

Public Hearing Draft Avila Ranch Development Plan



Avila Ranch, LLC



May 2017

City Council

Heidi Harmon, Mayor
Dan Rivoire, Vice Mayor
Carlyn Christianson, Council Member
Aaron Gomez, Council Member
Andy Pease, Council Member

Planning Commission

Charles Stevenson, Chair
John Fowler, Vice Chair
Hemalata Dandekar, Commissioner
Scott Mann, Commissioner
Ronald Malak, Commissioner
Kim Bisheff, Commissioner
Nicholas Osterbur, Commissioner

Architectural Review Commission

Greg Wynn, Chair
Angela Soll, Vice Chair
Richard Beller, Commissioner
Amy Nemcik, Commissioner
Brian Rolph, Commissioner
Allen Root, Commissioner
Greg Starzyk, Commissioner

Parks and Recreation Commission

Jeff Whitener, Chair
Greg Avakian, Commissioner
Suzan Ehdaie, Commissioner
Susan Olson, Commissioner
Keri Schwab, Commissioner
Douglas Single, Commissioner
Rodney Thurman, Commissioner

Avila Ranch Project Team

Project Developer	Avila Ranch, LLC San Luis Obispo, California
Planning and Management	Peck Planning and Development, LLC Morro Bay, California
Architecture	RRM Design Group San Luis Obispo, California
	Focus360 Irvine, California
Engineering	Cannon San Luis Obispo, California
	Wallace Group San Luis Obispo, California
	RRM Design Group San Luis Obispo, California
Cultural Resources	Applied Earthworks San Luis Obispo, California
Geology and Soils	Grisanti Consulting Los Osos, California
	Geo-Solutions Engineering San Luis Obispo, California
Biology	Althouse and Meade Paso Robles, California
Noise and Acoustics	David Lord Acoustics San Luis Obispo, California
Finance	Kosmont Associates Santa Ana, California
Energy Consulting	Jennifer Rennick Architecture San Luis Obispo, California
Marketing and Outreach	Barnett Cox and Associates San Luis Obispo, California



Table of Contents

Avila Development Plan Update Summary	1
Development Plan Format and Content	6
Project Overview	10
Introduction and Project Features	10
Sustainable Energy Features	13
Sustainable Open Space and Agriculture	14
A Complete “Linked” Community	15
A Diverse Range of Housing Opportunities	15
Major City Objectives	16
Environmental Setting and Background Information	17
Flooding and Hydrology	17
Biological Resources	19
Soils and Geology	19
Hazardous Materials/Assessment	21
Noise	21
Air Quality	22
Cultural Resources	22
Agricultural Resources and Preservation	23
Airport Safety	23
Land Use Plan and Framework	25
Land Use	25
Parks and Recreation	29
Residential Uses and Affordability	30
Revitalizing Tank Farm Creek	33
Project Phasing	34
Design Framework	37
Site Planning and Organization	37
Building Orientation and Setbacks	37
Pedestrian Activity Areas	44
Parking	46
Outdoor Use Areas	47
Screening	47
Preservation of Views and Scenic Resources	48
Architecture	51
Landscape	59

Buildings, Signs and Lighting	61
Public Art	64
Drainage	64
Fencing	65
ZNE+ Energy Conservation and Production	66
Circulation Framework	71
Traffic Study Recommendations	78
Vehicular	78
Pedestrian and Bicycle	79
Transit	79
Site Access and Circulation	80
Phasing	80
Infrastructure Framework	82
Water	82
Recycled Water	83
Sanitary Sewer	83
Dry Utilities	83
Stormwater, Hydrology and LID Compliance	86
Appendices	
A—Avila Ranch Development Plan Graphics	
B—Avila Ranch Parks Master Plan	
C—Avila Ranch Open Space Master Plan	
D—Avila Ranch Conceptual Landscape Plan'	
E—ZNE Energy Analysis	
F--Traffic Mitigations	
G—Vesting Tentative Map	
H—Phasing of Agricultural Conservation Mitigation	
I—EIR Mitigation Index	

List of Tables

Table 1—Revised Avila Ranch Plan Statistics	5
Table 2—Land Plan Statistics	29

List of Figures

Figure 1—Project Location	10
Figure 2—Vicinity	11
Figure 3—Vicinity and Site	12
Figure 4—Pre-development Flood Areas	18
Figure 5—Post Development Flood Areas	19
Figure 6—Avila Ranch Land Use Plan	26
Figure 7— Land Use Plan and Tank Farm Creek	28
Figure 8—Park Locations	31
Figure 9-- Phasing Plan	36
Figure 10—R-1 Development Standards	38
Figure 11—R-2 Development Standards	39
Figure 12—R-3/R-4 Development Standards	40
Figure 13—Town Center Plazas	46
Figure 14—Town Center Parking, Screening and Access	46
Figure 15—Buckley Road Buffering and Setbacks	48
Figure 16—Conceptual View of Avila Ranch Buckley Frontage	50
Figure 17—Residential Street Scene	51
Figure 18—Agrarian Architectural Style	52
Figure 19—Bungalow Architectural Style	52
Figure 20—Contemporary/Mid-Century Modern Architectural Style	53
Figure 21—Craftsmen Architectural Style	53
Figure 22—Mission Architectural Style	54
Figure 23—Avila Ranch Neighborhoods	56

Figure 24—Special Fence Treatment Areas	65
Figure 25—Open Space Fence Example	66
Figure 26—Overall Circulation Plan	72
Figure 27—Buckley Road Sections	73
Figure 28—Collector Streets and Bike Lanes	75
Figure 29—R-1 Zone Street Sections	76
Figure 30—Local Street Sections (Non R-1)	77
Figure 31—Water Supply Master Plan	84
Figure 32—Wastewater Master Plan	85
Figure 33—Storm Drain Master Plan	87

Avila Development Plan Update

This update to the Avila Development Plan includes modifications to the plan that have occurred over the past 14 months since its submittal in December 2015 and during the Plan's environmental and public review process. This version of the Plan includes a greater level of detail for the proposed land plan, additional environmental protections, provisions and regulations to reduce environmental impacts identified in the Environmental Impact Report for the Project, and additional provision to address anticipated changes in environmental regulations. The Plan represented herein is based on the "Mitigated Project Alternative" in the Draft EIR.

The overall land use plan and site design under the MPA would be similar to the Project and the Plan would continue to provide residential land uses with varying densities, and the same overall number of residential units, but would slightly decrease the number of R-1 low density and R-2 medium density units and increase the number of R-3 medium-high density units. R-1 low density single-family residential neighborhoods would continue to be located south of Tank Farm Creek, and that land use would now include about a third of the units with alley loaded uses, with shared open spaces. Figure 6 shows the revised land plan, and the detailed site plans and special development details are provided in Appendix A hereof.

Land uses northwest of the creek would continue to consist of a predominantly R-2 medium density single-family neighborhood, with R-4 high density residential uses continuing to be proposed along both sides of the Earthwood Lane at the site's northwest corner. In the R-2 area, there would continue to be common drives, common open space, and "pocket cottage" setting would be introduced for up to 76 units. The Pocket Cottage units would have smaller floor plans to address affordability, and would have wider open spaces in the front yards.

The planned R-3 medium-high density residential uses would continue to be located in the northeast area of the site, although the configuration of this area would differ from the Project because of the revised alignment of Tank Farm Creek, and the R-3 area would now include a centralized park, and a "duplex" configuration that would offer larger unit sizes in the R-3 area to provide for a wider range of unit sizes (and a wider representation of income groups, presumably) in that area.

The Town Center would continue to be located in the eastern portion of the site, south and east of the creek along the west side of the Jespersen Road Extension, and would include 15,000 square feet (sf) of commercial buildings. Additionally, the updated Development Plan would allow a broader mix of uses in the Town Center to potentially reduce the number of offsite trips that may be generated. General retail store square footage would be limited to 7,500 sf, and individual stores would not exceed 1,800 sf. General (nonmedical) professional, business, and services offices would be allowed. Uses expected for the Town Center would be neighborhood serving uses only including general (non-medical) accessory, professional, business and service offices, general retail, restaurants, limited indoor commercial recreation such as fitness/gym facilities, religious facilities, specialized and technical schools, private schools and tutoring services, laundromats, and community meeting rooms. The Town Center would

provide parking for the Neighborhood Park, and for the Tank Farm Creek Bike Path (as a trail head). It would also provide parking for special events in the adjoining parks and park structures such a weekly farmers markets, neighborhood movies and other neighborhood gatherings.

The size and configuration of open space areas would change, resulting in more contiguous open space with open space concentrated in and adjacent to the 300-foot wide buffer along Buckley Road, along the creek, and in the northeast and southeast corners of the site. Park distribution and layout would change and park acreage has increased to approximately 18 acres in a total of nine parks. Park areas have been increased in the northwest R-2 (Phase 3) area, and in the R-3 (Phase 4) area to ensure that the amount of park area was maintained at a minimum of five acres per thousand at any one point in time. Resulting park area at buildout would be approximately 10.9 acres per thousand population.

A final parks plan has also been developed and has been reviewed and approved by the City Parks and Recreation Commission. Each phase of the project includes a public park. Special park and community facilities will include several dog parks, community gardens, basketball courts, natural interpretive areas, soccer field, baseball fields, pickleball courts, “tot lot” play areas, tennis courts and other facilities.

Primary internal circulation has not changed but neighborhood street layout in Phases 3 and 4 has changed substantially in response to the new land use plan and drainage modifications. Phase 5 streets would be modified to reflect the inclusion of alley units with common open space. Minor changes have been made to comply with the City’s adopted street design criteria. Additional circulation improvements have been included in the project to address EIR issues, including the extension of Horizon Road to Suburban as part of Phase 4 (and the improvement of pedestrian and vehicle improvements

Many “green” modifications have been added to the project to address EIR issues, and to address prospective changes in the State and local building codes. The following features are being added to the Plan:

1. Building energy efficiency standards that will enable the project to comply with the “net zero” energy requirements that are anticipated in the 2019 building code. Specific changes to the Plan will include a requirement for onsite generation of 100 percent of the electrical demand through onsite photovoltaic solar generation (“Solar PV”). This standard applies to all residential and non-residential buildings in the Plan area. Compliance would be through a combination of solar canopies, roof-top solar panels, and solar shingles, as provided in the Design Framework. Single family units must be “solar ready” meaning the roof design should provide adequate clear area for the required area for the solar array (equivalent of 275-300 square feet per unit of tilted south-facing roof area). R-3, R-4 and Town Center use will have EV charging stations at a rate specified in the design guidelines.
2. Shared Mobility strategies would be included to reduce the necessity for additional vehicles for each family. Car sharing would be provided in the development at an initial rate of one car per 50 residences, with at least 50 percent of that fleet in the form of electric vehicles.

Vehicles would be stored onsite on public streets, in guest parking spaces, near public parks and on public streets, as permitted. There would also be a bike sharing program, or provision of bicycles for each household or tenant.

3. Transit usage would be encouraged by extension of Route 2 to the project site as provided in the plan, plus information and/or incentive packages for transit ridership.
4. To comply with the anticipated 2019 building code changes, there are special energy-saving design requirements. Special design requirements include the use of Building Performance Institute (“BPI”) certified trades, Advanced Framing/Engineering (wider stud placement for decrease in transmission loss and reduction in required framing lumber), Quality Insulation Installation (QII) to minimize envelope and duct seal energy losses, compact plumbing to minimize plumbing runs and distance between hot water taps and water heaters, and usage of EPA WaterSense fixtures to reduce indoor water usage.

Many of the proposed changes are the result of changed physical or regulatory conditions, or changes in or changes in the setting for the project. Some of these changes include:

1. A finding and determination that re-routing Tank Farm Creek to connect to the Chevron open space had significant environmental impacts and uncertain timing. The previous version of the plan relied upon expected drainage improvements by Chevron, and the timing of those improvements is now uncertain. Connecting to the Chevron open space also resulted in the loss of federal and state wetlands. The revision avoids those impacts while maintaining adequate flood control.
2. Setbacks have been increased along Tank Farm Creek so that they are a minimum of 35 feet along at least 90 percent of the corridor, and no less than 25 feet, the minimum City Zoning Ordinance and Conservation and Open Space Element.
3. The project was modified to provide for more contiguous open space, a longer and wider Reservation Area along the Buckley frontage, and an expanded Safety Zone S-1B area to accommodate extension of Runway 7-25, and the elimination of all residential uses from the expanded S-1B Safety Zone. The project received its final Conformity Finding from the San Luis Obispo Airport Land Use Commission on December 21, 2016.
4. More specific designs were prepared for the parks and recreation areas of the project and the number and size of the parks was increased. The project has received approval for the design of the public parks and open space in Phases 1-3 and has received conceptual approval for the public parks and open spaces in development phases 4-6. The location and sizes of the parks have been adjusted in accordance with those approvals. The plan now reflects the park facilities approved by the Parks and Recreation Commission.

5. Enhanced pedestrian and bicycle connectivity. These changes include narrower vehicle lanes and wider bike lanes on internal streets. Vehicle lanes have been narrowed to 10 feet while bicycle lanes have been widened to a full 8-foot buffered bike lane standard. These buffered bike lanes occur on all internal major streets, including Earthwood, Venture, Jesperson and Horizon. Special at-grade “speed table” pedestrian street crossings have also been included. These provide for the traffic calming and a continuous walking experience. Finally, pedestrian through connections have been specified along and between residential blocks. This results in a pedestrian intersection density of over 500 intersections per square mile, well in excess of the standard established by LEED and the Smart Growth Coalition.

The net result of these changes has been:

1. Increase in open space area.
2. Reduction in wetland impacts by 0.7 acres.
3. Improvement of storm water management and effectiveness of LID measures.
4. Increase on building energy efficiency more than 40 percent.
5. Reduction in projected vehicle miles travelled by 25 percent.
6. Reduction in projected water usage below the citywide residential average by 30 percent.
7. Increase in the number of units that are affordable to workforce income groups (160 percent of local median family income and below).
8. Finding of conformity with the County Airport Land Use Plan by the ALUC.
9. Increase in the amount of park space from 16 acres to 18 acres onsite, to 10.9 acres per thousand, ten percent about the standard for Expansion Area specific plans, and four times the current citywide average.
10. Approval of the parks plan by the City Parks and Recreation Commission.
11. A reduction in air quality impacts. Building related Greenhouse Gas Emissions will be reduced by 50 to 75 percent, and ROG/NOx gas reduction are estimated to be reduced by 35 percent to 50 percent.

Table 1 on the following page, extracted from the EIR, shows some the principal changes to the project compact to the initial submittal in December 2015.

Several changes have made to the project as a result of the environmental review process and the public participation process. The conformance of the project with the mitigation measures in the Environmental Impact Report is reported in two ways: 1) Appendix I contains a tabular list of the EIR mitigations and an indication of where those mitigations have been included in the Development Plan; and, 2) the mitigation measures are included in the text with the mitigation measure in parentheses at the appropriate location (e.g., **(MM Trans-2)**).

Table 1
Revised Avila Ranch Plan Statistics

Item	Revised (2017) Avila Ranch Project	Original (2015) Project	Difference
Tank Farm Creek			
North-South Creek Segment	Not Realigned, widened to accommodate flood flows	Realigned and extended through to Tank Farm property	Reduced riparian habitat impacts
East-West Channel	Channel retained	Channel removed	Reduced hydrological impacts and in- channel wetland preserved
Creek/Riparian Buffer Setback	35 feet, with 20-foot minimum along no more than 700 linear feet	Generally 5-35 feet	Improved habitat and wildlife corridor connectivity
Tank Farm Creek Class I Bicycle Path	Minimum of 35 foot setback from top of creek bank/ riparian canopy with 20-foot minimum along no more than 700 lineal feet	Inside creek/ riparian buffer	Improved/ habitat and wildlife corridor
Retaining/flood walls at toe of slope along creek corridor	At setback along east side of the creek	Not included	Improved erosion protection and bio-filtration for runoff
Residential Uses			
Residential: Acreage	55.3 acres	68.23 acres	-12.93 acres
Residential: Units	720 units	720 units	none
Mix of Units	101 R-1 units 297 R-2 units 197 R-2 units 125 R-4 units	105 R-1 units 305 R-2 units 185 R-3 units 125 R-4 units	-4 R-1 units -8 R-2 units +12 R-3 units
ALUP Safety Areas			
Units within ALUP Safety Areas	No residential units within S- 1B and S-1C Safety Areas	7 R-3 units within S-1B Safety Area	Residential units relocated outside of S- 1B Safety Area
Neighborhood Commercial Uses			
Acreage	1.86 acres	3.34 acres	-1.48 acres
Parking	125 spaces	66 spaces	-59 spaces
Maximum Square Footage	15,000 sf	15,000 sf	none
Potential Uses	Local uses	Broader mix of uses	Potential trip reduction
Open Space & Parks			
Open Space: Acreage	53.04 acres	55.3 acres	-3.34 acres
Parks: Acreage	18.00 acres	16.00 acres	+2.00 acres
Parks: Number	1 Neighborhood Park 1 Pocket Park 7 mini-parks	1 Neighborhood Park 1 Pocket Park 5 mini-parks	+2 mini-parks, 1 located in the creek setback; 1 located within R-3 development

Development Plan Format and Content

The Avila Ranch Development Plan contains an environmental setting section, a brief project description, background information, Land Use, Design, Circulation and Infrastructure regulations and strategies. The 2014 Land Use and Circulation Element Update (LUCE) prescribes the format and content of regulatory elements of Specific Plans for Special Focus Areas in LUCE Policies 8.1.1 and 8.1.2, as well as the development objectives for the site in LU Policy 8.1.6. The Avila Development Plan provides the program for development of the site in conformance with the General Plan's objectives, policies and standards. The actual enabling framework for implementation of this development program is contained in the Airport Area Specific Plan Amendment policy document associated with the Avila Ranch project.

According to the Land Use Element a Specific Plan is to contain a **Land-Use Framework** that includes the proposed land-use pattern, actual development densities in each subarea on the project site and development phasing. Also incorporated into the Land-Use Framework is a classification system that clearly identifies uses allowed in each subarea, and "performance standards" for each site and subarea. Another key element of the Land-Use Framework are general site planning and development standards that specify the requirements for all development and land uses regardless of the applicable land-use designation, including sensitive resources, site access requirements, energy efficiency, fences, walls, hedges, buffers, and other screening, noise regulations, outdoor lighting standards, related performance standards (e.g., air quality, glare, vibration, etc.) and undergrounding of utilities. The Land Use Framework also includes the proposed housing mix within the area that is in keeping with the LUCE's focus on housing for this site.

The Specific Plan also includes a **Design Framework** that provides detailed design guidelines to be used as the Specific Plan is implemented /developed. The purpose of these guidelines is to establish the expected level of design quality within the area while still maintaining project flexibility and innovation. The objective of this framework is not to dictate a specific design but to establish design expectations that can be implemented as various project components are proposed for implementation. The Design Framework is intended to provide guidance on the integration of the site-specific features such as building architecture, with area-wide elements such as streetscape, recreation and open spaces, resources and architecture into the overall project design. The Design Framework also has standards that define the overall character of the streetscape. The design regulations contained herein are not considered to be final. As individual projects are brought forward for implementation, they will be reviewed by the City staff and Architectural Review Commission (ARC) in accordance with City regulations.

The **Circulation Framework** of the Specific Plan includes the proposed circulation system elements, design standards, and circulation system phasing. This Framework also addresses parking and loading standards, if different than standard City requirements, transit needs, and non-vehicular modes of circulation such as pedestrians and bicycles.

Finally, the Specific Plan will include an **Infrastructure/Public Facilities Framework** that covers those requirements (water, sewer, storm drainage, electricity, natural gas, and communications) as well as parkland, schools and other public facilities. For infrastructure, the framework addresses the proposed trunk infrastructure system improvements and system phasing necessary to support implementation of the land-use plan and financing mechanisms to implement planned facilities.

The LUCE and other General Plan Elements set out special planning and development objectives for the Avila Ranch site to be addressed in the Avila Ranch subarea of the AASP. This Development Plan includes features responsive to these requirements. The LUCE objectives are intended to ensure that the site is developed primarily as a residential neighborhood with supporting commercial, and recreation facilities, and provisions for onsite and offsite open space/resource protection. LUCE Policy 8.1.6 indicates the specific plan for this area should consider and address the following land use and design issues:

1. Provision of a variety of housing types and affordability levels, with a minimum of 500 dwelling units, and maximum of 700 dwelling units.
2. Modification of the Airport Area Specific Plan to either exclude this area or designate it as a special planning area within the Airport Area Specific Plan.
3. Provision of ag buffers along Buckley Road and along eastern edge of the property.
4. Provision of open space buffers along northern and western boundaries to separate this development from adjacent service and manufacturing uses, and an open space buffer along Buckley Road. Open space/agriculture is to be provided equivalent to 50 percent of the site, with up to one-third of this requirement may be provided off-site or through in-lieu fees consistent with the Airport Area Specific Plan. That is, the minimum amount of on-site open space is to be 50 acres.
5. Provision of open space buffers and protections for Tank Farm Creek to enhance wildlife corridor that runs through the property.
6. Conformance to safety and noise parameters described in this General Plan and the purposes of the State Aeronautics Act, and other applicable regulations such as the San Luis Obispo County Airport Land Use Plan.
7. Participation and enhancement to Buckley Road and enhancement of the connection of Buckley Road to South Higuera Street.
8. Appropriate internal and external pedestrian, bicycle, and transit connections to the City's circulation network, and implementation of the City's Bicycle Transportation Plan including connections to the Bob Jones Trail.

9. Provision of water and wastewater infrastructure needs as detailed in the City's Water and Wastewater Master Plans. This may include funding and/or construction of a wastewater lift station.
10. Fire protection and impacts to emergency response times.
11. An architectural design that relates to the pastoral character of the area and preserves view of agrarian landscapes.
12. Provision of a neighborhood park, and park space consistent with the Parks and Recreation Element of the General Plan.

There are several supporting documents associated with the Avila Ranch Development Plan. Those include the following:

1. Airport Area Specific Plan Amendment (AASP). This document includes the necessary policy, text and graphics modifications to the AASP to accommodate the implementation of the Avila Ranch Development Plan. This document includes Goals, policies, objectives, standards and guidelines for conservation and open space, design, circulation, infrastructure, and financing associated with implementation of the Avila Ranch project, as well as development policies associated with the continuing development of the overall 1,500-acre Airport Specific Plan Area. Amendments are proposed that provide for the development program contained in the Avila Ranch Development Plan.
2. General Plan Conformity Analysis. This document evaluates the conformity of the Avila Ranch Development Plan with the various applicable polices and regulations in the adopted elements of the San Luis Obispo General Plan. The Conformity Analysis contains a detailed response to each applicable General Plan Policy, and demonstrates how the project can be found to be in substantial compliance with those policies.
3. Storm Water Control Plan. This document is included in the submittal for the Avila Ranch Vesting Tentative Map and demonstrates compliance of the Development Plan with the Regional Water Quality Control Board's ("Water Board") Low Impact Development (LID) regulations.
4. Drainage Report. A drainage report was submitted with the Vesting Tentative Map that analyzed the hydrology for the project site, including pre-development runoff and flooding, post-development runoff and flooding, and compliance with various City, State and Federal drainage regulations.
5. Water Supply Assessment. An SB610 Water Supply Assessment was prepared for the project to demonstrate the adequacy of water supplies for the project.
6. Airport Land Use Plan Conformity Analysis. This analysis included a quantitative analysis of conformance with the density limitations in the Airport Land Use Plan, and a policy conformity analysis. This document was reviewed by the Airport Land Use Commission in May 2015,

and again in September 2016 after project modifications were made to develop the Mitigated Project. The project was finally reviewed on December 21, 2016 when it was found to be consistent with the ALUP by the ALUC.

7. Environmental Technical Studies. Various environmental technical studies (in addition to those above) have been prepared that have informed the Development Plan development of the plan. These documents have included:
 - a. Traffic Impact Analysis and Report
 - b. Biological Reconnaissance Study
 - c. Wetlands Study and Delineation
 - d. Cultural Resources Evaluation and Inventory
 - e. Noise Impact Evaluation
 - f. Phase 1 and Phase 2 Environmental Site Assessments
 - g. Soils Report and Infiltration Report

Project Overview

Introduction and Project Features

The Avila Ranch site is composed of approximately 150 contiguous acres at the northeast corner of Buckley Road and Vachell Street, and is comprised of three separate parcels: APN: 053-259-006, APN: 053-259-04 and APN: 053-259-005 (See Figures 1 through 3). The site slopes from the northeast to southwest, although there are localized undulations. It is diagonally bisected by a drainage that is colloquially referred to as “Tank Farm Creek” which conveys on- and off-site storm drainage indirectly to San Luis Creek and comprises approximately 14 acres of the 150-acre site.



Figure 1 Project Location

The site was annexed to the City in 2008 after the adoption of the original Airport Area Specific Plan (AASP). At that time, it was given a holding land-use designation of Business Park, the same designation the County of San Luis Obispo applied to it in 2000 prior to its annexation to the City. This land-use designation is in significant supply in the city and surrounding areas. The City’s Sphere of Influence is adjacent with the southern boundary of the site, which also includes properties to the east and west of the project. See Figure 3.

As currently planned, Avila Ranch would include approximately 720 dwelling units with a diverse range of housing needs, a centrally located “Town Center” with 15,000 square feet of local-serving retail and office uses, 16 acres of pocket parks, mini-parks and neighborhood parks, and 53 acres of riparian open and farmed agricultural land. There will be riparian recreation, open space, community gardens and bike connections to the Chevron and Octagon Barn bike facilities, among other amenities.

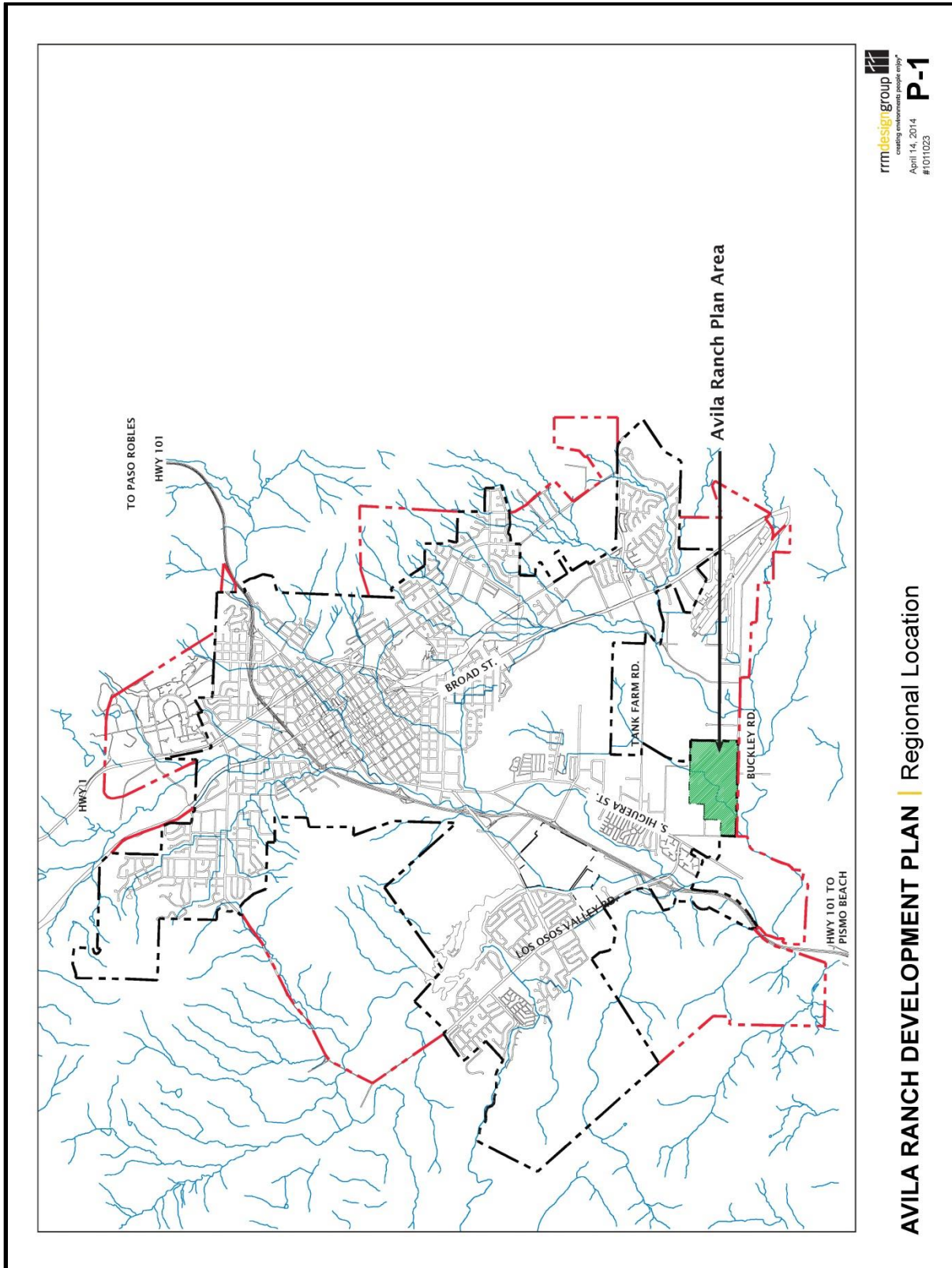


Figure 2 Vicinity

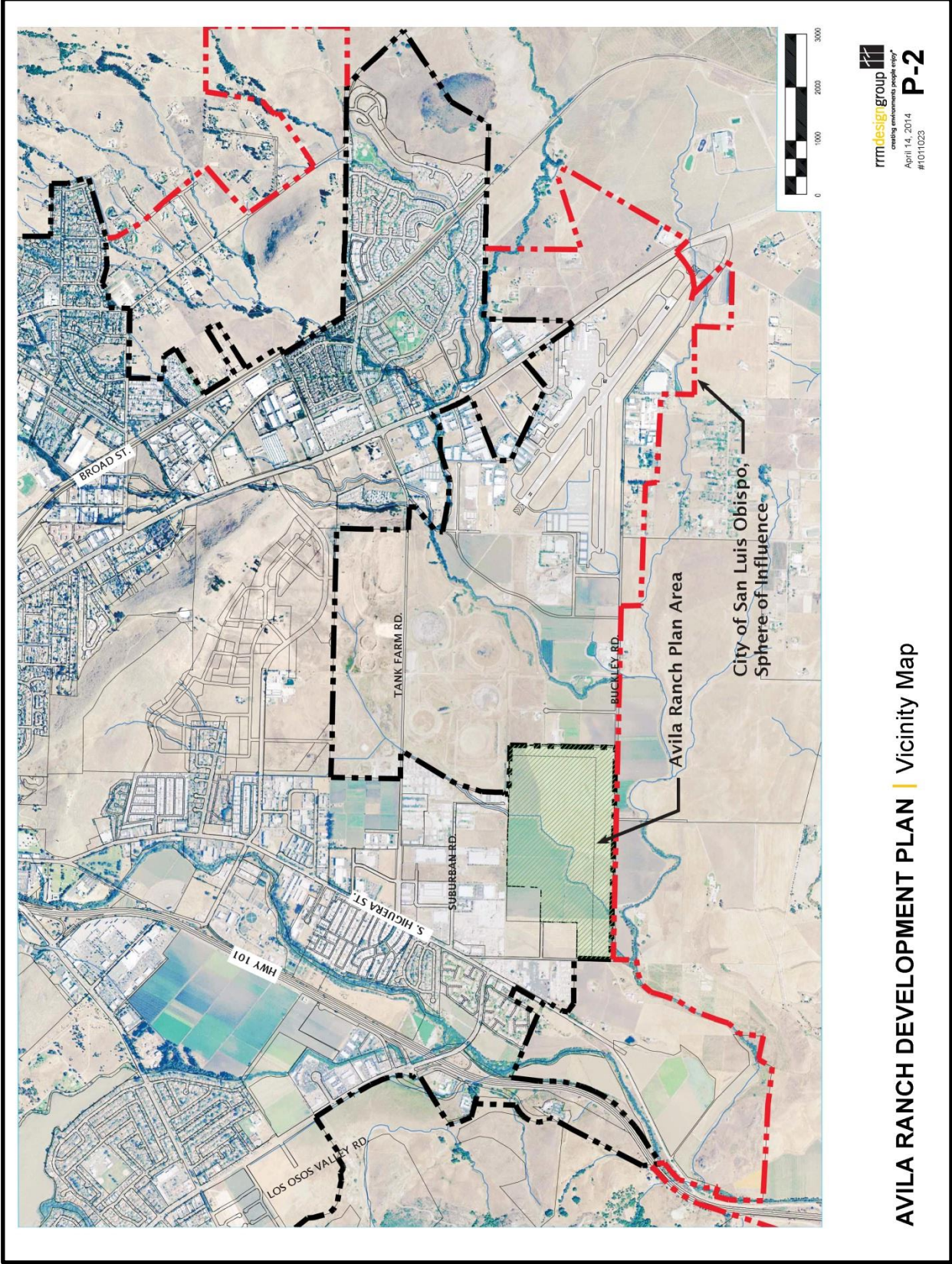


Figure 3 Vicinity and Site

Sustainable Energy Features

The Avila Ranch project will be a model for sustainable development practices. It is intended to be compliant with the U.S. Green Building Council's Leadership in Energy and Environmental Design for Neighborhood Development ("LEED-ND"), and San Luis Obispo County's adoption of the GreenPoint checklist. Just a few of the features include:



1. Compliance with SLO Green Build passive solar guidelines for building orientation, south glazing and thermal mass.
2. Pervious alternatives to hardscape.
3. Compliance with GreenPoint rated- single family, GreenPoint-multifamily and CalGreen checklists.
4. High-efficiency Energy Star fixtures, appliances and features.
5. Single family detached residential buildings that are at least 15 percent more energy efficient than the 2016 California Energy Efficiency ("Title 24") standards, and multifamily residential and non-residential structures that are at least 10 percent more energy efficient than the 2016 Title 24 standards.
6. Alternative energy systems (photovoltaic solar, wind, etc.) capable of delivering 100 percent of the energy demand for the residential and non-residential units in the project. The current City guideline (GP Conservation Policy 4.6.17) is for at least 30 percent of the single-family units to be supplied with basic photovoltaic (PV) systems. The project will exceed that by requiring that the project be "Net Zero" with all the units with rooftop or solar canopy PV systems that provide at least 100 percent of the unit's electrical energy demand or equivalent energy saving improvements.
7. Shared Mobility strategies are included to reduce the necessity for additional vehicles for each family. Car sharing would be provided in the development at an initial rate of one car per 50 residences (with adjustments to increase or decrease vehicles based on actual demand and usage), with at least 50 percent of that fleet in the form of electric vehicles. Vehicles would be stored onsite, on street, in guest parking spaces, near public parks and on public streets, as permitted. There would also be a bike sharing program, or provision of bicycles for each household or tenant.
8. Building design standards intended to exceed the expected 2019 "Net Zero" building codes. To meet and exceed the anticipated 2019 building code changes, there are design requirements for the usage of Advanced Framing and more energy efficient wall, floor and ceiling

assemblies, Quality Insulation Installations, and Compact Demand Hot Water and plumbing. Advanced Framing/Engineering involves wider stud placement to decrease transmission loss and reduction in required framing lumber. Quality Insulation Installation (QII) will minimize heating and cooling losses, compact plumbing to minimize plumbing runs and distance between hot water taps and water heaters, and usage of EPA WaterSense fixtures to reduce indoor water usage. Formal adoption of these standards will need to be through the California Energy Commission's "Reach Code" process and adoption of a special ordinance for Avila Ranch, if applicable prior the effective date of the 2019 California Energy Standards "Net Zero" code.

9. Compliance with the San Luis Obispo County Air Pollution Control District's optional mitigation measures, including those set forth in Table 3.3-9 of the EIR. These include such features as Walkable Streets and dense bike path, transit improvements, traffic calming, dense pattern of pedestrian and bike circulation improvements, water conservation strategies, EV charging stations in common areas, and car sharing.
10. Compliance with the City's Climate Action Plan.
11. Project features and measures to reduce average daily potable water usage by at least 30 percent below community's current residential water demand per unit.

Sustainable Open Space and Agriculture

The project will include improvements to the existing riparian corridors for habitat, drainage and pedestrian and bicycle paths. Onsite open space will total over 53 acres in accordance with LUCE Policy 8.1.6, including 36 acres for sustainable agriculture, and 17 acres for riparian open space. The sustainable agriculture will be dedicated to the production of local produce through practices that are environmentally responsible and compatible with the surrounding environment.

Progressive storm-water treatment and management improvements will also be used to further the community's Low Impact Development goals through bio-retention swales, runoff treatment and filtration, permeable paving and pavement systems, water retention gardens and other integrated treatment detention/retention systems. These facilities will also have the added benefit of providing open-space and aesthetic value. These improvements will also solve storm-water issues associated with upstream and adjacent properties.

A Complete “Linked” Community

The surrounding neighborhood provides a wealth of services, facilities and resources. Day care, drug stores, restaurants, schools, an upscale convenience store, a bank, several places of worship, a fitness center, medical and/or dental services, personal-care services, and a full-service supermarket are currently located within biking or walking distance of the Avila Ranch. In addition, there are currently over 2,500 jobs within a half mile distance of walking or biking. An integrated web of pedestrian and bicycle pathways will be developed along the public street system, dedicated pedestrian pathways, and riparian bike paths.



To augment these existing services and facilities, the community will offer a 9.5-acre neighborhood park and that is within no more than two blocks of any residential unit, and eight mini-parks within one-eighth mile of residential units, a pocket park, the Tank Farm Creek Riparian Corridor and a “Town Center” with a community center, convenience goods and services. The Town Center will function as more than just a commercial destination. It will have plaza areas for public gatherings, parking to be shared with the adjacent neighborhood park and the Tank Farm Creek riparian corridor, and areas for a trailhead that is connected by local, community and regional roadways, bike trails, pedestrian linkages and transit. More than just an area for daily shopping and convenience goods, the Town Center will serve as a community gathering place, a transit hub and a location for occasional community events and gatherings. A fully improved transit, trolley, school bus and van pool stop will also be included as part of the community’s Town Center.



A Diverse Range of Housing Opportunities

The project will reflect a wide range of housing across the economic and socio-economic spectrum. It will also be characterized by styles that have the detailing and architectural authenticity for which San Luis Obispo has become known, with a wide enough range in styles to create neighborhood identities and avoid monotony and repetition. There will be areas for traditional single-family units of varying designs, smaller lot R-2 single family detached units, attached single family cluster units and medium- and high-density multifamily units.



In particular, the project will provide housing that will appeal to the community's "workforce" housing needs with unit sizes, pricing and amenities for small families, professionals, retirees, "empty nesters" and larger families. Under current market conditions, it is expected that the project will provide over 450 units (63 percent) that are affordable to families with moderate and "workforce" incomes (80-160 percent of City median family income). The project revisions have included new, smaller unit sizes ("Pocket Cottages of 1,000 SF to 1,200 SF) in the R-2 area to widen the socio-economic base of that area and to offer a lower market rate price point. Within the R-2 area unit sizes range from approximately 1,000 SF to 2,100 SF. Conversely, the R-3 area now includes some larger "duplex" units to introduce larger units for larger families or for "move up" R-3 units, and the unit size range in the R-3 area now includes units ranging in size from 700 square foot studio units to 1,750 square foot duplex units. The R-4 multifamily units will offer smaller studios ranging in size from 550 square foot rental units to 1,150 square foot units for larger families.

The project's architectural styles will be respectful of local traditions and culture, while meeting present-day life-style needs. Anticipated architectural styles are expected to include highly detailed Agrarian/Ranch, Bungalow, Mission, Craftsman Bungalows, and Contemporary/Mid-Century Modern. Neighborhoods will be organized around the project's open-space features with a neighborhood park, pocket park or open-space amenity within walking distance. Public buildings, park structures and structures in civic meeting places will use an agricultural theme, such as modern or contemporary barn architecture.



Major City Development Objectives

The project site has been identified in the adopted LUCE Update as one of the principal potential growth sites in the community over the next 10-20 years. In addition to the General Plan objectives noted above, and the conformance with General Plan policies noted in the General Plan Conformity Analysis, it will promote several community objectives that are furthered or achieved by the project, as follows:

1. **Completion of the Buckley Road Extension.** The City and County development plans consider the extension of Buckley Road to Higuera an essential element of the community's circulation network. The extension of Buckley Road from Vachell Lane to South Higuera is one of the key features of the project. The SLOCOG RTP/Sustainable Communities Plan considers this improvement a high priority. This will have significant community and region-wide benefits as it will provide for direct vehicle connections between SR 227 and SR 101, and route regional traffic around the edges of the community rather than through impacted intersections. This connection will also provide a direct connection between the City's bikeway system east of Vachell to Higuera, thereby connecting the City's bicycle network to the Octagon Barn trailhead for the Bob Jones Trail.

2. Completion of Missing Bikeway Links. There are currently bike facilities at Santa Fe and Tank Farm Road, and portions of the Bob Jones City to Sea Trail at Los Osos Valley Road and Highway 101 and at Ontario and Highway 101. The County of San Luis Obispo is currently processing an extension of the Bob Jones Trail to connect it to the Octagon Barn to serve as a trailhead and hub. The extension of Buckley Road, the onsite riparian bikeway along Tank Farm Creek and the bikeway improvements along the Buckley will complete this trail network. All in all, the project will result in the addition of almost three miles of bicycle paths and lanes, pedestrian trails, and completion of critical missing important links in the overall bicycle network, critical transportation priority in the community.
3. Correction of Hydrology and Flooding. Over the years, the Tank Farm Creek corridor has been neglected and suffers from overgrown, choked channels. This corridor will be rehabilitated and adjacent green spaces developed which will include Class I bike paths, pocket parks and pedestrian/bikeway overpasses. There are also drainage issues along Suburban Road, Vachell Road and Buckley Road, many resulting from incremental, site-specific drainage problems over the years. There are also drainage issues associated with the “Dioptrics” site at Venture and Vachell Lane that will be addressed.
4. Oversizing of Infrastructure. The City plans to serve all areas within the AASP with sewer and water services, once they are annexed to the City. The project will bring in and extend domestic water, recycled water and sewer service through the project site and make it available for extension to the east. Sewer and water mains will also be installed, to the extent feasible, along Suburban Road to serve the properties along Suburban that were annexed to the City in 2008, but developed in the County.
5. Climate Action Plan. The City has a renewed emphasis on the Climate Action Plan and air quality issues. Many of the new features are designed to address those priorities.

Environmental Setting and Background Information

The environmental impacts of development on the property were evaluated in the Airport Area Specific Plan EIR, certified by the City Council in August 2005. Recently, the AASP was amended to address changes in the Chevron site and the LUCE was amended. In addition, there have been several site-specific technical studies that have informed the development of the project. A summary of those issues and findings as they pertain to the project site, are summarized below.

Flooding and Hydrology

As noted, a portion of the project is in the FEMA 100-year flood plain. According to City documents, any project components within a 100-year flood plain would be subject to a “no net fill” requirement, and building pads would have to be elevated at least one foot above base flood elevation. Figure 4 shows the pre-development 100-year flood plain. Figure 5 shows the predevelopment flood areas.

A system of 22 sub basins is planned to provide the required LID retention, detention and storm water treatment. These basins provide localized detention, retention and storm-water filtration/quality enhancement to the various neighborhoods and have a collective capacity necessary to provide detention adequate to accommodate a 50-year event, and retention necessary to accommodate a 25-year event. In order to accommodate offsite storm drainage a 20-30-foot-wide swale will be provided along the north property line. This line will convey existing offsite flows to Tank Farm Creek. Figure 5 shows the post development flood prone areas. As part of this project, the north-south portion of Tank Farm Creek will be widening to accommodate and channel offsite flood flows that come from the Suburban Road area, and runoff from South Hills through Tank Farm Creek.

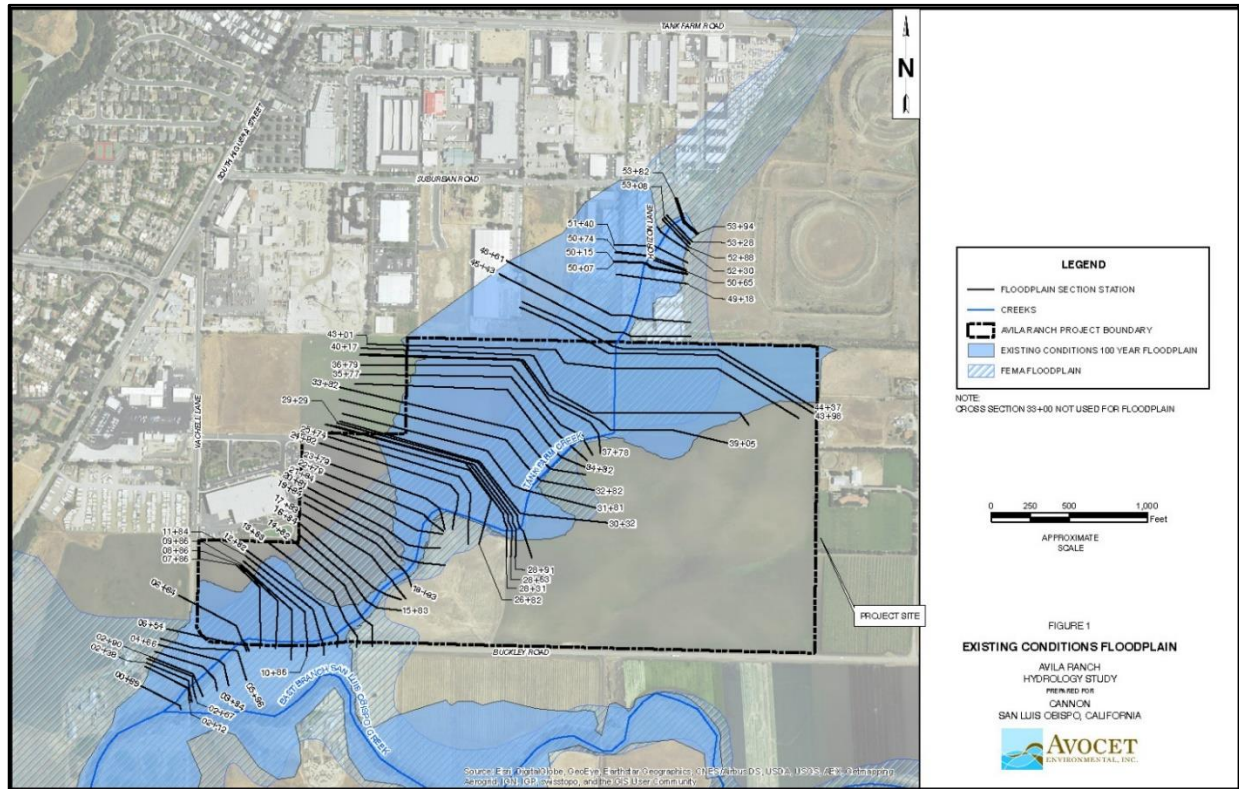


Figure 4 Predevelopment Flood Areas

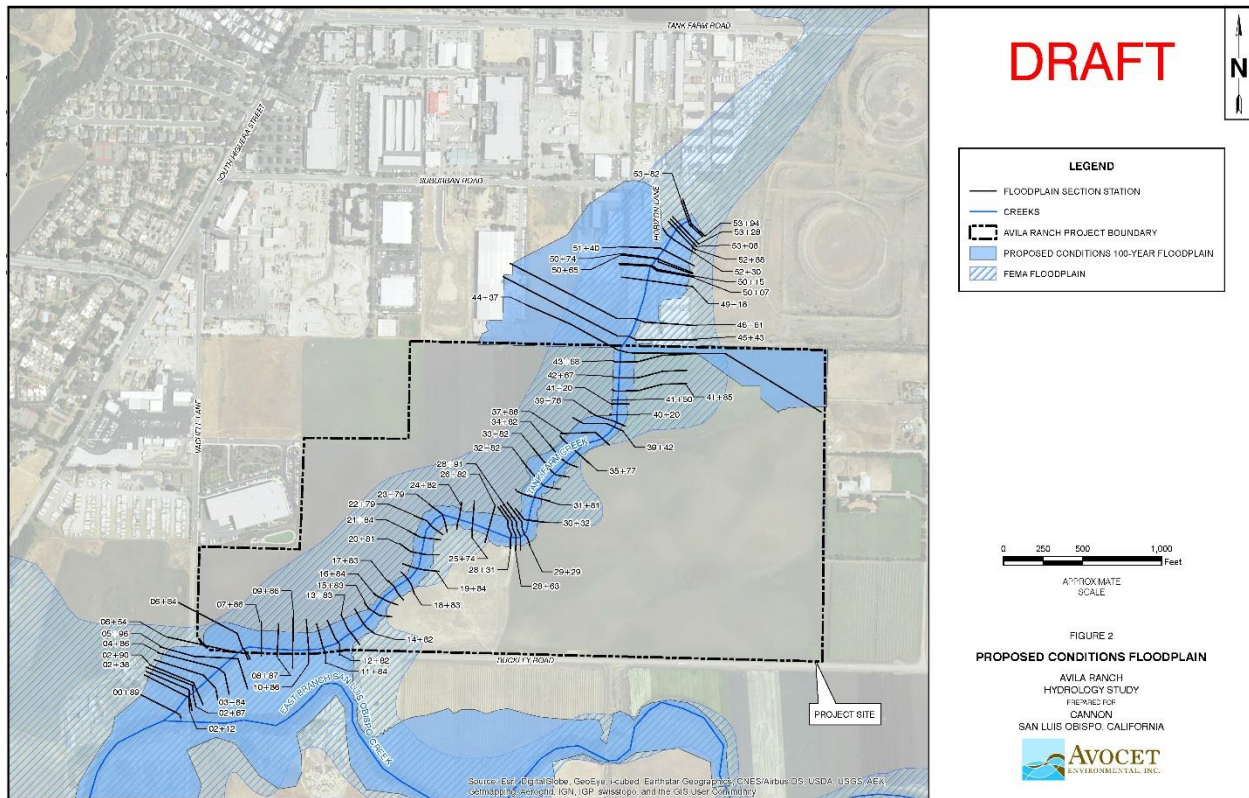


Figure 5 Post Development Flood Areas

Biological Resources

The AASP EIR and the LUCE EIR identified a number of species of concern on, or near, the project site. Biological resources surveys and wetland delineation were prepared by Althouse and Meade between 2012 and 2016. The initial biological findings show the project can improve the biological conditions, protect the corridor, enhance the connectivity for wildlife, and upgrade the biological value of the Tank Farm Creek area. The site development plan includes replacement and improvement at mitigation ratios acceptable to state and federal regulatory agencies. As part of the updated project, the riparian setbacks and wildlife corridors along Tank Farm Creek have been increased significantly above City minimums.

Soils and Geology

There are no expected impacts for soils and geology. A review of the SCS Soil Survey map for San Luis Obispo, indicates four classifications of soil are primarily found in the area. Soils and geology surveys were conducted on the site, and for the Buckley Road extension. Soils in the vicinity of the Buckley Road extension are believed to have some serpentine soils and the potential for naturally occurring asbestos; however, the studies along the proposed alignment yielded limited exposure and routine mitigations specified by the State and APCD are included in the project.

Soils on the project site are classified as Concepcion loam, Cropley clay, Marimel sandy clay, and Salinas clay. All are fanned from alluvium derived from sedimentary rocks and have slopes ranging from

zero to nine percent. These soils are found on terraces, alluvial fans, flood basins and in small basins. Characteristics of these soils are as follows:

Concepcion loam. 2 to 5 percent slopes.

The Concepcion loam constitutes about half of the site, generally easterly of the Tank Farm Creek alignment. It is a very deep, moderately well drained, gently sloping soil fanned on marine terraces. It is derived from old alluvium weathered from sedimentary rocks. The Concepcion soil permeability is very slow and the surface run off is slow. In a representative profile, the surface layer is a very dark gray loam. Below this dark gray layer is a light brownish gray sandy loam. The national hydric soils list does not identify the Concepcion series as a hydric soil.

This soil type is considered a non-prime farmland soil with a land capability rating of 3, and has a California Revised Storie Index rating of "Poor." It is a farmland of local importance.

Cropley clay 2 to 9 percent slopes.

This soil type represents about one-fourth of the site and includes the area generally east of Di-optics, and north of Tank Farm Creek. This soil was formed from alluvium derived from sedimentary rocks and have slopes ranging from zero to two percent. These soils are found on terraces, alluvial fans, flood basins and in small basins. Cropley clay soils are moderately well drained and have slow permeability. In a representative profile the surface layer is a very dark gray silty clay to about 36 inches. Below this dark gray layer is a yellowish brown silty clay loam.

The soil type is considered a non-prime farmland soil with a land capability rating of 2 when irrigated, and 3 when not. It has a California Revised Storie Index rating of "Fair". It is farmland of local importance.

Marimel sandy clay loam. Occasionally flooded.

The Marimel sandy clay soils group comprises most of the rest of the project site and is in the southwest corner of the project site. This soil is very deep, somewhat poorly drained, nearly level, on alluvial fans, floodplains, and narrow valleys. It is formed in alluvium weathered from sedimentary rocks. and exhibit moderately slow permeability and slow surface runoff. In a representative profile, the surface layer is a grayish brown sandy clay loam. Below this layer is a mixed grey and pale olive silty clay loam.

The soil type is considered a non-prime farmland soil with a land capability rating of 3. It has a California Revised Storie Index rating of "Fair. It is farmland of local importance.

Salinas Silty Clay, 0 to 2 percent slopes

The Salinas Silty Clay soils on the site cover approximately 10 acres and generally run parallel to Buckley road up to Tank Farm Creek, outside the URL and in the designated agricultural buffer. They are very deep, well drained, nearly level on alluvial fans, floodplains and narrow valleys. The soil is formed in alluvium weathered from sedimentary rocks and exhibit moderate to rapid permeability. This

soil type is considered Class 1 “prime” soils when irrigated; however, they are considered Class 3 non-prime soils if dry farmed as they are now.

Soil permeability on the site generally follows the soil type capabilities, with areas to the southwest slower and somewhat more compacted below the depth of cultivation according to soil permeability tests performed on the site. The Concepcion group has pockets that are highly permeable and suitable for onsite drainage and water management. According to the percolation analysis, approximately two thirds of the Concepcion portion of the site has soil permeability that is classified as moderate to rapid.

Hazardous Materials/Assessment

A Phase I and Phase II Preliminary Site Assessment (PSA) were conducted for the project by Grisanti and Associates of Los Osos in 2012. The Phase I assessment revealed a well-known occurrence of inundation of the site during the 1926 Unocal Tank Farm fire. Although limited testing completed for the Phase I report did not reveal any remnant on-site contaminants from that event, a Phase II study was considered prudent to conclusively eliminate the possibility of remnant hydrocarbons from that event, and for pesticides. The Phase II assessment concluded that “...*the Laboratory Reports of Analysis showed no detectable concentration of any pesticides, herbicides or hydrocarbons. Based on the previous submitted Avila Ranch Property Preliminary Assessment and the Phase II evaluation of the property, the tests exceeded reasonable due diligence requirements of the PSA evaluation of this property and further assessment activities are not warranted.*”

Noise

No noise issues were identified in the AASP EIR. There are, however, potential issues associated with uses on the south side of Suburban Road adjacent to the project, and future traffic on Buckley. As part of the project, buffer areas are to be provided along the north and northwest property lines. Agricultural buffers provide setbacks to Buckley Road, the main noise-generating road facility. The Airport Land Use Plan’s noise contours do not conflict with the proposed site uses. The Final EIR for the Airport Master Plan demonstrates noise levels on the project site do not exceed City standards. A review of the ALUP noise contours, as part of the Airport Land Use Commission review of the pre-application for the Development Plan, confirmed that these contours do not materially affect the project.

A noise monitoring study was prepared by David Lord and demonstrated there were no significant aircraft peak or average daily noise issues associated with development of the project. He also concluded there are no stationary source noise issues but future noise from Buckley Road traffic may exceed city standards. In order to address potential overflight as nuisance issues, the project will include noise mitigation measures to limit aircraft-related interior 24-hour, 10-second interval peak noise level (“Lmax”) to 45 decibels, as described in amended AASP Policy 4.5.3, in order to reduce potential complaints from residents. There are also special measures associated with R-4 units located adjacent to the Suburban industrial uses. **(MM NO. 3a)**.

Air Quality

Construction related impacts are to be mitigated through measures identified in the EIR. Long-term air-quality impacts were found to be mitigable, and consistent with the local Climate Action Plan. According to the EIR, the project has a vehicle miles traveled (VMT) metric that is lower than the SLOCOG standard and the Citywide average. Additional features to further reduce VMT and air quality impacts are described in Table 3.3-9 in the EIR. The project also introduces a number of features such as car sharing, bike sharing and enhanced transit, extensive bike and pedestrian connections and improvements, school bus service, and other features. The project will also establish standards for early compliance with the anticipated 2019 California Energy Code “Net Zero” building efficiency and renewable energy generation standards. electrical generation through onsite Solar PV, and 2019 building code “Net Zero” building energy and construction standards.

To comply with the anticipated 2019 building code changes, there are design requirements to increase the energy efficiency of single family residential units (R-1 and R-2) by at least 15 percent above 2016 Title 24 standards, and for non-residential and multifamily residential units (NC, R-3 and R-4) to exceed the 2016 standards by at least 10 percent. These improvements will be from the usage of Advanced Framing and more energy efficient wall, floor and ceiling assemblies, Quality Insulation Installations, and Compact Demand Hot Water and plumbing. Standards are also set for the minimum amount of Solar PV for each building type, for adequate roof area for the solar arrays, and for the placement of solar canopies in common parking lots of multifamily and non-residential areas. Based on these requirements and the other measures it is expected that Greenhouse Gas and ROG emissions associated with building energy use will be reduced between 50 and 75 percent. Combined with the 25 percent reduction in VMT, air quality impacts associated with the project will be reduced 35 percent to 40 percent.

Cultural Resources

Implementation of the proposed project would entail ground disturbance associated with infrastructure development and construction of new structures, access roads and underground utilities could have an impact on known or unknown cultural resources. A survey of the site was conducted in 2000 by Gibson’s Archeological Consulting, followed by a Phase 1 and a Phase 2 analysis in 2015 and 2016 by Applied Earthworks. The archaeological surface survey consisted of one archaeologist zig-zagging back and forth examining the surface, rodent burrows, farm roads and other cleared areas around the fields for any signs of prehistoric cultural materials (including seashell fragments, stone tools and fragments, stone flakes, bone, burnt rock, etc.) or significant historic cultural materials. An archival records search was conducted which included the Central Coast Archaeological Information Center located at the University of California, Santa Barbara. Based on the most recent survey, grading mitigations and limitations are recommended for the project site. **(MM CR 3a)**.

Agricultural Resources and Preservation

Agricultural production is limited by the availability of irrigation water on the site and the productivity of the soils. As noted above, and with the exception of the 10 acres of the site in Salinas silty clay loam along the Buckley Road frontage, the Storie Rating for the soils on the site ranges from “Fair” to “Poor.” Farming on the site has been ongoing for many years, with three crops grown in the site in most years, primarily dry grains such as barley and wheat, occasional safflower, and beans. Crops are normally dry farmed, or at least selectively irrigated, and crop yields are somewhat lower than the County average. Single crop barley revenue yields are approximately \$150 per acre. Safflower yields approximately twice the revenue per acre when cultivated; however, this crop depends on irrigation at a rate of approximately 0.5 acre feet per acre, or higher-than-average precipitation. For purposes of analysis, agricultural productivity from the site is approximately \$25,000 to \$35,000 per year for the 140 acres that are capable of being cultivated. Agricultural productivity on the site is significantly below the County average of \$500 per acre for field crops, and the \$10,000 per acre revenue rate for fruit and nut crops, as reported by the San Luis Obispo County Department of Agriculture.

The AASP EIR and the LUCE EIR addressed the loss of ag land due to the annexation and development of the area. That loss was identified as a significant and irreversible adverse impact that could not be mitigated. Policies contained in the existing LUCE and Airport Area Specific Plan require direct dedication of open space areas, or payment of an in-lieu fee, for newly developed and annexed land. The EIR requires, as a condition of annexation and/or development within the Airport and Margarita Areas, that developers be required to dedicate open space land or pay in-lieu fees to secure open-space easements on agricultural land outside the URL at a ratio or no less than 1:1. The project will convert 96 acres from agricultural to non-agricultural use within the designated URL. There are 35 acres of agricultural area outside of the Urban Reserve Line that will apply towards this requirement, and approximately 15 acres inside of the URL that will be preserved as open space. An additional 64 acres of agricultural conservation area will be identified at least equal or better agricultural production capability to compensate. In addition, the frontage along Buckley Road will be planted with more productive crops like those of adjoining properties which will result in the agricultural production on the site equally or exceeding the present valuations. Appendix H shows the phasing of the agricultural conservation easements to comply with **MM AG-4**.

Airport Safety

A significant amount of technical work has been completed by the City to document the appropriate area for special safety regulations to ensure long-term viability of the San Luis Obispo Regional Airport (SBP). This included a study by a professional aviation land-use planning consultant under contract with the City. As part of the process of developing the Avila Ranch Development Plan, the Airport Land Use Commission reviewed the project’s compatibility analysis and initial concepts to achieve compliance and found the plan reflects safety, noise, overflight, airspace protection and other issues identified in the ALUP. A pre-application was submitted to the ALUC in April of 2015 which found that the Development Plan could be found to be consistent with the ALUP if presented in substantially the same format. Followup presentations were made to the ALUC in June and September of 2016, and a formal application was submitted in November 2016. The pre-application and application studies concluded

that the project was consistent with the ALUP, and in December 2016 the ALUC found that the Avila Ranch project was in conformance with the Airport Land Use Plan.

Land Use Plan and Framework

Land Use

The proposed Project includes a land use plan which designates 55.3 acres of residential land uses, 71.3 acres of open space and parks, and 1.9 acres of neighborhood commercial development (see Table 1 and Figure 6). This would allow for the development of approximately 720 residential units and 15,000 square feet (sf) of commercial buildings. Low, medium, medium-high, and high density residential developments would be constructed along proposed collector and residential roadways. One neighborhood park, eight mini-parks would be established as part of the 18 acres of park space planned for the Project site. The Land Plan for the project is shown in Figure 6.

Low Density Residential (R-1) designation for the Avila Ranch area is for new single family residential development. It is expected that there will be 100-110 Low Density Residential dwelling units on 13 acres including a range of lot sizes from 5,000 SF to 10,000 SF units with a mixture of front garages and alley loaded garages. Maximum density would be up to eight units per net acre. Potential unit sizes will range from 1,650 square feet to 2,500 square feet. Sheet A7 in Appendix A shows the planned layout of the R-1 neighborhood.

The **Medium Density Residential (R-2) designation** in the Avila Ranch area will be primarily 4-pack, 6-pack and cluster units that will create small lot detached single-family units. Total R-2 development in the Avila Ranch area is projected to be approximately 300 dwelling units on 27 acres, with maximum potential development of 12 units per net acre. The R-2 units may be in several different configurations, and development shall comply with the design standards in the Avila Ranch Development Plan. A Small Cluster “Pocket Cottage” concept has been included to address the need for smaller unit sizes; these units are illustrated in Sheets A-4 through A-6, and A-17 in Appendix A and range in size from 1,000 square feet to 1,250 square feet and include more limited parking. The R-2 portions of the project will be oriented to provide small-lot “work force” housing with housing sizes and corresponding initial sales prices aimed at those families with incomes equal to 120 percent to 160 percent of City Median Family income, as described in Policy 4.2.12 of the AASP. Unit sizes in the R-2 area will range from approximately 1,000 square feet to 2,400 square feet. Sheets A-4 through A6 in Appendix A show the planned layout of the R-2 neighborhoods.

Medium High Density Residential (R-3) the Medium-High Density Residential land use designation is for a combination of stacked flats apartments, townhomes and condominiums arranged around a central amenity or open space. The R-3 portion of the Avila Ranch project is expected to yield approximately 200 dwelling units on eleven acres, but may include up to 20 density units per acre in accordance with Chapters 17.16.010 and 17.28 of the City’s Zoning regulations. The planned development types for the R-3 zone will include townhomes and duplexes organized around central park area. Unit sizes will range from a 700-square foot for-sale and for-rent studios in the townhome portion to 1,750 square foot duplexes. Sheet A-9 in Appendix A shows the planned layout of the R-3 townhomes and duplexes.



Figure 6 Avila Ranch Land Use Plan

High Density Residential (R-4) residential land uses will include stacked flat apartments, arranged around or associated with a central amenity or open space. The Avila Ranch R-4 land use area is in the northwest corner of the project, adjacent to existing and future Business Park and Service Commercial developments. While dwelling units in the R-4 land use area are not considered to be subject to excessive stationary noise impacts (based on the noise study prepared for the project), the sleeping and living portions of the dwelling units are to be oriented away from the eastern and northern project boundaries and carports, garages, and drives are to be located along these boundaries to act as buffers to adjacent non-residential land uses. The R-4 portion of the Avila Ranch project is expected to yield between 120-130 dwelling units on the 4.4 acres, but may include up to 24 density units per acre in accordance with Chapters 17.16.010 and 17.30 of the City's Zoning regulations. Sheet A-6 shows the planned layout of the R-4 apartment area.

The **Conservation/Open Space** designation is intended to preserve undeveloped or minimally developed land for preservation of natural resources, production agriculture and public safety. The LUCE provides that fifty percent of the site area shall be provided in open space, with up to one-third of that provided offsite. For this project site of 150 acres, there would be a minimum requirement of 50 acres of onsite open space. The total amount of proposed onsite open space (not including recreational park areas), is 53 acres. The balance of the required open space, 22 acres, will be provided offsite through open space or agricultural conservation easements, or through a fee as established in the AASP. The Avila Ranch Development Plan designates the following specific areas for open space:

- A. Planning area creeks: to protect and enhance habitat and recreational values;
- B. Agricultural buffer areas outside of the URL along the Buckley Road frontage and the easterly project boundary. Within the agricultural buffer area along Buckley Road and outside of the URL, furrows and planted rows should run parallel to the extended Runway 7-25 centerline, where feasible to enhance aircraft safety.
- C. The ACOS Reservation Space in conformance with the ALUP.
- D. The Tank Farm Creek corridor as a linear park, bikeway and passive recreation areas.



Figure 7 shows the relationship of the elements of the project and the site's open space features.

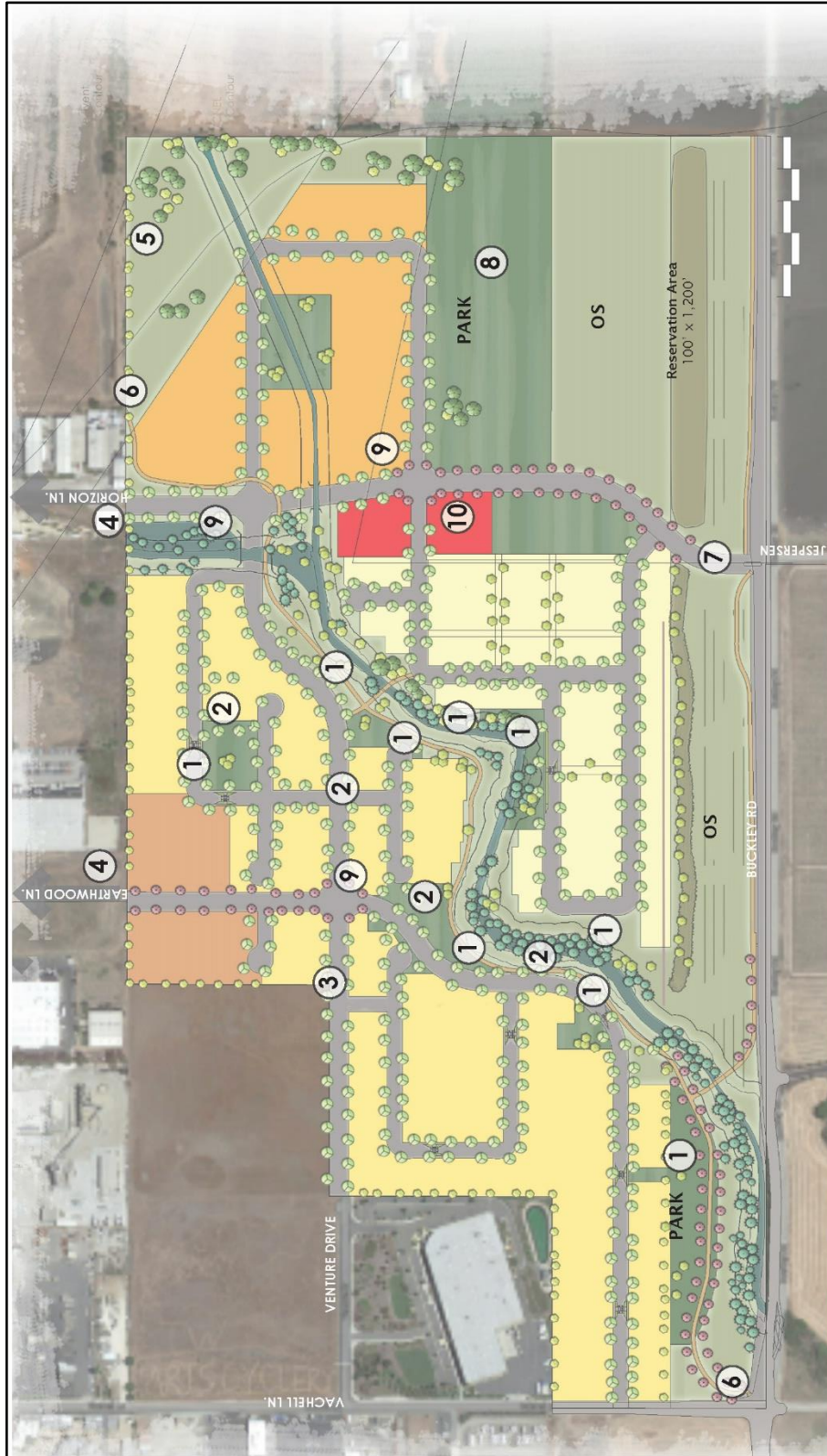


Figure B-5: Avila Ranch Site Plan - Overview of Key Design Features

LEGEND

- ① Neighborhood Connections to Open Space and Parks
- ② Rear R-2 Units fronting onto common green space
- ③ R-2 Units fronting onto Collector with no vehicle access
- ④ New access connection to Suburban Rd. for pedestrians, bicycles, and vehicles
- ⑤ Open Space contiguous with Chevron Open Space
- ⑥ A continuous multi-use path along Tank Farm Creek and Buckleef
- ⑦ Road Entry Treatment Complementary to Project Character.
- ⑧ Figure B-1. Neighborhood Park
- ⑨ Roundabout for Traffic Calming and aesthetic accent.
- ⑩ B-13. Neighborhood Town Center.

Figure 7 Land Plan and Tank Farm Creek

The **Neighborhood Commercial** area will serve as a focal point and activity center for the project, and will provide shared use parking for nearby open space and parks uses, bicycle parking and storage facilities, public plazas for gatherings and special events, and transit connections. Because of the nearby retail shopping center on South Higuera, this neighborhood center will focus on small-scale convenience items, and possibly provide some office space. Development will be for 15,000 SF or building area. Sheet A-7 and A-8 show the planned layout of the Town Center and Neighborhood Commercial area.



Table 2

Land Plan Statistics

Land Use	Acres	Percent of Total Acres	Units
Residential	55.30	36.9%	720 units
R-1 Low Density (7 du/acre)	12.80	8.5%	101
R-2 Medium Density (12 du/acre)	27.30	18.2%	297
R-3 Medium-High Density (20 du/acre)	10.80	7.2%	197
R-4 High Density (24 du/acre)	4.40	2.9%	125
<i>Affordable Housing Units</i>			
Neighborhood Commercial	1.86	1.2%	15,000 sf
Roadways	21.71	14.5%	
Open Space and Parks	71.04	47.4%	
Open Space	53.00	35.4%	
Parks	18.00	12.0%	
Total	149.91	100.0%	

Parks and Recreation

“Expansion Areas”, as defined in the 1994 General Plan are required to provide park and recreation facilities at a rate of 10 acres per 1,000 residents, four times the current citywide average. These facilities are to be provided in a mix of neighborhood parks, mini-parks, and pocket parks and community gardens, with at least half of the requirement (5 acres per thousand) in a neighborhood park. The neighborhood park is to be located within one-half to one mile of the serviced population. The projected residential population on the project site is 1,649 persons, which creates a park requirement of 16.5 acres. The neighborhood, mini-park and pocket park facilities on the project site will total 18 acres (not including pedestrian trails and passive open space).

A 9.5-acre neighborhood park will serve the project. It is centrally located next to the Town Center so that most residents will be within one-half mile to it. This neighborhood park will be linked to surrounding neighborhoods, the Tank Farm Creek riparian corridor and to the regional bikeway system by separated Class I bike paths and Class II bike lanes, and special ped/bike bridges over Tank Farm

Creek. According to the concept plan approved by the Park and Recreation Commission (See Appendix B) the neighborhood park will include group BBQs, basketball courts, tot lots, baseball diamonds, soccer fields, pickleball courts, tennis courts, a dog park, a skate park, and a community meeting pavilion area.

Eight mini-parks and a pocket park will also serve the neighborhoods. Each will be one-half to 2.5 acres in size and provide facilities such as community gardens, tot lots, passive play areas, BBQ and picnic areas, basketball courts, community gardens, dog park, and landscaping. These will serve residents within a two-block radius and fill the few “gaps” in the coverage for the neighborhood park facilities. The mini-parks will be phased with adjacent residential development to provide park facilities for future residents near their homes. Figure 8 shows the location of parks in the project.



Residential Uses and Affordability

There is an intentional mix of residential densities in the Avila Ranch project that includes a range of R-1 lot sizes, R-2 “four-packs”, “six-packs” and cluster units, and R-3 and R-4 multifamily dwellings, with an emphasis on smaller lot, higher density units. R-2 units comprise over forty percent of the residential units, and medium density and above units will comprise over 85 percent of the units in the project. In contrast to other recent projects, the average unit size across the entire project is approximately 1,500 square feet, compared to an approximate 1,750



square foot average for recent developments in the Margarita and Orcutt Specific Plan areas. These R-2 units can provide a substantial contribution towards the need for “workforce” housing and housing for moderate income (80-160 percent of local median family income) families. The R-2 single family units are located where there are streetscape benefits (functionally and aesthetically) from few driveway cuts and orientation to open space. For example, houses will have front doors facing Venture Road, an important Residential Collector, but access points will be limited to intersecting public streets, or through rear or side common driveways.



Figure 8 Park Locations

An additional concept that has been included in the update are the “Pocket Cottage” units. These units are included to meet the needs of young professionals, empty nesters and young families. They are smaller in scale and have floor plans ranging from 1,000 to 1,200 square feet in 2BR/2B and 3BR/2B configurations. They have private patios and open space is provided through a shared front yard area.



Single-family units in the project comprise about 15 percent of the residential uses in the development. Lot sizes for the R-1 single-family units are planned to range from a low of 4,000 SF to a high of 8,500 square feet. These units are intended to address the upper end of the workforce housing and other above- moderate housing needs. The R-1 units are in two configurations, one adjacent to the Town Center which will have alley-loaded units and common yard areas, and a traditional single-family portion with front-loaded lots.

The project includes 197 R-3 multifamily units on 11 acres that range in size from 700 square foot for-sale and for-rent studios to 1,750 square foot duplexes. The duplex and townhomes will offer many of the advantages of single-family detached homes, but with common open space. The R-3 portion of the project is organized around a central one-acre park that will oriented around an enhanced riparian corridor. The R-3 portion will include for-sale inclusionary housing units for low and moderate-income buyers pursuant to the City’s guidelines.



Finally, the project will include a substantial number of apartment units that are near employment and shopping at Suburban and Higuera. The R-4 apartment portion of the project will be directly served by an on-street transit stop and will be within walking distance of nearby shopping. A one-acre portion of R-4 project will be dedicated to an affordable housing provider to address the local need for lower income housing and to satisfy, in part, City affordable housing requirements. Unit sizes in the R-4 apartment portion will range from 550 square foot studios to 1,150 square foot units for larger families.



The Avila Ranch project will encourage long term housing affordability by including design and development strategies that serve to provide lower cost housing. The cost of housing over time is most closely related to the size of the dwelling unit, the size of the lot, and costs of maintenance. Within each

of the residential zones there will be a broad range of dwelling unit sizes from 550 square foot studios in the R-4 area to 2,300 square foot single family detached units. The average size of the units in the development is less than 1,500 square feet; by comparison, recent developments in the Margarita Area and the Orcutt Area have averages more than 1,750 square feet. Maintenance expenses, to the extent feasible, will also be included in a Community Facilities District to reduce the necessity for Homeowners Associations, and the higher costs associated with that maintenance and governance structure. Landscape maintenance and cost of water and utilities will also be reduced because of the drought tolerant landscaping, smaller lots and other features.

The commitment to 100 percent solar “Net Zero” development and early compliance with the 2019 Title 24 Energy Efficiency standards will further reduce utility costs for Avila Ranch residents well below the level of typical new residential units in San Luis Obispo. The 100 percent solar commitment will reduce annual energy costs of the average household approximately \$1,000 to \$1,500 per year, and the higher building energy efficiency will further reduce heating and cooling expenses an additional 15 percent better than the 2013 “Tier II” efficiency level proposed in the original Plan and project. Landscaping will also be designed to be low-maintenance and water efficient to reduce monthly water expense and landscape maintenance. Passive and active solar energy strategies will also be included to reduce monthly energy costs. Finally, the presence of onsite transit, car sharing and bike sharing programs will reduce the residents’ reliance on private automobiles and possibly the need for a household to have multiple vehicles.



The project’s car sharing program will help reduce the project’s air quality impacts by reducing VMTs, but it will have a more direct and profound effect on the housing affordability issues by reducing the need to own multiple cars. A recent study found that car share program members drive nearly 50% less after joining, and that nearly 30% of them reduced their household vehicle ownership and two-thirds of the households avoided purchasing another car. This program could contribute hundreds of dollars per month to household budgets in avoided vehicle costs.

Revitalizing Tank Farm Creek

One of the key project components is the revitalization of Tank Farm Creek, which is used as the principal organizing element for the overall project design. Aesthetically and topographically, this site feature defines the neighborhoods, creates a unifying open-space element, provides the principal connecting feature through and to the project and provides the potential to provide pedestrian and bicycle access to the project’s parks and open space. The north-south utilitarian drainage channel extension of Tank Farm Creek will be enhanced and widened to address offsite storm flows. Sheet A-23 and A-24 in Appendix A show the planned cross sections for Tank Farm Creek (see Sheets A-4 through A-6 for a key map of the cross sections). **(MM BIO 2a)**.

Project Phasing

Figure 9 shows the phasing of the land uses. This phasing is primarily determined by the required location of sewer and circulation facilities, existing road improvements, and site topography. Phase descriptions are as follows:

Phase 1 includes up to 179 R-2 units, completion of the Buckley Road frontage improvements along the phase boundary, completion of the sewer pump station and force main, extension of Venture Road along the phase frontage, extension of the potable and recycled water facilities, and extension of dry utilities to the phase, and extension of Earthwood to Suburban. This phase would also include the Class I Bike Path from the Class II Diversion to Vachell, as described in the Circulation section, a pedestrian/bike bridge Tank Farm Creek Bridge for the Class I Bike Path, a Class II Bike Lane Bridge on south side of Buckley and the Buckley/Tank Farm Creek Bridge, the extension of the Earthwood Collector (w/Class II bike lane) to Suburban, and a transit stop along the Venture Extension. This phase, if possible, will also include a permanent or interim bike path or bike lane from Vachell to the Octagon Barn parking lot, subject to right of way availability and governmental approvals. This phase will be designed as two principal neighborhood clusters, with each having its own architectural and design identity, as described in the Design Framework. Circulation improvements associated with this phase will include signalization and turn lane improvements to the Suburban and Higuera intersection, pedestrian and bike lane improvements to Earthwood between Venture and Suburban, and pedestrian and bike lane improvements on Suburban between Earthwood and Higuera. This phase will include the development of 2.9 acres of park land.

Phase 2 will include the development of 29 R-2 units and the extension of the wet and dry utilities along the phase frontage. This phase will also include the extension of Buckley Road from Vachell to Higuera, including bike facilities. Concurrent with the opening of the Buckley Road Extension, left turns from and to Higuera and Vachell will be restricted. This phase would include the development of 1.3 acres of park land and the extension of the Class I bike path from Earthwood Lane to Venture Drive.

Phase 3 includes 89 R-2 units, and 125 R-4 units, as well as the completion of intracts. This phase would also include the development of a 0.8-acre mini-park in that phase. The R-4 portion of the project would include the dedication of a one-acre site to an affordable housing provider for the development of 30 inclusionary housing units for lower income households.

Phase 4 would involve the development of significant additional transportation infrastructure. This phase would include the construction of a vehicle bridge crossing for Venture Lane over Tank Farm Creek, construction of Horizon Lane north of Venture Lane to Suburban, and the construction of Jespersen Road south of Venture Lane to Buckley Road. Frontage improvements along Buckley would also be constructed from Phase 1 east to the eastern project boundary, and the internal loop system for the R-3 portion of the development would be installed. Pedestrian and bicycle improvements would be made along Suburban between Horizon and Earthwood. During Phase 4, a 0.9-acre mini-park would be installed in the R-3 area, and the 9.5-acre Neighborhood Park would be completed. Also, during this

phase, the Tank Farm Creek Class I bike path would be completed to the Chevron open space. The residential portion of the development would include of 197 R-3 units, including 38 duplex units and 159 townhomes, 18 of which would be income restricted for low and moderate-income households.

Phase 5 includes 101 R-1 units. This also includes the development of an additional 2.6 acres of park area, and the portion of the open space/buffer area within the phase.

Phase 6 includes the development of the Town Center neighborhood commercial sites and remaining project frontages.

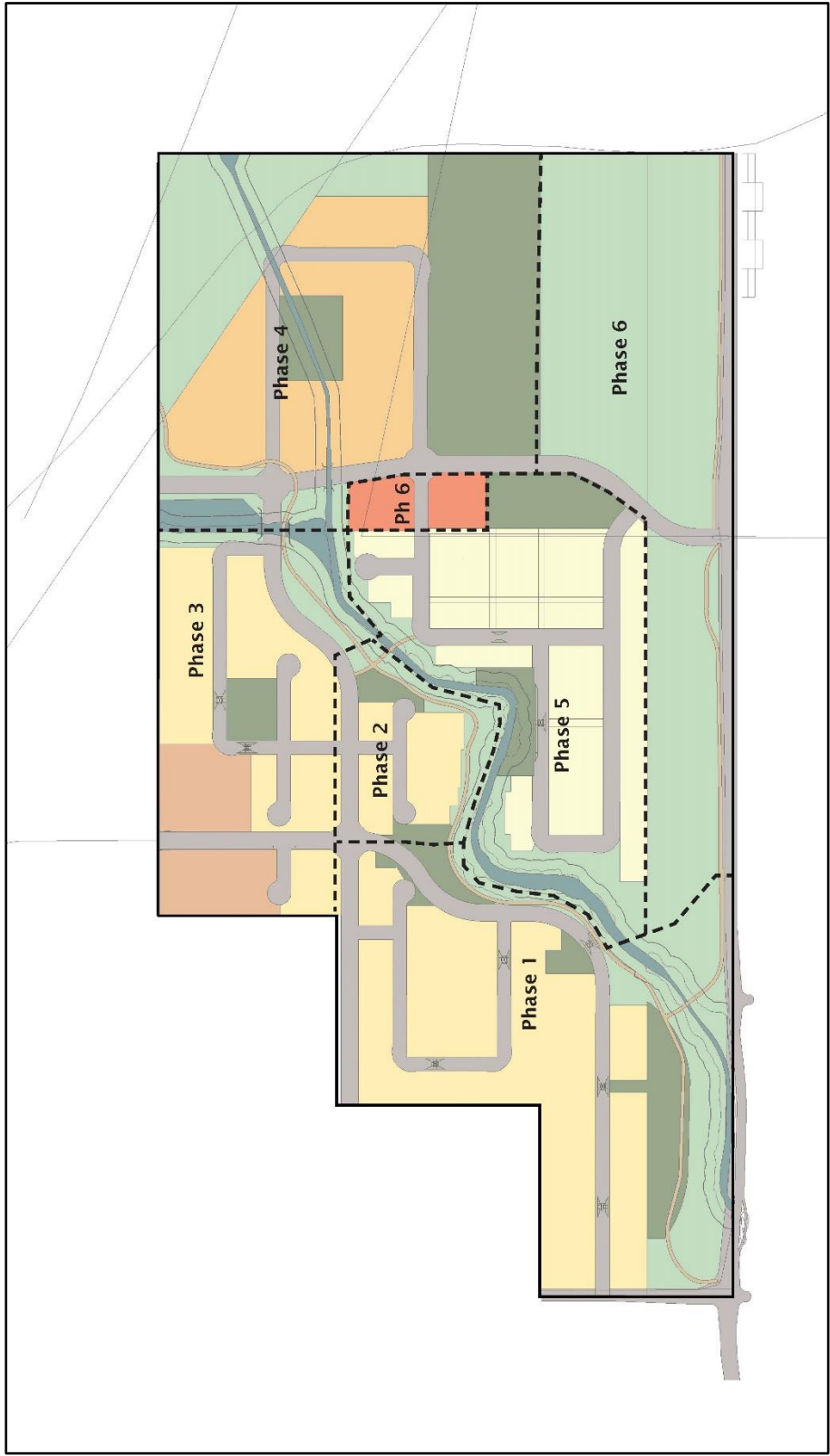


Figure 9 Phasing Plan

Design Framework

This section includes design standards and guidelines for the Avila Ranch project. They are intended to be specific to the Avila Ranch project, and are to work in conjunction with the adopted goals, policies, standards, and guidelines found in the Airport Area Specific Plan (AASP), the City of San Luis Obispo Community Design Guidelines (CDG), the City Zoning Ordinance (Chapter 17 of the City of San Luis Obispo Municipal Code), and other related documents. They are intended to create a customized design character reflective of the overall vision for Avila Ranch while at the same time avoiding unnecessary replication of existing City development code documents. Owners, builders, architects, and designers should refer to these design guidelines, in addition to the AASP, CDG, and City Zoning Ordinance (Chapter 17), as a guide when considering the design or construction of property within Avila Ranch. Where specific design standards and guidelines are set forth within these guidelines and the AASP, they shall be used; where there are design requirements and regulations in the CDG and Zoning Ordinance that are not in this document or the AASP, the CDG and Zoning Ordinance provisions shall apply.

As outlined within Chapter 5 of the AASP, *Standards* define actions or requirements that must be fulfilled by new development. Alternatively, *Guidelines* refer to methods or approaches that may be used to achieve a stated goal but to provide some flexibility and allow for interpretation depending upon specific conditions as to how they are satisfied. Collectively, the standards and guidelines incorporated herein are meant to guide implementation of the vision intended for the project.

SITE PLANNING AND ORGANIZATION

1.0 Building Orientation and Setbacks

Pedestrian interaction for Avila Ranch is encouraged through the thoughtful placement and orientation of residential and commercial structures. Porches will be incorporated on street-facing residential units to provide opportunities for everyday neighborhood interaction. Residential units fronting onto Residential Collector and Residential Arterial streets such as Venture Drive, Earthwood Lane, and Jespersen Drive will have limited or no vehicle access points to preserve the residential streetscape without having the interruption of driveways and vehicle maneuvering.

These features of the Residential Collector streets will enhance the safety and convenience of these streets as principal bikeways.

Standards

- 1.1 Goals 5.1 and 5.2 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Building Orientation and Setbacks section.
- 1.2 Residential building setbacks shall conform to the development standards set forth in Figures 10 through 12. Residential setbacks may vary, but must be in proportion to

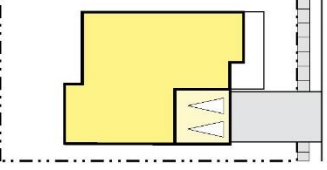
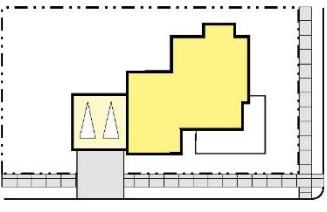
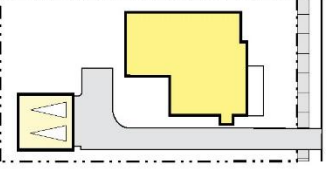
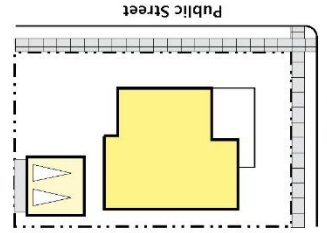
Avila Ranch Specific Plan		Development Standards							
Low Density Residential Lot and Building Standards (R-1)									
<p>EXAMPLES These sketches show basic lot layouts that would follow from the standards listed in the text, and in this table below. Not all features shown in the sketches are standards (for example, 2-car garages are not required).</p>		 PARKING AT FRONT OF LOT		 PARKING AT FRONT OF LOT		 PARKING AT REAR OF LOT		 ALLEY ACCESS (Parking access from alley only)	
STANDARDS (minimums)		STREET ACCESS (Alley Not Available)							
		PARKING AT FRONT OF LOT		PARKING AT FRONT OF LOT		PARKING AT REAR OF LOT		ALLEY ACCESS (Parking access from alley only)	
Lot Area		5,000 sf		5,000 sf		5,000 sf		4,500 sf	
Lot Width		50 ft		50 ft		50 ft		45 ft	
Corner Lot Width		55 ft		55 ft		55 ft		50 ft	
Lot Depth		90 ft		90 ft		90 ft		80 ft	
Lot Coverage		40% Max.		40% Max.		45% Max.		50% Max.	
Front Setback House		15 ft		15 ft		15 ft		15 ft	
Garage, carport (A)		20 ft		15 ft		Does not Apply		Does not Apply	
Front Porch		10 ft		10 ft		10 ft		10 ft	
Rear Setback House		15 ft		15 ft		20 ft		(from alley)	
Garage, carport		5 ft		5 ft		5 ft		15 ft	
Side Setback House		5 ft		5 ft		driveway side		5 ft	
Street (corner lot)		10 ft		10 ft		12 ft		10 ft	
Garage, carport		5 ft		5 ft		5 ft		5 ft	

Figure 10 R-1 Development Standards

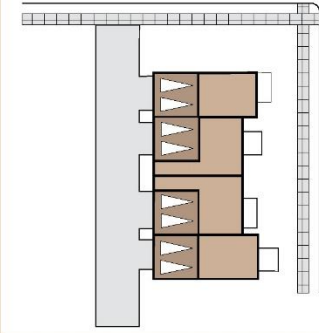
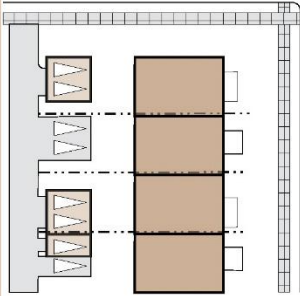
Avila Ranch Specific Plan		Development Standards								
<p>Medium Density Residential Building Standards (R-2)</p> <p>EXAMPLES These sketches show basic lot layouts that would follow from the standards. Not all features are shown in each layout.</p>										
<p>STANDARDS Minimums, unless noted otherwise.</p>	<p>DETACHED - ZERO LOT LINE</p>		<p>ATTACHED OR DETACHED (attached may include pairs of dwellings on adjacent lots)</p>		<p>DETACHED (parking access from alley only)</p>		<p>CLUSTER DEVELOPMENT 4 TO 6 LOTS</p>		<p>CLUSTER DEVELOPMENT 4 TO 6 LOTS</p>	
	Lot Area	3,575 sf Min. 60% Max	3,575 sf Min. 60% Max	3,575 sf Min. 60% Max	3,575 sf Min. 60% Max	3,575 sf Min. 60% Max	3,575 sf Min. 60% Max	3,575 sf Min. 60% Max	3,575 sf Min. 60% Max	3,575 sf Min. 60% Max
	1- Street Setback Dwelling Front Porch	15 ft 10 ft	15 ft 10 ft	15 ft 10 ft	15 ft 10 ft	15 ft 10 ft	15 ft 10 ft	15 ft 10 ft	15 ft 10 ft	15 ft 10 ft
	2- Rear Setback Dwelling Garage	20 ft 13 ft	20 ft 13 ft	20 ft 13 ft	20 ft 13 ft	20 ft 13 ft	20 ft 13 ft	20 ft 13 ft	5 ft 5 ft	5 ft 5 ft
	3- Side Setback (A)	0 (at lot line) or as provided in Zoning Regulations R-2 Zone	0 (attached) or as provided in Zoning Regulations R-2 Zone	0 (attached) or as provided in Zoning Regulations R-2 Zone	0 (attached) or as provided in Zoning Regulations R-2 Zone	5 ft	5 ft	5 ft	5 ft	5 ft
	4- Interior Setback								4 ft	4 ft
	5- Garage Setback								14' Min.	14' Min.
	6- Pedestrian Circ. Setback								10' Min.	10' Min.
7- Side Steet Setback		10'	10'	10'	10'	10'	10'	10'	10'	
<p>A- Side setback applies to dwelling and covered parking. Where a building wall is located on a lot line, there shall be an easement at least 5 feet wide on the neighboring lot for access to maintain the building wall. B- Reciprocal yard easements are allowed as an alternative. C- Minimum yard size of 150 sf with Minimum 10' dimension D- Second floor setbacks to match Ground floor setbacks</p>										

Figure 11 R-2 Development Standards

High Density Residential Lot and Building Standards (R-3/R-4)

EXAMPLES

These sketches show a site layouts that would follow from the standards. Not all features shown in the sketch are standards.



STANDARDS (minimums)

Lot Area	1,000 ft ²	N/A
Lot Width	20 ft	N/A
Lot Depth	40 ft	N/A
Front Setback Dwelling	15 ft	15 ft
Front Porch	10 ft	10 ft
Rear Setback Dwelling	10 ft	10 ft
Parking	0 ft	0 ft
Side Setback (A) (applies to any structure, including covered parking)	as provided in R-2 zone	as provided in R-2 zone
Street (corner lot)	15 ft	15 ft

Figure 12 R-3/R-4 Development Standards

the width of the street so that there is at least 75 percent of the units have one foot of building height for each 1.5 feet of distance from the street centerline to the façade of the dwelling unit.

- 1.3 Buildings located within the Neighborhood Commercial Town Center shall have street yard setbacks of zero feet.
- 1.4 Neighborhood Commercial buildings shall be sited to address adjacent streets with the main building facades oriented towards Jespersen Drive, according to the proportions shown in Sheet A-8 and Appendix A.
- 1.5 Neighborhood Commercial buildings facing streets shall incorporate horizontal and vertical wall articulation through the use of wall plane offsets and other features which articulate walls such as recessed windows and entries, second floor setbacks, and awnings and canopies. There shall also be regular access points along the public street frontage no less frequently than every 50 feet, with access points every 25 feet preferred.
- 1.6 Residential buildings along Venture Drive, Jespersen Drive/Horizon Lane and Earthwood Lane shall be oriented to the residential street with front doors and porches fronting on the street. Dwellings along Jespersen Drive/Horizon Lane and Venture Drive shall only have access from the side or rear and there shall be no direct individual driveway access to these roadways. Individual driveways are not permitted along Earthwood Lane, except for common driveways, intersecting public streets, and access points for common parking lots for multifamily units.
- 1.7 Residential buildings on lots adjacent to greenbelt areas, e.g. Tank Farm Creek, Open Space, neighborhood parks, and linear parks, shall be oriented with front doors and porches, or secondary patios and yards fronting on the greenbelt area. Such units shall have vehicular access from the side or rear and there shall be no direct individual driveway access to and from the open space.

- 1.8 Within R-3 and R-4 residential zones, parking shall be utilized as a buffer between open space. Specifically, within the R-4 zone, buildings shall be setback from the north and project boundaries (eastern property line for R-4 area east of Earthwood, and the western property line for area west of Earthwood) no less than 85 feet, with the intervening area comprised



of parking areas with solar canopies for energy generation and sound attenuation. To ensure noise compatibility with adjoining uses, sleeping and living areas should be oriented away from the north and west project boundaries, with west- and north-facing balconies and upper story outdoor activity areas discouraged. **(MM NO 3a)**

- 1.9 Buildings and improvements adjacent to Tank Farm Creek shall have adequate setbacks to ensure a 35-foot-wide riparian setback to any improvements and adequate slope and transition area, as per Sheets A-23 and A-24 of the Avila Development Plan in Appendix A.
- 1.10 Buildings adjacent to wetlands shall be set back a minimum of 50 feet from the wetlands.
- 1.11 R-1 and R-2 residential units planned in the Project site within 300 feet of Buckley Road and R-4 units in the northwest corner of the Project site shall include noise mitigation for any potential indoor space and outdoor activity areas that are confirmed to be above 60 dB(A) as indicated in the Project's Sound Level Assessment. The following shall be implemented for residential units with noise levels exceeding 60 dB(A):
- a. Outdoor Activity Area Noise Mitigation. Where exterior sound levels exceed CNEL = 60 dBA, noise reduction measures shall be implemented, including but not limited to exterior living spaces of residential units such as yards and patios shall be oriented away from Project boundaries that are adjacent to noise-producing uses that exceed exterior noise levels of CNEL = 60 dBA, such as roadways and industrial/commercial activities. Construction of additional sound barriers/berms with noise-reducing features for affected residences. **(MM NO 3a)**
 - b. Exterior Glazing. Exterior window glazing for residential units exposed to potential noise above Ldn=60 dBA shall achieve a minimum Outdoor-Indoor Transmission Class (OITC) 24 / Sound Transmission Class (STC) 30. Glazing systems with dissimilar thickness panes shall be used. **(MM NO 3a)**
 - c. Exterior Doors Facing Noise Source. According to Section 1207.7 of the California Building Code, residential unit entry doors from interior spaces shall have a combined STC 28 rating for any door and frame assemblies. Any balcony and ground floor entry doors located at bedrooms shall have an STC 30 rating. **(MM NO 3a)**
 - d. Exterior Walls. Construction of exterior walls shall consist of a stucco or engineered building skin system over sheathing, with 4-inch to 6-inch deep metal or wood studs, fiberglass batt insulation in the stud cavity, and one or two layers of 5/8-inch gypsum board on the interior face of the wall. If possible, electrical outlets shall not be installed in exterior walls exposed to noise. If not possible, outlet box pads shall be applied to all electrical boxes and sealed with non-hardening acoustical sealant. **(MM NO 3a)**
 - e. Supplemental Ventilation. According to the California Building Code, supplemental ventilation adhering to OITC/STC recommendations shall be provided for residential units with habitable spaces facing noise levels exceeding Ldn=60 dBA, so that the opening of windows is not necessary to meet ventilation requirements. Supple-

mental ventilation can also be provided by passive or by fan-powered, ducted air inlets that extend from the building's rooftop into the units. If installed, ducted air inlets shall be acoustically lined through the top-most 6 feet in length and incorporate one or more 90-degree bends between openings, so as not to compromise the noise insulating performance of the residential unit's exterior envelope. **(MM NO 3a)**

- f. In the northwest to R-4 area, to ensure noise compatibility with adjoining uses, sleeping and living areas should be oriented away from the north and west property lines, with west- and north-facing balconies and upper story outdoor activity areas discouraged. **(MM NO 3a)**
- g. Per AASP Policy 4.5.3, all residential units shall be designed to limit the aircraft-related 24-hour, 10-second interval peak noise impacts to no more than 45 decibels.

Guidelines

- A. In order to improve the visual quality of the streetscape in the R-1 and R-2 zones, every third house should include a variation to the front yard setback.
- B. Front yard setback variations for houses in the R-1 and R-2 zones should not be less than two to five feet, with a minimum street yard of ten (10) feet.
- C. Buildings should be sited and rooflines designed to take advantage of solar access for each unit to the greatest extent possible.
- D. Residential units should be oriented to front or side onto parks and open spaces to provide safety and maximize visibility of the park, where appropriate. Fencing types and landscaping palettes shall be used to reinforce the connectivity of the dwelling units to the open space and park areas.
- E. Attached residential units should be designed and detailed to correlate to neighboring single - family detached and/or attached homes. The architecture should incorporate the best features of the neighboring units.
- F. Pedestrian linkages to nearby neighborhoods and other commercial projects should be provided within all zones.
- G. Designs for all residential zone units should be oriented to incorporate a relationship between indoor and outdoor spaces.
- H. Buildings should be oriented within R-3 and R-4 zones to take advantage of natural amenities such as views, mature trees, creeks, riparian corridors, and similar features unique to Avila Ranch.
- I. Within the R-4 zone, buildings should be the predominant view from adjacent streets. Parking should be concentrated in areas behind buildings and away from the street.

2.0 Pedestrian Activity Areas

Neighborhood parks, open space trails, plazas, and amenities in the Town Center comprise the primary pedestrian activity areas within Avila Ranch. These areas are envisioned to encourage healthy, active lifestyles within individual neighborhoods while also providing a medium for ongoing neighborhood social events.

Standards

2.1 Goal 5.3 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Pedestrian Activity Areas section.

2.2 The northwestern and southwestern corners of Jespersen Drive/Horizon Lane at the R-1 Residential Road intersection (Town Center) shall include plazas of a minimum 1,200 square feet that are oriented towards the Neighborhood Park and Town Center Plaza as illustrated on Figure 13. Neighborhood Commercial uses should have windows and entries that open onto these plazas to ensure that there is interaction between these public spaces, retail, and services uses.

2.3 Mini Parks and Pocket Parks shall be provided within or adjacent to each individual neighborhood of Avila Ranch as delineated in Figure 8. These parks shall be provided in accordance with the approved master plan for parks adopted by the Parks and Recreation Commission as set forth in Appendix B.



Figure 13 Town Center Plazas

Guidelines

- A. Each neighborhood area should provide convenient access to the Tank Farm Creek pedestrian trail through the incorporation of multiple pathway entry points. See Figure 7.
- B. The character of Jespersen Drive/Horizon Lane and the R-1 Residential Road abutting the Town Center should provide a pedestrian-friendly environment with accessible sidewalks, bulbouts, parkway landscaping, street trees, limited driveway access points, and reduced front building setbacks.
- C. Roundabouts, bulbouts, and decorative paving should be incorporated at primary intersections locations such as Venture Drive/Earthwood Lane or Jespersen Drive/R-1 Residential Road, where appropriate. Roundabouts shall provide decorative landscaping, including trees that provide for monumentation and reference points within the project. The Town Center roundabout shall also include agricultural implements such as water towers and windmills to accentuate the agricultural design character of the Town Center. At-grade crossing shall be provided as illustrated in the Avila Development Plan (Sheets A-15 and A-16 of Appendix A) to provide for street-side parkettes, traffic calming, and unobstructed pedestrian passage across streets.
- D. The Neighborhood Park should be designed to provide neighborhood recreation needs including a mix of passive and active areas that foster social interaction and healthy lifestyles. These include a skate park, dog park, court games, jogging track, community meeting pavilion and other uses illustrated in the Park Master Plan in Appendix B.
- E. Neighborhood Park facilities may include informal turf areas, bocce ball courts, children's play areas, group barbeque areas, group picnic facilities and shade structures, clubhouse, pool, pedestrian and bicycle trails, and community gardens.
- F. Programming of the Neighborhood Park may include shared facilities or related uses with on-site agricultural production such as outdoor learning areas, picnic, farming and cooking demonstrations, and a farm stand.
- G. The plaza located within the Neighborhood Park directly across from the Town Center should incorporate ample seating, trash receptacles, bicycle racks, a central organizing feature, unique landscaping, and pervious hardscape

3.0 Parking

Parking is an essential component of all proposed land uses within the Avila Ranch project. Ensuring adequate buffering between abutting land uses, public streets, and commercial parking areas will ensure the promotion of the high-quality environment envisioned for the development. Parking requirements for specific land uses within Avila Ranch are found within Chapter 17.16.060 of the City of San Luis Obispo Municipal Code. Except in the Pocket Cottage portion of the R-2 zone, parking shall be provided with two covered spaces per unit, on street parking, and at least two on-site guest parking spaces per 6-pack or 4-pack cluster. Parking stalls to be designed per Engineering Standards 2220. In the Pocket Cottage portion of the project, one covered and one uncovered space is to be provided, without additional guest parking spaces.

Standards

3.1 Goal 5.4 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Parking section.

3.2 Parking for the Neighborhood Park shall be provided through both on-site parking, on-street parking on the adjacent local street, and shared parking with the Town Center commercial area. Any on-site parking associated with the Neighborhood Park shall be located within a parking lot or other parking space configurations on the north side of the park. These parking lots shall provide for bicycle storage, staging areas, and special event parking.

3.3 Driveway access points for the Neighborhood Commercial Town Center shall be located along the R-1 Residential Road adjacent to the R-1 Residential zone as shown in Figure 14.

3.4 Parking shall be designed and sited to minimize and buffer commercial noise from adjacent residential land uses.

3.5 A ten-foot minimum landscape buffer shall be provided on the Neighborhood Commercial properties adjacent to the R-1 Residential zone and the Neighborhood Commercial Town Center. In addition, there shall be a minimum twenty (20) foot setback from the east property line to any habitable structure to comply with ALUP Safety Area requirements, as shown in Figure 14.



Figure 14 Town Center Parking, Screening and Access

- 3.6 Parking for the R-4 units shall be carports for added noise mitigation and visual screening.
- 3.7 Parking for car sharing stations shall be provided along public streets as approved by the City Engineer, in guest parking spaces in the R-2 portion of the project, in common area parking lots in the R-3, R-4 and the Town Center. Total number of car share vehicles shall be an initial rate of at least one vehicle per 50 units (and adjusted thereafter based on actual demand). At least fifty percent of the car share fleet shall be EVs. There shall be a minimum of five car-sharing stations dispersed through the project, with each station having electrical charging stations for EV car sharing vehicles.
- 3.8 All common parking lots shall have solar canopies to produce energy and to provide shade and noise attenuation.
- 3.9 All parking lots in the R-3, R-4 and NC zones and in public parks shall provide EV charging stations at a rate of one station per eight (8) spaces (12.5 percent of the total number of parking spaces common area parking spaces). R-1 and R-2 units shall be “ZEV ready” and be pre-wired for garage charging stations.

4.0 Outdoor Use Areas

While outdoor use areas, as defined by the AASP, are unlikely to occur within the project area, any outdoor use areas proposed in conjunction with Avila Ranch land uses will meet the standards and guidelines outlined within the AASP.

Standard

- 4.1 Goal 5.5 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Outdoor Use Areas section.

5.0 Screening

Service, storage areas, trash and recycling collection areas, and utilities associated with proposed Avila Ranch land uses will be properly screened to minimize visual impact and promote the natural, unobstructed open space views.

Standard

- 5.1 Goal 5.6 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Screening section.

Guideline

- A. Equipment related to on-site agricultural production should be properly stored and screened from public view.

6.0 Preservation of Views and Scenic Resources

6.1 Views from the Road

The City of San Luis Obispo General Plan identifies Buckley Road as a scenic corridor that should be maintained in order to protect views of surrounding open space resources. A minimum 300-foot wide buffer, as illustrated in Figures 15 and 16, has been incorporated into the Avila Ranch Development Plan along Buckley Road to maintain the scenic nature and the rural/agricultural character of this corridor. Uses within this buffer provide a wide range of amenities for the area including accessible multi-use trails, natural open spaces, and agriculture production. Views of structures visible from Buckley Road are minimized through the incorporation of landscaping and natural screening techniques. The Buckley Road frontage buffer is to be installed in Phase 1 of the project. **(MM VIS 3)**. A split rail fence is also to be provided between the Class I bike path and the onsite agricultural buffer. **(MM AG 2a)**.

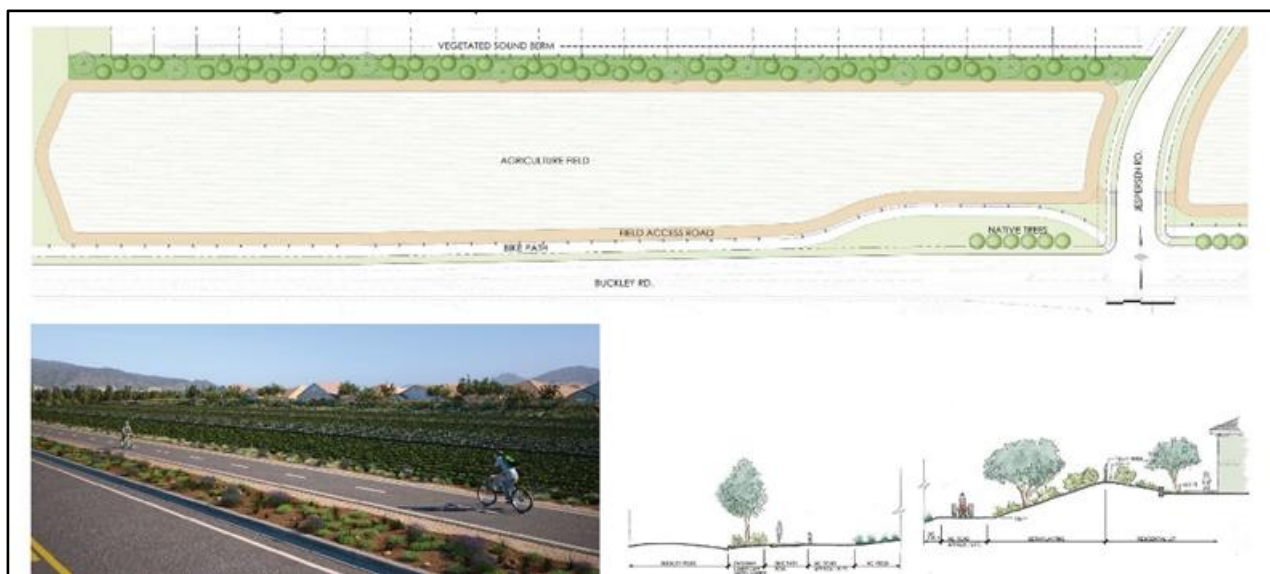


Figure 15 Buckley Road Buffering and Screening

Standards

- 6.1.1 Goal 5.7 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Views from the Road section.
- 6.1.2 Views along Buckley Road towards the Irish Hills to the west and towards the Santa Lucia range and foothills to the east shall be maintained through the incorporation of an open space and park buffer of a minimum 300 feet wide along Buckley Road as shown in Figures 15 and 16. The sound berm illustrated in Figure 14 shall be planted with a combination of native tree species and shrubs to provide a natural, rather than ornamental, backdrop to the working agricultural area along Buckley Road. This berm shall be installed as part of Phase 1 of the project so that trees and shrubs can be established early in the development of the project. Any fencing on the berm shall be at the top of the

slope, and shrubs and trees shall be planted on the Buckley downslope of the berm to screen the fencing.

- 6.1.4 The Open Space Plan illustrated in Appendix C shall be implemented as part of the project. The Open Space Plan is intended to ensure the long-term maintenance of the Tank Farm Creek corridor, ensure adequate wildlife corridors, ensure views from the residential area and the roadways to the Tank Farm Creek, and to ensure that Tank Farm Creek functions efficiently as a storm drainage conveyance.

Guidelines

- A. Visible building facades from Buckley Road should be minimized to maintain the scenic nature of the corridor through landscaping and/or other natural screening techniques.
- B. Cul-de-sacs should be open ended and/or dead-end onto open space or park areas. All cul de sacs shall provide for pedestrian and bicycle pass throughs, and should terminate on the public street side with a pedestrian speed table, where possible.

6.2 Gateways

The AASP does not identify areas within the Avila Ranch development as possible locations of a gateway for the City of San Luis Obispo. If a gateway is identified and proposed on the Avila Ranch site within the future, goals, standards, and guidelines found within the AASP will take precedent.

Standard

- 6.2.1 Goal 5.8 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Gateways section.
- 6.2.2 Entry monuments and treatments shall be provided at the Jesperson/Venture roundabout, the Earthwood/Venture roundabout, and at the Buckley/Jesperson entrance. These entrance treatments shall use an agrarian theme in conformance with LUCE design objectives for the project, including usage of antique agricultural windmills where compatible with airport operations and traffic safety.

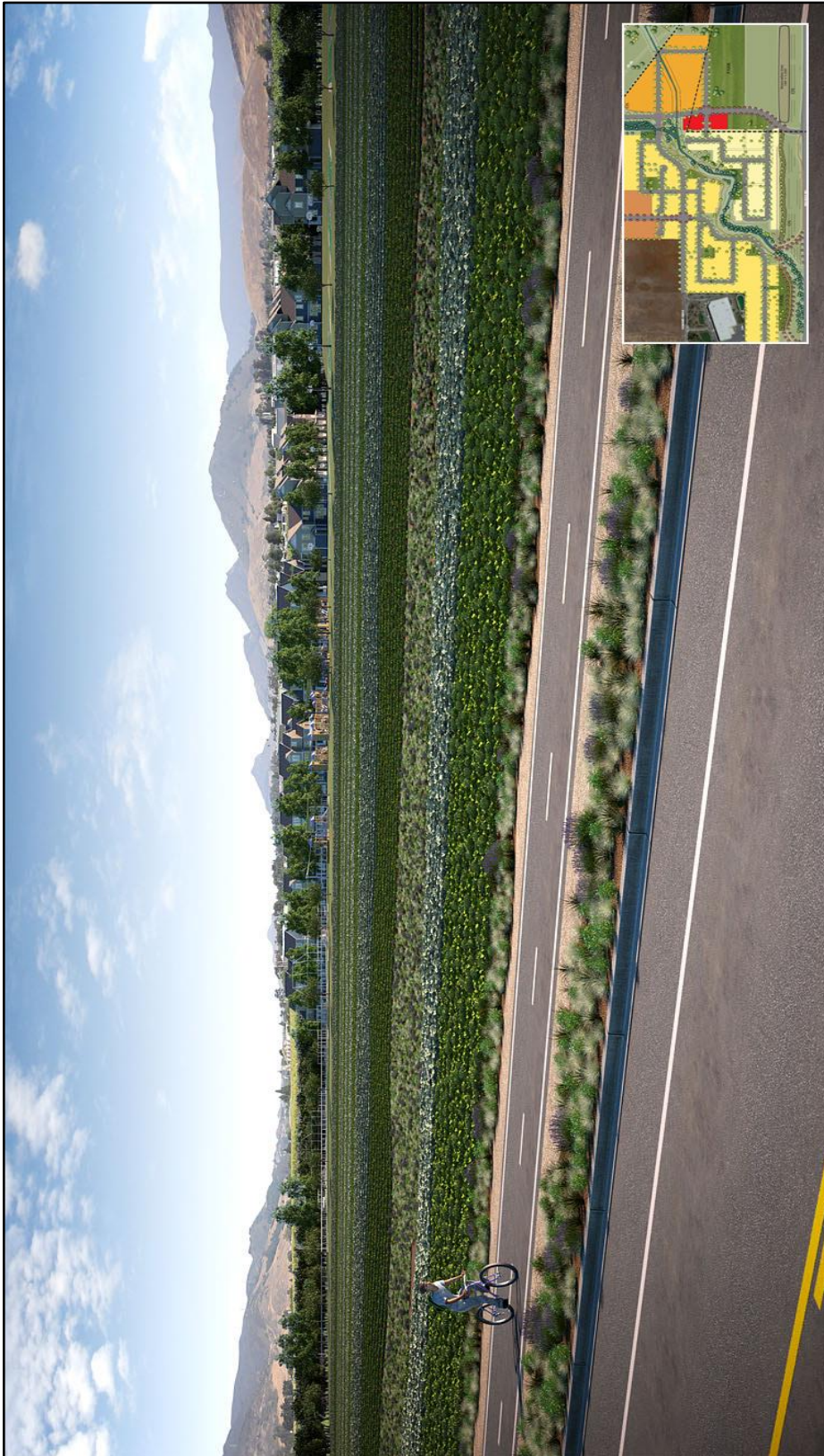


Figure 16 Conceptual View of Avila Ranch Buckley Frontage

7.0 Architecture

7.1 Architectural Character

The architectural character of Avila Ranch is to be representative of the agricultural heritage associated with southern San Luis Obispo as well as architectural styles typically found within the city. A contextual appropriate selection of architectural styles aides in defining the context of the site from the rural character along the southern property line to the industrial character found along the northern property edge. A list of permitted architectural styles appropriate for each land use within Avila Ranch has been provided to ensure consistency with the overall project vision.

Standards

- 7.1.1 Goal 5.9 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Architectural Character section.
- 7.1.2 The architectural styles for residential land uses within Avila Ranch shall be Agrarian, California Bungalow, Contemporary, Craftsman, or Mission as illustrated in Figures 18 through 22.



Figure 17 Residential Street Scene



Figure 18 Agrarian Architectural Style

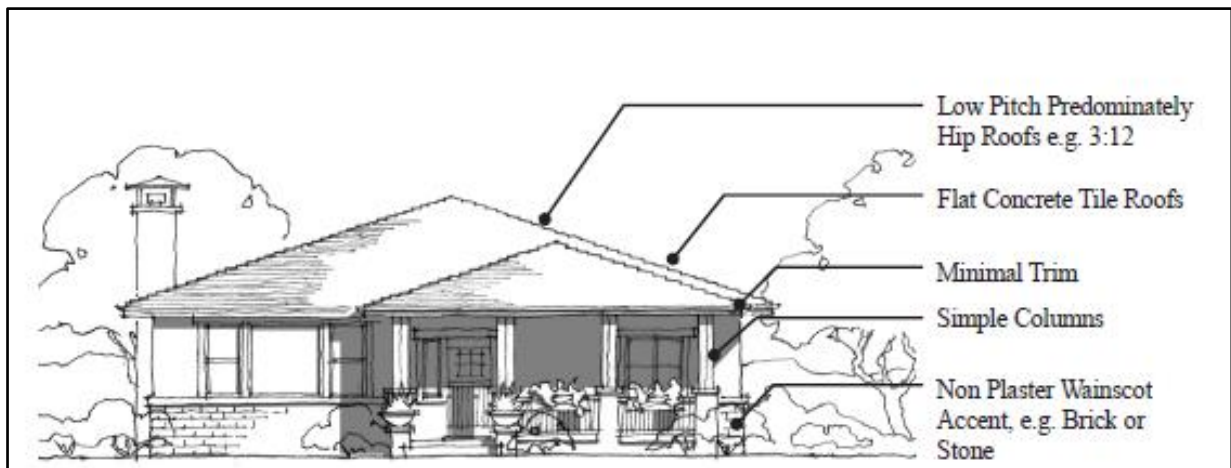


Figure 19 Bungalow Architectural Style



Figure 20 Craftsmen Architectural Style

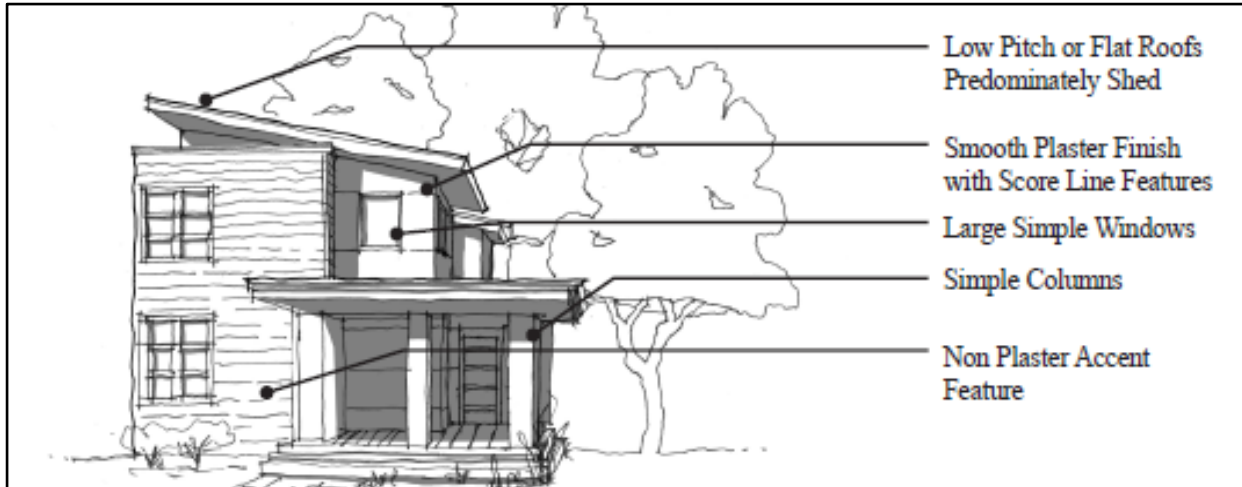


Figure 21 Contemporary/Mid Century Modern Architectural Style

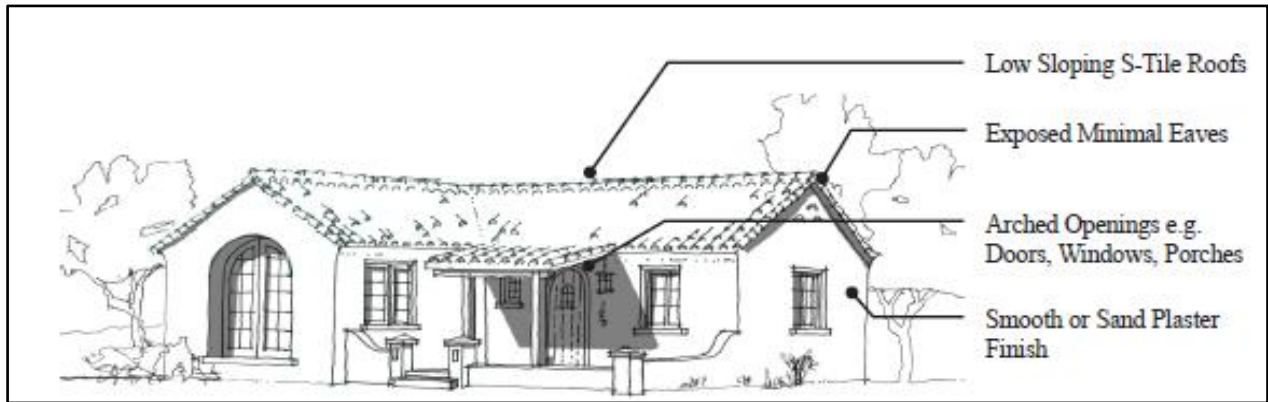


Figure 22 Mission Architectural Style

7.1.3 In order to create some individualism the project is broken down in neighborhoods, as shown in Figure 23. Within each neighborhood or enclave, there shall be a dominant and subordinate architectural styles to avoid monotony. The percentage proportions of architectural styles within the R-2 zones of Avila Ranch shall be integrated as follows in order to create the desired residential character and transitioning of the site from south to north:

- a. **Neighborhood Area 1:** 60% of units shall be designed with Agrarian style architecture. The remaining 40% of units shall be divided into 10% increments between the other allowed residential architectural styles. Any fraction of a number over a half shall be rounded up to the nearest whole number with any remaining balance placed in an architecture style of choice.
- b. **Neighborhood Area 2:** 60% of all units shall be designed with California Bungalow/Craftsman style architecture. The remaining 40% of units shall be divided into 10% increments between the other allowed residential architectural styles. Any fraction of a number over a half shall be rounded up to the nearest whole number with any remaining balance placed in an architecture style of choice.
- c. **Neighborhood Area 3:** 60% of all units shall be designed with Contemporary style architecture. The remaining 40% of units shall be divided into 10% increments between the other allowed residential architectural styles. Any fraction of a number over a half shall be rounded up to the nearest whole number with any remaining balance placed in an architecture style of choice.

- 7.1.4 R-4 zone shall be designed uniformly with one of the allowed residential architectural styles. **(Neighborhood Area 4).**
- 7.1.5 R-1 zone shall be designed with a proportional yet mixed use of at least three of the allowed residential architectural styles. **(Neighborhood Area 5).**
- 7.1.6 The Neighborhood Commercial Town Center buildings and any buildings located within the Conservation/ Open Space zoned areas shall be designed uniformly with an Agrarian or Contemporary Agrarian style of architecture. **(Neighborhood Area 6).**
- 7.1.7 R-3 zone shall be designed uniformly with one of the allowed residential architectural styles. **(Neighborhood Area 7).**
- 7.1.8 Porches shall have a minimum depth of six (6) feet.
- 7.1.9 Residences shall have entries that front onto the street except for residences configured in a parking court within R-2 zones. Where possible, these interior R-2 units shall have frontage treatments onto adjacent parks or open spaces. Units that are adjacent to the parkway commons in Neighborhood Area 2 shall have frontage treatments along that parkway and the interior motor court/common driveway.
- 7.1.10 Buildings within R-3 and R-4 zones shall have covered porches, entries, or walkways that front onto the street.

Guidelines

- A. Residential elevations within the R-1 and R-2 zones should not be repeated more frequently than every fourth house. This variation may be achieved by not repeating both a color scheme and an elevation style. Setbacks should have minor variances (3-5 feet) to ensure a variety in the streetscape and elevation pattern.
- B. The Neighborhood Commercial Town Center architectural character should reflect Agrarian style architecture that may be represented through modern barn, rustic barn, or other contemporary barn elements.
- C. The Architectural Review Commission, Planning Commission, and any other approving body may allow an exception to the height requirements for the Neighborhood Commercial Town Center focal point provided that architectural features meet the desired Agrarian architectural character.

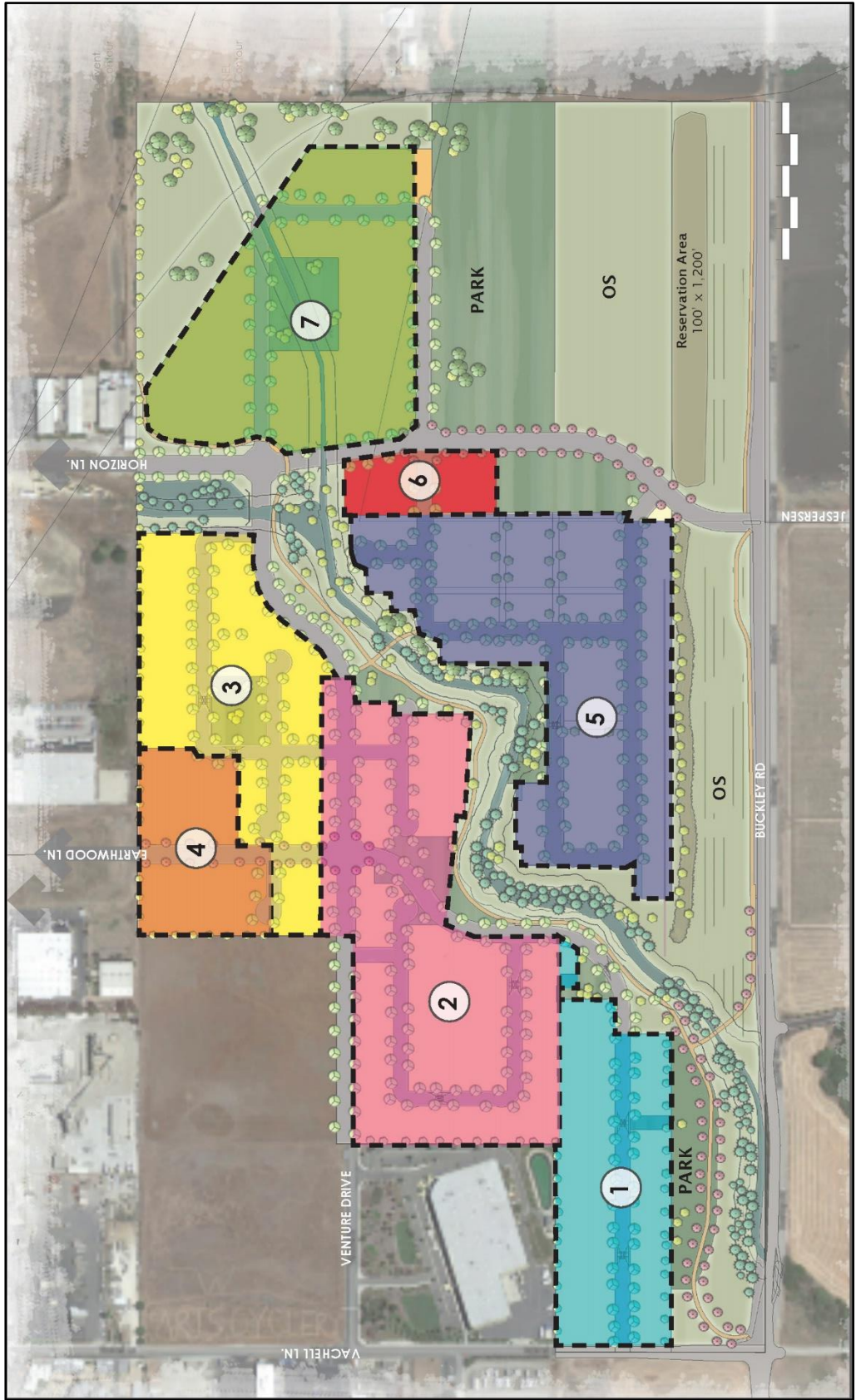


Figure 23 Avila Ranch Neighborhoods

- D. Residences within the R-1 zone should incorporate a covered front porch.
- E. Residences within the R-2 zone that front collector or local residential roads should include a porch.

7.2 Scale and Massing

The pedestrian and agricultural character of Avila Ranch will be reflected through appropriately scaled buildings and landscaping. It is anticipated that building forms will be modest in size with individual components of buildings expressively articulated through playful use of massing.

Standards

- 7.2.1 Goal 5.10 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Scale and Massing section.
- 7.2.2 To avoid garage dominated streets, a portion of the house or porch within the R-1 Residential Zone shall be at least five (5) feet in front of the garage.
- 7.2.3 In order to ensure that the building height and setbacks are appropriate to the street context, building heights along the street frontage shall be one foot in height for each 1.5 feet in distance from the building setback to the street centerline.

Guidelines

- A. Variation in front yard setbacks, lot widths, and one and two story homes should be used to create a diversity of architectural massing.
- B. Massing design should include variation in the wall plane (projection and recess), variation in wall height, and rooflines at different levels.
- C. Portions of the upper story of a two-story home should be stepped back in order to reduce the scale of the façade that faces the street and to break up the overall massing. This could be achieved with a porch covering a min of 60% of the front facade.
- D. Architectural elements that add visual interest, scale, and character to the neighborhood, such as recessed or projecting balconies, verandas, or porches should be included within building designs.
- E. A variety of roof planes and pitches, porches, overhangs, and accent details should be incorporated into residential designs to increase the visual quality and character of a building, while reducing the bulk and size of the structure.
- F. Garages should be recessed behind the home's main façade to minimize the visual impact of the garage door and parking apron from the street.
- G. Garages located in parking court configurations should be recessed in order to increase the prominence of the main entry.

7.3 Building Heights

Building heights for residential structures are expected to range from one to three stories to accommodate both single-family and multi-family developments. Commercial structures located within the Town Center are two stories in height but buildings adjacent to corner plazas across from the park may be up to three stories.

Standards

- 7.3.1 Goal 5.11 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Building Heights section.
- 7.3.2 Residential building heights shall abide by the development standards set forth in the Airport Area Specific Plan Amendment.
- 7.3.3 Buildings located within the Neighborhood Commercial zone shall abide by the building height requirements set forth within Chapter 17.38 of the City's development code.
- 7.3.4 A minimum of 25% of R-1 zone units shall be single story. Single story units shall be concentrated along the landscaped berm, parallel to Buckley, unless it can be demonstrated that a two-story dwelling unit conforms to the city noise regulations.
- 7.3.5 The height of buildings next to major circulation routes should be equal to at least two-thirds of the distance from the street centerline to the face of the building. At least 75 percent of the units have one foot of building height for each 1.5 feet of distance from the street centerline to the façade of the dwelling unit.

Guidelines

- A. Town Center buildings abutting the two plazas at the corner of Jespersen Drive and the R-1 Residential Road should be least 20 feet in height.

7.4 Architectural Façade and Treatment

Facades and architectural treatments of buildings within Avila Ranch are designed as a collection of high quality, individual neighborhoods comprised of individually articulated and highly detailed structures. To meet this high standard of quality, full articulation of building facades and use of architecturally compatible treatments will be utilized consistently throughout the development.

Standard

- 7.4.1 Goal 5.12 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Architectural Façade and Treatment section.

Guidelines

- A. Entries should be enhanced to reflect the architectural style and details of the building.
- B. Windows should be articulated with accent trim, sills, shutters, window flower boxes, awnings, or trellises authentic to the architectural style of the building.
- C. Windows, garage windows, and doors should complement the architectural style of the building.
- D. Garage doors should incorporate architectural detailing that is consistent with the overall architectural style of the building.

7.5 Materials and Colors

Materials considered appropriate for Avila Ranch are those that have generally stood the test of time such as stone, brick, wood, glass, plaster, and metal. Each development may choose to express its unique identity through material and color selection, as long as they are compatible with the overall character of the area.

Standard

- 7.5.1 Goal 5.13 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Materials and Colors section.

Guidelines

- A. Roof tiles and colors consistent with the architectural style of the house should be incorporated. Roofing colors should be soft earth tones. Where solar shingles are used to comply with solar energy requirements in this plan, they shall be integrated so that they are part of the architectural character.
- B. Roof penetrations for vents should be consolidated and located on the rear side of roof ridges. Vents should be painted to match the roof color.
- C. As part of the last development phase, the building materials, colors, entries, and windows of the Neighborhood Commercial Town Center should reflect adjacent residential area.

8.0 Landscape

8.1 Planting Concept

Landscaping for the Avila Ranch development is envisioned to reflect both the natural and agricultural landscapes of San Luis Obispo. Natural landscape patterns have been integrated within the Tank Farm Creek riparian corridor and within Conservation/Open Space areas. Agricultural landscape patterns have been incorporated along Jespersen Drive and adjacent to the on-site agriculturally related facilities.

Standards

- 8.1.1 Goal 5.14 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Planting Concept section.
- 8.1.2 Trees planted within Avila Ranch outside of residential zones shall be chosen from the City's approved Street Tree Master List and shall be in conformance with the master plan in Appendix D.
- 8.1.3 Shrubs, perennials, and ground cover planted outside of residential zones within Avila Ranch shall be in conformance with the master plan in Appendix D.
- 8.1.4 Trees, shrubs, perennials, and ground cover planted within the residential portions of Avila Ranch shall be located as shown in Appendix D and shall be chosen from the City's approved Street Tree Master List.
- 8.1.5 Street trees shall be provided in tree wells along streets abutting the Neighborhood Commercial Town Center with the intent of developing a continuous canopy over the sidewalk. Thematic parkway trees shall also be planted on Earthwood, Venture, Jespersen, and Horizon at least every fifty (50) feet. Tree selection for these parkway strips on the Residential Collectors and Residential Arterial shall be of a single species to provide continuity throughout the project. Tree species should be selected for canopy height and width to ensure that at least 50 percent of the adjacent walkway is shaded within 10 years after planting.
- 8.1.6 Trees, shrubs, and plants chosen to be planted along the Tank Farm Creek riparian corridor shall utilize native, locally procured varieties.
- 8.1.7 Plants and shrubs planted on properties adjacent to Tank Farm Creek shall be properly situated and maintained to avoid spreading into the adjacent riparian corridor.
- 8.1.8 Plants and shrubs shall be low water using.
- 8.1.9 Turf shall not be located within front yards of residential zones.
- 8.1.10 To reduce the potential for noise, dust and pesticide drift, the project shall include dense hedgerows of trees and landscaping at the top of the southern noise berm, along the eastern property line between the R-3 and Neighborhood park and the adjacent agricultural parcel, along the northern property line in the 20-foot drainage swale, along the east side of Vachell between the R-2 residences and Vachell, and along the western property line between the R-4 and R-2 areas in Phase 3 and the properties to the north and west. **(MM AG 2b)**.

Guidelines

- A. Residential Collectors and Residential Arterials shall have a single street tree species for continuity. A different street tree species unique to each neighborhood shown in Figure 27 should be utilized to provide a layer of consistency and individuality for that neighborhood.
- B. Native trees, plants, and other low water using plant varieties are encouraged within Avila Ranch and should be integrated into the project to the greatest extent possible.
- C. Community gardens that are easily accessible to residents should be incorporated within Avila Ranch in mini parks and pocket parks, as shown on the Parks Master Plan in Appendix B.
- D. Open space areas adjacent to Buckley Road should incorporate working agricultural areas.
- E. Agriculture production related facilities should integrate a grove or farm compound styled tree plantings to unify and add visual interest to the site, in accordance with the Parks Master Plan and Open Space Plan.

9.0 Buildings, Signs and Lighting

9.1 Buildings

Buildings placed throughout Avila Ranch will be rooted in the surrounding landscape and natural open spaces through the incorporation of contextual landscaping. Landscaping will soften building edges at the ground plane and provide attractive plantings to support the planned environment of the project.

Standard

- 9.1.1 Goal 5.15 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Buildings section.
- 9.1.2 Public art shall be incorporated within Avila Ranch in conformance with the City's Public Art for Private Development ordinance. The preferred method of compliance is by including larger scale sculptures in the Sculpture Garden in Park H.
- 9.1.3 Public art shall reflect the agrarian history and context of the site.

9.2 Signs

Standards

- 9.2.1 Goal 5.17 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Signs section.

- 9.2.2 All signage within Avila Ranch shall comply with the City of San Luis Obispo's Sign Regulations for applicable Residential, Neighborhood Commercial, and Conservation/Open Space land uses.

Guideline

- A. Landscaping should be incorporated within parking courts to minimize paving and views of garages.

9.3 Lighting

Lighting for residential, commercial, and open space uses within Avila Ranch is envisioned to provide adequate illumination levels to aide in the transitioning of urban to rural uses while also providing an appropriate illumination level to address public safety concerns. Proposed lighting is intended to maintain the current low lighting levels that distinctly differentiate between existing urban and rural land uses within the area.

Standards

- 9.3.1 Goal 5.18 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Lighting section.
- 9.3.2 Exterior lighting within the Specific Plan Area shall comply with the City of San Luis Obispo's Community Design Standards, Airport Area Specific Plan, and Night- Sky Preservation site requirements.
- 9.3.3 All exterior lighting within Avila Ranch shall be compatible with and complement the architectural styles and landscape designs proposed.
- 9.3.4 Exterior lighting fixtures shall be properly shielded to minimize light overflow and glare onto adjacent properties.
- 9.3.5 Trail and walking pathway lighting shall be appropriately scaled to the pedestrian. Additional overhead park lighting may be utilized in areas where pedestrian safety is a concern.
- 9.3.6 Lighting fixtures shall be energy efficient in accordance with the latest version of the California Energy Standards (Title 24).
- 9.3.7 All project lighting shall comply with the City's Night Sky Preservation Ordinance (Zoning Ordinance Chapter 17.23). Lighting in the project shall conform to the following operational and development standards:
 - a. Outdoor lighting shall be directed downward and away from adjacent properties and public rights-of-way.

- b. No lighting on private property shall produce an illumination level greater than two maintained horizontal foot-candles at grade on any property within a residential zoning district except on the site of the light source.
- c. The maximum light intensity on a residential site shall not exceed a maintained value of 10 foot-candles, when measured at finished grade.
- d. The maximum light intensity on a nonresidential site, except auto sales lots and sports fields, shall not exceed a maintained value of 10 foot-candles, when measured at finished grade.
- e. The maximum light intensity on an auto sales lot shall not exceed a maintained value of 40 foot-candles, when measured at finished grade.
- f. The maximum light intensity on a sports field shall not exceed a maintained value of 50 foot-candles, when measured three feet above grade. Baseball field lighting and lighting for other recreational uses may be increased to a maintained value of 100 foot-candles with approval of the Community Development Director.
- g. Outdoor lighting shall be completely turned off or significantly dimmed at the close of business hours unless lighting is essential for security or safety (e.g. illumination of parking areas and plazas).
- h. Outdoor lighting shall not blink, flash, or rotate.
- i. Outdoor flood light projection above the horizontal plane is prohibited, unless exempted by Section 17.23.080.
- j. Outdoor sports fields shall not be illuminated after 11:00 p.m. except to conclude a scheduled recreational or sporting event in progress prior to 11:00 p.m.
- k. Outdoor lighting fixtures, including lighting for outdoor recreational facilities, shall be cutoff fixtures designed and installed so that no emitted light will break a horizontal plane passing through the lowest point of the fixture. Cutoff fixtures must be installed using a horizontal lamp position. Lighting fixtures should be of a design that complements building design and landscaping, and may require architectural review.
- l. Outdoor lighting shall be fully shielded or recessed.
- m. Lighting fixtures shall be appropriate in height, intensity, and scale to the use they are serving. Parking lot lights shall not exceed a height of 21 feet, and wall-mounted lights shall not exceed a height of 15 feet, from the adjacent grade to the bottom of the fixture. The Architectural Review Commission can approve an exception to these height standards based on specific extenuating circumstances.
- n. All luminaries mounted on the under surface of service station canopies shall be fully shielded and utilize flush-mounted canopy fixtures with flat lenses.

o. Search lights, laser source lights, or any similar high-intensity light shall be prohibited, except, in emergencies, by police and/or fire personnel, or at their direction, or for purposes of gathering meteorological data. Exceptions may be granted in conjunction with approved temporary lighting.

9.3.8 All exterior building lights facing Tank Farm Creek shall be hooded to prevent light spillover into the creek. All residential street lights over 10 feet in height shall be setback a minimum of 100 feet from the top of the creek bank and hooded and/or directed away from the creek. Any night lighting adjacent to the creek (e.g., walkway lights) shall be of low voltage and hooded downward. Artificial light levels within 20 feet of the top of the creek bank shall not exceed 1-foot candle or the lowest level of illumination found to be feasible by the City. **(MM BIO 5a)**.

10.0 Public Art

In order to weave and integrate Avila Ranch with the existing cultural and aesthetic fabric of San Luis Obispo, public art is intended to be incorporated as a central organizing element within or adjacent to the Town Center plazas or parks. Installations will reflect the agrarian history and context of the area and that of the project site, and may include antique agricultural implements, Aeromotor windmills, and other features. Signage designs for land uses within Avila Ranch comply with applicable City Sign Regulations while playfully integrating and playing off the dominant architectural character of the area. Individual residential neighborhoods are imagined as having unique identification signage to inform and direct residents and visitors. Commercial uses are to display functional yet simple signage designs that effectively alerts potential patrons to their location within the Avila Ranch development.

Standards

11.1 Goal 5.16 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Public Art section.

11.2 The preferred method of complying with the public art requirements for the project is the implementation of the Sculpture Garden in Park H.

11.0 Drainage

Drainage requirements related to Avila Ranch are intended to meet the Regional Water Control Board's Low Impact Development Post Construction Requirements. The performance of designed detention basins and permeable surfaces integrated throughout the project ensure on-site retention of the project's share of stormwater runoff while ensuring the safety of adjacent property.

Standard

11.1 Goal 5.19 (and associated standards and guidelines) outlined within the AASP shall be referred to and incorporated as part of this Avila Ranch Drainage section.

- 11.2 A landscaped drainage swale shall be included along northern property line of Avila Ranch within the R-2 and R-4 Residential Zones to facilitate drainage from adjacent property, and to provide screening to the light industrial properties to the north.

12.0 Fencing

Fencing proposed for Avila Ranch will add to visual quality and character of the overall development. In addition to the existing City fencing requirements, the following standards and guidelines apply to all residential lots within Avila Ranch in order to maintain and emphasis views of Tank Farm Creek.

Standard

- 12.1 Residential lots adjacent to Tank Farm Creek, parks, open spaces, or walking pathway, as shown in Figure 24, shall use open fencing types like those illustrated in Figure 25.

Guideline

- A. Fencing adjacent to Tank Farm Creek, parks, open spaces, or walking pathways should use wrought iron or split rail fencing types (See Figure 25 for examples).

Special Fence Treatment Locations (Typ)



Figure 24 Special Fence Treatment Locations

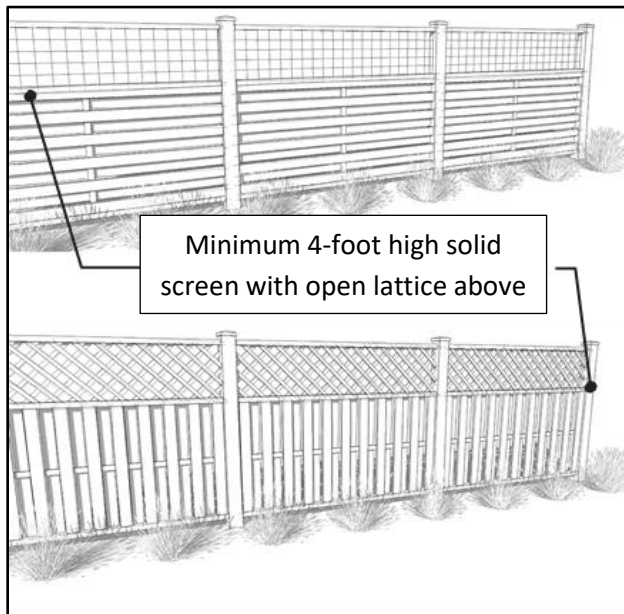


Figure 25 Open Space Fence Example

13.0 “ZNE+” Energy Conservation and Production (MM AQ 2a)

13.1 Energy Conservation

Energy Conservation is a significant policy focus area for the City of San Luis Obispo. Both the Open Space and Conservation Element, and the Airport Area Specific Plan provide guidance in the conservation of energy. Current (2016) building codes provide for additional energy conservation measures that are designed to be approximately 28 percent more energy efficient (“Tier II”) than the 2013 code. It is expected that the 2019 (California 2020 Net Zero Goals) building codes will provide for significantly greater energy conservation and for greater onsite energy production than currently called for in City building codes and City planning regulations. The 2019 “Zero Net Energy” (“ZNE”) code is intended to promote higher building energy efficiency to lower the building energy usage by 15 to 25 percent over the 2016 code. Onsite renewable energy generation will also be required. The goal Avila Ranch’s ZNE compliance strategy is to have energy features that are up to 15 percent more efficient than the anticipated 2019 energy code. Technical backup for this “ZNE+” energy strategy is provided in Appendix E.

The cumulative effect of these code modifications will be the reduction of greenhouse emissions from building sources (non-mobile or indirect sources) by 50-75 percent, and energy cost savings to homeowners of \$750 to \$1,000 per year. Building energy usage comprises approximately one quarter of the source of project operational greenhouse gas emissions according to Table 3.3-13 of the EIR. The proposed energy conservation features will therefore reduce total project greenhouse gas emissions by an additional 15-20 percent. Mobile sources (gasoline and diesel cars and trucks) account for approximately two-thirds of GHG emissions. The additional features and mitigations described here are estimated to reduce total vehicle miles travelled by 25 percent, and shift an additional 5 percent of trips from fueled vehicle trips to EV trips, bikes and pedestrians. A total of 30 percent reduction on gasoline and diesel fueled vehicles miles is conservatively estimated resulting in a 35-45 percent overall reduction in GHG emissions.

The intent of these standards and guidelines is to establish energy conservation standards and guidelines for the project as an early stepping stone to the 2019 “Net Zero” building standards. The overall intent of the recommendations, standards and guidelines below is to improve energy conservation measures in R-1 and R-2 buildings by at least 15 percent over the 2016 Title 24 standards, and by at least 10 percent for R-3, R-4, NC and other uses. When combined with the requirements for Solar PV in Section 13.2 below, it is expected that the structures will meet the California Energy Commission’s Energy Design Rating criteria for Time Dependent Value (“TDV”) Zero Net Energy. The energy conservation measures described below are those which have a demonstrable positive benefit to cost ratio.

Standard

- 13.1.1 All buildings and structures shall meet and exceed the anticipated 2019 “Net Zero” energy conservation standards. Prior to the establishment and adoption of 2019 Title 24 Energy Code, R-1 and R-2 structures in the Avila Ranch project shall be 15 percent more efficient than the 2016 Title 24 Energy Standards, and R-3, R-4, NC and other uses shall be at least 10 percent more efficient than the 2016 Title 24 Energy Standards.

- 13.1.2 Energy conservation measures should give priority to the thoughtful design of structures to take advantage of passive cooling and heating, including cross ventilation, solar exposure, solar thermal massing strategies.

Guideline

- A. Building and structures shall use high-performance Advance Framing (AF) and/or Structurally Insulated Panel (SIP) techniques, where structurally possible, to reduce the amount of framing lumber and the heating and cooling loss associated with frequent framing intervals. Advanced framing techniques qualify as Reduced Thermal Bridging under section 4.4.5 of the Energy Star Thermal Enclosure System Rater Checklist (ver. 3, rev. 5). Advance Framing techniques may include, but are not limited to the following:
- a. Increased framing member spacing, typically to 24 inches on center, effectively trimming the number of required studs by about one-third. Perimeter walls may be built with 2x6 wood framing spaced 24 inches on center have deeper, wider insulation cavities than conventional 2x4 framing spaced 16 inches on center, thereby increasing the amount of insulation inside the wall to at least R-20 and improving the whole-wall R-value.
 - b. Use of insulated corners to eliminate the isolated cavity found in conventional three- or four-stud corners, making it easier to install insulation and providing for more cavity insulation space. Advanced framing wall corners can include insulated three-stud corners or two-stud corner junctions with ladder blocking, drywall clips, or an alternative means of supporting interior or exterior finish.
 - c. Advanced framing ladder junctions should be used at wall intersections with 2x blocking at 24-inch on center vertical spacing. This method requires less than 6 feet of blocking material in a typical 8-foot tall wall. In conventional walls, interior wall intersections include a stud at each side of the intersecting wall, which can require as much as 16 feet of stud lumber plus additional blocking material.
 - d. Advanced framing headers offer increased energy efficiency by replacing framing materials with space for cavity insulation inside the header. Advanced framing headers are sized for the loads they carry and are often installed in single plies rather than double. Wood structural panel box headers are another option to consider that maximize the insulatable cavity while providing the structural support via the wood structural panels that are already used on the exterior of the building.
- B. Quality Insulation Installation (“QII”) shall be used per California Energy Commission standards and Insulation Stage Checklists to ensure high performing insulation systems. QII ensures that insulation is installed properly in floors, walls, and roofs/ceilings to maximize the thermal benefit of insulation. Depending on the type of insulation used, QII can be simple to implement for

only the additional cost of HERS verification. Batt insulation may require an increase in installation time over standard practice because batts may need to be cut to fit around penetrations and special joists.

- C. Compact plumbing strategies shall be used to reduce water and water heating waste. These will include reducing the total run from the water heating unit to the hot water dispensing appliances, “demand” recirculating hot water systems, back-to-back and stacked plumbing fixtures, and other techniques.
- D. Pursuant to AASP Policy 7.2.2, the buildings and structures in the project shall provide for indoor and outdoor water use that is at least 35 percent below current citywide average. WaterSense fixtures, or their equivalent, shall be used for all appliances, and all appliances shall comply with CalGreen standards for water use efficiency. (**MM AQ 2a**).
- E. Rainwater and stormwater management shall be in conformance with the Regional Water Quality Control Board’s Low Impact Development standards. Such standards call for the detention/retention and treatment of the 95th percentile storm event. Treatment will be in decentralized filtration basins, bioswales, underground artificial or natural cisterns, and other approved strategies. The Parks Master Plan and the Open Space Master Plan in Appendices B and C, respectively, show the locations and extent of these basins.
- F. Passive solar strategies shall be used in all buildings to the greatest degree practicable. At least 75 percent of the structures in a neighborhood should have the longer roof line axis within 15 degrees of east-west. Design building to include roof overhangs that are sufficient to block the high summer sun, but not the lower winter sun, from penetrating south facing windows (passive solar design). Roofing materials shall be used which have a solar reflectance values meeting the EPA/DOE Energy Star® rating to reduce summer cooling needs.
- G. City infrastructure should comply with the recommendations of the City’s Climate Action Plan and should utilize strategies and improvements to conserve energy. These include: 1) usage of roundabouts where possible to avoid the usage of electrically powered traffic signals; 2) usage of high-efficiency LED street lights; 3) usage of high-efficiency LED traffic signals. Where traffic signals are modified as part of this project, signal heads with low-efficiency incandescent fixtures shall be modified to have high efficiency LED fixtures, where possible; 4) bus stops shall include PV systems to support the power requirements; and, 5) street lighting, park lighting and area lighting shall be designed to limit errant light.
- H. Design plans for units shall provide for the use of battery powered or electric landscape maintenance equipment for new development. At least one exterior convenience outlet shall be provided for each yard area that requires regular maintenance. Two outdoor outlets shall also be provided for any private outdoor activity/patio areas.

- I. Each dwelling unit shall be designed to provide a convenient storage area for bicycles that is easily accessible. This may include storage space in garage for bicycle and bicycle trailers, or covered racks / lockers to service the residential units, or front porch bike lockers.
- J. Residences should be equipped for the possible use of all electric appliances. This shall include adequate electrical connections in cooking and laundry areas.
- K. To encourage the use of electric vehicles private residential garages shall be equipped with a dedicated 240-V circuit or outlet for electrical vehicle charging in conformance with the California Green Building Code and the National Electrical Code. Residences with common parking areas such as the R-3, R-4 and Neighborhood Commercial areas shall be equipped with electric vehicle charging stations at a rate equal to one charging position for each eight vehicles (12.5 percent of spaces) per the LEED ND requirements.

13.2 Onsite Energy Production

Solar PV systems shall be included on all structures and buildings sufficient to produce 100 percent of the projected electrical demand for the type of building unit (but not including electrical demand for EV charging stations). This may be provided through a combination of solar canopies for R-3, R-4, Neighborhood Commercial/Town Center and public park uses, solar panels, solar shingles and other methods. Guidelines for specific unit types and land uses are as follows:

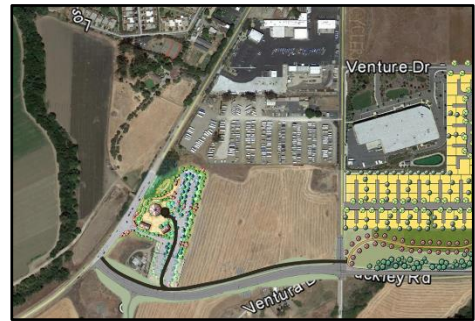
- a. R-1 Single Family. These uses should provide between 275 and 300 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit to generate at least 7,250 kWh per year, or as may be calculated in the energy analysis for the structure. Surface material and finish shall be non-glare for airport compatibility.
- b. R-2 Pocket Cottages Single Family. These uses should provide between 200 and 225 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit (to generate at least 5,500 kWh per year, or as may be calculated in the energy analysis for the structure. Because of the orientation of these uses from a common driveway from an east-west street, care should be taken to orient the longer roof along the east-west axis where possible. There are limited opportunities for solar canopies in guest parking areas, except where these spaces are used for car sharing stations. Surface material and finish shall be non-glare for airport compatibility.
- c. R-2 Standard Single Family. These uses should provide between 250 and 275 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit to generate at least 7,000 kWh per year, or as may be calculated in the energy analysis for the structure. Because of the orientation of these uses from a common driveway from an east-west street, care should be taken to orient the longer roof along the east-west axis where possible. There are limited opportunities for solar canopies in guest parking areas, except where these spaces are used for car sharing stations. Surface material and finish shall be non-

glare for airport compatibility.

- d. R-3 Single Family Attached Duplex Units. These uses should provide 200 and 225 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit to generate at least 5,500 kWh per year, or as may be calculated in the energy analysis for the structure. Solar canopies in guest parking spaces may provide the predominant share of the total requirement of 7,500-8,000 square feet of total solar array area, and the solar canopies are the preferred method of achieving this objective because of the required orientation of these uses, and the sensitive architectural setting. Where possible, units should provide rooftop solar water heating units. Surface material and finish shall be non-glare for airport compatibility.
- e. R-3 Townhome Units. These uses should provide 150 to 175 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit to generate at least 4,000 kWh per year, or as may be calculated in the energy analysis for the structure. Solar canopies in guest parking spaces may provide the predominant share of the total requirement of 25,500 square feet of total solar array area, and the solar canopies are the preferred method of achieving this objective because of the required orientation of these uses, and the sensitive architectural setting. Where possible, units should provide solar water heating or pre-heating units. Surface material and finish shall be non-glare for airport compatibility.
- f. R-4 Apartment Units. These uses should provide 125 to 150 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit to generate at least 3,500 kWh per year, or as may be calculated in the energy analysis for the structure. Solar canopies in guest parking spaces may provide all or the predominant share of the total requirement of 17,750 square feet of total solar array area, and the solar canopies are the preferred method of achieving this objective because of the required orientation of these uses, and the sensitive architectural setting. Where possible, these units should provide solar water heating units or pre-heating units. Surface material and finish shall be non-glare for airport compatibility. These solar canopies are to be located around the perimeter of the site along the west and north boundaries so that they function as noise attenuation barriers as well.
- g. Neighborhood Commercial/Town Center. Total electrical energy demand is estimated to be 7,500 to 10,000 kWh. All of this demand can be accommodated through solar canopies on the central parking lot area. Surface material and finish shall be non-glare for airport compatibility.
- h. Public Parks/Spaces. Each public park has structures that may be outfitted with rooftop solar systems. These include picnic shelters, shade structures, covered pavilions, and potential solar canopies may provide 10,000 to 12,500 square feet of solar array area.

Circulation Framework

There are four principal circulation features for the site: 1) the extension of Buckley Road along the “Caltrans” alignment to Higuera Road; 2) connection of a new Class I bike paths and Class II “buffered” bike lanes from and through the project site to the Octagon Barn which is the trailhead for the Bob Jones City to Sea Trail; 3) the extension of Venture Drive through the site and connecting with the extension of Jespersen Road from Buckley Road, creating a continuous Residential Collector; 4) the extension of Earthwood Lane as a Residential Collector from Venture Road to Suburban Road for connectivity and access to the neighborhood shopping center; and, 5) the extension of Jespersen Drive from Buckley into the project site, with the eventual extension of it offsite to connect to Suburban Road via Horizon Lane. A vehicle bridge and two pedestrian/bike bridges are planned over Tank Farm Creek to provide neighborhood connectivity, and an eastbound bike bridge is planned on the south side of Buckley to provide two-way bike connectivity along Buckley Road. Figure 26 shows the overall circulation system and Figures 27 through 30 show the proposed City standard street sections that are to be used for the project.



The LUCE update identified the need to add north-south connections between Tank Farm Road and Buckley Road. The extension of Earthwood Lane south of Suburban Road to the Avila Ranch project, the extension of Jespersen north of Buckley to the northern project limits will contribute to this connectivity. In the longer term, the connection of Horizon to Tank Farm Road from Suburban, completion of the “Unocal Collector” and other improvements will complete this system.

Pedestrian circulation will be accommodated by street design standards that include sidewalks on both sides of the street for most classifications of streets within developed areas, and off-street, multi-use paths along streets adjacent to open space areas, and network of multi-use, Class I facilities that will connect to the street system within the planning area as well as existing and proposed facilities outside of the Airport Area.

The City’s Bicycle Transportation Plan proposes a comprehensive system of on-street and off-street bicycle facilities in and around the project site. The ultimate alignment of some of the Class I bike paths south of Tank Farm Road will need to be determined as part of the plans to develop the Chevron property. However, the AASP illustrates the following conceptual alignments:

- A. Off-street Class I multi-use paths that parallel creeks and riparian corridors,

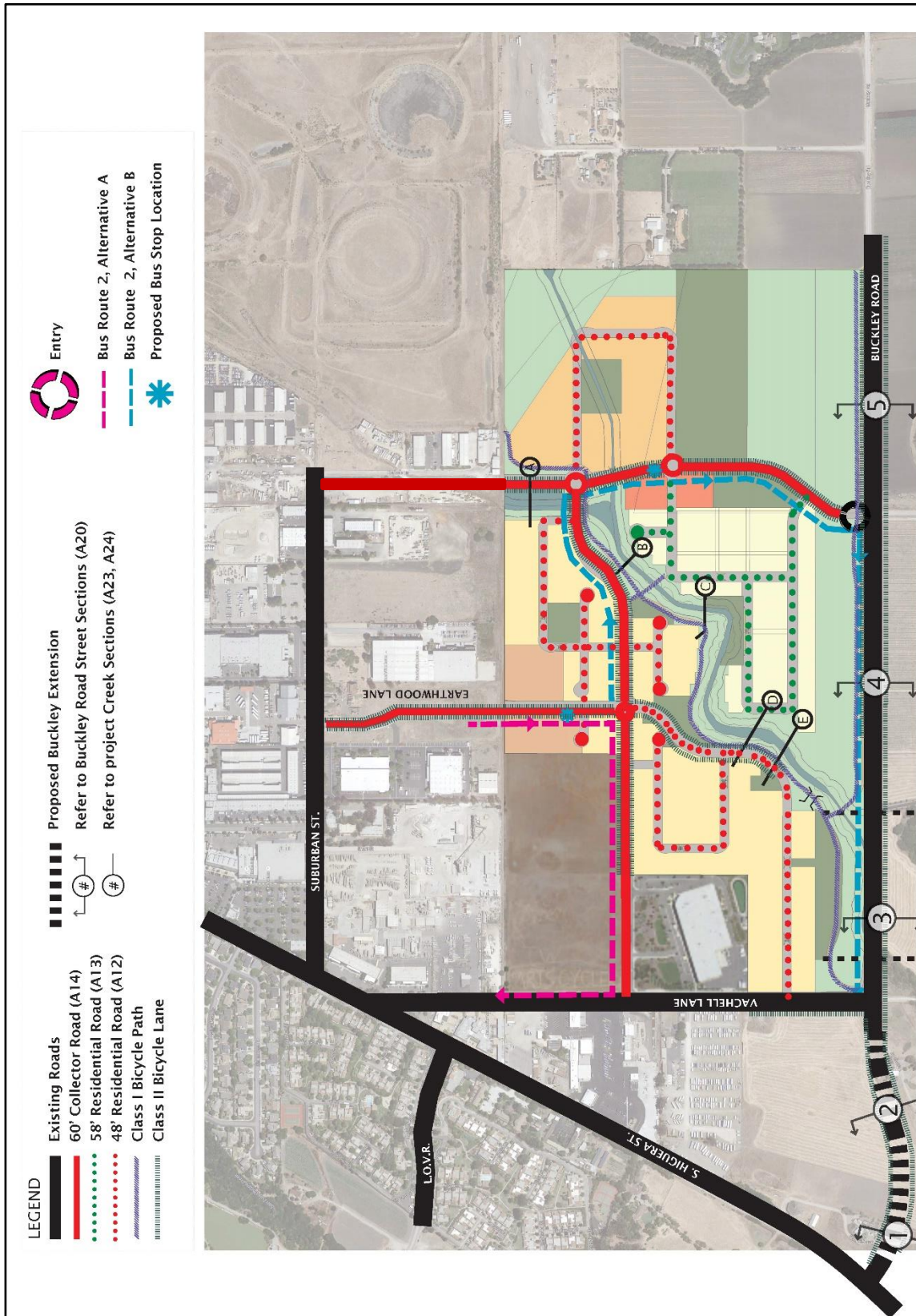


Figure 26 Overall Site Plan

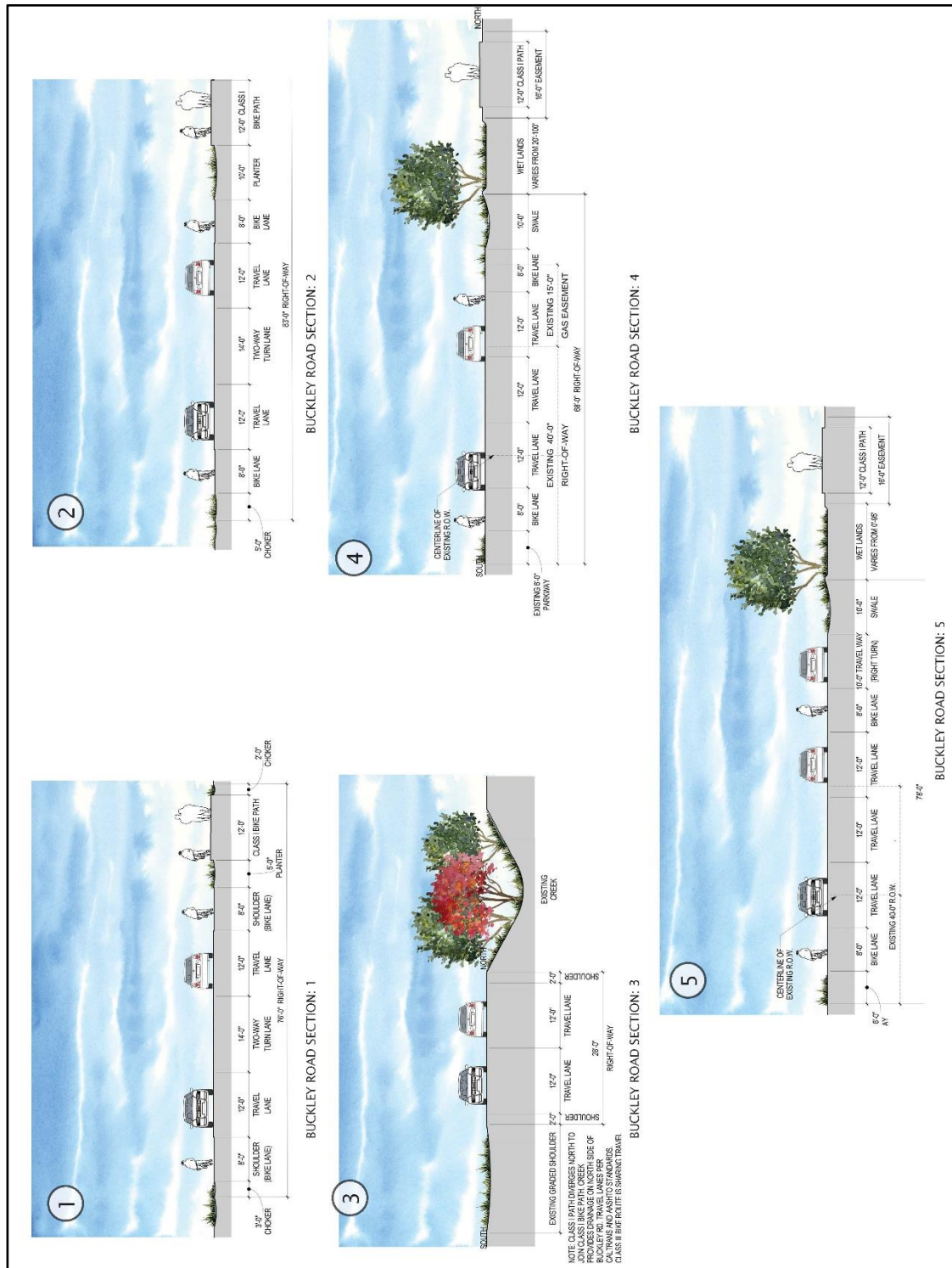


Figure 27 Buckley Road Sections

- B. On-street Class II bicycle lanes on arterial and collector streets, and;
- C. A combination of off-street paths adjacent to streets and on-street bicycle lanes.

Class I bicycle paths and Class II bicycle lanes within the Avila Ranch area will be constructed, signed and marked to meet or exceed the minimum standards established by the California Department of Transportation Highway Design Manual and the City of San Luis Obispo design standards. Class I paths are to be a minimum of 12 feet in width with two-foot shoulders, except in hillside areas where grading would cause visual impacts or along creeks where space is limited. Class II bicycle lanes are to be at least 6.5 feet wide under normal circumstances, according to the design criteria of the Bicycle Master Plan (BMP). For Buckley Road and Vachell Lane, Class II facilities will be at least eight feet wide. The project's Residential Collectors bicycle lanes are planned to be 8-foot "buffered" lanes (instead of the BMP standard of five feet for that condition), as shown in Figure 28.

An important linkage in the regional bikeway system is Buckley Road. It will eventually connect to Higuera and the San Luis Obispo City Bob Jones Trail trailhead at the Octagon Barn site. Because of physical constraints and the extent of construction, the amount of roadway available for bike traffic varies between Broad and Vachell. These constraints include the bridges across Tank Farm Creek and the East Fork of San Luis Creek. The Bicycle Transportation Plan provides for Class II bike lanes and Class I bike paths along corridor, and continuing to Higuera.

Residential Collector and Local streets are planned for Avila Ranch. These roadways function to collect traffic from local streets and fronting property and then channel the traffic to arterial streets. Collector streets have fewer limitations on intersections and driveways than higher order streets. Figure 28 shows a plan and sectional view of an Avila Ranch Collector Street. A plan and section view of Local streets for the R-1 area is shown in Figure 29, and an illustration of the other Avila Ranch Local streets is shown in Figure 30.

Per the AASP, all traffic mitigation measures, taken at full build out of the Airport Area, assure compliance with the Circulation Element LOS D policy. However, since the rate and exact development patterns within the Airport Area cannot be predicted, no fixed implementation schedule of overall traffic mitigation measures can be determined. Therefore, and although not anticipated, development projects within the Specific Plan area may cause a temporary cumulative traffic level of LOS E to be reached prior to public improvement project being undertaken. Individual development projects within the Specific Plan area are to construct adjacent streets, bicycle and transit improvements as part of their development. For AASP transportation fee public projects, the City reviews LOS levels periodically and makes recommendations for use of accumulated Airport Area traffic impact fees toward new CIP projects to address the higher LOS levels and assure ultimate LOS levels are achieved with ultimate build-out development of the Airport Area.

Phasing of the bicycle improvements, according to the AASP, is a multi-jurisdictional and long-term effort. According to the AASP, the City or County will implement Class I and II bikeways that are not adjacent to development or are in the unincorporated area outside of the Specific Plan area (e.g., along Buckley and Santa Fe Roads, and along the East Branch of San Luis Obispo Creek south of Buckley

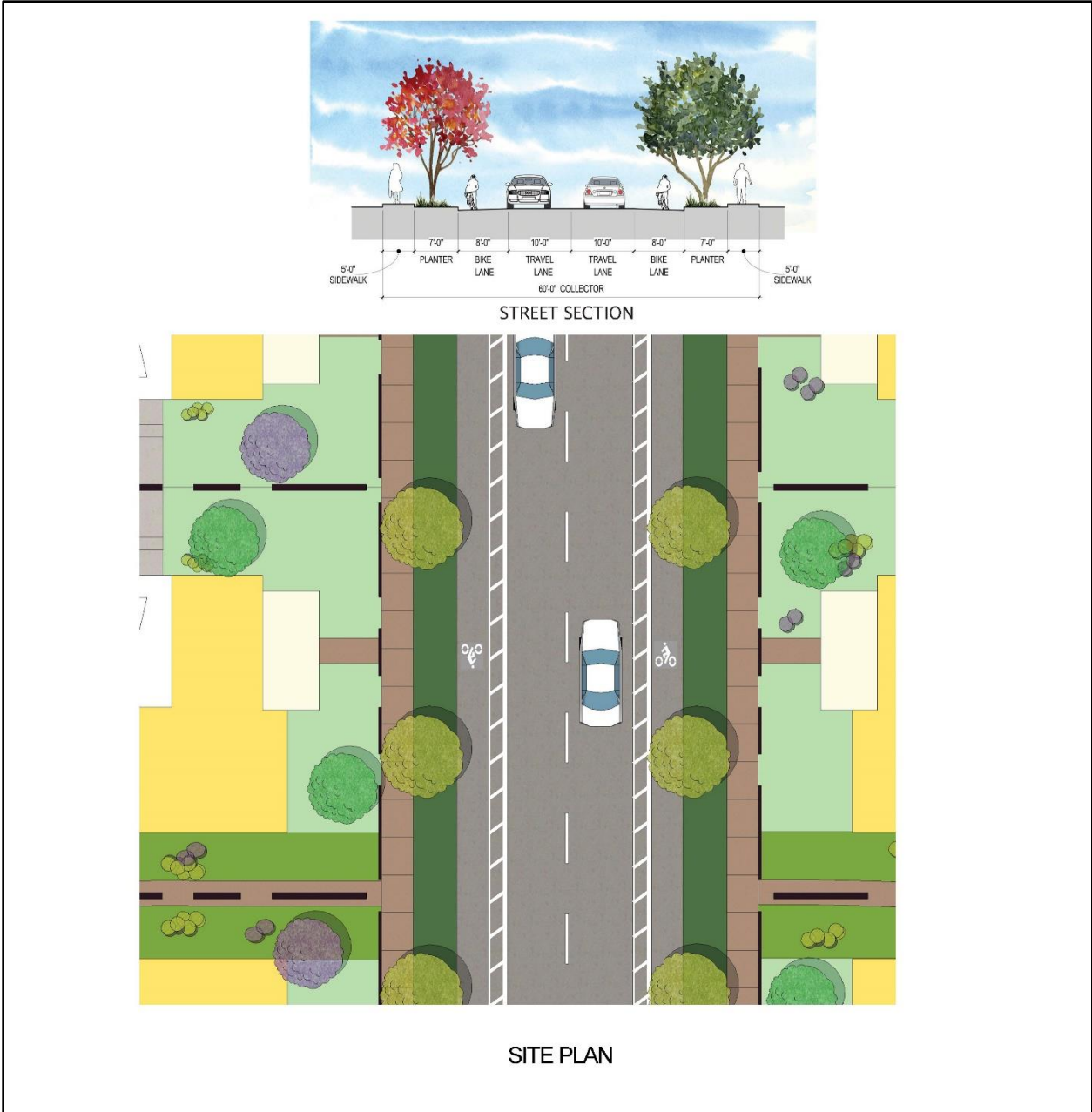


Figure 28 Collector Streets and Bike Lanes

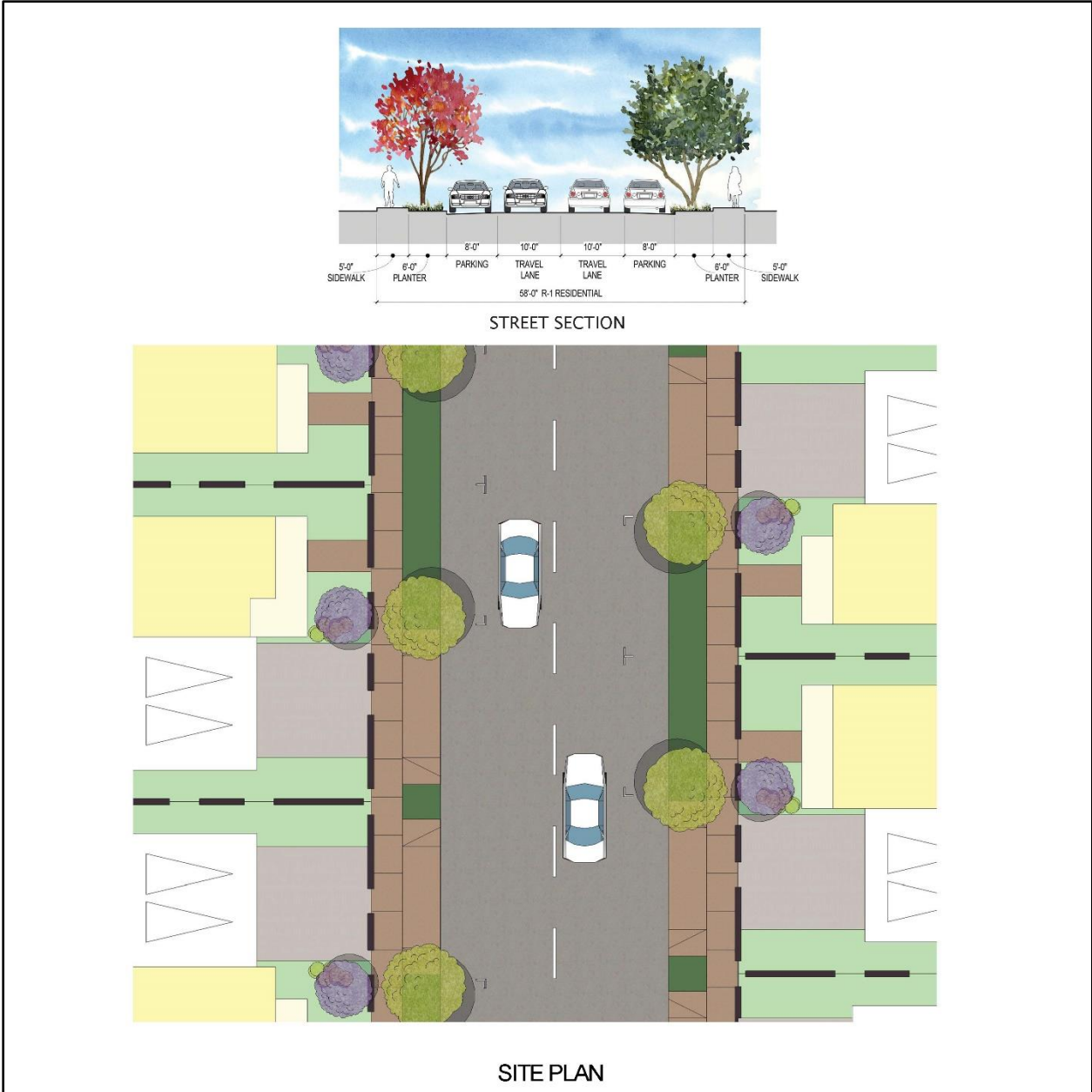


Figure 29 R-1 Zone Street Sections



Figure 30 Local Street Sections (Non-R-1)

Road) as part of their respective Capital Improvement Programs. This provision does not reduce the possibility that development may need to complete these segments as part of their individual environmental review assessments, if warranted. Several constraints to implementation include right of way acquisition along the project's Buckley frontage, the Buckley extension, bridge improvements, and other factors.

According to the traffic Study, at full buildout, the following improvements would be needed to address project impacts and needs. Unless otherwise noted, the recommendations apply to all horizon years (Existing, Near Term, and Cumulative Plus Project).

Traffic Study Recommendations

Vehicular:

1. Extend Prado Road to Broad Street. This planned project would reduce queue issues at the intersections of South Street/S Higuera Street, Madonna Road/S Higuera Street, and Tank Farm Road/S Higuera Street. *The improvement is being implemented as part of the Margarita Area Specific Plan, and potentially as a citywide project under the City's current revision of the traffic impact fees program.*
2. A second northbound left turn lane at Prado Road/S Higuera Street. The intersection functions adequately, but turning queues are excessive in the peak hours. This requires widening the Prado Road Bridge west of S Higuera Street to provide two receiving lanes. *This widening of the Prado Road bridge and Prado Road west of Higuera is currently underway as a City Capital Improvement Project with support from Specific Plan impact fees. The project will implement the northbound left turns as part of Phase 1 of the development.*
3. Add second southbound left turn lane to the Tank Farm Road/S Higuera Street intersection. The intersection functions adequately, but turning queues are excessive in the peak hours. The single turn lane also restricts through traffic flow. *This improvement, part of the Citywide traffic fee program, will be installed by the project in Phase 1 per the EIR.*
4. Restripe westbound approach to Suburban Road/S Higuera Street to provide a dedicated left and shared left/right turn lane and change southbound left to protected signal phasing. *This improvement is being installed as part of the Project's Phase 1 traffic improvement.*
5. Prohibit left turns into and out of the Vachell Lane/S Higuera Street intersection. Extend Buckley Road to South Higuera Street or connect the project to Earthwood Lane before the turn prohibition is implemented. *Buckley Road is being extended as part of Phase 2 improvements and modification of the Vachell/Higuera intersection is dependent of an alternate route. The Vachell/Higuera left turn prohibition improvements will occur when the Buckley Road Extension is completed.*

6. Under Near Term Plus Project conditions, add a second southbound right turn lane to the LOVR/S Higuera Street intersection. *This improvement is a longer-term improvement that requires additional rights of way, and is intended to address excessive right turning queues in the peak hours. The city is currently managing the flow of the intersection under the Los Verdes Settlement Agreement, and the improvement will be implemented as part of the citywide traffic impact fee program.*
7. Under Cumulative Plus Project conditions install a traffic signal or single lane roundabout at the intersection of Buckley Road/Vachell Lane. *Adequate right of way has been planned for either improvement, depending on the recommendations at the time of construction.*
8. Implement the County/Caltrans Highway 227 Corridor Plan. *SLOCOG, the County and Caltrans have adopted a corridor improvement concept for Broad/227/Edna Road from Aero Drive to Los Ranchos Drive. The City portion of this project will be included in the AASP Specific Plan Public Facilities Financing Program.*

Pedestrian and Bicycles:

1. Construct Class I multi-use paths in accordance with the project site plan and connect them to the off-site transportation network consistent with the City's Bicycle Transportation Plan. *Proposed Bicycle circulation is consistent with the BMP.*
2. Construct Class II "buffered" bike lanes on all Residential Collectors and Residential Arterials in the Project (Earthwood, Venture, Jespersen and Horizon), and on offsite roads include Vachell and Buckley along the project frontages, offsite Earthwood to Suburban, and the Buckley Road Extension.
3. Construct two bike bridges across Tank Farm Creek, one for eastbound traffic on the south side of Buckley to provide east-west connectivity on Buckley Road, and the other along the southern side of Phase 1.
4. Pedestrian improvements along Suburban, Vachell and Higuera to eliminate the missing links of sidewalks and/or elimination of non-ADA compliant crossings. Appendix F shows the scope of these improvements.

Transit:

1. Provision of transit stops on the project site. Phase 1 will include a transit stop on Earthwood north of Venture, and Phase 4 will include a transit stop at the Town Center. *Transit stops are shown on the Circulation Plan in conformance with this requirement.*

2. The project site will also be served by bus service from the San Luis Coastal Unified School District. Transit stops will be provided throughout the project in accordance with their requirements.

Site Access and On-Site Circulation:

1. Provide left and right turn lanes on Buckley Road at Vachell Lane and the south project entry. *The project design accommodates these improvements.*
2. Construct single lane roundabouts at the on-site intersections of two collector roads. *Roundabouts are shown at Earthwood/Venture, Venture/Horizon(Jespersion), and the Town Center.*
3. Where collector roads intersect with local roads the local roads should be stop controlled.
4. Review construction documents to ensure adequate sight distance is provided at on-site intersections and driveways. *Site distance calculations are shown on the Vesting Tentative Map, in conformance with City design requirements.*
5. Connect the project to Earthwood Lane as a part of Phase 1 of development. Connect the project to Horizon Lane as a part of Phase 4 of development. *Earthwood is connected to Suburban as part of Phase 1. Venture is connected to Jespersen/Horizon as part of the Phase 4, and the Jespersen/Horizon extension from Buckley is planned for Phase 4.*

Additional detail on these improvements is provided in the traffic impact study for the project.

Phasing

The foregoing summary provides the scope of needed improvements to support the circulation needs and demands for the project. Some of these improvements will be installed as part of the project, as described below. Others will be implemented by the City and/or County as part of their capital improvement programs. The transportation improvements associated with each phase of the project based on information from the traffic study and project impacts are as follows:

Phase 1 includes the Buckley Road frontage improvements along the southern phase boundary, extension of Venture Road along the phase frontage through the Venture/Earthwood roundabout, and extension of Earthwood to Suburban. It would also include widening of the Buckley Road shoulders along the project frontage to meet minimum bikeway standards for road speed, slope other site conditions. This phase would also include the Class I bike path from the Class II diversion on Buckley to Vachell, a pedestrian/bike bridge over Tank Farm Creek north of Buckley for Class I bike path, a Class II bike lane bridge on south side of Buckley at the Buckley/Tank Farm Creek Bridge, the extension of the Earthwood Collector (w/Class II) to Suburban, and a transit stop along Earthwood Extension. **(MM TRANS 11a, 12)**. This phase would also include the modification of the Higuera/Suburban intersection per the traffic study **(MM TRANS 7c)**. The changes to the Vachell/Higuera intersection would be deferred until completion of the Buckley Road Extension. **(MM TRANS 2b)**. As part of Phase 1 the Buckley

Extension Class I bike path may be installed in an interim or permanent condition, subject to availability of right of way and governmental approvals. **(MM TRANS 7c.** Phase 1 will also include pedestrian improvements on Suburban Road between Earthwood and Higuera, and pedestrian improvements along the east side of Higuera between Vachell and LOVR per the plans in Appendix F. **(MM TRANS 10a, 10b, 10c).** Phase 1 will include completion of the Class II bike lanes on Vachell from Buckley to Higuera. **(MM TRANS 2d).** Mitigation measures prescribed by the EIR for the project in Phase 1 include the following:

- a. Installation of an additional northbound left turn lane at Higuera and Prado. **(MM TRANS 2b, 7a).**
- b. Installation of an additional southbound left turn lane at Higuera and Tank Farm Road. **(MM TRANS 7b).**
- c. Extension of the northbound right turn lane at South and Higuera. **(MM TRANS 6).**

Phase 2 This phase will include the extension of Buckley Road from Vachell to Higuera, and improvements to restrict left turns to and from Higuera and Vachell. This phase would also include the extension of frontage improvements and the extension of the Tank Farm Creek Class I bike path to Venture Lane.

Phase 3 circulation improvements includes completion of intracts, and the frontage improvements along Venture Lane.

Phase 4 includes the development of the eastside circulation network for the project, including the construction of the vehicle and pedestrian bridge from Venture to Jesperson, the completion of Jesperson Road to Buckley, completion of Horizon Road from Venture to Suburban Road, project entry improvements on Buckley Road, the Buckley frontage improvements from the termination of the Phase 1 improvements to the eastern property line. **(MM TRANS 2e, 2f).** Phase 4 would include the completion of the Tank Farm Creek Class I bike path to the Chevron open space, and the improvement of sidewalks and ADA crossings on Suburban between Horizon and Earthwood. Phase 4 would also involve the development of the second transit stop at the Town Center.

Phase 5 circulation improvements include the development of intract improvements, and the construction of the second bridge over Tank Farm Creek connecting to the Town Center. No added traffic improvements are planned.

Phase 6 does not include the development of any additional traffic and circulation improvements.

Infrastructure Framework

Domestic Water

Existing City water main facilities slated to serve the site consist of an 18 -inch main in S. Higuera Street and an existing 12 -inch main in Suburban, and new potable and recycled water mains in Earthwood. Providing adequate domestic and fire flows to the Avila Ranch project will require extension to the new lines in Earthwood and eventual looping of the system. Main lines within the project will be looped through the individual phases to provide required flows and redundancy. Figure 31 shows the proposed water system improvements.

Construction of a 10-inch main line within the Earthwood Lane Phase I Right of Way has been completed. This line is stubbed approximately one-third of the way into the Earthwood subdivision project, with plans for a Phase II extension of the road to the north property line of Avila Ranch.

The adjacent Dioptrics project is served by water originating from an existing private offsite well, and private water line which runs within Vachell Lane. The system, installed at that time, provided stubs for future water connection to a new main line in Vachell. The Avila Ranch project will provide connection to these laterals at the time a main line is extended within Vachell.

The project proposes several features that meet and exceed the current water conservation and management regulations from the City or State agencies. Development in the Avila Ranch area is to be designed so that the projected annual residential water consumption for the project is 30 percent less than the city's current average residential per-person annual community water consumption (estimated at 60 gallons per day per person). To meet this goal, the following performance standards are to be used: 1) turf shall not be permitted for individual yard landscaping. Landscape plans shall be developed which require lower water usage, and which require lower maintenance. Landscape plans shall reflect the local climate zones and local plant material; 2) turf may be used where it is associated with a common open space, parkways, sports field or other common area. Where feasible, these areas will be irrigated with recycled water supplies; 3) landscape and irrigation plans should use drip irrigation systems to the extent feasible. General broadcast irrigation is discouraged; 4) residential units will be pre-plumbed for onsite water recycling; 5) plumbing fixtures shall comply with EPA "WaterSense" standards and to CalGreen flow standards; and 6) the project shall use "compact plumbing" strategies as described in Section 13 of the Design Framework.

The site currently uses approximately 90-95 acre-feet of ground water per year from a local irrigation well. This is based on one fourth of the site being planted in irrigated crops each year at an application rate of 30 inches per crop, with the balance of the site either fallow or in dry farmed crops. The Water Supply Assessment prepared for the project found that the ten-year average per capita water use for the City was 114.4 gallons per capita per day (gpcd) from 2005-2016. The 2015 residential water use

for the community is currently 59 gpcd. Total City current water use is 4,990 AF/year, a ten percent reduction from the previous year. The Avila Ranch water usage is estimated to be lower than current city average usage, with estimated residential water usage calculated to be 39 gallons per day per person per day. Avila Ranch's projected usage is 0.7% of total supply and 2% of available water supply. Total projected water usage for the project according to the Water Supply Assessment for the Mitigated Project, is 127.7 acre-feet (AF), with 73 AF feet of that demand being met by potable water supplies, and 57.7 AF being met by city recycled water supplies.

Recycled Water

The City of San Luis Obispo continues to expand their recycled water system. New facilities to serve the Avila Ranch project will be extended from the existing line in Earthwood. Figure 31 shows the planned locations of the potable water and recycled water main lines. Approximately 82 percent of irrigation demand for the project site will be met with non-potable recycled water, a total of 57.7 acre feet of recycled water.

Sanitary Sewer

The Avila Ranch property, as with all properties within the Airport Area Specific Plan, lies downstream of the existing Sewage Treatment Plant, requiring a system of force mains and/or lift stations to transport flows to the gravity lines which feed the plant. As part of the Avila Ranch project, a pump station will be constructed near the intersection of Vachell and Buckley to move flows to the north. This force main will run through Earthwood with eventual disposition into a gravity main in Suburban or Short Street. The Avila Ranch project proposes to construct a system of gravity lines within the project to transport flows to the proposed pump station and construct a force main system to transport those flows back up through the site, across an adjacent parcel to Suburban Road and easterly in Suburban to a point where a gravity line can be constructed to extend northerly to tie to the existing main line in Tank Farm Road which feeds into the Tank Farm Lift Station. Figure 32 shows the planned sewer mains, lift station and force mains.

Adjacent future development at Venture Lane was planned to be served by septic systems when initially approved by the County and the existing Dioptrics project pumps from the existing building to a leach field on the north side of their property. Revisions to that system, and extension of sewer mains, to this area are not a part of proposed improvements associated with Avila Ranch.

Dry Utilities

PG&E will provide underground extensions from existing facilities, from overhead lines along the west side of Vachell, and along the south side of the Suburban properties to the north. Final requirements need to be confirmed with PG&E. Cable TV/Phone facilities exist along Vachell Lane and are planned to be extended to serve the site. Southern California Gas Company has an existing 16 -inch high-pressure main line which extends southerly in Vachell and easterly in Buckley. It is anticipated that

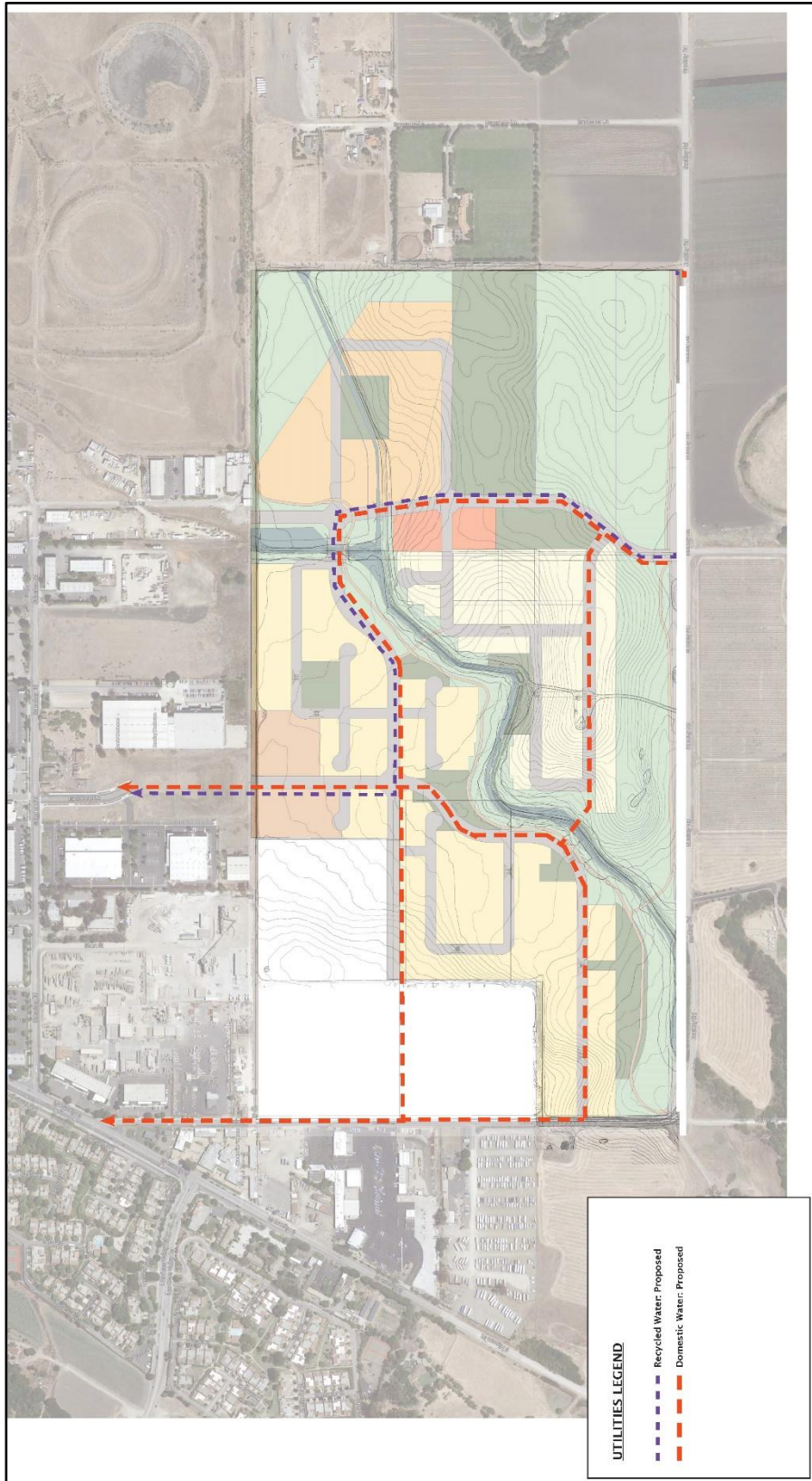


Figure 31 Water Master Plan

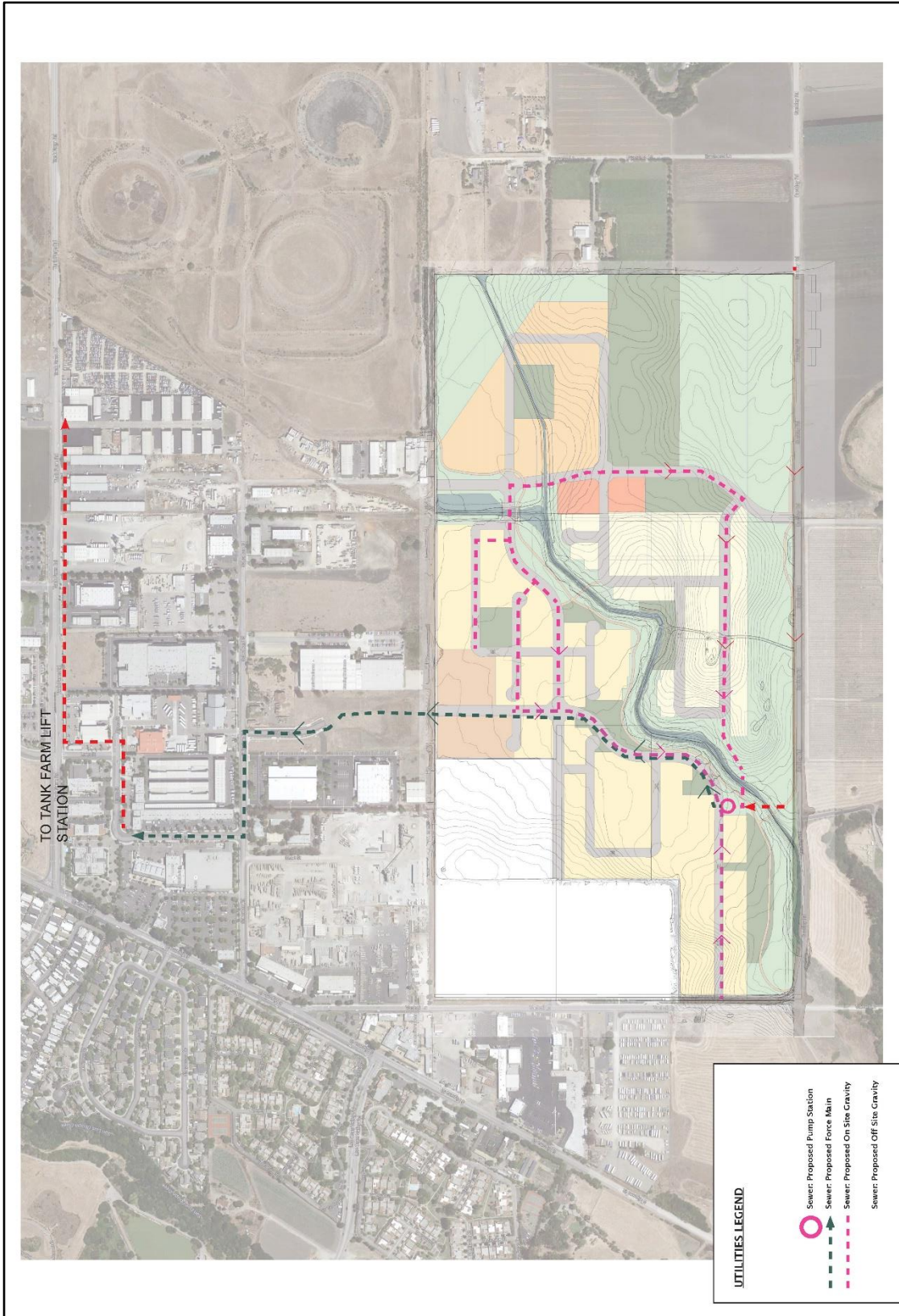


Figure 32 Sewer Master Plan

service for the Avila Ranch project will originate from this 16 -inch line, and will include the installation of pressure reducing stations to be designed by SoCal Gas.

Storm water, Hydrology and LID Compliance

The project falls under the Low Impact Development requirements of the Regional Water Quality Control Board's Post Construction Requirements. A drainage study has been prepared to analyze the project's conformance with Water Board and City of SLO drainage requirements. Stormwater treatment and retention is proposed for runoff from the new impervious areas associated with this project. Runoff from these areas will be directed to vegetated facilities that are intended to retain and infiltrate the runoff from events up to the 95th percentile 24-hour rainfall event. For larger events, these vegetated facilities will overflow into standpipes that connect to storm drain conveyance pipes that discharge to Tank Farm Creek.

Drainage for the proposed development is shown in Figure 33 and described in the following sections.

Northwest Portion of Site

The portion of the site on the northwest side of Tank Farm Creek consists of Phases 1 through 3 and is comprised mostly of medium-density single-family residences (approx. 4,000 sf lots) with some high-density multi-family residences. Runoff from these areas will be directed to onsite vegetated treatment facilities to meet treatment and retention requirements. For storms larger than the required on-site retention design storm, the vegetated facilities will overflow into standpipes that connect to a network of storm drain conveyance pipes in the streets that discharge to Tank Farm Creek at various locations.

Runoff from the public sidewalks and streets is proposed to be conveyed by surface flow in the gutters and streets to vegetated treatment facilities located in the small onsite parks and along the creek bank. These facilities will overflow into standpipes that connect to the storm drain pipe networks that discharge to the creek or a detention pond. There is currently one detention pond planned for the site. This pond will be located at the southwest corner of the site and detain the runoff from the single-family residences and streets located in that portion of the site. This pond is adequate to handle the peak flow and storm drainage needs of Phases 1 through 3. Offsite runoff that enters the site from the north and west is proposed to be collected and conveyed through the project site with underground pipe.

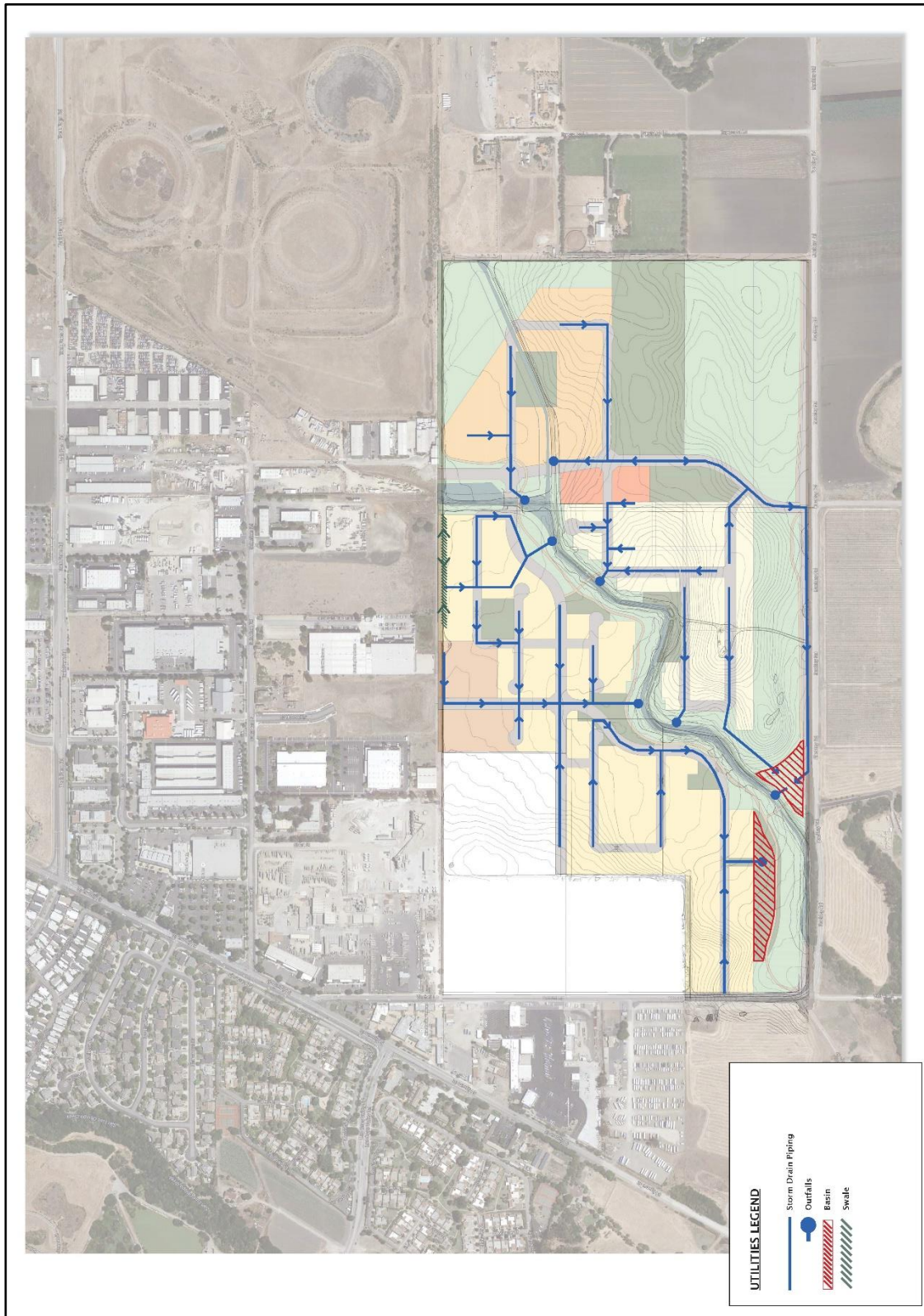


Figure 33 Storm Drain Master Plan

Southeast Portion of Site

The portion of the site on the southeast side of Tank Farm Creek includes phases 4 through 6 and is comprised of low-density single-family residences (approx. 5,000 sf lots), medium-high density multi-family residences, commercial development, and parks. Runoff from the impervious surfaces, including the public sidewalks and streets, is planned to be directed to vegetated treatment facilities located at the backs of the sidewalks to meet treatment and retention requirements. For storms larger than the required onsite retention design storm, the vegetated facilities will overflow into standpipes that connect to a network of storm drain conveyance pipes in the streets that discharge to Tank Farm Creek at various locations. Because of the peak flows associated with the site, development of this portion of the project is dependent on the installation of a portion (but not all) of the storm drainage improvements being installed as part of the Chevron Remediation project. These improvements are those located in the southeast portion of the Chevron site immediate north of the project site. They would be installed either by Chevron as part of their planned remediation efforts, or, if unexpectedly delayed, under contract with Avila Ranch LLC.

The project's design features have been developed to comply with Performance Requirements 1 through 4.

Performance Requirement 1 – Site Design and Runoff Reduction:

Under this requirement there is limited disturbance to creeks and drainage features, avoidance of compaction to permeable soils, limited clearing and grading of vegetated areas, reduction in impervious surfaces and other measures to limit offsite runoff. Tank Farm Creek will not be modified except for its realignment to its former natural course and connection to the Chevron detention basin. The project site soils show a wide pattern of permeability and those adjacent to the creek show the most consistent pattern of moderate to rapid permeability, with soils influenced by historic water flows or occasional flooding showing the lowest permeability. Soils adjacent to the Tank Farm Creek will be used for open space, recreation and for storm water infiltration, and detention.

The project will also include many features to minimize impervious surfaces, including usage of pervious pavement and pavers for R-2 driveways, usage of pervious pavers/porous concrete on at least 20 percent of parking lot areas for multifamily/commercial and town center areas (in conjunction with gutters and French drains), and narrower streets sections consistent with other Specific Plans in the community. Streets and paved areas will be surfaced drained where possible to LID catchment areas.

Performance Requirement 2 – Water Quality Treatment

The site will have an integrated system of small filtration ponds that will retain the 85th percentile 24-hour storm. Figure 23 shows the distribution of these areas and the bioswales for the project. It is estimated that approximately five percent of the surface area is required to comply with the retention requirement.

Performance Requirement 3 – Runoff Retention

The site will have an integrated system of small filtration ponds that will retain at least the 85th percentile 24- hour storm. Thirty-five percent of the site will be in open space or for parks uses, substantially reducing runoff from the project site. The ponds have a combined capacity of approximately 23 acre-feet, an amount adequate for retention of a 25-year storm, or detention for a 50-year storm.

Performance Requirement 4 – Peak Management

The onsite ponds and detention areas are designed to manage flows through the onsite ponds. The peak management strategy is to filter surface flows and to release these filtered flows into Tank Farm Creek Retain ahead of upstream flows. The ponds have a combined capacity of approximately 23 acre-feet, an amount adequate for retention of a 25-year storm, or detention for a 50-year storm.