Plan.** In compliance with the County's Specific Plan requirements and State law, the Project Applicant/Developer is requesting a General Plan Amendment to amend the AVAP and County General Plan Highway Plan by adding the major highways, secondary highways, limited secondary highways, parkways, and expressways that are proposed on the Project site to serve the circulation needs of development and that meet the criteria for being included in the AVAP Highway Plan (Map 3.1 of the AVAP) and County General Plan (Figure 7.3 of the County General Plan). This amendment would reflect the location of the project's internal circulation network of roadways,

as provided in the *Centennial Specific Plan*. This amendment would not change the land use designations, allowable development or open space areas in the AVAP or General Plan.

- ***Approval of Vesting Tentative Parcel Map.*** Vesting Tentative Parcel Map (VTPM) is being sought as part of the initial set of project entitlements for finance and conveyance purposes. Commonly referred to as "Financing Maps", this form of Parcel Map creates legal parcels that can be used as security to help finance infrastructure and other improvements. A VTPM does not authorize the creation of residential or commercial lots, nor does it permit construction of new buildings.
- ***Development Agreement.*** A Development Agreement (DA) is also anticipated to be sought as part of the initial project entitlements. Under state law, a DA is a voluntary agreement, adopted by ordinance, between the County and the project proponent. The purpose of a DA is to provide both the County and the developer with long-term contractual assurances that the project includes public benefits and can be built out as approved.
- ***Approval of Conditional Use Permit - Grading.*** The Project Applicant/Developer is requesting approval of a Conditional Use Permit (CUP) for Grading, pursuant to Section 22.56.217 of the Los Angeles County Code, which requires a CUP for grading over 100,000 cubic yards. The size of the Project site (i.e., 12,323 acres) is reflective of the proposed grading under the Conceptual Grading Plan and complies with the Hillside Design Guidelines in the *Centennial Specific Plan*, which are consistent with the County's Grading Ordinance. The Conceptual Grading Plan is discussed in Section 4.5.17 above.
- ***Approval of Conditional Use Permit – Infrastructure.*** The Project Applicant/Developer is requesting approval of a CUP to provide a master or programmatic approval of the proposed infrastructure that would be needed to serve the Project. These infrastructure improvements include the following:
    - Roadway circulation system
    - Water system including domestic and recycled water tanks and pipelines and accessory booster pumps and storage ponds
    - Sewage disposal pipelines and waste water reclamation facilities
    - Flood control and drainage facilities
    - Electrical substations
    - Gas, telephone, cable and internet and electric lines within roadway rights-of-way
    - Green waste composting
    - Solid waste and materials recovery facilities and recycling centers.
    - Water retention/detention basins, water banks, tanks, well facilities, water treatment plants
    - Realignment of National Cement Plant Road
    - Construction of bridges over the Aqueduct
    - Improvements to the SR-138 intersections.

## Future Discretionary and Ministerial Actions

In addition to the discretionary actions listed above, additional ministerial and discretionary actions related to the future approvals are anticipated in the future, as discussed below.

Some future actions will be ministerial in nature as they will not require any special discretion or judgment on the part of the County official in processing the application. Rather, these actions merely require a determination of whether an application complies with applicable requirements of the Specific Plan. Accordingly, such actions will not require future CEQA review pursuant to Section 21080(b)(1) of the *California Public Resources Code* and Section 15268(a) of the CEQA Guidelines (14 CCR). Examples of such actions include, but are not limited to, the following:

- Grading and demolition permits
- Building and occupancy permits
- Encroachment permits
- Acquisition of rights-of-entry easements and rights-of-way for Project features under Caltrans jurisdiction (previously described in Section 4.7), as necessary.
- Final Subdivision Maps.

Additionally, Chapter 4 of the *Centennial Specific Plan* (Appendix 4.0-A) has been created to describe the processes and procedures for certain subsequent Centennial Project approvals. Section 15268(c) of the State CEQA Guidelines provides that "each public agency should, in its implementing regulations or ordinances, provide an identification or itemization of its projects and actions which are deemed ministerial under the applicable laws and ordinances". As the *Centennial Specific Plan* will serve as the Project's implementing regulations once adopted, Chapter 4 of the *Centennial Specific Plan* categorizes future approvals as ministerial and discretionary based on (1) the nature of the action; (2) the degree to which the action conforms to the *Centennial Specific Plan* and corresponding EIR analysis; and (3) the extent to which the exercise of judgment is necessary in considering such action. The following lists these ministerial and discretionary approvals as set forth in Chapter 4 of the *Centennial Specific Plan.* Each type of approval is followed by the corresponding *Centennial Specific Plan* section reference. The applicable *Centennial Specific Plan* section describes each approval in further detail; sets forth the necessary conditions that must be satisfied in order to receive approval; lists the standards the County official must use to determine whether a particular application should be granted; and provides the applicable procedures the County will follow in processing each application.

### *Ministerial Actions*

The following actions are ministerial as they involve only (1) a determination that the proposed action conforms to the *Centennial Specific Plan;* (2) a determination of consistency with an approved Tentative Map, Final Map, Conditional Use Permit, or other approval issued pursuant to the *Centennial Specific Plan;* or (3) a determination that an application meets the standards required for that particular type of application as in Chapter 4 of the

*Centennial Specific Plan* or the County Code. As stated above, each type of approval is followed by the corresponding *Centennial Specific Plan* section reference.

- Interpretations (Section 4.5.1.1.1);
- Development standard equivalency (Section 4.5.1.1.2);
- *Centennial Specific Plan* text and figure changes (Section 4.5.1.1.3);
- Affordable housing consistency (Section 4.5.1.1.4);
- Residential signage consistency (Section 4.5.1.1.5);
- Non-residential signage consistency (Section 4.5.1.1.6);
- Deviations from development standards (Section 4.5.2.1.1);
- Exhibit map change that does not require a tentative map modification (Section 4.5.2.1.2);
- Changes in the order or configuration of phasing on an approved tentative map (Section 4.5.2.1.3);
- Minor Transfers within Villages (Section 4.5.2.1.4);
- Transfers of Park Use and Greenways (Section 4.5.2.1.5)
- Land Use Equivalency Determination (Section 4.5.2.1.6)
- Conceptual Land Use Plan and Development Standards (Section 4.5.4.1)
- Existing uses (Section 4.5.5.1);
- Ministerial interim use permit (Section 4.5.5.2.1).

***Discretionary Actions***

The following actions require the exercise of discretion by the County or may propose a scope of development that has not been reviewed as part of the Centennial Specific Plan EIR. Future CEQA review of these discretionary actions shall be processed in accordance with CEQA, including Section 21166 of the *California Public Resources Code* and Sections 15162 and 15164 of the CEQA Guidelines (14 CCR). If the County determines that an additional CEQA document must be prepared in connection with such discretionary approval, future environmental analysis should tier from this EIR whenever feasible pursuant to Section 21093 of the *California Public Resources Code.* Each type of approval is followed by the corresponding *Centennial Specific Plan* section reference.

- Land Uses Requiring "Substantial Conformance Review" (Section 4.5.3.1.1).
- Conditional use permit modifications (Section 4.5.3.1.2).
- Major Transfers within Villages (Section 4.5.3.1.3).
- Transfers of residential units and non-residential building square footage from Village to Village (Sections 4.5.3.1.4 and 4.5.3.1.5).

- Conversions (Sections 4.5.3.1.6).
- Off-site haul routes (Section 4.5.3.1.7).
- Sign and sign programs (Section 4.5.3.1.8).
- Parcel maps and minor land divisions (Section 4.5.4.2).
- Tentative maps (Section 4.5.4).
- Amended tentative maps (Section 4.5.4.3).
- Revised tentative maps (Section 4.5.4.4).
- Initial approval of exhibit maps (Section 4.5.4.5).
- Discretionary interim use permit (Section 4.5.5.2.2).
- Temporary use permit (Section 4.5.5.3).
- Conditional use permits (Section 4.5.5.4).
- Land use/planning area boundary adjustments (Section 4.6.1).
- Specific Plan amendment (Specific Plan Section 4.9).
- Roadway realignments (Specific Plan Section 4.6.1).

### 4.8.2 RESPONSIBLE AND TRUSTEE AGENCIES

The EIR would also provide environmental information to responsible agencies, trustee agencies, and other public agencies which may be required to grant approvals or coordinate with the County of Los Angeles as a part of Project implementation. These agencies include, but are not limited to, those listed below.

## Federal

- ***U.S. Army Corps of Engineers (USACE).*** The Project would require a USACE Section 404 permit for impacts to areas determined to be "Waters of the United States."

## State of California

- ***Public Utilities Commission (CPUC).*** The Project may require the creation of an entity to operate and maintain the water supply, water treatment, and wastewater reclamation facilities, as well as the storm water facilities if annexation of the Project site into the Golden Valley Municipal Water District does not occur. Should a private entity be created to handle the operation and maintenance of these systems and facilities, then issuance of Certificates of Public Convenience and Necessity and/or Exemption would be necessary. Alternatively, if a public entity (e.g., Community Facilities District, CSD, California Water District, or other agency approved by Los Angeles County [the Maintenance Entity] and agreed to by the Project Applicant/Developer) is created to operate and maintain all water supply, wastewater reclamation facilities, and other necessary water facilities, then CPUC

action would not be required. However, some action by the Local Agency Formation Commission (LAFCO) may be necessary, depending on the public entity selected. Ultimately, the water supply, wastewater reclamation, and storm water agency(ies) providing these services would require the concurrence of the County and the applicable regulatory agencies.

- ***Department of Fish and Wildlife (CDFW).*** The Project would require a Streambed Alteration Agreement from the CDFW pursuant to Sections 1600 and Sections 2081 of the *California Fish and Wildlife Code.*
- ***Department of Transportation (Caltrans).*** Activities located within Caltrans right-of-way (described previously) would require an Encroachment Permit and must be in compliance with the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit.
- ***Department of Water Resources (DWR).*** The Project would require an Encroachment Permit from DWR for two bridge crossings of the California Aqueduct ("A" Street and "B" Street), as well as for the crossing of potable and recycled water pipes.
- ***State Water Resources Control Board, Water Division of Drinking Water (DDW).*** A permit to operate a public water system for the potable water distribution system on the Project site would be required from the SWRCB's Water Division of Drinking Water (DDW).
- ***Regional Water Quality Control Board, Lahontan Region (Lahontan RWQCB) and Los Angeles Region (Los Angeles RWQCB).*** Lahontan RWQCB and Los Angeles Region RWQCB approvals will be required for the following activities within their respective areas of the Project site:
    - Waste Discharge Requirements (WDRs) for the fill or alteration of "waters of the State" on the Project site located in Lahontan RWQCB's jurisdiction.
    - WDRs and Wastewater Reclamation Requirements *or* a Master Reclamation Permit for approval and operation of the two proposed WRFs.
    - Water Quality Certifications under Section 401 of the Federal Clean Water Act.

## Regional and Special Districts

- ***Gorman Joint School District.*** The Gorman District would be the agency responsible for the acquisition of land, design, and development of the proposed grades K–8 schools on the Project site. The Gorman District is required to comply with the requirements of Section 15186 of the State CEQA Guidelines regarding school facilities (which addresses potential health impacts resulting from exposure to hazardous materials, wastes, and substances). This EIR would be used by the Gorman District as acceptance of three proposed grades K–8 schools and one K-5 school within the Project site. However, subsequent environmental documentation for the proposed schools may be required. The need for subsequent environmental documentation would be determined by the Gorman District when school site plans are available.

- ***Antelope Valley Union High School District.*** The AVUHSD would be responsible for the acquisition of land, design, and development of the proposed high school (grades 9–12) in the Project site. The AVUHSD is required to comply with the requirements of Section 15186 of the State CEQA Guidelines regarding school facilities (which addresses potential health impacts resulting from exposure to hazardous materials, wastes, and substances). This EIR would be used by the Antelope Valley Unified High School District as acceptance of one proposed high school in the Project site. However, subsequent environmental documentation for the proposed school may be required. The need for subsequent environmental documentation would be determined by the AVUHSD when school site plans are available.
- ***Westside Union School District.*** The WUSD serves grades K–8 students. A portion of the eastern part of the Project site falls within the boundary of the WUSD. The WUSD would be responsible for the acquisition of land, design, and development of two proposed grades K–8 schools in the Project site. The WUSD is required to comply with the requirements of Section 15186 of the State CEQA Guidelines regarding school facilities (which addresses potential health impacts resulting from exposure to hazardous materials, wastes, and substances). This EIR would be used by the WUSD as acceptance of two proposed grades K–8 schools within the Project site. However, subsequent environmental documentation for the proposed school may be required. The need for subsequent environmental documentation would be determined by the WUSD when the school site plans are available.
- ***Golden Valley Municipal Water District (GVMWD) or other Public Utility District (PUD).*** The GVMWD is a California municipal water district formed and operated under Section 71000 of the *California Water Code.* The District's service area encompasses approximately 12.5 square miles and is adjacent to the Project's western boundary (GVMWD 2011). The GVMWD currently operates approximately 20 municipal water service connections and a wastewater reclamation facility for the unincorporated community of Gorman. Centennial Founders, LLC has requested the District Board of Directors to consider annexing the Project area and operating the Project's proposed potable water, water recycling, and wastewater facilities. Annexation of the Project into the GVMWD service area would require approval by the Los Angeles County Local Agency Formation Commission (LAFCO) and would occur after the certification of this EIR. If the Project area is annexed, GVMWD or a PUD would become the agency in charge of operating and maintaining storm water facilities.
- ***Local Agency Formation Commission (LAFCO).*** LAFCO is responsible for reviewing and approving proposed jurisdictional boundary changes, including annexations and detachments of territory to and/or from cities and special districts; incorporations of new cities; formations of new special districts; and consolidations, mergers and dissolutions of existing districts. For the Project, the following special districts are in the area and may be impacted, requiring action by LAFCO to include the Project site in their service area: GVMWD or PUD, Antelope Valley Health Care District, Antelope Valley Resource Conservation District, Los Angeles County Consolidated Fire Protection District, and Lancaster Cemetery District.

- ***South Coast and Antelope Valley Air Quality Management Districts.*** Approximately 85 percent of the Project site lies within the Antelope Valley Air Quality Management District (AVAQMD) while the remaining 15 percent lies in the South Air Quality Management District (SCAQMD). Air quality conditions in the South Coast Air Basin are under the jurisdiction of the SCAQMD while the portion of the site under the jurisdiction of the AVAQMD lies within the Mojave Desert Air Basin. Developers and businesses who plan to install equipment with the potential to emit air pollutants, including toxic and hazardous air pollutants, must obtain permits from the applicable Air Quality Management District prior to construction or operation. Examples of businesses and equipment that require permits are gas stations, dry cleaners, emergency generators, boilers for heating and hot water in large buildings, restaurant cooking equipment, and manufacturing facilities.
- ***Los Angeles County Fire Department.*** The Project includes construction of three new Fire Stations to provide fire and paramedic services to the Project area. A CUP will be needed to construct the facilities pursuant to the Los Angeles County Code. The environmental impacts of these facilities have been analyzed in this EIR. The Consolidated Fire Protection District of Los Angeles County, commonly known as the County of Los Angeles Fire Department, will apply for the conditional use permit at such time it is necessary in the future so that the first station will be constructed, equipped, and operational prior to the issuance of the first building permit for the first phase of Project implementation.
- ***Kern County.*** The Project includes new wells and water pipelines that would be located off site, all within Tejon Ranch Company-owned lands immediately to the northeast of the site in Kern County. Although the environmental impacts of these facilities have been analyzed in this EIR, approvals from the County of Kern would be required before any construction occurs.

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