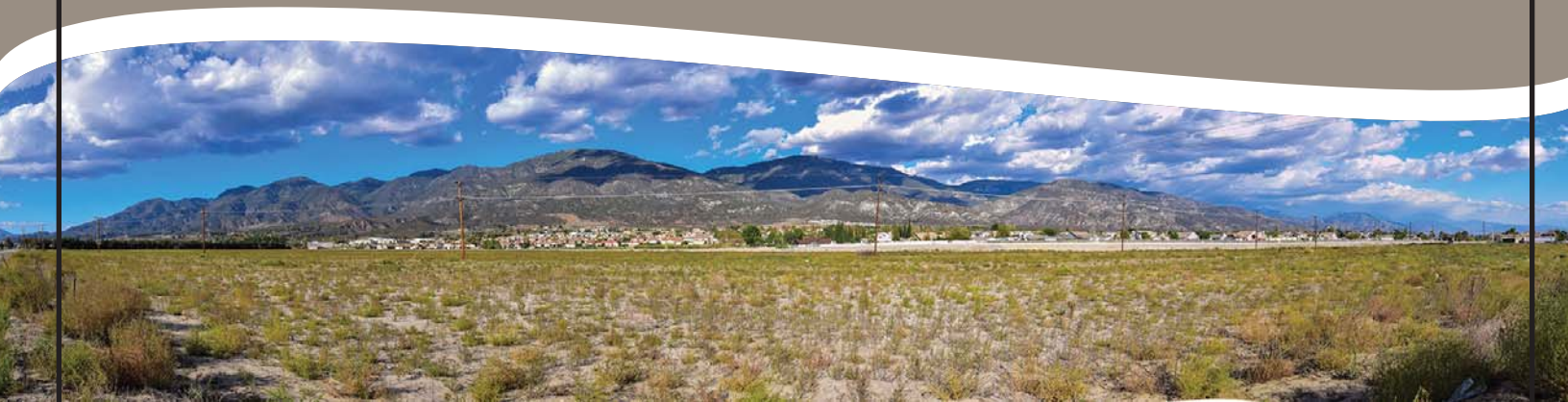


RANCHO



PALMA



Specific Plan

City of San Bernardino

November 2015

Rancho Palma Specific Plan

Prepared for:

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November 2015

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1 INTRODUCTION

1.1 Overview and Vision

The Rancho Palma Project is dedicated to create a mixed use neighborhood that respects the surrounding community by type and quality of development. The project provides additional shopping and commercial services to the area within walking distance to residents of Rancho Palma and the Verdemont Heights Community.

Rancho Palma has established the following Four Cornerstones guiding the design philosophy of the project:

1.1.1 City's Heritage

1. Establish a California-focused theme and character.
2. Create a landscape palette that is "California Friendly" incorporating native species and drought tolerant plants.
3. Provide for a compatible and quality development.

1.1.2 Neighborhood Centered

1. Provide parks as gathering places for the neighborhood.
2. Create a walkable environment to parks and commercial uses.
3. Incorporate a variety of home sizes and architectural styles.
4. Provide safe streets and a wholesome living environment.

1.1.3 Green and Healthy Lifestyle

1. Promote a healthy lifestyle with walkable park and shopping opportunities.
2. Include a commercial center near the freeway for local goods, services, and job creation, and to reduce traffic.
3. Promote energy and water conservation, and utilize California-friendly plants to reduce landscape irrigation.

1.1.4 Fiscally Responsible

1. Structure Rancho Palma's development so that it is financially self-sufficient, and does not require any new funding from the City.
2. Increase population to support existing and future businesses.
3. Provide additional sales tax revenue for the City's General fund.
4. Promote savings in the improvement of existing streets.
5. Provide for the operation and maintenance of parks and streets.

1.2 Location and Surrounding Environment

Rancho Palma is located in the City of San Bernardino's Verdemon Heights Community at the base of the San Bernardino Mountains (see Figures 1-1, Regional Map, and 1-2 Vicinity Map). The site takes access from West Little League Drive, which forms the southwest border of the specific plan area. Cable Creek Channel forms the northeast border of the site, except for an approximate one-half acre portion that is adjacent to Ronald Reagan Park. Just south of the site is an existing commercial center at the intersection of Palm Avenue and West Little League Drive.

Northeast of Rancho Palma is the Cable Creek Channel, Ronald Reagan Park and the Verdemon Heights Community. North of the site is Al Guhin Park, Chavez Middle School, North Verdemon Elementary School, and the Little League Baseball Western Region Headquarters. Southwest of the site is West Little League Drive, which is adjacent to the Barstow Freeway (Interstate 215). Southwest of the freeway are existing residences, industrial areas, and Historic Route 66. Southeast of Rancho Palma are existing commercial businesses, Palm Avenue, and the Palm Avenue/Interstate 215 interchange, the Verdemon Heights Community and industrial uses.

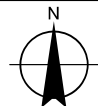


Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Figure 1-1

Rancho Palma Regional Map

Strata Palma, LLC



8,000 Feet

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Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 1-2

RANCHO PALMA

Vicinity Map

Strata Palma, LLC



2,000 Feet

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November 2015

2 DEVELOPMENT PLAN

2.1 Project Objectives

1. Establish a mixed use community for the Verdemont Heights Community with a balance of land uses including commercial, single family housing, and recreation.
2. Deliver an appropriately sized neighborhood commercial center that provides a mix of retail uses with employment growth and increased sales tax for San Bernardino.
3. Provide new single family housing in the Verdemont Heights Community with two lot size categories and corresponding home sizes to serve a variety of future resident lifecycles.
4. Increase the Verdemont Heights Community's recreation opportunities by expanding the size and/or amenities of Ronald Reagan Park.
5. Adopt appropriate standards and design guidelines to implement the development to insure compatibility to surrounding neighborhoods.
6. Promote a sense of community and character by providing neighborhood signage and monumentation.
7. Create a pedestrian environment with walkable parks and commercial uses.
8. Provide for a fiscally sound project that provides for ongoing maintenance and operation of neighborhood parks and project streets with the additional sales tax revenues from the commercial uses.
9. Improve circulation in the Verdemont Heights Community with improvements of West Little League Drive and Magnolia Avenue adjacent to the project.
10. Facilitate additional public parking with the improvement of West Little League and Magnolia Avenue.
11. Reduce the need for overnight parking of RV units on the street or driveways with the provision of a RV storage yard.
12. Reduce the water consumption thru the use of native, drought tolerant landscaping and "smart" irrigation systems.
13. Promote a "Green" project with water and energy saving measures as defined by the Sustainable Guidelines.

2.2 Land Use Plan

2.2.1 Land Use Concept

The project allows up to 120 single family dwelling units located within two residential planning areas, and up to 98,000 square feet of commercial uses in one planning area. Figure 2-1, Land Use Plan, depicts the land uses within Rancho Palma. The residential areas are designed to provide a gated single family community with access to a variety of recreational opportunities, while the commercial planning area is designed to provide retail opportunities for local residents, as well as to take advantage of the adjacent regional traffic along Interstate 215.

In addition to the residential and commercial components, two private parks and a paseo are provided within the residential portion, along with a recreational vehicle storage lot, and approximately one-half acre of parkland will be dedicated for the expansion of Ronald Reagan Park. Table 2-1, Land Use Plan Summary Table, depicts the acreage of each of the Rancho Palma land uses.

**Table 2-1
Land Use Plan Summary Table**

Land Use	Acres	Planned Units	Maximum ¹ Units
Planning Area 1 (Residential – 7,000 sf)	15.6	63	70
Planning Area 2 (Residential – 5,000 sf)	11.3	57	62
Planning Area 3 (Commercial)	9.3		
Public Park (Ronald Reagan Park Expansion)	0.5		
Private Park (Linear Park)	1.4		
Open Space (Cable Creek Channel)	3.5		
Total	41.6	120	120

2.2.2 Residential Land Uses

Rancho Palma provides for a maximum of 120 single family dwelling units in two lot sizes; 5,000 square foot and 7,000 square foot. These lot sizes are consistent with other residential areas in the Verdemon Heights Community. Planning Area 1 is designed to contain 63 dwelling units with a maximum of 70 dwelling units and a minimum lot size of 7,000 square feet. Planning Area 2 is designed to contain 57 dwelling units with a maximum of 62 dwelling units and a minimum lot size of 5,000 square feet. These residential areas will be gated, with access taken from West Little League Drive and Magnolia Avenue.

¹ Total Permitted dwelling units within a residential Planning Area may be lesser or greater than the planned number if: a) the maximum units are not exceeded for any Planning Area, and b) the overall Specific Plan does not exceed 120 units.

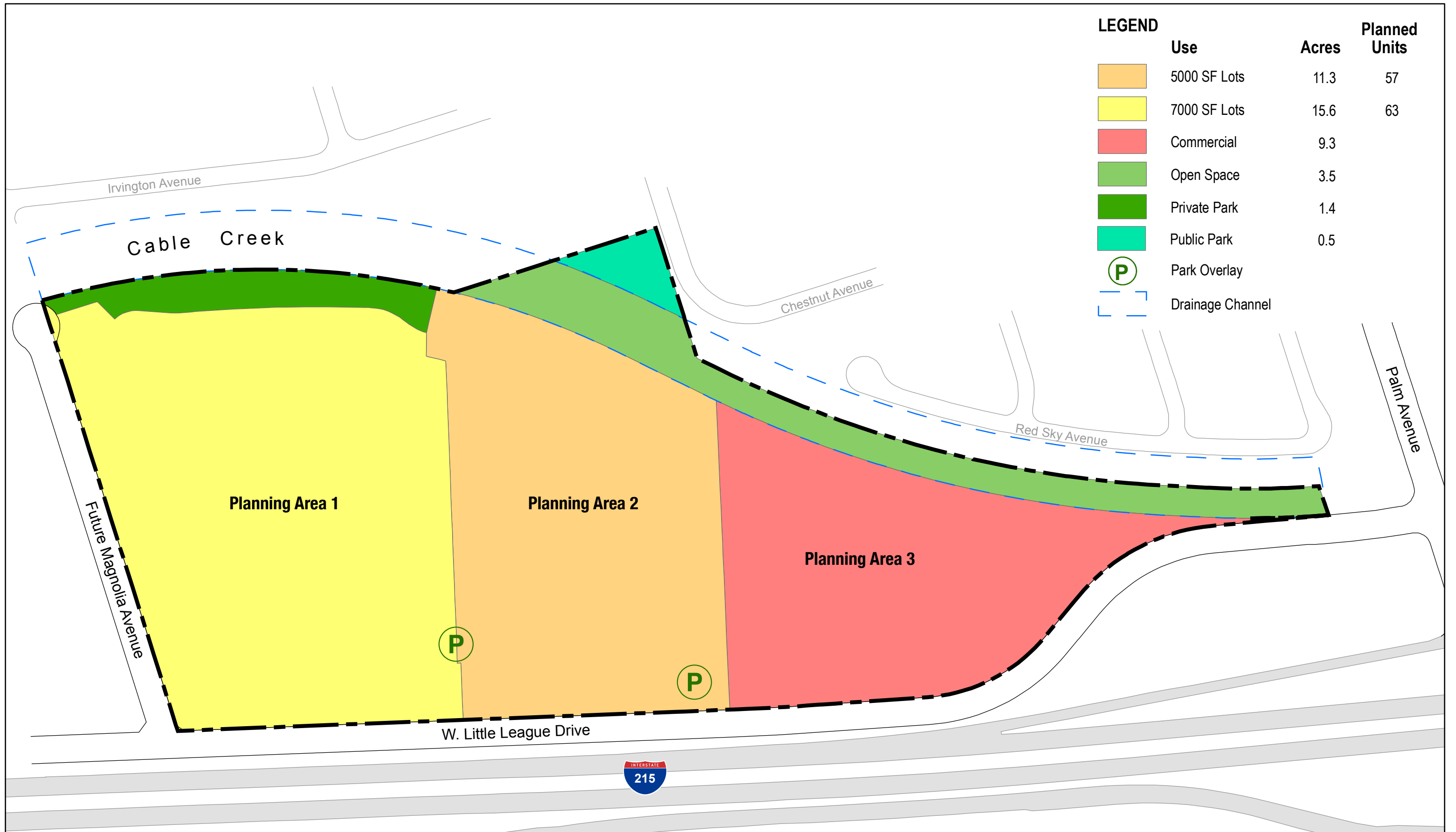


Figure 2-1

RANCHO PALMA

Land Use Plan

In addition to the dwelling units, a private pocket park and paseo will be provided, along with a recreational vehicle storage lot, and a drainage basin. Conceptual designs for the pocket park and paseo are located in Chapter 4, Design Guidelines. The final location of the pocket park, paseo, recreational storage lot and drainage basin will be determined during the site planning process.

2.2.3 Commercial Land Uses

Planning Area 3 is designated Commercial and is intended to provide retail and service opportunities for the Verdemon Heights Community as well as the regional traffic along the adjacent Interstate 215. These uses will also provide additional sales tax revenue and employment opportunities for the City of San Bernardino. The maximum amount of commercial uses permitted in the Planning Area 3 is 98,000 square feet.

2.2.4 Public and Private Parks

Two areas are designated as Park on the Rancho Palma Land Use Plan. The public park is an expansion of the existing Ronald Reagan Park, located east of the Cable Creek Channel. This parcel will be dedicated to the City of San Bernardino. The private park is a neighborhood park located adjacent to Planning Area 1. A conceptual design of the park is located in Chapter 4, Design Guidelines.

The City of San Bernardino requires 5 acres of parkland for every 1,000 residents. Using the City's formula of 3.48 residents per dwelling unit, the park requirements for Rancho Palma is approximately 91,000 square feet. The Ronald Reagan expansion site and the Neighborhood Park total approximately 83,000 square feet. The pocket park and paseo are anticipated to be approximately 13,000 square feet bringing the total park area provided at 96,000 square feet. The linear park, pocket park, and paseo will be fully improved and will be maintained by the Homeowners Association.

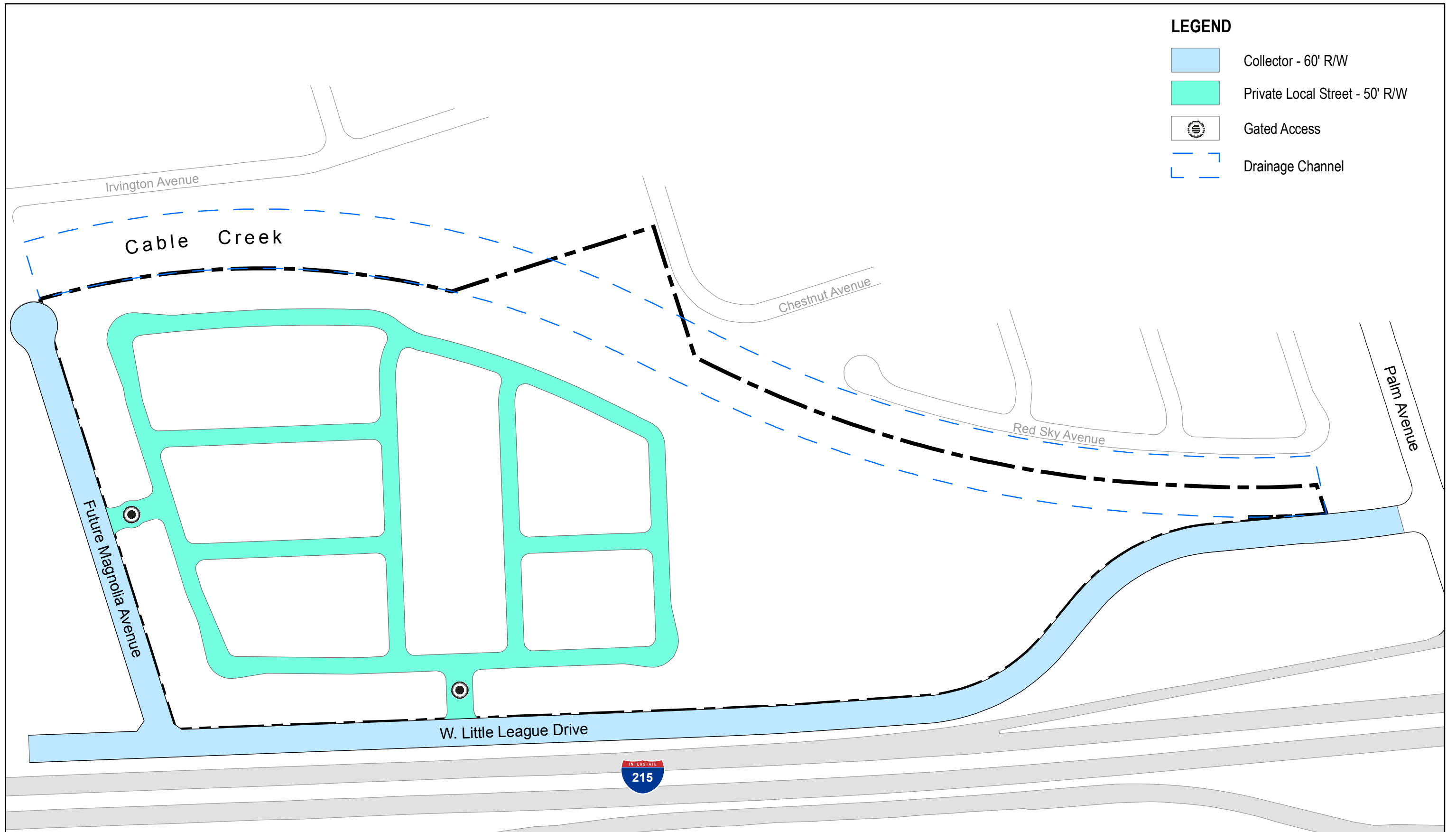
2.2.5 Open Space

The Open Space designation is for the area within the existing Cable Creek Channel. This area is operated and maintained by the San Bernardino County Flood Control District.

2.3 Circulation Plan

The Circulation Plan, shown on Figure 2-2, Circulation Plan, establishes a general layout and design standard of roadways for Rancho Palma to meet safely the transportation needs of the community.

The commercial component of Rancho Palma takes access from Little League Drive, west of Palm Avenue. This location provides easy access to Interstate 215 via the Palm Avenue interchange. It is anticipated that there will be one primary entrance to the commercial center along Little League Drive, and one delivery entrance.



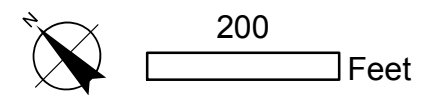
- LEGEND**
- Collector - 60' R/W
 - Private Local Street - 50' R/W
 - ⊗ Gated Access
 - Drainage Channel

RANCHO PALMA

Strata Palma, LLC

Figure 2-2

Circulation Plan



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Access to the residential component of Ranch Palma will be taken from Little League Drive and Magnolia Avenue. Both of these streets are designated as Collector Roads. West Little League Drive has a 60-foot right of way, while Magnolia Avenue has an additional 5-foot landscape area, for a 65-foot total right of way. Five foot pedestrian sidewalks will be provided along both collectors. Figure 2-3, Street Sections, depicts the street sections for Rancho Palma.

Magnolia Avenue currently exists east of Cable Creek Channel. Magnolia will be improved along the northern property line of Rancho Palma from Little League Drive to a cul de sac, west of Cable Creek Channel.

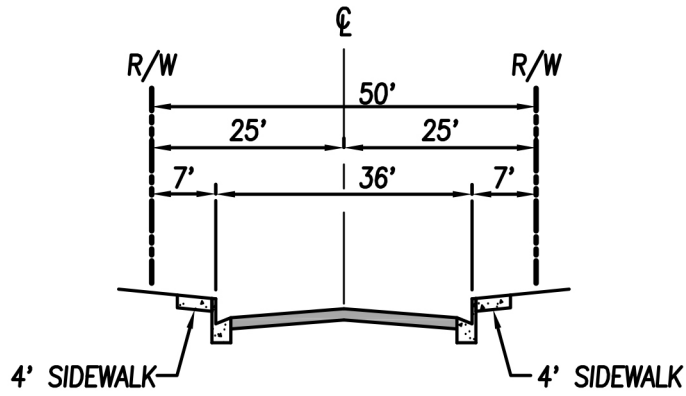
The entrances to the residential component are off Little League Drive and Magnolia Avenue. Both of these entrances will be gated. The interior roadway system will utilize Local Streets (50-foot right of way, see Figure 2-3, Street Sections) and contain 4-foot sidewalks on each side. This will allow residents pedestrian access throughout the community to the interior parks within Rancho Palma, as well as nearby community parks and school, and the adjacent commercial center. On-street parking will also be available along the Local Streets.

2.4 Water Plan

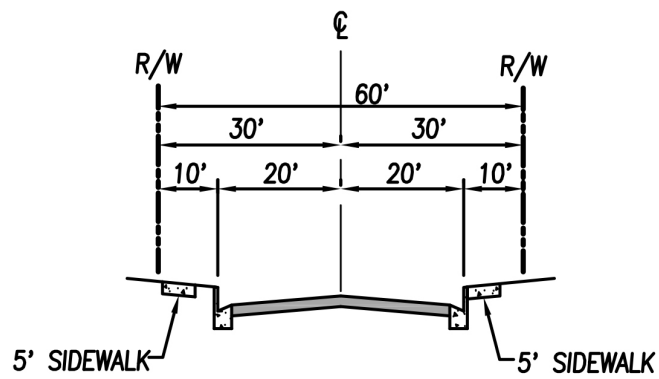
Domestic water service for the Ranch Palma Specific Plan area will be provided by the City of San Bernardino Municipal Water Department. The Conceptual Water Master Plan is depicted on Figure 2-4, Water Plan. A proposed water line will be installed within Little League Drive, connecting to an existing 24-inch water line located just south of the Magnolia Avenue/Little League Drive intersection, to an existing 16-inch water line located adjacent to the proposed commercial component, north of Palm Avenue. The residential units will access water through a proposed 8-inch looped water system located within the Local Streets. A looped water system will also be provided in the commercial center.

2.5 Wastewater Plan

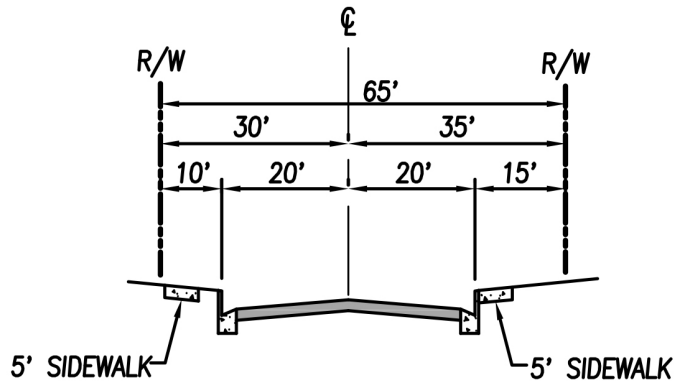
Wastewater service for the Ranch Palma Specific Plan area will be provided by the City of San Bernardino Public Works Department. The Conceptual Wastewater Master Plan is depicted on Figure 2-5, Wastewater Plan. An existing 15-inch sewer line is located within the right of way of Little League Drive. The proposed residential units will access this sewer line through a proposed 8-inch system located within the Local Streets. The commercial center will also tie in to this existing 15-inch sewer line.



LOCAL STREET
50' R/W
 N.T.S.



LITTLE LEAGUE DRIVE
COLLECTOR- 60' R/W
 N.T.S.



MAGNOLIA AVENUE
COLLECTOR- 65' R/W
 N.T.S.

Figure 2-3

RANCHO PALMA

Street Sections

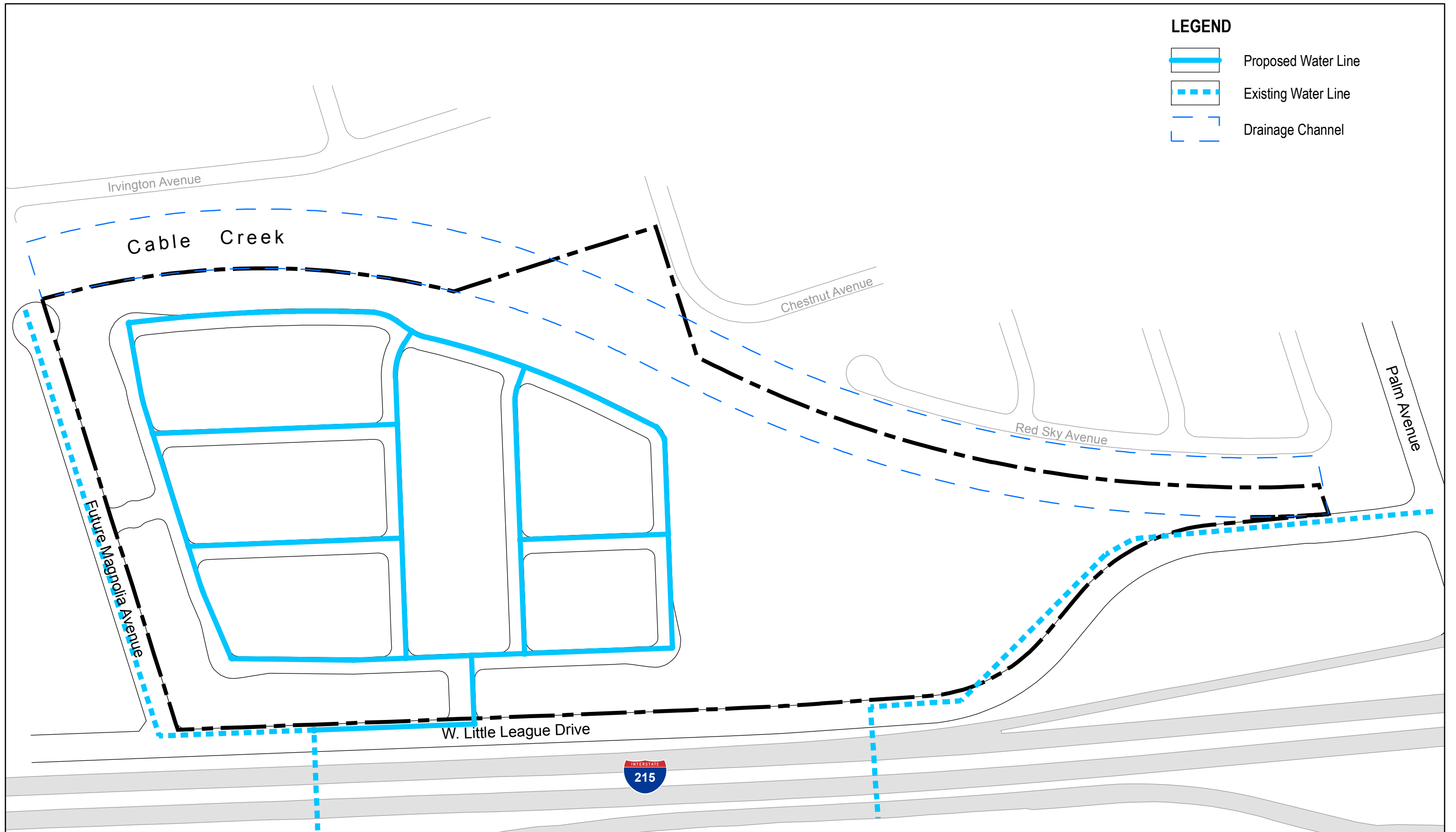


Figure 2-4

RANCHO PALMA

Water Plan

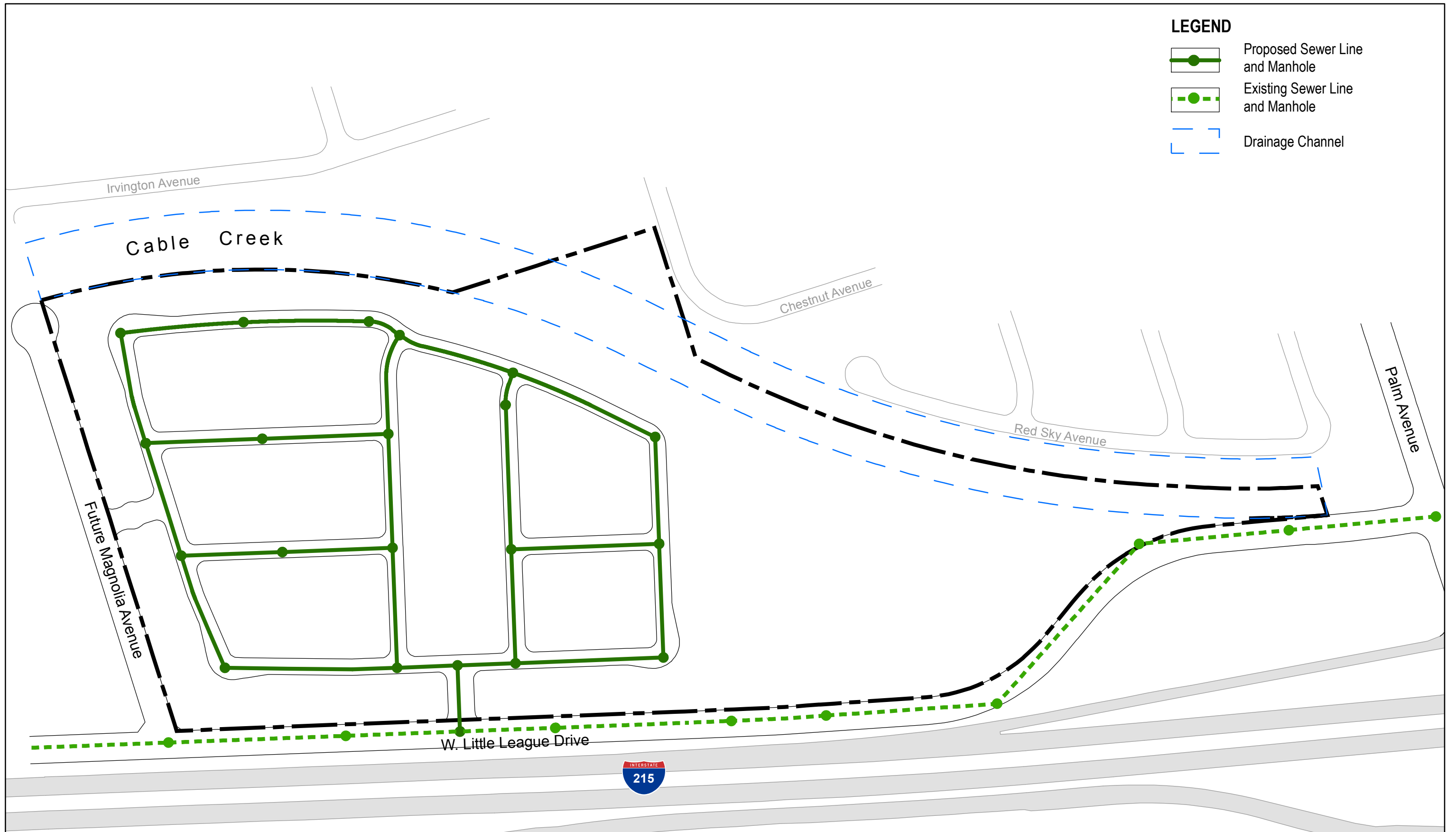


Figure 2-5

RANCHO PALMA

Wastewater Plan

2.6 Drainage Plan

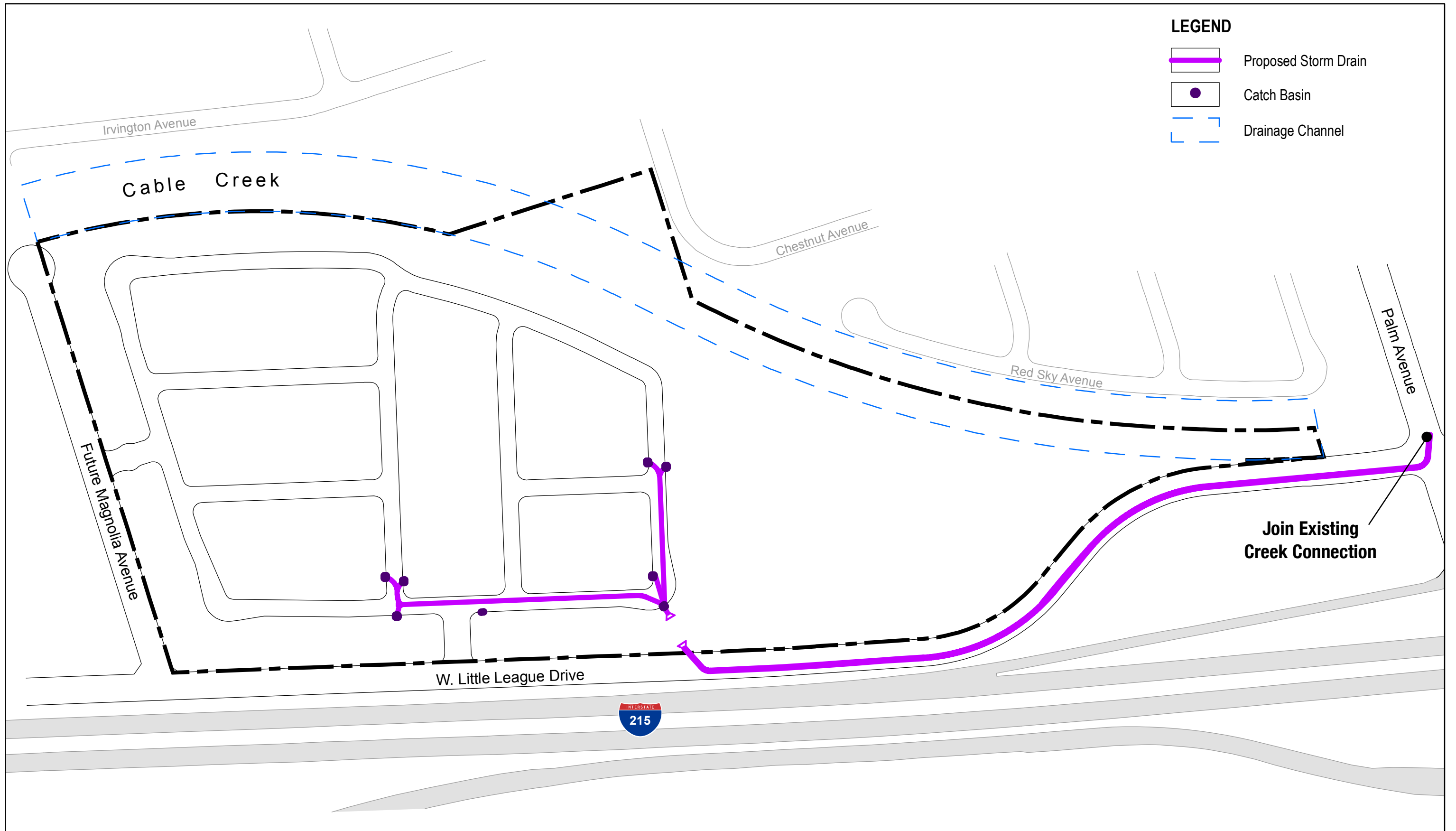
Flood protection of the site is provided by Cable Creek Channel. The channel is owned, operated, and maintained by the San Bernardino County Flood Control District.

The site currently drains to the intersection of Palm Avenue and Little League Drive. Drainage is carried overland and in a roadside swale to a catch basin and pipe connection to Cable Creek at the Pam Avenue bridge. The area experiences flooding and debris deposition in the roadway due to these flows, and the nature of the roadside swales. The project will size appropriately the connection to Cable Creek and extend a storm drain upstream in Little League to collect flows from the development.

Flows will be delivered to the storm drain through a series of catch basins and reinforced concrete pipes.

The proposed drainage system for the Rancho Palma Specific Plan area is depicted on Figure 2-6, Drainage Plan. The stormwater will be collected from the local streets and transported in storm drains to a new basin located in the southwest portion of the residential area. An additional storm drain will transport the stormwater within a new storm drain in the right of way of Little League Drive, to connect to existing facilities located at Palm Drive and Cable Creek Channel.

Prior to entering the creek, the water will be cleaned of pollutants consistent with the current MS4 permit with the County and City. The residential flows are expected to be cleaned with an infiltration basin located adjacent to Little League Drive, and the Commercial site will clean the flows with a variety of options that may include basins within landscaped areas, underground chambers, dry well, and/or porous concrete.



RANCHO PALMA

Strata Palma, LLC

Figure 2-6

Drainage Plan



200 Feet

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3 DEVELOPMENT CRITERIA

3.1 Development Standards

The purpose of this section is to specify regulations governing the use of land within the Specific Plan area. Development projects within the Specific Plan area shall comply with these regulations. Where no regulations are specified, provisions of the City Development Code will govern.

The following standards apply to development of residential, commercial, and open space/recreation areas. All such development within Rancho Palma shall conform to the development standards as set forth in the Specific Plan for the permitted uses. Locations of all proposed permitted uses shall be as designated on the Land Use Plan, Exhibit 2-1.

These regulations and general site planning provisions are further augmented by the Design Guidelines described in Chapter 4 and the Sustainable Guidelines in Chapter 5. The Design and Sustainable Guidelines are aimed at enabling users of the Specific Plan to understand its intent and apply provisions for flexibility in the plan in accordance with the City's desires.

3.1.1 Residential Development Criteria – Planning Areas 1 and 2

The following standards apply to residential development areas (Planning Areas 1 and 2) for Rancho Palma.

1. Site Development Standards as described in Table 3-1, Residential Site Development Standards Summary.
2. Development shall comply with the Design Guidelines described in Chapter 4 and the Sustainable Guidelines in Chapter 5.

**Table 3-1
RESIDENTIAL SITE DEVELOPMENT STANDARDS SUMMARY¹**

	PA 1	PA 2
Planned Number of Units	63	57
Maximum Number of Units ²	70	62
Minimum Lot Area	7,000 sq. ft.	5,000 sq. ft.
Minimum Lot Width at front yard setback, standard lot	55 feet	45 feet
Minimum Lot width at front yard setback, knuckle	20 Feet	20 Feet
Minimum Lot Depth, standard lot	90 feet	90 feet
Maximum Height (two stories) ³	35 feet	35 feet
Minimum Front Setback to dwelling unit living area or side entry Garage	15 feet	15 feet
Minimum Driveway Depth (front on garage)	20 feet	20 feet
Minimum Front Setback to porch	10 feet	10 feet
Minimum Interior Side Setback	5 feet	5 Feet
Minimum Street Side Setback	9 feet	9 feet
Minimum Rear Setback ⁴	20 feet	20 Feet

¹ All setbacks shall be measured from property line to the main structure.

² Total permitted dwelling units within a residential Planning Area may be lesser or greater than the planned number if: a) the maximum units are not exceeded for any Planning Area, and b) the overall Specific Plan does not exceed 120 units.

³ Measured from top of slab to roof. Tower features and other structures, chimneys and architectural projections may exceed the maximum building height, subject to approval by the Planning department.

⁴ For lots along a knuckle or cul de sac, the rear setback can be calculated by averaging the distance between both rear corners of the lot and the dwelling unit provided the average is not less than 20 feet.

2. Permitted Uses

The following uses are permitted in Planning Areas 1 and 2:

- a. Single-family detached dwellings.
- b. Active and passive open space.
- c. Utility easements or rights of way.
- d. Drainage Facilities.
- e. Recreational Vehicle Storage.
- f. Public and Private Recreational Facilities as described in the Rancho Palma Specific Plan.
- g. Other uses which are found by the Planning Director to be consistent with the purpose and intent of the Residential designation and which are found to be compatible with the uses stated above.

3. Accessory Uses

- a. Home occupations, as specified in the San Bernardino Development Code, Chapter 19.04.
- b. Small- and large-family, day-care homes per San Bernardino Development Code, Chapter 19.04.
- c. Model homes and corresponding signage and facilities.
- d. Secondary residential units subject to approval per San Bernardino Development Code, Chapter 19.04.
- e. Garages, carports, accessory buildings, structures and uses where related and ancillary to the primary residence subject to the provisions of San Bernardino Development Code, Chapter 19.04.

4. Prohibited Uses

- a. Commercial Uses
- b. Manufacturing Uses

3.1.2 Parks Development Criteria**1. Permitted Uses**

- a. Sports Courts including basketball, tennis, soccer, or baseball.
- b. Gazebos
- c. Tot lots.
- d. Dog park.
- e. Picnic areas and associated facilities, including bar-b-ques.
- f. Restroom facilities.
- g. Access and service roads.
- h. Remedial grading.
- i. Trails.

- j. Utility easements or rights of way.
- k. Drainage Facilities.
- l. Public Facilities.
- m. Other uses, which are found by the Planning Director to be consistent with the purpose and intent of the Park designation and which are found compatible with the uses stated above.

2. Prohibited Uses

- a. Residential Uses
- b. Commercial Uses
- c. Manufacturing Uses

3. Development Standards

- a. Lot Area: No minimum
- b. Maximum Building Height: 15 feet.
- c. Minimum Building Setbacks:
 - i. Front Setback 10 feet
 - ii. Side Setback 10 feet
 - iii. Rear Setback 15 feet

3.1.3 Open Space Development Criteria

1. Permitted Uses

- a. Access and service roads.
- b. Remedial grading.
- c. Trails.
- d. Utility easements or rights of way.
- e. Drainage Facilities.
- f. Public Facilities.
- g. Other uses, which are found by the Planning Director to be consistent with the purpose and intent of the Open Space designation and which are found compatible with the uses stated above.

2. Prohibited Uses

- a. Residential Uses
- b. Commercial Uses
- c. Manufacturing Uses

3. Development Standards

- a. Lot Area: No minimum
- b. Maximum Building Height: 15 feet.

- c. Minimum Building Setbacks:
 - i. Front Setback 10 feet
 - ii. Side Setback 10 feet
 - iii. Rear Setback 15 feet

3.1.4 Commercial Development Criteria – Planning Area 3

A commercial site is located at the southern portion of Rancho Palma, adjacent to an existing commercial center and Interstate 215. (Planning Area 3). This Planning Area will contain retail and service uses for the future residents of Rancho Palma, existing residents, and travelers. This area shall also be designed to function architecturally as a gateway into the project. The maximum amount of commercial uses permitted in Planning Area 3 98,000 square feet.

1. Permitted Uses

- a. Those uses permitted in the CG-1 (Commercial General) Zone of the San Bernardino Development Code, Chapter 19.06.
- b. Remedial grading.
- c. Utility easements or rights of way.
- d. Drainage Facilities.
- e. Public Facilities.
- f. Other uses, which are found by the Planning Director to be consistent with the purpose and intent of the Commercial designation and which are found compatible with the uses stated above.

2. Conditional Uses

- a. Those uses conditionally permitted in the CG-1 (Commercial General) Zone of the San Bernardino Development Code, Chapter 19.06.

3. Prohibited Uses

- a. Those uses prohibited in the CG-1 (Commercial General) Zone of the San Bernardino Development Code, Chapter 19.06.

4. Development Standards

- a. Lot Area: 10,000 square feet minimum.
- b. Maximum Building Height: 30 feet.
- c. Minimum Building Setbacks:
 - i. Front Setback 10 feet
 - ii. Side Setback 10 feet
 - iii. Rear Setback 0 feet
- d. Maximum Lot Coverage: 50 percent

5. Signage

Commercial signage shall be consistent with Chapter 19.22 of the San Bernardino Development Code as well as Section 4.5, Commercial Signage Guidelines within the Rancho Palma Specific Plan, with the following exceptions:

- a. One Freeway Multi-Tenant Center Identification Sign is permitted in Planning Area 3
- b. The maximum sign area for the Multi-Tenant Center Identification sign shall be 150 square feet per face.

4 DESIGN GUIDELINES

4.1 Introduction

The Design Guidelines will be utilized to direct the future physical development of the Rancho Palma Specific Plan. In order to create a unique neighborhood structure, these neighborhood guidelines will provide a framework for site planning and architectural themes. The Design Guidelines are not intended to be interpreted as a rigid formula for design, but are to encourage creativity and cohesion of architecture and landscape design.

4.1.1 Purpose

The Design Guidelines for the Rancho Palma Specific Plan are intended to establish neighborhood guidelines and standards for the Project to allow the creation of a quality and aesthetically pleasing environment. The use of these guidelines will serve to direct the overall design of the Rancho Palma Specific Plan and assure a quality neighborhood character, appearance and land use compatibility.

These Guidelines will also serve as design criteria for use by planners, architects, landscape architects, engineers, builders and future property owners. They will provide a viable framework and clear direction during the development process, without limiting innovative design. The result will be a neighborhood with a strong sense of identity, character and cohesiveness.

Through cohesive neighborhood design and quality site planning, the Rancho Palma Specific Plan will offer a diverse living environment for its residents. The Rancho Palma property will be identified by unified design elements such as architecture, landscaping, trail networks, walls, fencing and entry treatments, all of which will contribute to a quality neighborhood environment.

The guidelines have been crafted to ensure compatibility and continuity within the Specific Plan. Variation of building designs are encouraged to allow the neighborhood to establish its' own design character, yet maintain continuity throughout the development. The following guidelines should be incorporated to provide a variety of quality housing types, adequate infrastructure and a pedestrian network that integrates into the City of San Bernardino:

1. Provide the City of San Bernardino with necessary assurances that the Rancho Palma neighborhood will be developed in accordance with the quality and character proposed within this Specific Plan.
2. Design a neighborhood that acknowledges the topographic, geologic and hydrologic opportunities and constrains of the land.
3. Design neighborhoods that integrate into the regional alternate transportation system, including bus and bicycle systems.
4. Plan neighborhoods that connect with the larger neighborhood, yet are sensitive to the human scale and encourage pedestrian activity.

5. Design a neighborhood that incorporates neighborhood parks, trails, and open spaces where neighbors can meet and children can play.
6. Create a neighborhood that reflects anticipated marketing needs and public demand by providing a range of housing types, which will be marketable and compatible with the adjacent neighborhoods of the City of San Bernardino.
7. Provide planning provisions for a safe and efficient circulation system composed of a network of planned local roadways designed for appropriate traffic and user needs.
8. Establish a standard in neighborhood design and implement it consistently over an entire new neighborhood creating an identifiable place.

The intent of these Design Guidelines is to be flexible to respond to market conditions, but not compromise quality site development. The flexibility of these Design Guidelines is intended to allow for changes in lifestyles, desired housing types, economic conditions, and overall market influences.

4.1.2 Design Intent and Elements of a “Great Neighborhood”

The goal of the Design Guidelines is to promote both visual compatibility and variety in a neighborhood setting achieved by utilizing a number of compatible traditional and contemporary styles. The principal design criteria and architectural styles are not intended to be restrictive, but are meant to assist in the design process.

1. Recommended Concepts

The following parameters are recommended concept designs:

- a. Create quality architecture designs and execute them consistently throughout the residential and commercial uses of the neighborhood.
- b. Create neighborhood designs that integrate architecture, site planning and landscape.
- c. Ensure that streetscapes and street spaces are attractive and comfortable.
- d. Encourage the specific use and selection of details that correlate well with the designed floor plan.

2. Discouraged Concepts

The following parameters are to be avoided in concept design:

- a. Harsh contrasts of materials and/or colors.
- b. Inappropriate scale.
- c. Poor selection and execution of details.
- d. Extreme interpretations of the characteristics for each style.
- e. Lack of window treatments or articulation, which result in flat, blank walls specifically on the rear elevations and side elevations, visible from public views.

4.2 Residential Architectural Guidelines

4.2.1 **Architecture Styles**

The residential architectural styles chosen for the Rancho Palma Specific Plan reflect the Verdemon Community’s heritage. They are appropriate to the climate zone and are capable of contemporary interpretation and variation. Their inherent attractiveness, informality, and charm have enabled these styles to remain popular over a long period of time.

It should be emphasized that the renderings provided for the architectural styles on the following pages are representative of design concepts and architectural features envisioned for the Rancho Palma Specific Plan. The photographs shown are not intended to be exact duplicates of the future product types for Rancho Palma, but they are intended to reflect design elements.

The proposed architectural styles include, but are not limited to the following:

- California Ranch
- Craftsman
- Spanish

1. California Ranch

Elements	Style Features	Enhanced Features
FORM	Low horizontal rambling profile arranged linearly and relating to outdoor spaces (gardens, courts, patios, etc.)	
ROOF	4:12 standard, low pitch gable and hip 25% opposing and 75% parallel hips Composition shingle or concrete tile with a shake texture 12 inch rake overhang Wide projecting eaves with exposed rafters and/or fascia boards	Roof Dormers
WALLS	Light to medium stucco sand finish	Full brick on stone walls
WINDOWS	Multi-paned windows in varying sizes and types, sometimes configured in horizontal bands Proportions more horizontal in nature	Wood windows Shutters
CHIMNEYS	Stone or brick detail, same as façade accent material	All masonry chimney

Elements	Style Features	Enhanced Features
DOORS	<p>Entry and surrounding will be covered by the front porch</p> <p>Front door shall be cross pattern with or without windows in upper half</p>	<p>Dutch doors</p> <p>Windows in top panels</p>
COLORS	<p>Trim – Soft tinted whites, in subtle contrast to the body color. Fascia and garage doors maybe in the same soft white or contrasting color.</p> <p>Body – Soft, light to mid-value hues of beige, tan, yellow, gray, and green.</p>	
DETAILS	<p>Wood knee braces at porch posts</p> <p>Decorative trim at gables or rooftop details such as cupolas</p> <p>Simple door and window trim</p> <p>Wood posts at guardrails</p> <p>All spark arrestors shall be low profile</p>	<p>Masonry door and window surrounds</p> <p>Masonry wainscots at wall plates</p>



California Ranch

2. Craftsman

Elements	Style Features	Enhanced Features
FORM	Simple two story box plan form with Vertical and horizontal breaks	Varied plan shapes
ROOF	Basic gable roof with side-to-side or front-to-back with cross gables Roof Pitch from 3 ½:12 to 8: 12 Architectural composition shingles (20 year minimum quality) or shake texture flat concrete tiles 12" to 18" overhangs at rakes 18" to 24" overhangs at eaves	Varied porch roofs – shed or gabled 18" to 36" overhangs at eaves Open eaves overhangs with shaped roof rafter tails Decorative gable ends with wood or cementitious trim accents
WALLS	Light to medium sand finish stucco Wood or wood-like lap or shingle siding inside gables on front elevation	Stone base accent
WINDOWS	Vertically hung upper mullioned windows at front elevation and in high visibility areas Often arranged in pairs Vinyl windows	Single hung windows in front elevation Feature three or more ribbon windows Layered wood trim at doors and windows
CHIMNEYS	Trim element at crown of stucco chimney	Blended stone or brick chimney
DOORS	Two to six paneled doors	Dutch doors with window in top panel.
COLORS	Body – Medium to dark value earth tones Trim – Dark value browns that are reminiscent of stained wood and mid value whites	

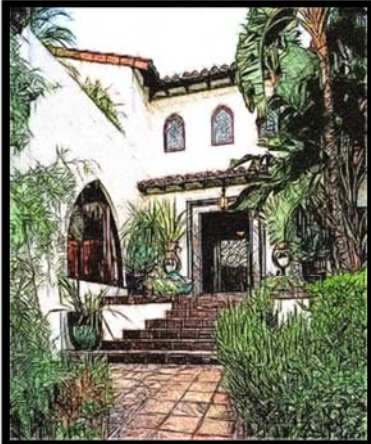
Elements	Style Features	Enhanced Features
	Accent – Earthy medium to dark shades of green and burgundy	
DETAILS	Entry porches with heavy square columns or posts on stone or brick piers Arts and crafts style lighting Shaped wood header trim at windows and doors All spark arrestors shall be low profile	Full porches with heavy square columns or posts on stone piers. Battered style columns Stone and brick base accents Decorative ridge beams Triangulated knee braces



Craftsman

3. Spanish

Elements	Style Features	Enhanced Features
FORM	Simple one or two stories massing	Round or square tower element.
ROOF	Simple hip or gable roof with one or more intersecting gable roof(s) 3 ½ : 12 to 4 : 12 roof pitch Barrel or "s" shaped concrete roof tiles Flush to 12 inch overhangs at rakes 12 to 18 inch overhangs at eaves	Shed roof over porch Boosted tiles with mudded bird stops
WALLS	Light to medium stucco sand finish	Smooth stucco finish
WINDOWS	Multi-grid lines in windows approximately 12" by 12" One (1) two inch minimum recessed feature window at front elevation All front and visible windows to have stucco or wood trim Vinyl windows	Feature recessed arched window Arched windows Windows in garage doors Shutter with decorative hardware
CHIMNEYS	Trim element at crown of stucco chimney	Tile or clay architectural element on vertical surface
DOORS	6-8 paneled doors.	Heavy plank doors
COLORS	Body – Light value, warm hues and off whites Trim – Mid to dark value brown tones reminiscent of stained wood Accent – Clear shades of blue, green, rust and burgundy	
DETAILS	Decorative grilles Wooden Posts (6 inch X 6 inch minimum or iron balcony on front elevation 4 inch header trim minimum Spanish style lighting All spark arrestors shall be low profile	Shaped rafter tails at feature areas Balconettes Arched stucco column porches Shutters at front or visible elevations



Spanish

4.2.2 Garage Placement

A variety of garage placement solutions are recommended to be incorporated into the overall design of the homes. The type of garage placement will be dictated by lot size, lot width, depth, and product placement. It should be noted that not each garage condition is appropriate for each lot size or configuration. The following garage placements could be implemented within Rancho Palma:

1. Forward Garages - Forward garages are located at least 5' (10' maximum) in front of the front elevation living space.
2. Shallow-Recessed Garage - Shallow recessed garages are located 5' or more behind the front elevation living space.
3. Mid-Recessed Garage- Mid-recessed garages are located 12' or more behind the front elevation/living space.
4. Swing-In Garage - Garage doors on swing-in garages are located on the side of the home, as opposed to the front. This garage placement may be located at the front, side, or rear of a plan or split, thereby reducing the impact of garage door faces on the streetscape.
5. Corner with Side-Street Entry Garage - This garage type allows the option of entering from the side street, thereby eliminating the front facing garage and driveway.
6. Porte Cocheres - An additional, partially covered parking space that also serves as an occasional outdoor private space.

4.2.3 Street Scene: Design Variation Requirements

The front setbacks of both the garage and living space of adjacent buildings shall vary to provide visual interest along street scene.

1. A variety of setbacks at porches, living spaces or covered entries are encouraged.
2. To provide visual interest along the street scene, a variety of garage placements with varying setbacks are recommended. Strict compliance with the minimum garage setback is discouraged so as not to contribute to a repetitious and monotonous appearance along the street.
3. Varying roof planes are encouraged, when appropriate, given the architectural style of the home.
4. Variable lot sizes may be used to increase selection and variety in house and lot size configurations.

4.2.4 Building Elevations

The building design should be sensitive to the visual character of the elevations, the street scene and the pedestrian. In addition, the building facades should be detailed to avoid long, plain surfaces. A combination of the following Design Guidelines should be incorporated to create building relief and quality building elevations:

1. Wall surfaces should contain a variety of articulations, such as offsets, projections, penetrations, or change of surface textures to reduce the apparent scale and provide visual interest.
2. Exposed side and rear elevations shall have articulation such as, but not limited to, modulated facades, window treatment, second story projections and balconies.
3. One-story massing on exposed side and front elevations is encouraged on corner side lots.
4. Entries should be covered, recessed or projected from the building to be clearly defined and add relief to the front elevation.
5. Architecturally appropriate design features, such as pillars, columns, trellises, bay windows, and other architectural features should be incorporated into the building elevations.
6. Second stories on front elevations should be stepped back or have projected elements to add relief to the higher building elevations.
7. Recessed doors, windows, and wall openings should be used to create a sense of depth and shadowing for visual variety and interest.
8. Balconies and porches are encouraged to articulate and enhance the building elevations.
9. Ornamental features including wrought iron and exterior light features should be utilized to create interest.
10. Detail elements such as shutters, exposed rafter tails or cross beams, decorative grille work, decorative stucco or clay pipe vents, decorative ceramic tile and/or other similar features are encouraged to provide articulation.
11. Varied street scenes can be achieved by varying roof planes in size and pitch
12. Intercepting hip or gable roofs are encouraged based on the architectural style of the home.
13. Attention should be given to the composition of the building mass. Box-like designs are discouraged, except when appropriate to the architectural style.
14. Vary the height and roof levels of the residence so that it appears to be divided into smaller massing elements. Architectural projections could be used to achieve this goal.
15. Articulate building forms and elevations with varying rooflines, roof overhangs, and intermediate roof elements to create strong patterns of shade and shadow.
16. Just as stepping the second story mass improves the side yard, it can be used to improve the front yard scene. As an example, the second story should be set back in relationship to the garage face or living space below it.

17. The designer should envision the building form as a series of interlocking masses rather than a rectangular or "L" shaped box. Therefore, achieving a more aesthetic design solution.

4.2.5 Architectural Elements

Architectural elements will play a significant role in the establishment of an architectural style. Therefore, attention should be given to the application of such elements. These elements include architectural detailing, colors and materials. The encouraged architectural elements are described below:

1. Unit Entries

- a. The entry serves several important architectural functions: it identifies and frames the front doorway; it acts as an interface between the public and private spaces; and it acts as an introduction to the structure while creating an initial impression.
- b. The entry should be designed and located so as to readily emphasize its prime functions. Accent materials are encouraged to be used to further emphasize the entries.
- c. Courtyard entries at the front elevation are encouraged to break up the building's mass and to provide private internal outdoor space
- d. If the front door location is not obvious or visible because of building configuration, the entry should direct and draw the observer in the desired path. The design of the entry area in merchant-built housing should be strong enough to mitigate the impact of the garage on the facade.
- e. Entry doors and doorways should be proportional to the architectural style of the structure.
- f. Front porches are encouraged in order to create an inviting neighborhood street scene and promote friendly interaction among neighbors.
- g. Porches and balconies shall be designed as an integral component of the building's architecture.

2. Doors

- a. Emphasis should be placed on the design and type of entry door used. It functions as the major introduction to the interior of the house and shall be compatible with the architectural style of the home.
- b. Recessed door, window and wall openings are encouraged at all front elevations, and other side or rear elevations as viewed from public streets, when appropriate given the architectural style of the home.
- c. The door may be covered by an overhead element or recessed into the wall plane.

- d. The entire door assembly should be treated as a single design element including surrounding frame, molding and glass sidelights.
- e. Wood may be used for the entry door. Wood grain texture and raised or recessed panels contribute to the appeal of the door. Greater use is being made of metal entry doors but in order to be acceptable, they should possess the same residential "feel" provided by the wood grain and panels.
- f. Doorways may be rectangular or round-headed and fully recessed. Spiral columns, arches, pilaster, stonework, decorative tiles, or other sculptural details are encouraged be integrated into the doorway design to enhance the visual importance of the entry door.
- g. The use of glass in the door and overall assembly is encouraged. It opens the entry and provides a sense of welcome and human scale. It can be incorporated into the door panels or expressed as single sidelights, double sidelights, transom glass or fan windows.
- h. Flexibility is allowed concerning the color of the door. It may match or contrast the accent trim, but is encouraged to be differentiated from the wall color.

3. Windows

- a. Typically, the location of windows is determined by the practical consideration of room layout, possible furniture placement, view opportunities and concern for privacy. Greater design emphasis should be directed to ensure that window placement and organization will positively contribute to the exterior architectural character.
- b. All windows are encouraged to be consistent with the architectural style of the building.
- c. Non-recessed windows should be surrounded with articulated architectural elements such as wood trim, stucco surrounds, shutters or recessed openings, shutters, pot shelves, ledges, sills, plant-ons, and rails, or other similar elements that complement the architecture.
- d. Proper window design and placement on rear and side elevations is encouraged. Since side elevations and second story rear windows are frequently visible, greater design effort and budget prioritization should be given to these elevations.

4. Garage Doors

- a. Garage types should complement the architecture, door designs, and plotting techniques. This approach will minimize the potential for repetitious garage doors framing both sides of a residential street. Variations may include, but are not limited, to the following:
 - i. Employment of second-story feature windows above the garage.
 - ii. Strong architectural entry elements.

- iii. Designs with a mix of 2 and 3 car garages.
- iv. The use of tandem garages incorporated into the building design.
- v. Garage plans with a double door and a single door plan. These plans are recommended not to be placed next to each other.
- b. If applicable, where lot width permits, some plans should include swing-in or side entry garages with reduced front yard setbacks.
- c. The design of the garage door should relate to the overall architectural design of the residence. Colors should be complimentary to the main structure.
- d. Ornamentation of garage doors should be provided to add visual interest from the street scene when appropriate given the architectural style.
- e. The use of the sectional, wood or metal, rolling garage door is recommended since it maximizes the availability of useable driveway length.
- f. Several different panel designs are encouraged to be utilized. Metal doors should only be used when they include either texture or raised panels of a "residential" nature. The use of window elements is encouraged.

5. Shade and Shadow

Homes should be situated on site to maximize shade. Therefore, the following considerations should be incorporated to maximize the benefits of proper building orientation and environmental opportunities of the site:

- a. Buildings should be oriented to take advantage of the natural light, heat, shade, and shadow, which will help reduce energy consumption and encourage energy conservation.
- b. Lot size and configuration should consider future orientation of a structure to take advantage of shade and prevailing winds.
- c. Covered entries, balconies and porches should be incorporated to provide shadow and shade for each residential unit.
- d. Windows should be framed with compatible materials to create well-defined edge treatments and are encouraged to be designed to provide distinctive shadows on the building facades.

4.2.6 Residential Roof Form

1. Roof Pitch

- a. Roof pitches shall be consistent with the proposed architectural style.
- b. A single roof pitch should be used on opposite sides of a ridge. Shallow pitches tend to lessen the apparent building mass.

2. Roof Types

- a. The use of different roof types will add variety and interest to the street scene. Changing the roof form also helps break up a building's mass and apparent scale. However, the roof characteristics should be consistent with the architectural style that is chosen.
- b. Hip, gable and shake-like material may be used separately or together on the same roof. Avoid a canyon effect in side yards when both buildings have front-to-rear gables, by providing dormer or hip elements. Repetitious gable ends along rear elevations should be avoided. Roof forms with pitch changes at a porch or projection are encouraged where it is style appropriate.
- c. Roof forms having dual pitches such as Gambrel or Mansard should not be used.
- d. Maximize variations in rooflines by offsetting roof planes and combining single-story elements with two-story elements. Long uninterrupted rooflines should be avoided.
- e. Mechanical equipment is not permitted on roofs.

3. Overhang Projects and Covered Porches

- a. Substantial overhangs are encouraged as a response to solar and climatic conditions, as well as architectural enhancement.
- b. The inclusion of covered porches and entries are encouraged as part of the product mix. They expand sheltered living space, create entry statements and provide visual relief.
- c. Rear covered porches may differ from the roof in both pitch and material, but front porches should retain at least one of these two characteristics.

4. Stepping the Roof Form

- a. Steps in the roof respond to the interior room arrangement and provide visual relief and interest.
- b. A vertical step within the ridgeline should be at least 12" – 18" in order to create visual impact and allow for adequate weatherproofing.

5. Solar Panels

- a. The frames should either match the roof or fascia color.
- b. Support equipment shall be enclosed and screened from view.

4.2.7 Accessory Items**1. Patio Covers, Trellises**

- a. Patio covers, trellises, pergolas or similar exterior structures when used are encouraged to reflect the character, color and materials of the building to which they are related.

- b. Supports and framing members should conform to the guideline criteria for columns and posts.
- c. Materials of accessory structures should be limited to, and compatible with, the dwelling's exterior siding, trim and roof material.

2. Air Conditioning Units

All mechanical equipment should be ground mounted and screened from public view. Further consideration should be given as to air conditioning unit pad placement within the rear yard to minimize impact on yard use and layout.

3. Awnings

Canvas awning of solid accent color may be permitted with moderation. Metal awnings are permitted as long as they are complimentary to the architecture. The decision to provide awnings should include consideration of their maintenance and deterioration for projects without maintenance associations. The continuous maintenance of the awning is recommended to be required through the HOA or CC&Rs to ensure their intended appearance.

4.2.8 Materials and Colors

1. General

- a. The appropriate selection of materials and colors will produce homes that possess their own individual identity, while remaining compatible with the surrounding residences and contributing to the overall quality of the neighborhood.
- b. Exterior plaster (stucco) is an acceptable exterior building material.
- c. Use of wood, pre-cast concrete, stone/stone veneer, and tile is acceptable, when in conformance with the overall building design.
- d. Exterior surfaces should have only a limited number of colors, one or two base colors and two or three trim accent colors.
- e. Exterior building materials are recommended to be compatible with the surrounding environment and the architectural style, yet varied enough to create distinct neighborhood identities.
- f. Accent colors are encouraged which are lighter or darker to highlight the character of the structure. Bright and non-earth tone colors are not recommended except as accents.

2. Roof Material

- a. It is neither necessary nor desirable that the neighborhood should have a single type or color of roof. Use of a single color or roof type creates a sense of monotony that contributes to a monolithic appearance when viewed from a distance. Clay tile, concrete tile

and comparable appearing materials are acceptable roofing materials. Fiberglass and aluminum roofing is not allowed.

- b. Roof colors should relate to the wall and fascia color.
- c. Roofs should be of a generally neutral tone
- d. Tile roofs are encouraged to be a consistent blend, with one color being more neutral. Medium to strong color contrasts within the blend should be avoided, unless warranted due to the architectural style of the home.
- e. Roof vents should be the same color as the surrounding roof surface.

4.2.9 Residential Site Design

The following Site Design Guidelines will be used in the development of the residential component of Rancho Palma. To ensure quality site planning is achieved, the following elements should be incorporated and implemented consistently throughout the residential areas:

1. Street Scene

- a. Vary building setbacks and plotting to create visual interest along the street scene. Enhanced landscaping should occur at the entries to identify the points of entry and set the tone for the development. The landscape plantings at these areas should be designed to complement the road edge transition and clearly emphasize the entry into the neighborhood.
- b. Pedestrian walkways should incorporate bollards, or similar type of pedestrian level lighting techniques, that is uniform, unobtrusive and complementary to the architecture and entry monumentation of the Rancho Palma Specific Plan.

2. Building Placement

Buildings should be oriented with sensitivity to the streetscape and with consideration to the interface between structures. In addition, homes should be plotted to encourage pedestrian movement throughout the neighborhood, allowing areas for sidewalks. Placement should also allow the opportunities for parks within the neighborhood to provide a place where neighbors can meet and children can play. The following are elements that should be incorporated into building placement:

- a. Create a distinct sense of neighborhood and place by designing attractive and comfortable street scenes and street spaces.
- b. Develop compatible relationships between topography, building placement, and existing open spaces.
- c. Incorporate connectivity through sidewalks throughout the neighborhood where feasible given the site's overall layout.

- d. Place buildings that allow architectural forward, recessed garages or a variety of garage conditions to create a visually interesting, varied and pleasing streetscape.
- e. Private outdoor spaces are encouraged to be designed with consideration for privacy.

4.3 Commercial Guidelines

The Rancho Palma Commercial Center is designed to provide retail sales and services to the Verdemon Community as well as the regional traveler along Interstate 215. These commercial guidelines are not intended to be interpreted as a rigid formula for design, but are to encourage creativity and cohesion of architecture and design.

4.3.1 Architectural Character and Design

The Rancho Palma Commercial Architectural guidelines below provides for the ability to create an inviting environment that considers the enhanced pedestrian experience goal. This section offers successful principles to promote and create visually interesting and balanced architectural elements that maintain a distinct quality and cohesive built pattern. Figure 4-1, Commercial Architectural Themes, depicts the commercial architectural themes envisioned for Rancho Palma. These themes will be compatible to the proposed residential architecture and will be tied together with the landscape design.

The following Architectural Design elements will help maintain architectural quality while providing great flexibility and promoting individual style.

1. Building and Massing

The intent is that the building forms should be treated in a three dimensional, sculptural way with the possibility of a variety of roof forms through the following guidelines:

- a. Varying building massing with appropriate "human" scale.
- b. Building heights should result in varied roof lines.
- c. Encourage overhangs to screen summer sun and allow for solar gain in the winter.

2. Exterior Colors and Materials

The intent is to design buildings with colors and material that are varied.

- a. Provide variety in varying materials, colors and texture.
- b. Avoid reflective materials that produces glare.
- c. Avoid large areas of dark colors that tend to absorb heat. Provide for thicker walls and/or insulation to retain heat for winter cooler temperatures.
- d. Encourage a variety of materials such as:
 - i. Stone
 - ii. Brick
 - iii. Wood
 - iv. Tile
 - v. Concrete
- e. Regionally-appropriate and compatible materials shall be used. Materials and colors shall be compatible with the existing environment, with the intent of reducing reflected heat and glare into exterior public areas.



RANCHO PALMA

Strata Palma, LLC

Figure 4-1

Commercial Design Themes

Not to Scale



FORMA

November 2015

3. Entrances and Fenestrations

The purpose of doors and windows are to provide entry, light to the inside, and provide outside view of displays.

- a. Entry doors should be transparent as possible.
- b. Openings should be at least 30% of the total façade area.
- c. Openings should be designed to maximize natural light into the building and to allow visibility of the interior display from the outside.
- d. Fenestrations should also have an aesthetics role by providing shade and shadows on façades.
- e. Fenestrations should be set back from the front façades to get visual relief.

4.3.2 Circulation and Parking

The majority of the commercial center patrons come by car and without easily accessible parking, many potential visitors, may be attracted to other commercial and entertainment centers with more convenient parking. Thus, the continued vitality and future economic success of the center depends heavily on providing access to convenient, strategically located parking.

1. Streetscapes

Streets and streetscapes must be designed with both cars and pedestrians in mind to ensure a healthy and vibrant commercial center.

- a. All the elements – buildings, signs, landscaping and furniture – together should create a unified and coherent visual identity and public space.
- b. Colorful and themed awnings and outdoor sidewalk umbrellas can add a great deal of vitality and excitement to an area as well as provide important sources of shade for pedestrians and customers.
- c. Patterned pavement and special paving materials should be used to designate intersections, pedestrian crossings, entries, parking plazas, and places of special interest.
- d. Bike racks should be installed.
- e. Bollards or other approved elements shall be placed between noted pedestrian and vehicular zones.

2. Parking

Provide adequate access and parking.

- a. Allow and promote uses to have shared parking.
- b. Where feasible, separate employee parking and delivery areas from customer parking.

4.3.3 Lighting Design

Lighting will be used to enhance, unify and reinforce the character of the overall commercial center design theme. Lighting elements should promote safety, provide functionality, and be efficient. Lighting should also be complementary to building and streetscape character. The following lighting design elements will promote appropriate lighting solutions.

1. Lighting

Locate lighting to be functional and aesthetically pleasing.

- a. Lighting and street furniture should contain consistent, unifying elements throughout the area.
- b. All lighting fixtures shall be appropriate in scale, intensity, and height to the use it is serving. There should be taller lighting fixtures for vehicular traffic and shorter lighting fixtures for pedestrian movement.
- c. Avoid lighting fixtures that create direct glare. Light pollution shall be minimized through the use of low lighting profiles, recessed luminaires and minimal luminance levels, where street light is cast downward.
- d. Provide lighting that is attractive and complementary to building character.
- e. Utilize a variety of lighting to accent, provide direction and to add to the vitality of the place.
- f. Use lighting to highlight and showcase landscape elements.
- g. Encourage the use of solar powered lights when feasible.

2. Exterior Building Lighting

Exterior lighting should be complementary to the commercial buildings.

- a. Exterior lighting should illuminate the overall building and focus on prominent features such as display and entry.
- b. Building design should exploit the use of natural light with windows, skylights, light shelves and similar devices, minimizing dependence on artificial light.
- c. Materials and lighting that causes glare and unwanted reflections at eye level should be avoided. Indirect light can be used to illuminate buildings, walkways and public spaces without glare.

3. Prohibited Lighting Types

- a. Blinking, flashing or changing intensity lighting is prohibited, except for temporary holiday displays.
- b. Any light that may be confused with a traffic control device.
- c. Beacon or search lights are prohibited except as a one-time or a special event feature.

4.3.4 Signage Design

The way finding and identity graphics of the commercial center is an important role in the unification of the project area as a whole. With the numerous varied program elements signage works to link the elements together, not necessarily to create a feeling of one large development, but rather to help the visitor navigate through the environment. The signage and graphics help to create a sense of orientation and direction for the first time visitor, and a sense of familiarity and comfort for residents that return often. Conceptual designs of the signage for Rancho Palma are located in Section 4.4, Landscape Guidelines. The following signage design guidelines will help define and preserve the character of the overall project as well as create a sense of excitement and activity.

1. Overall Character

Encourage a variety of signage type and character to function, enhance, and support the use and activity.

- a. Signs should be visually interesting and informative. They should be distinctive and eye-catching yet simple, avoiding cluttered designs and excess advertising.
- b. Signs should complement the architecture of the building and also provide a unifying element along the streetscape.
- c. Utilize clear and understandable graphics.
- d. Locate signs to complement and not dominant the architecture or the aesthetics of the building.
- e. Design signs that are in concert with the style, character, landscaping and street furniture to enhance the sense of place.
- f. Window signs, where lettering is affixed directly on the glass, can be attractive and eye-catching provided that the style is in keeping with the scale and style of the building.
- g. Undesirable signs are plastic, flashing signs, billboards, generic trademark signs, and any sign temporarily affixed to ground floor windows.
- h. Generally, signs should be externally lit with downward facing lights to avoid excessive nighttime glare.
- i. Signs should be located so that they do not interfere with pedestrian movement or block the sight lines along the road or pedestrian pathways.

2. Entrance Signage

Character and purpose of the sign is for guiding visitors to the commercial center.

- a. Readable from vehicles traveling on Interstate 215.
- b. Individual dimensional letter and logo will identify the commercial center.
- c. Letters and logo may be internally illuminated.

3. Tenant Signage

Individual tenants will be encouraged to use a mixture of signage techniques.

- a. Storefront.
- b. Awnings.
- c. Signage on glass store front and entrances.
- d. Dimensional blade sign.
- e. Wall plaques.
- f. Floor signs.
- g. Fascia signs.

4. Prohibited signs

Certain signs that would detract from the pedestrian experience will be prohibited.

- a. Formed plastic.
- b. Surface mounted box cabinet signage.
- c. Freestanding signs and portable signs such as any sign designed to be portable, except during holiday periods.
- d. Balloon or inflatable sign.
- e. Signs which emit sounds or odor.
- f. Signs with exposed raceways, conduit junction boxes, transformers.
- g. Fluorescent or reflective sign or color.
- h. Simulated materials such as wood grained, plastic laminate, wall coverings, paper, cardboard or Styrofoam.
- i. Plexi-face channel letters.

4.4 Landscape Guidelines

Rancho Palma's landscape design embraces a California vineyard theme reflective of the region's agricultural heritage. Through thoughtful, sensitive design, Rancho Palma can be developed to conserve valuable resources and create a noteworthy community within the City of San Bernardino. Sustainable landscape design links natural and built systems to achieve balanced environmental, social, and economic outcomes. In addition, it improves the quality of life, long-term health of communities, and the environment. Sustainable landscape balances and benefits both the needs of people and the environment. Figure 4-2 depicts the Master Landscape Plan for Rancho Palma. The following is a list of various 'sustainable' features and practices to be used and/or considered:

- Due to extreme drought conditions, be mindful to choose low water, drought tolerant, and/or native plants that match the local micro climate, and soil conditions. (Refer to Plant Palette herein)
- Select plants that are "non-invasive" according to the current California Invasive Plant Inventory, published by the California Invasive Plant Council.
- Design landscape and plant spacing to allow for plants to reach mature size. Using appropriate sizes and the thoughtful placing of plants prevents overgrowth and future thinning, reducing the amount of material sent to the landfill.
- Locate plants to ensure proper drainage and to reduce potential damage to buildings.
- Increase tree cover to provide shade in developed areas to reduce energy demand, mitigate solar heat gain into buildings, and to reduce the amount of heat absorbed by paved areas.
- Plant deciduous trees on the south side of buildings to allow for increased solar heat gain in winter months (thereby reducing energy needed for heating interiors) and shading in summer months (thereby reducing energy needed for cooling interiors).
- Create natural looking designs to reduce maintenance required.
- Reuse soils from the site, if appropriate, as horticultural soils.
- Maintain and/or improve soil health through responsible management including nurturing soil with organic matter, reducing synthetic fertilizer use, and restoration to sustain protected and future ecosystems.
- Use integrated pest management to control or eliminate pesticide and toxic chemical use.
- Use nitrogen-fixing plants to reduce fertilizer use.
- Create and/or maintain wildlife habitat.
- Use sustainable materials in landscape construction and site furnishing selections including, but not limited to, recycled materials, environmentally preferable/responsible products, materials that can be recycled, certified "green" products, and locally available or locally manufactured products.
- Encourage the use of low toxic wood preservatives (no CCA), or naturally rot-resistant wood for landscaping.



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Figure 4-2

Master Landscape Plan



200
Feet

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- Utilize weather and climate-smart irrigation controllers.
- Design irrigation zones to suit plant requirements and incorporate high-efficiency nozzles.
- Incorporate water conservation measures (xeriscape, rain gardens, grouping plants with similar requirements) into the landscape.
- Control water runoff (bioswales, rain gardens, green roofs).

4.4.1 Community Design Theme/Landscape Character

Landscape design plays an important role in establishing the visual identity and character of the Rancho Palma community. The ability to create consistency in theme and the application of major community-level design elements allows for a unified and cohesive community. Enhanced entries with monumentation and signage, upgraded hardscape and decorative entry gates provides a sense of arrival. Perimeter landscape and upgraded walls and pilasters will provide an attractive visual buffer to the various existing uses surrounding the project. The community interface with improved edge conditions, and site-specific plant materials is designed to be maintained throughout Rancho Palma to communicate and enhance the community's identity.

Rancho Palma embraces a California vineyard theme (see Figure 4-2, Master Landscape Plan). Careful thought has been given to integrate the structural and aesthetic elements of a balanced, cohesive community. To ensure that these design guidelines are implemented in a manner that will provide a sense of its own character and ambiance, a central theme embracing the classic California vineyards has been developed. This theme is consistent with the community vision and tie the community together while enabling the neighborhoods and commercial area to further develop their individual character through their own unique elements.

Several identifying design and landscape elements will be incorporated throughout the community and will generally include:

- Wood beams, stacked stone, and poured-in-place concrete are incorporated into monumentation and accessory structures.
- Natural landscaped areas blended with manicured landscaping.
- Low water, drought-tolerant and native tree and shrub materials.
- Natural materials such as stone, wood, and boulders, complemented by an earthtone color palette.

Rancho Palma is a planned community that is inspired by the California vineyard and recognizes this historical character. Like California itself, the design intent and architecture is an eclectic and colorful mix of various influences from across the United States. This community offers its residents an environment in which pedestrian connectivity, recreational activity, and social interaction are fostered. The residential neighborhood within Rancho Palma focuses on these aspects by residences oriented to the street, pathways throughout the development, public gathering spaces, and local parks with recreational amenities.

Thematic elements are major project improvements that occur at the community or neighborhood level, and assist in establishing the overall design theme for the Rancho Palma community. These major thematic elements will be reinforced within the following:

- Monumentation/ Signage
- Streetscape Landscape
- Enhanced Masonry Vertical Elements
- Enhanced Hardscape
- Enhanced Community Edge Conditions
- Parks and Recreation Facilities
- Lighting/ Street Furniture Family
- Walls and Fences
- Landscaping/Plant Palette

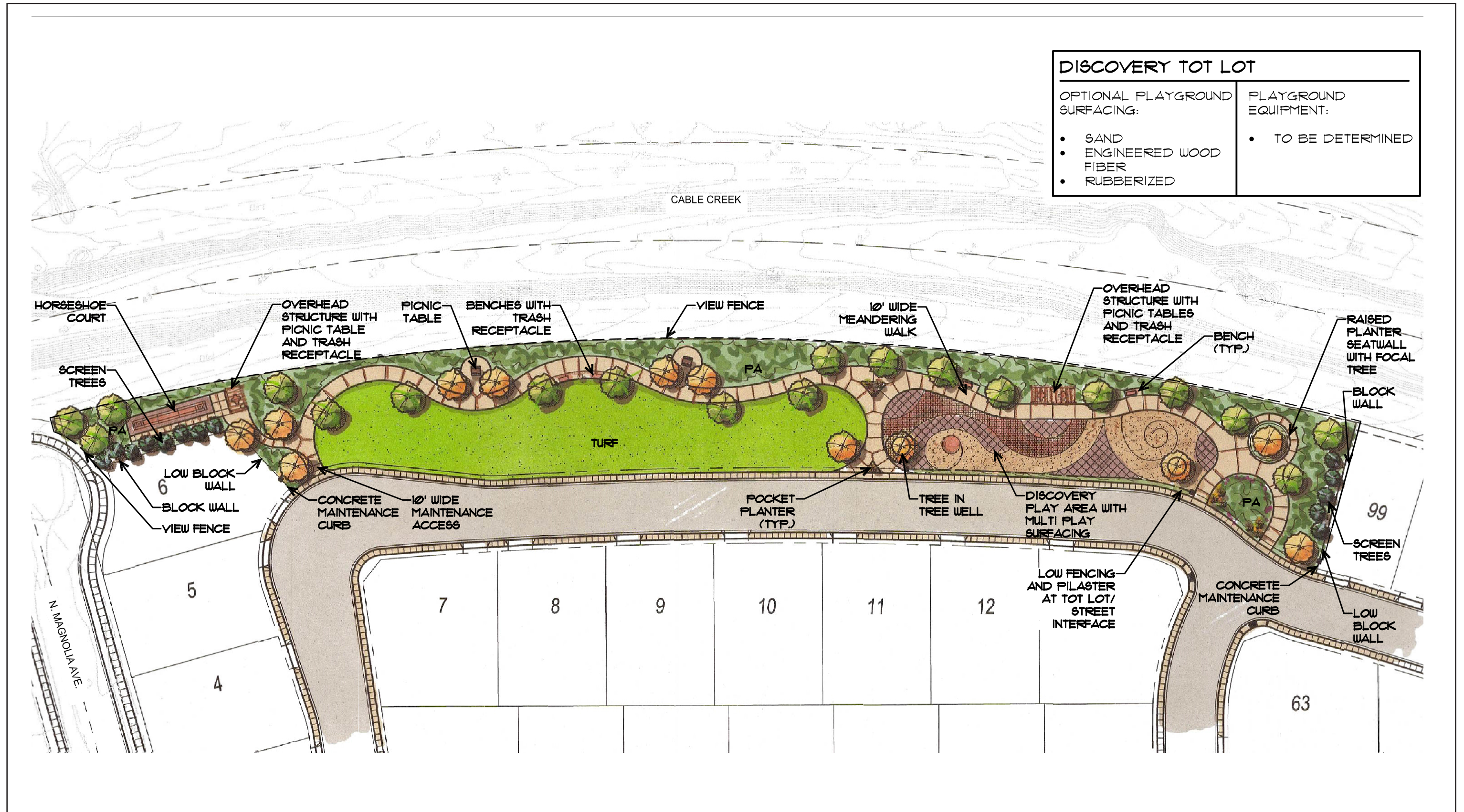
These thematic elements will commonly occur throughout the community and will unite Rancho Palma under a common design vocabulary. General design guidelines and design criteria for the community theme elements are contained in the sections that follow.

4.4.2 Parks, Water Quality Basin, and RV Storage Lot

One neighborhood park, one pocket park and a paseo connection to the commercial center are located within the residential neighborhood. Rancho Palma is also providing a half acre expansion of the existing Ronald Reagan Park, located across Cable Creek Channel. Conceptual designs for the parks are depicted in Figure 4-3, Neighborhood Park Concept, Figure 4-4, Pocket Park Concept, and Figure 4-5, Ronald Reagan Park Expansion Concept.

The neighborhood park is proposed to have open play turf areas along with paths, picnic nodes, and a playground area. A horseshoe court or other activity may also be provided. The Pocket park is designed for passive activities and may include bocce ball, or similar type recreation. The paseo connection will include landscape screening, benches, and gated access to the commercial center.

The Water Quality Basin will be fenced and gated for maintenance access (see Figure 4-6, Water Quality Basin and Paseo). The recreational vehicle parking lot will also be landscaped to screen views from adjacent properties (see Figure 4-7, RV Parking Concept).



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Figure 4-3

Neighborhood Park Concept



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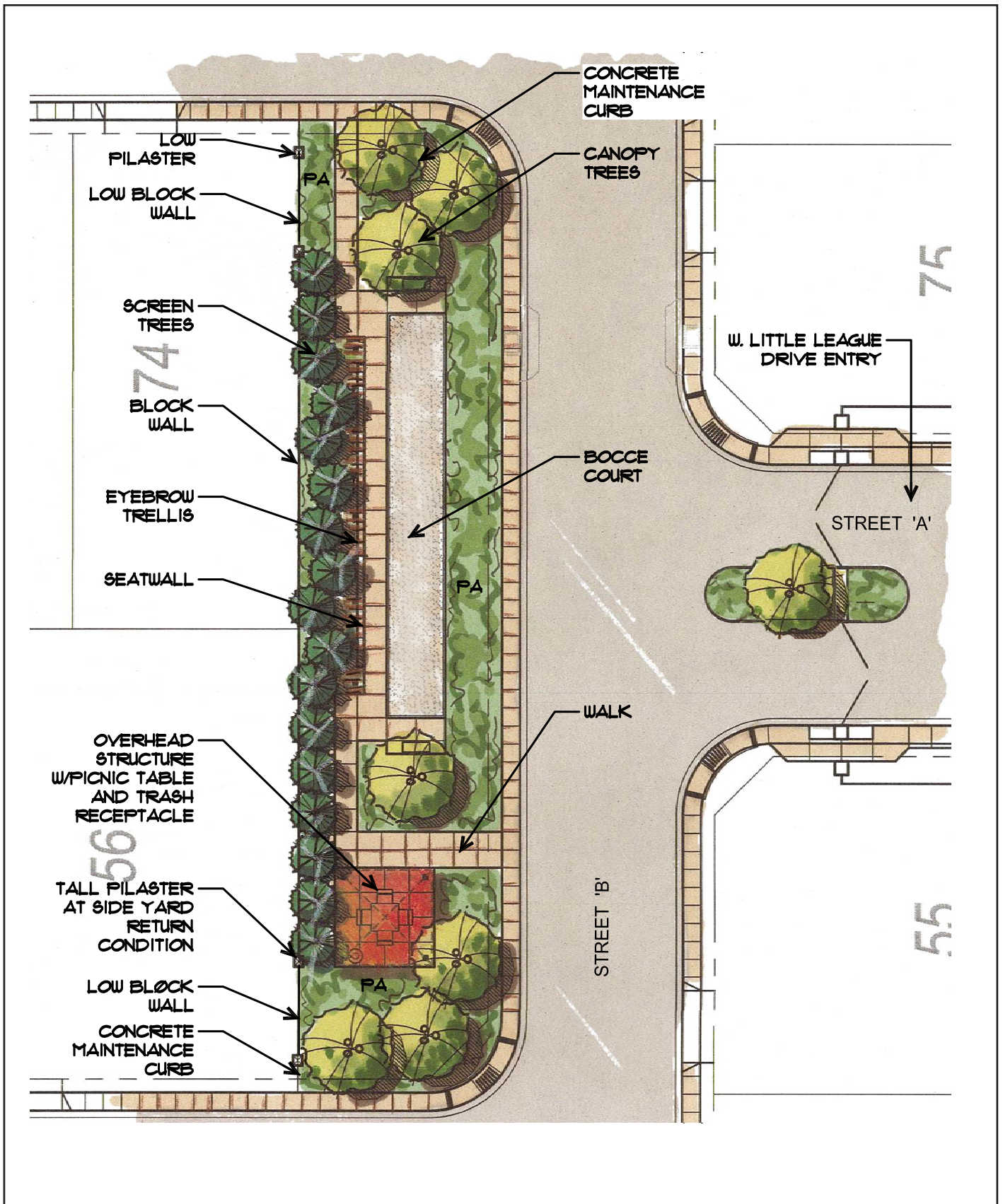


Figure 4-4

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Pocket Park Concept

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Figure 4-5
Ronald Reagan Park Expansion Concept



30
 Feet

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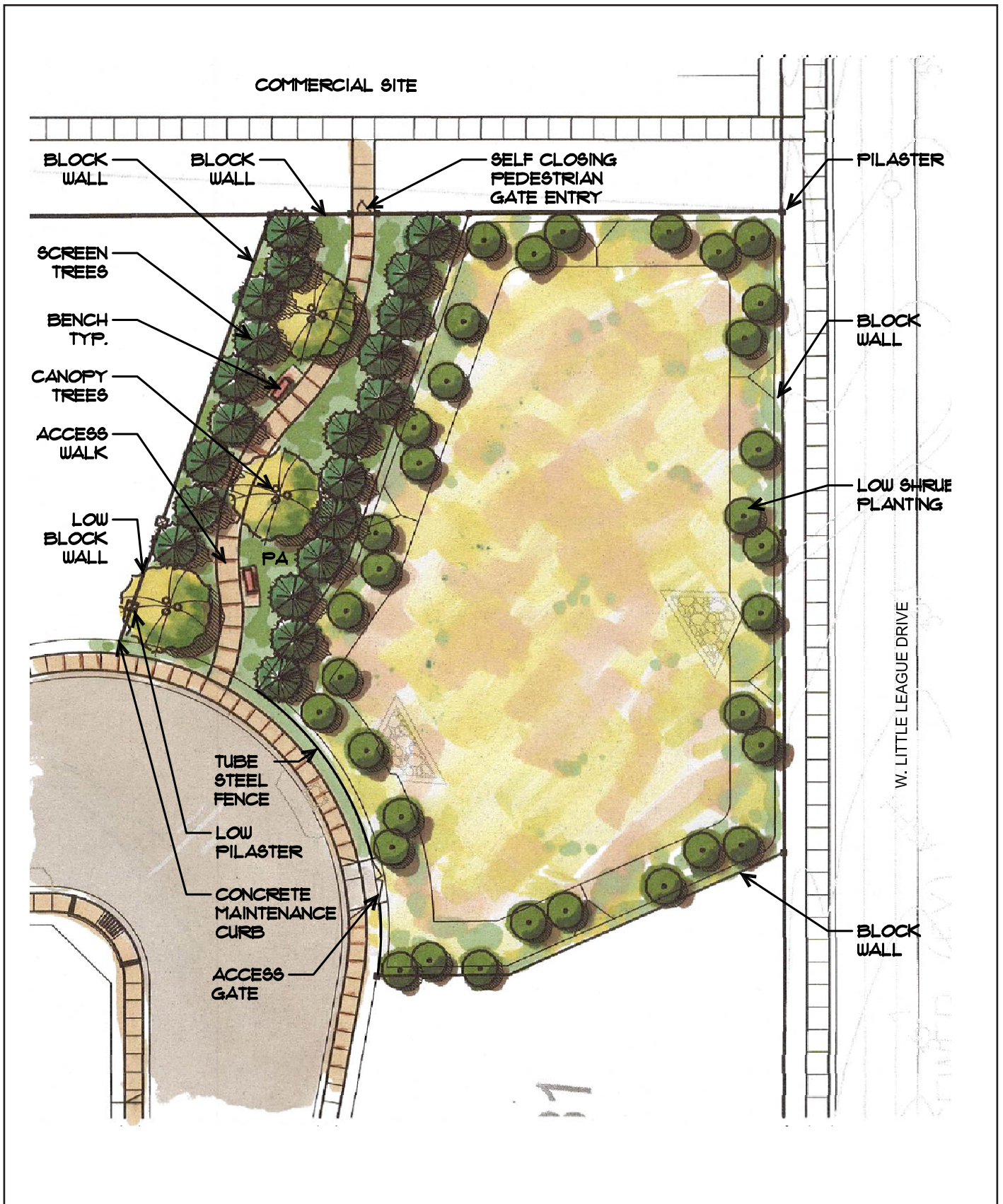


Figure 4-6

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Water Quality Basin and Paseo

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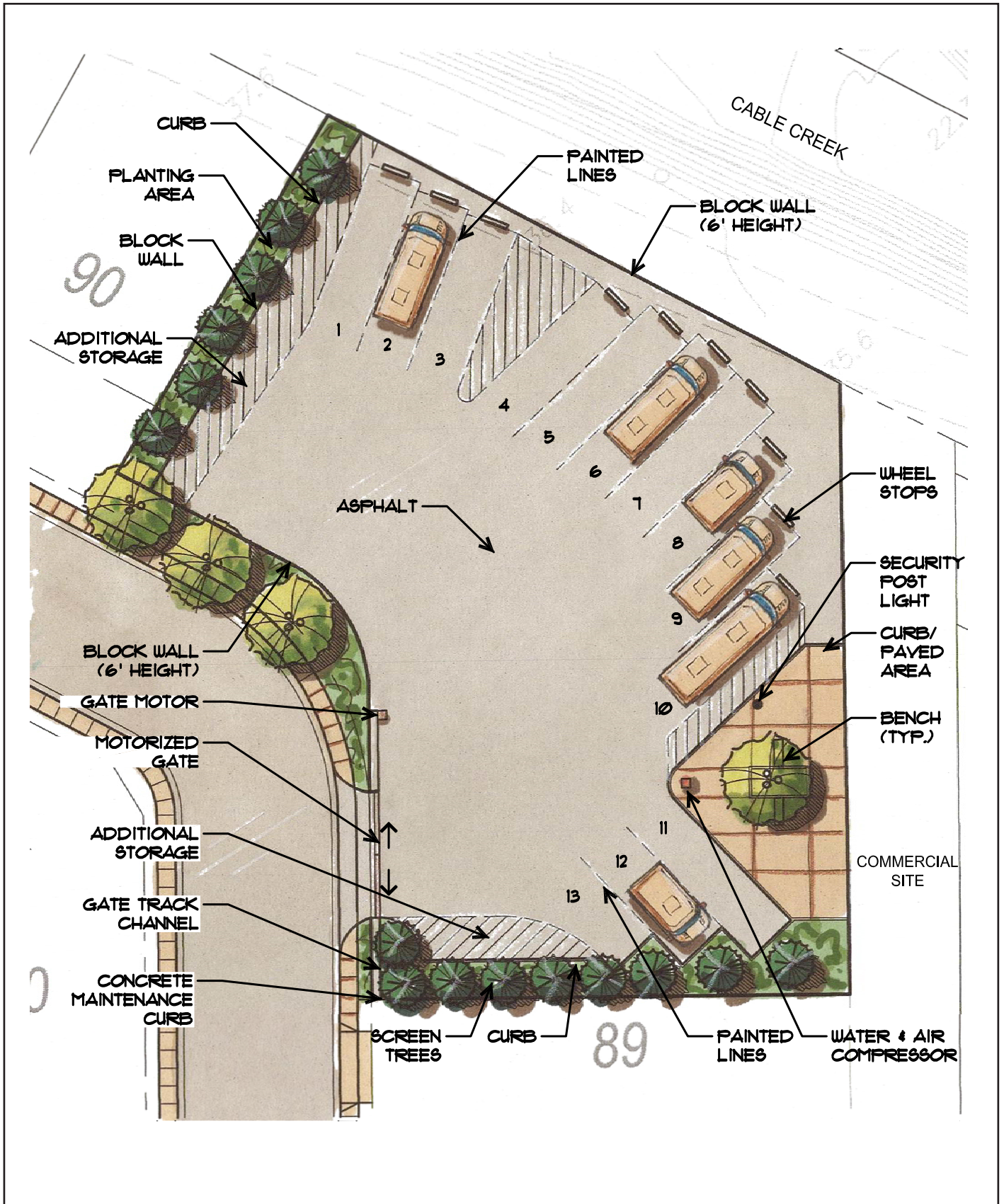


Figure 4-7

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RV Parking Concept

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30
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4.4.3 Streets and Entries

Streets and entries are important elements for the design of Rancho Palma. These areas serve as the gateways to both the commercial and residential components of the community. Figure 4-8, Street Sections depicts the conceptual street sections for West Little League Drive, Magnolia Avenue, and the private, residential local streets.

The residential neighborhood entries at West Little League Drive and Magnolia Avenue have been designed to provide a formal arrival to the neighborhood and be an extension of the overall landscape theme. These entries are gated and are depicted in Figure 4-9, Project Entry at Magnolia Avenue Concept, Figure 4-10, Project Entry at West Little League Drive Concept, and Figure 4-11, Project Entry Gate Concept.

4.4.4 Community Identity Plan/Monumentation

Appropriate community and commercial thematic identification is important for the establishment of a new community and maintaining the overall Rancho Palma theme. Identification and monumentation provides a system for community development and gives directional information to residents and visitors.

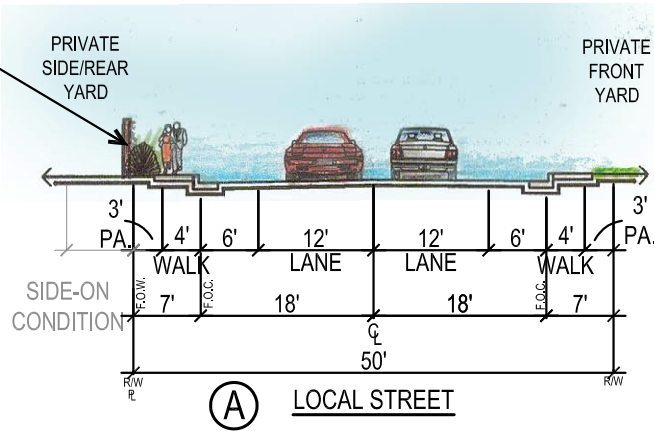
Entry monument signage, through decorative typefaces and symbolic graphics, will inform the visitor that they are entering a planned community. Monument signage will be consistent with the character of the project, but flexible enough to respond to individual project contexts. Logos, type styles, color schemes, and architectural features should be consistent throughout the area being identified. Monument signs may vary in size and detail in a manner that reflects their relative importance within the signage hierarchy, but will incorporate all the materials proposed within the major community monumentation.

Materials:

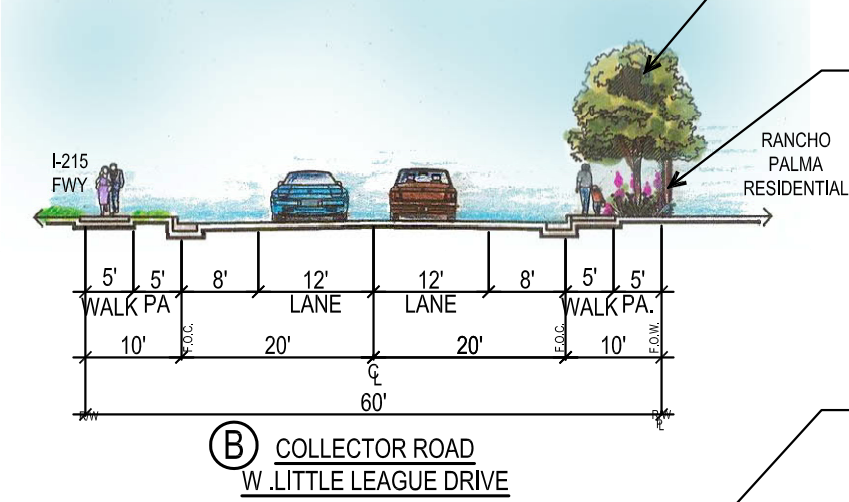
- Dry stacked stone monument bases, or manufacturer's dry stacked stone product application on monument bases.
- Community logo panel
- Natural wood or metal horizontal member components
- Poured-in-place concrete components
- Stucco veneer to match adjacent architecture

Three types of monumentation have been conceptually designed for Rancho Palma; Residential Entry Monumentation, Primary Commercial Monumentation, and Primary Commercial Marquee. The locations for these monuments are depicted on Figure 4-12, Monumentation Plan, with Figure 4-13, Residential Entry Monumentation, Figure 4-14, Primary Commercial Monumentation and Figure 4-15, Primary Commercial Marquee, depicting the monumentation.

VINE ATTACHED TO WALL AND SHRUB PLANTING

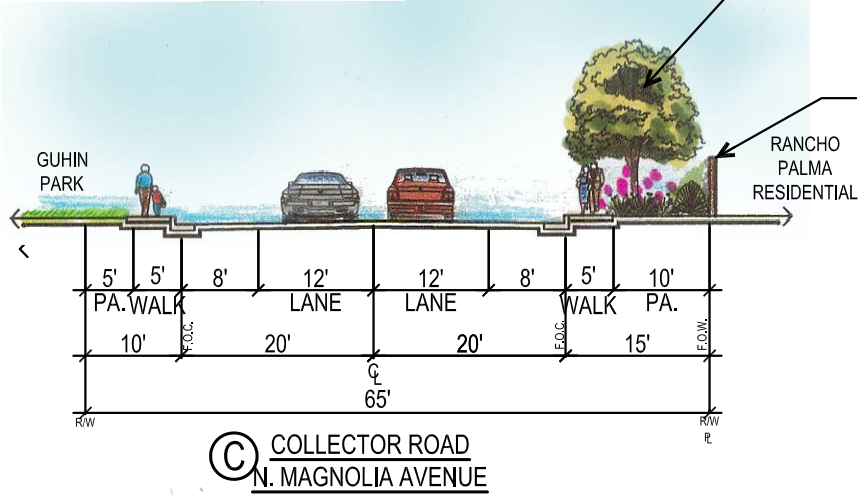


- LANDSCAPE LOT INCLUDES-
- VERTICAL BUFFER/SCREEN TREE
 - VINE ATTACHED TO WALL
 - SHRUBS



PERIMETER WALL

- LANDSCAPE LOT INCLUDES -
- VERTICAL BUFFER/SCREEN TREE
 - VINE ATTACHED TO WALL
 - SHRUBS



PERIMETER WALL

KEYMAP

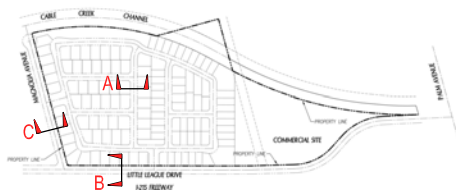


Figure 4-8

RANCHO PALMA

Streetscape Sections

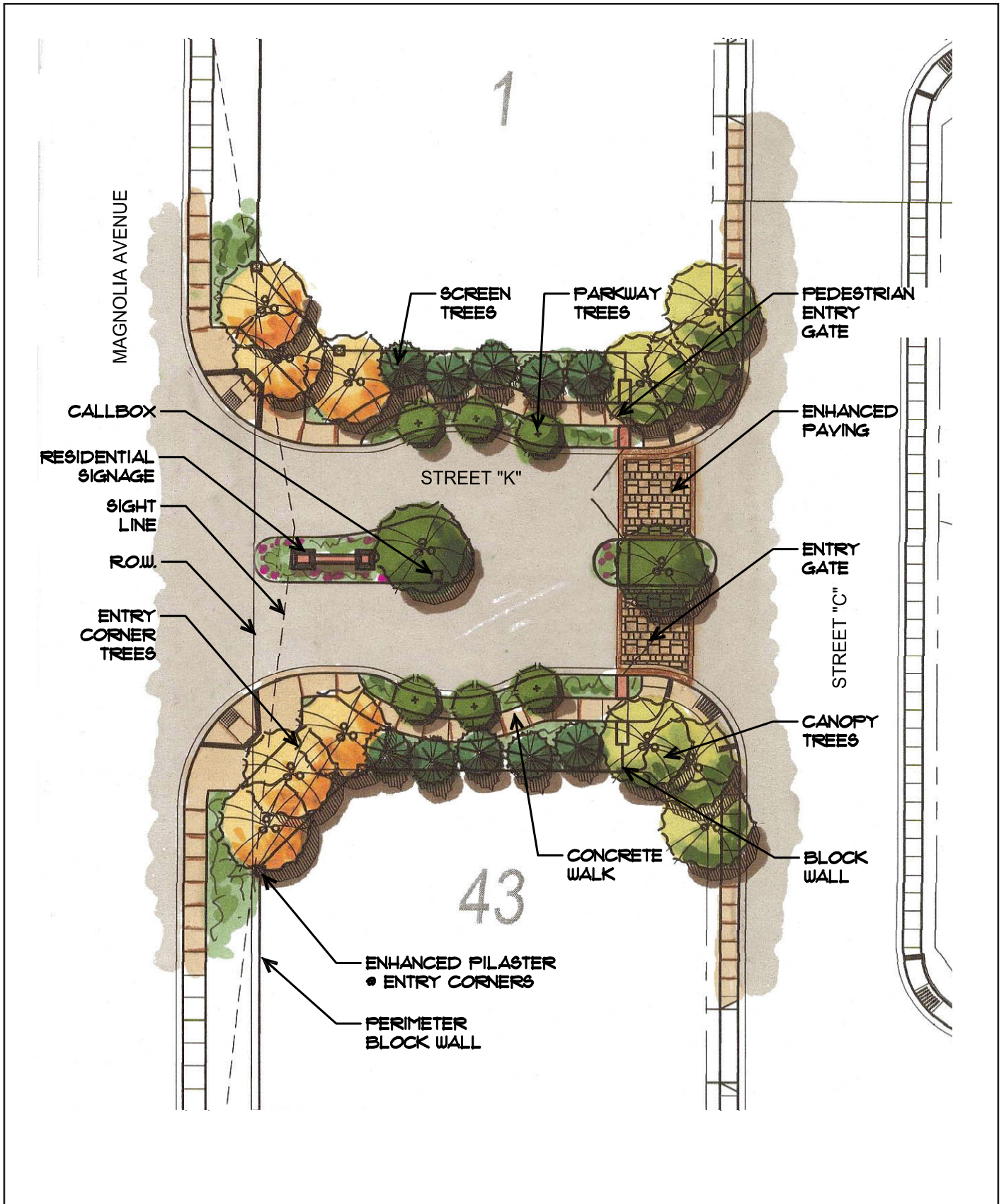


Figure 4-9

Project Entry Concept at Magnolia Avenue

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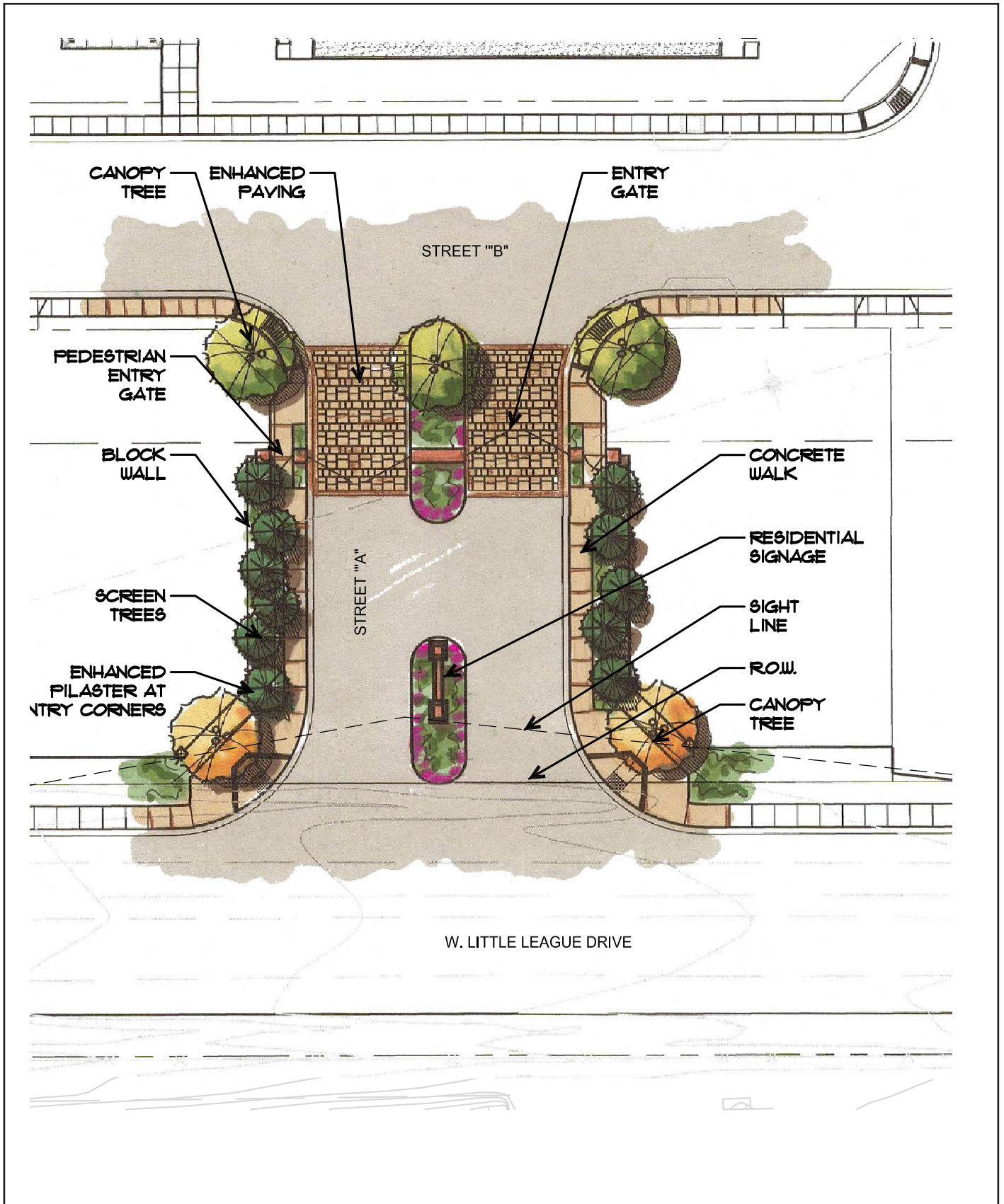


Figure 4-10

Project Entry Concept at W. Little League Drive

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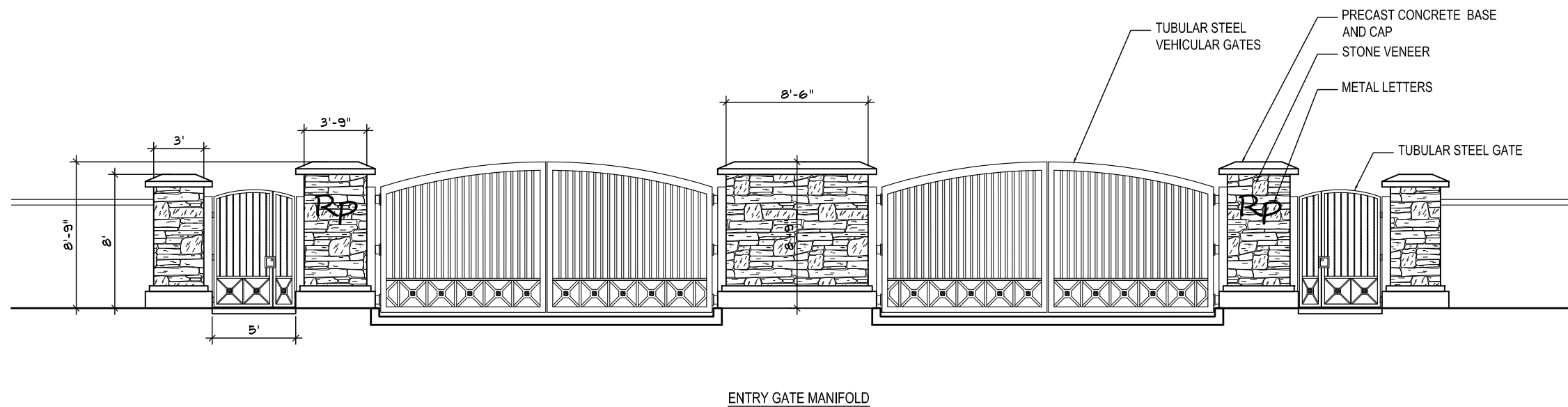
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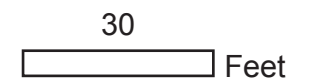
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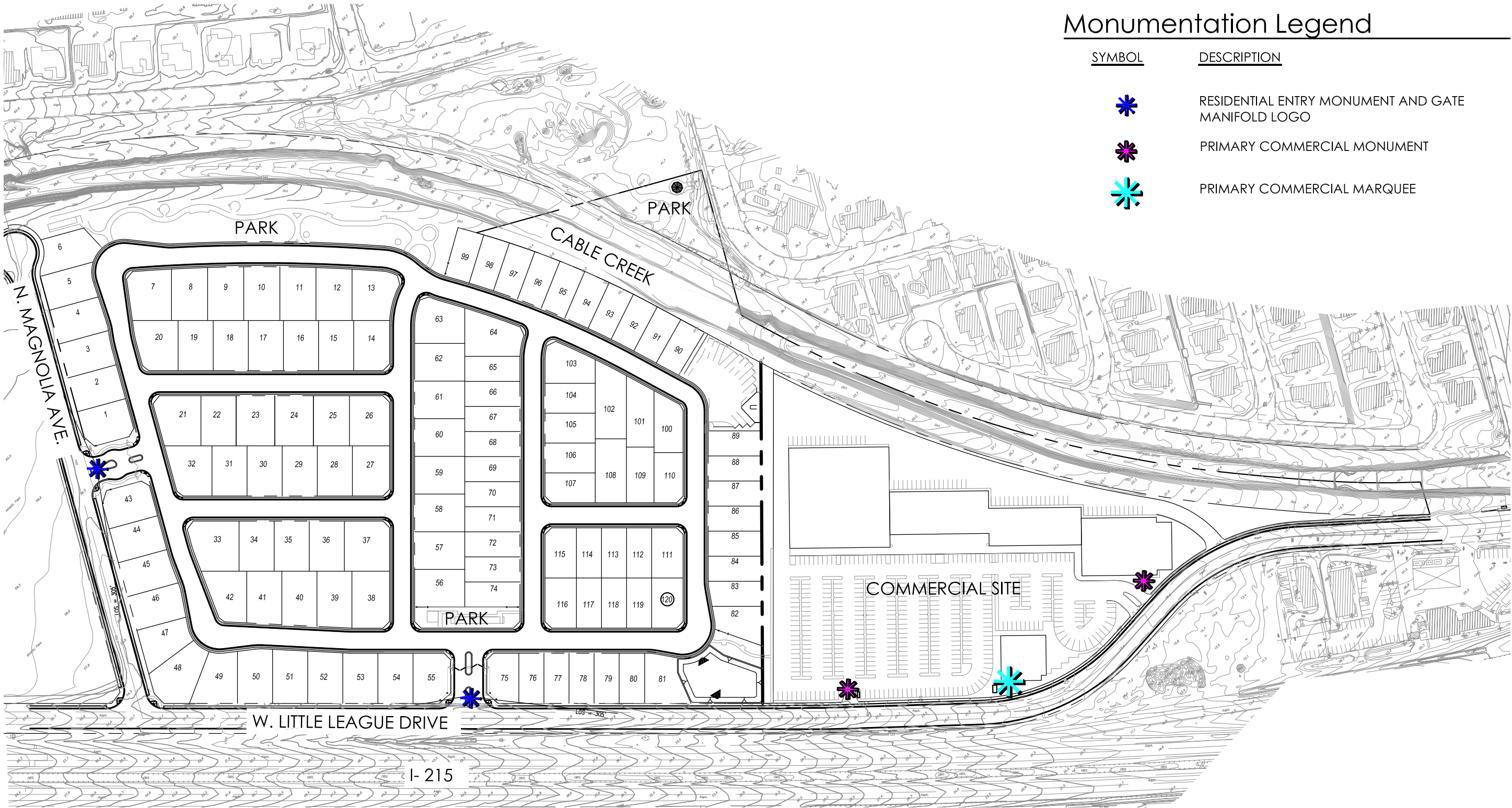
Figure 4-11
Project Entry Gate



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Monumentation Legend

SYMBOL	DESCRIPTION
	RESIDENTIAL ENTRY MONUMENT AND GATE MANIFOLD LOGO
	PRIMARY COMMERCIAL MONUMENT
	PRIMARY COMMERCIAL MARQUEE

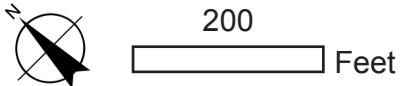


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Figure 4-12

Monumentation Plan



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NOT TO SCALE

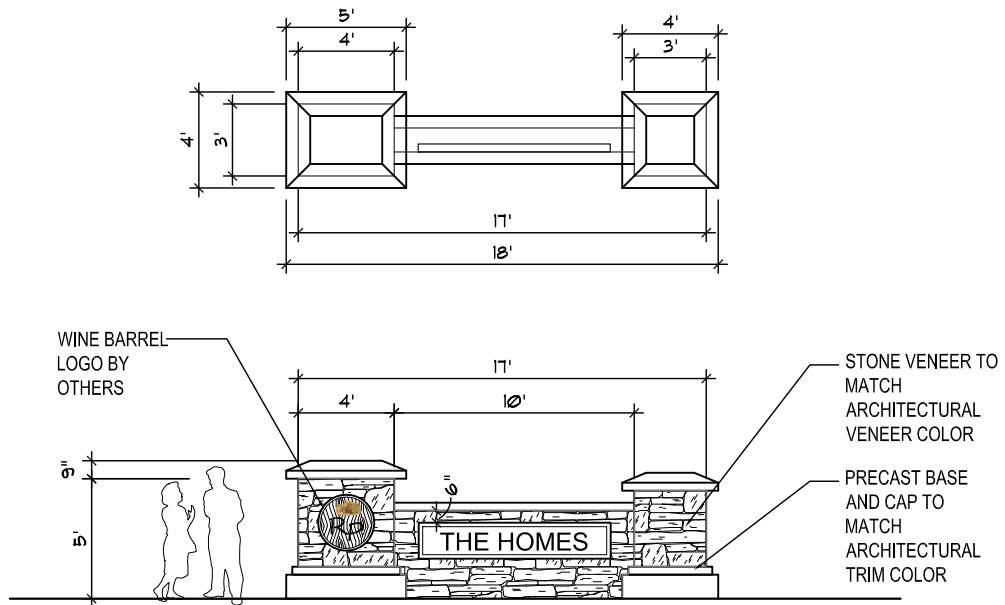


Figure 4-13

RANCHO PALMA

Residential Entry Monumentation

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10 Feet

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NOT TO SCALE

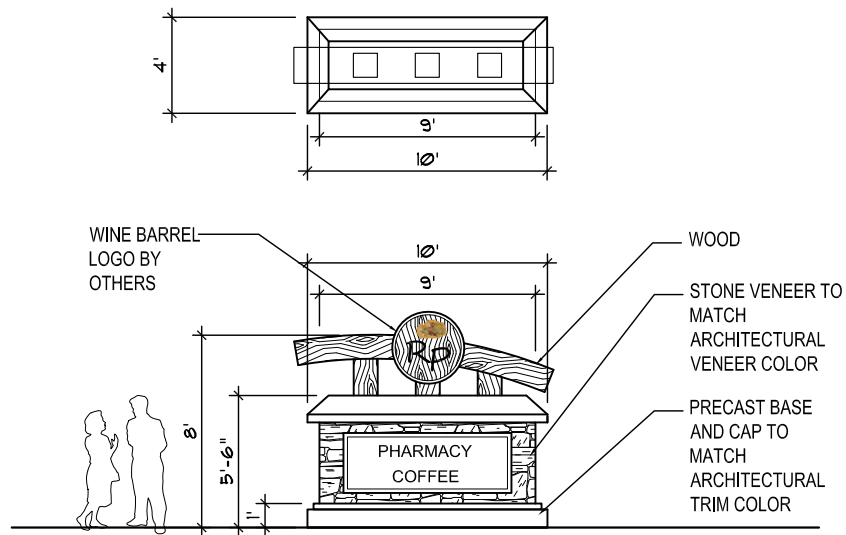


Figure 4-14

RANCHO PALMA

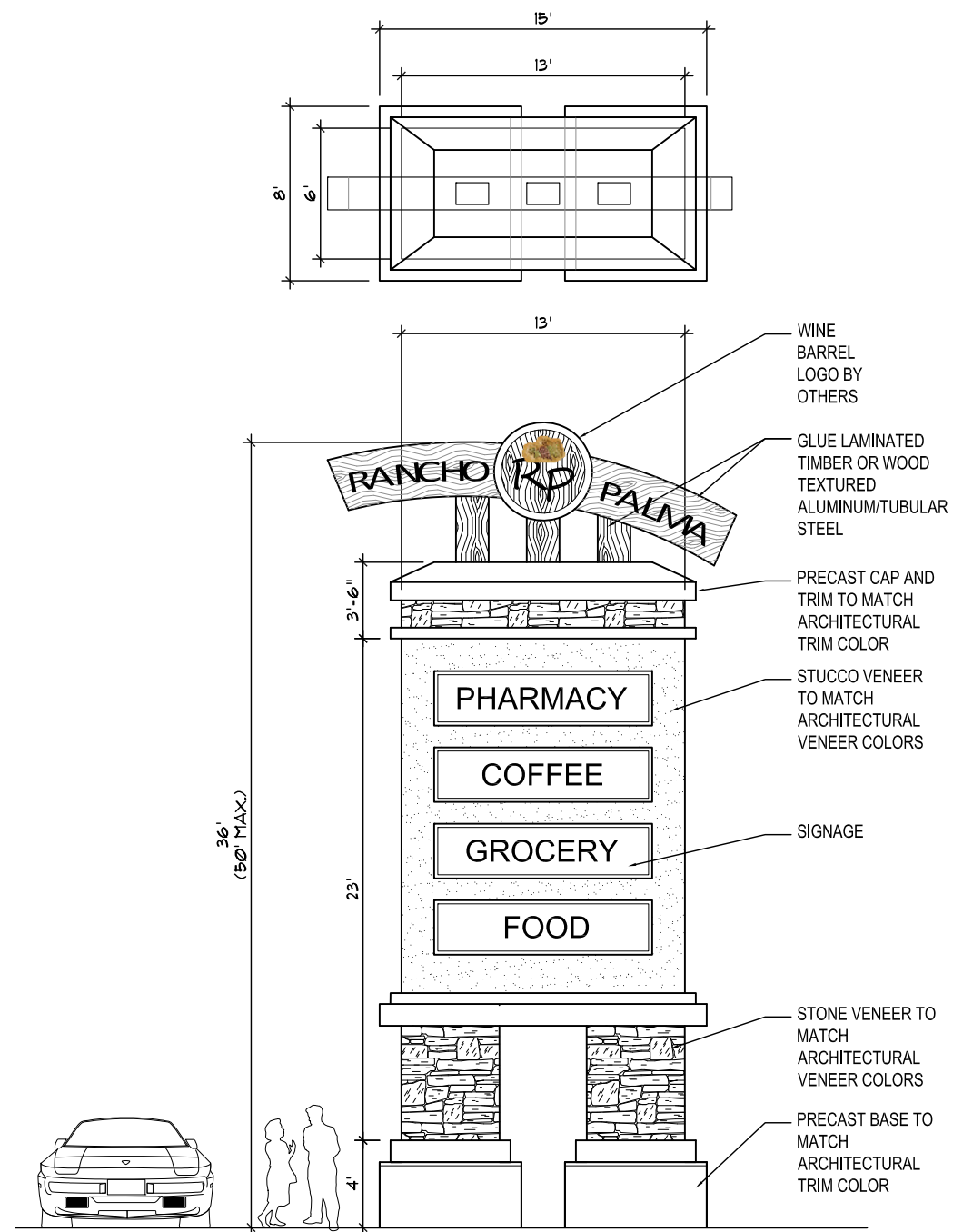
Primary Commercial Monumentation

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RETAIL SIGNAGE



NOT TO SCALE

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Figure 4-15

Primary Commercial Marquee



8 Feet

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4.4.5 Wall and Fence Guidelines

Maintaining quality and character of all aspects of the public realm is a key place-making principle. The wall and fence design criteria is intended to provide variety and privacy for each lot while providing continuity and unity within the community.

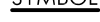







Walls and fencing will be used throughout the community to complement the overall design theme, establish community identity, provide protection from roadway and other noise, and allow privacy and security in residential areas. The use of walls and fences can also serve to accentuate neighborhood features in addition to screening streets and adjacent uses.

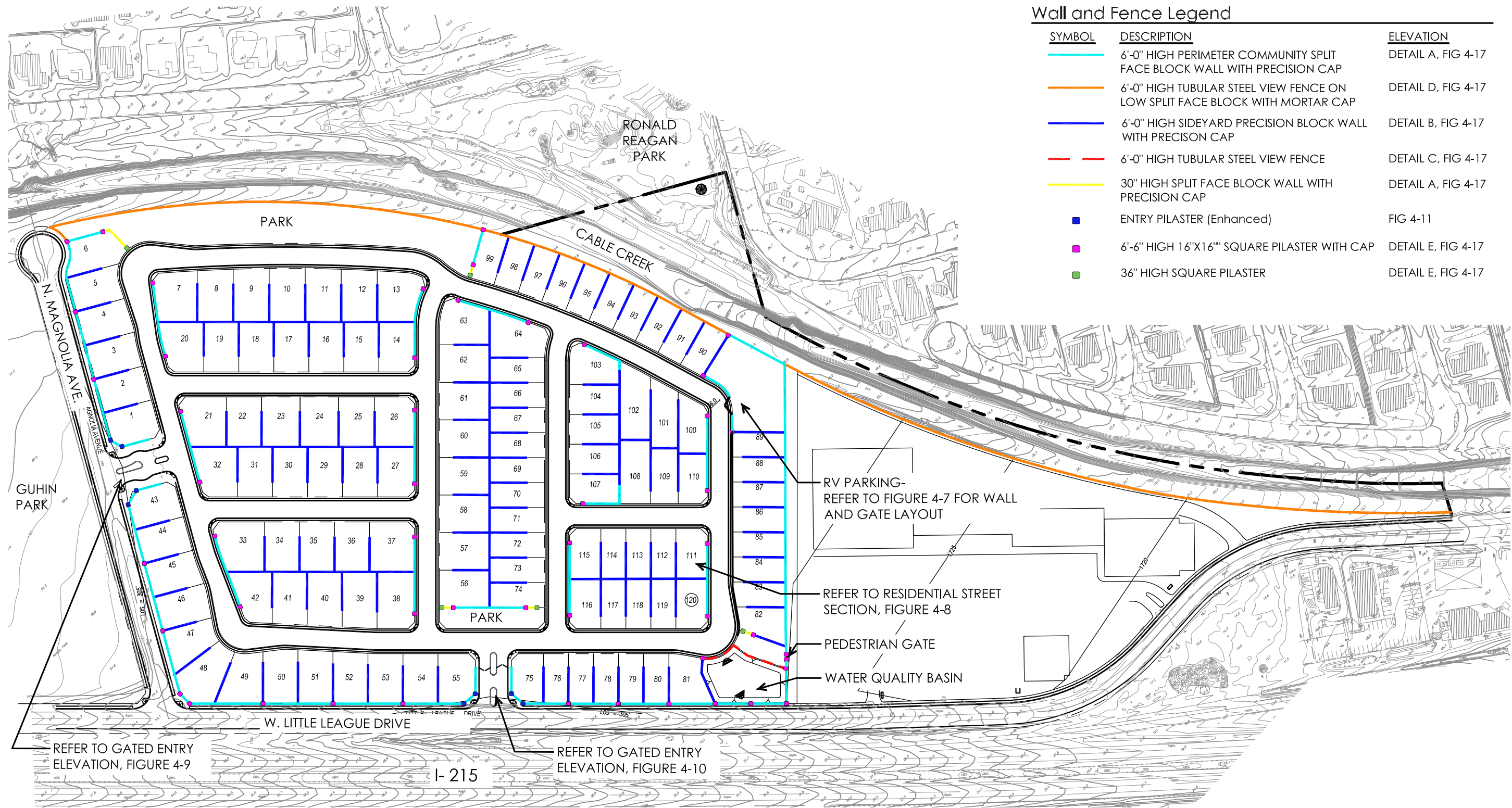
The following types of walls and fences (open and largely transparent) have been selected for possible use within different areas of the project site. All wall and fence heights are measured from the highest grade elevation on either side of the wall or fence. An overall community wall program is provided to help unify and reinforce community character.

- Decorative walls and/or screen walls shall be integrated with the architecture of community buildings, as well as the overall landscape design.
- All community theme walls and fences shall be consistent in design.
- The community wall will be colored split face block with a 4" precision block cap.
- Interior/side yard or any wall not visible to the public realm shall be precision block with precision cap.
- Vines and/or shrubs should be planted along community walls to soften the visual character. An extensive use of vines is encouraged.

Figure 4-16 depicts the Rancho Palma Wall and Fence Master Plan, and Figure 4-17 depicts Wall and Fence Details.

Wall and Fence Legend

SYMBOL	DESCRIPTION	ELEVATION
	6'-0" HIGH PERIMETER COMMUNITY SPLIT FACE BLOCK WALL WITH PRECISION CAP	DETAIL A, FIG 4-17
	6'-0" HIGH TUBULAR STEEL VIEW FENCE ON LOW SPLIT FACE BLOCK WITH MORTAR CAP	DETAIL D, FIG 4-17
	6'-0" HIGH SIDEYARD PRECISION BLOCK WALL WITH PRECISION CAP	DETAIL B, FIG 4-17
	6'-0" HIGH TUBULAR STEEL VIEW FENCE	DETAIL C, FIG 4-17
	30" HIGH SPLIT FACE BLOCK WALL WITH PRECISION CAP	DETAIL A, FIG 4-17
	ENTRY PILASTER (Enhanced)	FIG 4-11
	6'-6" HIGH 16"X16" SQUARE PILASTER WITH CAP	DETAIL E, FIG 4-17
	36" HIGH SQUARE PILASTER	DETAIL E, FIG 4-17



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Strata Palma, LLC

Figure 4-16

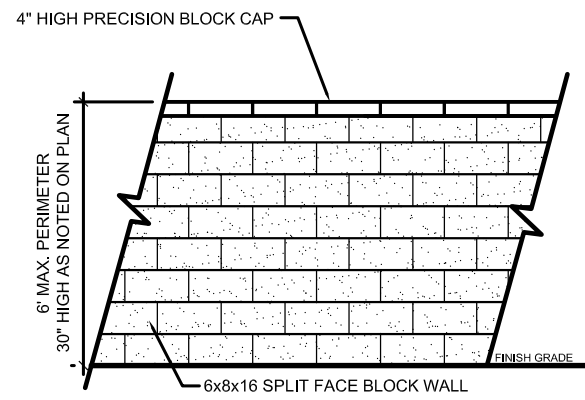
Wall and Fence Master Plan



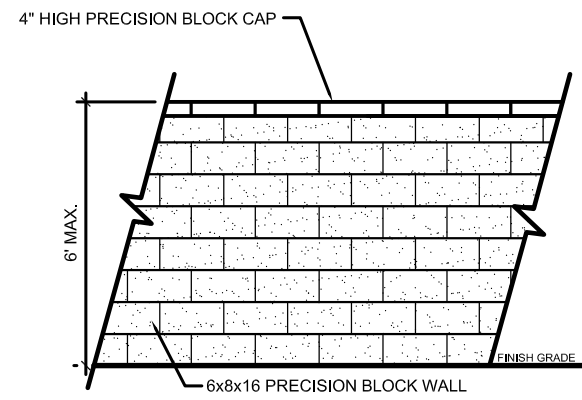
200
Feet

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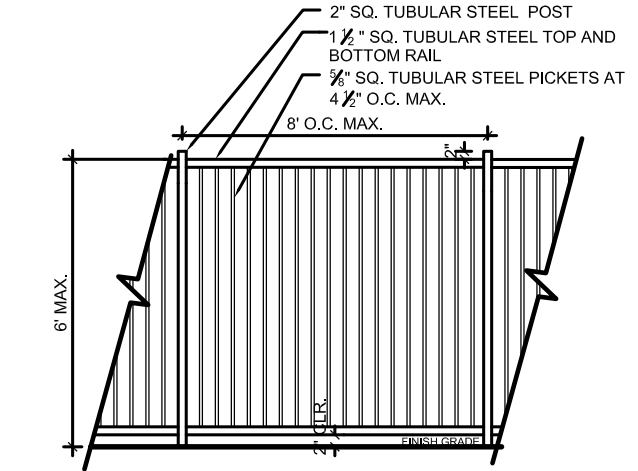
November 2015



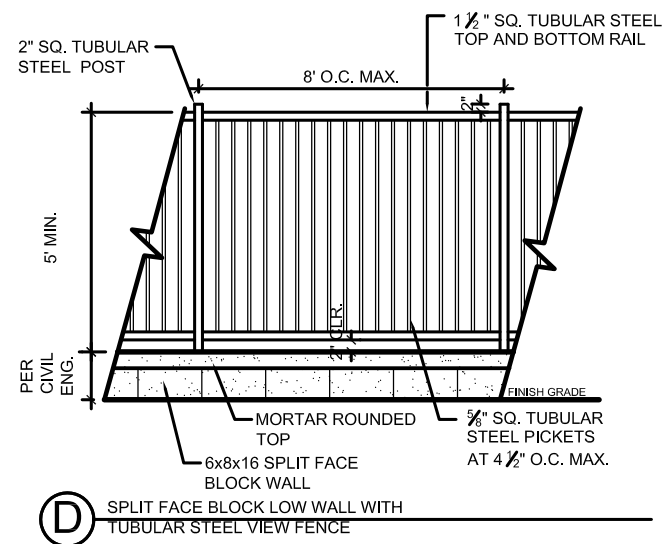
(A) SPLIT FACE BLOCK WALL



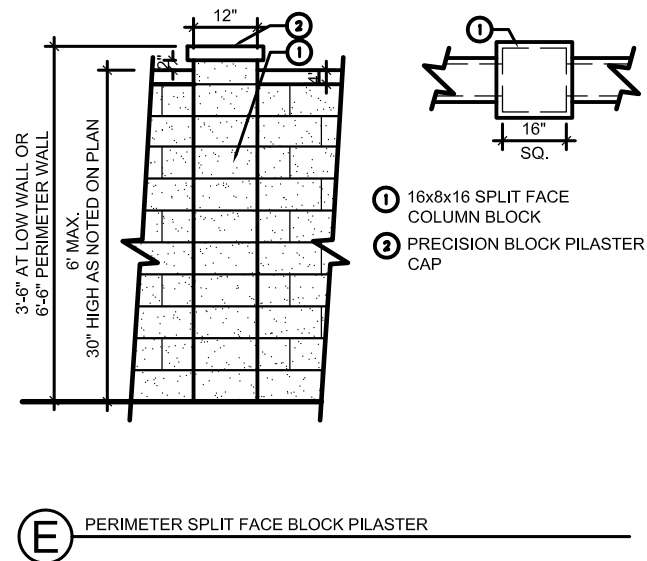
(B) PRECISION BLOCK WALL



(C) TUBULAR STEEL FENCE



(D) SPLIT FACE BLOCK LOW WALL WITH TUBULAR STEEL VIEW FENCE



(E) PERIMETER SPLIT FACE BLOCK PILASTER

- ① 16x8x16 SPLIT FACE COLUMN BLOCK
- ② PRECISION BLOCK PILASTER CAP



4.4.6 Landscape Irrigation

All common landscape areas will be permanently irrigated using an automatic, underground irrigation system or drip system. The irrigation system will be separated into several systems based on water requirements of each hydrozone. Hydrozone separations will be based on sun orientation and water requirements of the plant material.

Irrigation of required landscaped areas shall be by either automatic, overhead, high-efficiency spray nozzle or drip irrigation and matched precipitation rate, low gallonage sprinkler heads, bubblers, and timing devices. Landscape areas less than 6' wide shall be irrigated with drip irrigation. Timing devices shall include soil moisture sensors and rain sensing override devices. Sprinkler popup heights shall range from 6" high in turf areas and 12" high in shrub/groundcover beds where a drip system may not be applicable. The irrigation system shall be capable of operating automatically by incorporating an electric weather-based and climate-smart irrigation controller or advanced solar technology components and low voltage electric remote control valves. Quick coupling valves, as required, shall be strategically located to provide supplemental water to plant material and for wash down purposes. All remote control and quick coupling valves shall be located and installed within the shrub beds wherever possible.

4.4.7 Plant Palette

The plant list for this project was developed to reinforce the community theme and to create some seasonal change with a mixture of low water use, drought-tolerant, deciduous, and evergreen plants while maintaining a well-balanced landscape. Many plants on this list are considered as low water use and are drought-tolerant species. These were chosen based on their specific growth characteristics, including flowering and foliage color, texture and form.

The following items should be considered in the community landscape design process:

- Extensive use of trees, vines and shrubs to soften the perimeter community theme wall and fencing and to provide a buffer to the adjacent land uses.
- Recognition of existing natural conditions and situations.
- Use of both "formal" and "informal" planting arrangements, depending upon the particular condition.
- Layering of the shrub understory to create depth, variety and interest.



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
TREES									
<i>Abies spp. (limited varieties are native)</i>	Fir	●						Moderate	
<i>Acacia spp.</i>	Acacia	●						Low	
<i>Agonis flexuosa</i>	Peppermint Tree	●						Low	
<i>Albizia julibrissin</i>	Silk Tree	●	●			●		Low	
<i>Araucaria araucana</i>	Monkey Puzzle Tree	●						Moderate	
<i>Araucaria bidwillii</i>	Bunya-Bunya	●						Moderate	
<i>Araucaria heterophylla</i>	Norfolk Island Pine	●						Moderate	
<i>Arbutus "Marina"</i>	Marina Arbutus	●	●	●	●	●	●	Moderate	
<i>Arbutus unedo</i>	Strawberry Tree	●	●	●	●	●	●	Low	
<i>Bauhinia variegata (purpurea)</i>	Purple Orchid Tree	●	●					Moderate	
<i>Brachychiton populneus</i>	Bottle Tree	●	●	●	●	●		Low	
<i>Callistemon citrinus</i>	Bottle Brush	●						Low	
<i>Calocedrus decurrens</i>	Incense Cedar	●						Moderate	●
<i>Cassia leptophylla</i>	Gold Medallion Tree	●	●	●	●	●		Moderate	
<i>Castanospermum australe</i>	Moreton Bay Chestnut	●				●		Moderate	
<i>Casuarina cunninghamiana</i>	River She-Oak	●						Low	
<i>Catalpa bignonioides</i>	Bean Tree	●						Moderate	
<i>Catalpa speciosa</i>	Western Catalpa	●				●		Moderate	
<i>Celtis occidentalis</i>	Common Hackberry	●	●	●				Moderate	
<i>Celtis sinensis</i>	Chinese Hackberry	●						Moderate	
<i>Ceratonia siliqua</i>	Carob	●	●	●	●	●		Low	
<i>Cercis canadensis</i>	Eastern Redbud	●						Moderate	
<i>Cercis mexicana</i>	Mexican Redbud	●						Moderate	
<i>Cercis occidentalis</i>	Western Redbud	●	●	●	●	●		Low	●
<i>Chilopsis linearis</i>	Desert Willow	●						Low	●
<i>Chionanthus retusus</i>	Chinese Fringe Tree	●						Moderate	
<i>Cinnamomum camphora</i>	Camphor Tree	●	●	●	●	●		Moderate	
<i>Citrus spp.</i>	Orange, Lemon Etc.	●		●		●		Moderate	
<i>Cupaniopsis anacardioides</i>	Carrotwood	●	●	●	●	●		Moderate	
<i>Cupressus sempervirens</i>	Italian Cypress	●		●	●			Low	
<i>Dracaena draco</i>	Dragon Tree	●						Low	



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Eriobotrya deflexa</i>	Bronze Loquat	●	●	●	●	●		Moderate	
<i>Eriobotrya japonica</i>	Loquat	●						Moderate	
<i>Erythrina coralloides</i>	Naked Coral Tree	●						Moderate	
<i>Erythrina crista-galli</i>	Cockspur Coral Tree	●						Low	
<i>Ficus florida</i>	Florida Fig	●	●	●	●	●		Moderate	
<i>Ficus macrophylla</i>	Moreton Bay Fig	●		●	●			Moderate	
<i>Ficus microcarpa (F. retusa nitida)</i>	Indian Laurel Fig/ Laurel Fig	●		●	●			Moderate	
<i>Ficus rubiginosa (F. microphylla)</i>	Rusty Leaf Fig	●	●	●	●	●		Moderate	
<i>Fraxinus angustifolia "Raywood" (F. oxycarpa)</i>	Raywood Ash	●				●		Moderate	
<i>Fraxinus dipetala</i>	Foothill Ash	●						Low	●
<i>Fraxinus uhdei</i>	Evergreen Ash	●				●	●	Moderate	
<i>Fraxinus velutina</i>	Arizona Ash	●				●	●	Moderate	●
<i>Fraxinus velutina "Modesto"</i>	Modesto Ash	●				●	●	Moderate	●
<i>Geijera parviflora</i>	Australian Willow	●	●		●	●		Moderate	
<i>Ginkgo biloba</i>	Maiden Hair Tree	●		●	●			Moderate	
<i>Gleditsia triacanthos</i>	Honey Locust	●	●			●		Low	
<i>Grevillea robusta</i>	Silk Oak	●				●		Low	
<i>Handroanthus chrysotrichus (Tabebuia chrysotricha)</i>	Golden Trumpet Tree	●	●	●	●	●		Moderate	
<i>Handroanthus impetiginosus (Tabebuia impetiginosa)</i>	Pink/Lavender Trumpet Tree	●	●	●	●	●		Moderate	
<i>Hesperocyparis spp.</i>	Cypress	●						Very Low	
<i>Hymenosporum flavum</i>	Sweet Shade	●			●	●		Moderate	
<i>Jacaranda mimosifolia</i>	Jacaranda	●		●	●	●		Moderate	
<i>Juglans californica</i>	California Black Walnut	●						Low	●
<i>Juglans hindsii</i>	Northern California Black Walnut	●						Low	●
<i>Juniperus spp.</i>	Juniper	●		●	●	●		Moderate	
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper	●						Moderate	
<i>Koelreuteria bipinnata</i>	Chinese Flame Tree	●	●	●	●	●		Moderate	
<i>Koelreuteria elegans</i>	Chinese Flame Tree	●						Moderate	
<i>Koelreuteria paniculata</i>	Golden Rain Tree	●	●	●	●	●		Low	
<i>Lagerstroemia spp., hybrids</i>	Crape Myrtle	●	●	●	●	●		Moderate	
<i>Laurus nobilis</i>	Sweet Bay	●	●		●			Low	



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Leptospermum "Dark Shadows"</i>	Dark Shadows Tea Tree	●						Low	
<i>Leptospermum laevigatum</i>	Australian Tea Tree	●						Low	
<i>Leptospermum petersonii</i>	Lemon Scented Tea Tree	●						Low	
<i>Liquidambar styraciflua</i>	Sweet Gum	●	●	●	●	●		Moderate	
<i>Lonicera hispidula</i>	California Honeysuckle	●						Very Low	●
<i>Lophostemon confertus (Tristania conferta)</i>	Brisbane Box	●	●	●	●	●	●	Moderate	
<i>Lyonothamnus spp.</i>	Ironwood	●						Low	●
<i>Magnolia grandiflora</i>	Southern Magnolia	●	●	●	●	●		Moderate	
<i>Magnolia x soulangeana</i>	Saucer Magnolia	●		●	●			Moderate	
<i>Melaleuca linariifolia</i>	Flax Leaf Paper Bark	●	●	●	●	●		Low	
<i>Melaleuca nesophila</i>	Pink Melaleuca	●						Low	
<i>Melaleuca viridiflora var. rubriflora (M. quinquenervia)</i>	Cajeput Tree	●						Moderate	
<i>Metrosideros excelsa (M. tomentosa)</i>	New Zealand Christmas Tree	●			●	●		Moderate	
<i>Morus alba</i>	White Mulberry	●						Moderate	
<i>Olea europaea</i>	Olive	●	●	●	●	●		Low	
<i>Olneya tesota</i>	Desert Ironwood	●						Low	●
<i>Parkinsonia spp.</i>	Mexican Palo Verde/ Jerusalem Thorn	●	●	●	●	●		Low	
<i>Parkinsonia "Desert Museum" (Cercidium)</i>	Desert Museum Palo Verde	●	●	●	●	●		Low	●
<i>Parkinsonia florida (Cercidium florida)</i>	Blue Palo Verde	●						Very Low	●
<i>Parkinsonia microphylla (Cercidium microphyllum)</i>	Little Leaf Palo Verde	●						Low	●
<i>Pinus spp.</i>	Pine	●	●	●	●	●	●	Low	●
<i>Pinus attenuata</i>	Knobcone Pine	●	●	●	●	●		Low	●
<i>Pinus coulteri</i>	Coulter Pine	●	●	●	●	●		Low	●
<i>Pinus edulis</i>	Pinyon Pine	●	●	●	●	●		Low	●
<i>Pinus monophylla</i>	Single Leaf Pinyon Pine	●	●	●	●	●		Low	●
<i>Pinus ponderosa</i>	Ponderosa Pine	●	●	●	●	●		Low	●
<i>Pinus sabiniana</i>	Foothill Pine	●	●	●	●	●		Low	●
<i>Pistacia chinensis</i>	Chinese Pistache	●	●	●	●	●		Moderate	
<i>Platanus acerifolia "Bloodgood"</i>	London Plane Tree								



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Platanus acerifolia</i> "Columbia"	London Plane Tree								
<i>Platanus racemosa</i>	California Sycamore	●	●	●	●	●	●	Moderate	●
<i>Podocarpus henkelii</i>	Long Leaf Yellow Wood	●		●	●	●		Moderate	
<i>Podocarpus macrophyllus</i>	Yew Pine	●		●	●	●		Moderate	
<i>Populus fremontii</i>	Western Cottonwood	●				●	●	Moderate	●
<i>Populus nigra</i> "Italica"	Lombardy Poplar	●				●	●	Moderate	
<i>Prosopis spp.</i>	Mesquite	●				●	●	Low	
<i>Prunus spp.</i>	Stone Fruit	●		●	●	●		Moderate	
<i>Prunus caroliniana</i>	Carolina Laurel Cherry	●		●	●	●		Moderate	
<i>Prunus ilicifolia</i>	Holly Leaf Cherry	●						Very Low	●
<i>Prunus ilicifolia lyonii</i>	Catalina Cherry	●					●	Low	●
<i>Psidium littorale</i> var. <i>longipes</i> (<i>P. cattleianum</i>)	Strawberry Guava	●				●		Moderate	
<i>Pyrus calleryana</i> cultivars	Callery Pear	●						Moderate	
<i>Pyrus kawakamii</i>	Evergreen Pear	●			●			Moderate	
<i>Quercus spp.</i> (limited varieties are native)	Coast Live Oak	●	●	●	●		●	Low	●
<i>Quercus agrifolia</i>	Coast Live Oak	●	●	●	●			Low	●
<i>Quercus douglasii</i>	Blue Oak	●	●	●	●			Low	●
<i>Quercus engelmannii</i>	Mesa Oak	●	●	●	●			Low	●
<i>Quercus kelloggii</i>	California Black Oak	●	●	●	●			Moderate	●
<i>Quercus lobata</i>	Valley Oak	●	●	●	●		●	Moderate	●
<i>Quercus wislizeni</i>	Interior Live Oak	●	●	●	●		●	Very Low	●
<i>Robinia pseudoacacia</i>	Black Locust	●						Low	
<i>Robinia x ambigua</i>	Locust	●						Low	
<i>Schinus molle</i>	California Pepper Tree	●				●		Low	
<i>Schinus terebinthifolius</i>	Brazilian Pepper Tree	●			●	●		Moderate	
<i>Senna spectabilis</i> (<i>Cassia excelsa</i>)	Senna/Cassia (Spectabilis/Excelsa)	●						Moderate	
<i>Sequoiadendron giganteum</i>	Giant Sequoia	●				●		Moderate	●
<i>Stenocarpus sinuatus</i>	Firewheel Tree	●						Moderate	
<i>Styphnolobium japonicum</i> (<i>Sophora japonica</i>)	Japanese Pagoda Tree	●						Moderate	
<i>Taxus baccata</i>	English Yew	●			●			Moderate	



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<i>Taxus baccata "Fastigiata"</i>	Irish Yew	●						Moderate	
<i>Thuja plicata</i>	Western Red Cedar	●						Moderate	●
<i>Tipuana tipu</i>	Tipu Tree	●	●	●	●	●		Moderate	
<i>Tristaniopsis laurina</i>	Little Leaf Myrtle	●						Moderate	
<i>Ulmus americana</i>	American Elm	●						Moderate	
<i>Ulmus parvifolia</i>	Chinese Evergreen Elm	●	●	●	●	●		Low	
<i>Ulmus pumila</i>	Siberian Elm	●						Low	
<i>Umbellularia californica</i>	California Bay	●	●			●		Moderate	●
<i>x Chitalpa tashkentensis</i>	Chitalpa	●						Low	
<i>Zelkova serrata</i>	Saw Leaf Zelkova	●	●	●	●	●		Moderate	
PALMS									
<i>Archontophoenix cunninghamiana</i>	King Palm	●			●	●		Moderate	
<i>Brahea armata</i>	Blue Hesper Palm	●		●	●			Low	
<i>Brahea brandegeei</i>	San Jose Hesper Palm	●						Low	
<i>Brahea edulis</i>	Guadalupe Palm	●			●			Low	●
<i>Butia odorata (B. capitata)</i>	Pindo Palm	●			●			Low	
<i>Chamaerops humilis</i>	Mediterranean Fan Palm	●		●	●	●		Low	
<i>Cycas revoluta</i>	Sago Palm	●		●	●	●		Moderate	
<i>Howea forsteriana</i>	Kentia Palm	●			●			Moderate	
<i>Phoenix canariensis</i>	Canary Island Date Palm	●			●	●		Low	
<i>Phoenix dactylifera</i>	Date Palm	●			●	●		Low	
<i>Phoenix reclinata</i>	Senegal Date Palm	●			●	●		Moderate	
<i>Phoenix roebelenii</i>	Pigmy Date Palm	●		●	●	●		Moderate	
<i>Ravenea rivularis</i>	Majesty Palm	●						Moderate	
<i>Rhapis excelsa</i>	Lady Palm	●			●			Moderate	
<i>Rhapis humilis</i>	Slender Lady Palm	●			●			Moderate	
<i>Sabal spp.</i>	Palmetto	●			●	●		Moderate	
<i>Syagrus romanzoffiana (Arecastrum romanzoffiana)</i>	Queen Palm	●			●	●		Moderate	
<i>Trachycarpus fortunei</i>	Windmill Palm	●			●	●		Low	
<i>Washingtonia filifera</i>	California Fan Palm	●			●	●	●	Low	●
<i>Washingtonia robusta</i>	Mexican Fan Palm	●			●	●	●	Low	



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SHRUBS									
<i>Abelia chinensis</i>	Chinese Abelia	●						Moderate	
<i>Abelia floribunda</i>	Mexican Abelia	●						Moderate	
<i>Abelia parvifolia (A. longituba)</i>	Schuman Abelia	●						Moderate	
<i>Abelia x grandiflora</i>	Glossy Abelia	●	●	●	●	●		Moderate	
<i>Abutilon palmeri</i>	Indian Mallow	●						Low	●
<i>Acacia spp.</i>	Acacia	●					●	Low	
<i>Acacia greggii</i>	Catclaw Acacia	●						Low	●
<i>Acacia podalyriifolia</i>	Pearl Acacia	●						Moderate	
<i>Acanthus mollis (shade in the desert) (dormant in summer in CV)</i>	Bear's Breech	●			●	●		Moderate	
<i>Acca sellowiana (Feijoa sellowiana)</i>	Pineapple Guava	●				●		Moderate	
<i>Adenostoma fasciculatum</i>	Chamise	●						Very Low	●
<i>Aesculus californica</i>	California Buckeye	●					●	Low	●
<i>Alyogyne huegelii</i>	Blue Hibiscus	●		●	●	●		Low	
<i>Anisodonte X hypomandarum</i>	South African Mallow	●						Moderate	
<i>Aquilegia spp. (CA native and non-native spp.)</i>	Columbine	●						Moderate	●
<i>Arctostaphylos spp.</i>	Manzanita	●		●	●	●	●	Low	●
<i>Arctostaphylos hookeri "Ken Taylor"</i>	Ken Taylor Manzanita	●		●	●	●	●	Low	●
<i>Arctostaphylos hookeri "Wayside"</i>	Wayside Manzanita	●		●	●	●	●	Low	●
<i>Artemisia spp. (shrubby)</i>	Sagebrush	●						Low	
<i>Artemisia californica</i>	California Sagebrush	●						Very Low	●
<i>Artemisia californica "Canyon Gray"</i>	Canyon Gray Sagebrush	●						Very Low	●
<i>Artemisia californica "Montara"</i>	Montara Sagebrush	●						Very Low	●
<i>Artemisia douglasiana</i>	California Mugwort	●						Low	●
<i>Asclepias (CA native species)</i>	Milk/Silk Weed	●						Low	●
<i>Asclepias subulata</i>	Desert Milkweed	●						Low	●
<i>Atriplex CA native species</i>	Saltbush	●						Very Low	●
<i>Aucuba japonica (SHADE)</i>	Japanese Aucuba	●			●	●		Moderate	
<i>Baccharis spp.</i>	Baccharis	●	●	●	●	●	●	Low	●
<i>Baccharis "Centennial"</i>	Centennial Baccharis	●			●	●	●	Low	●
<i>Baccharis salicifolia</i>	Mule Fat	●						Moderate	●



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Bambusa spp.</i>	Bamboo (Bambusa)	●			●	●		Moderate	
<i>Berberis spp.</i>	Berberis	●					●	Low	●
<i>Berberis "Golden Abundance" (Mahonia)</i>	Golden Abundance Mahonia	●						Moderate	●
<i>Berberis nevinii</i>	Nevin Mahonia	●						Low	●
<i>Berberis x stenophylla "Irwinii"</i>	Barberry	●						Moderate	
<i>Bougainvillea spp.</i>	Bougainvillea	●		●	●			Low	
<i>Brunfelsia pauciflora</i>	Yesterday Today And Tomorrow	●						Moderate	
<i>Buddleja davidii and hybrids</i>	Butterfly Bush	●				●		Moderate	
<i>Buxus microphylla japonica</i>	Japanese Boxwood	●	●	●	●	●		Moderate	
<i>Caesalpinia gilliesii</i>	Desert Bird Of Paradise	●						Low	
<i>Caesalpinia mexicana</i>	Mexican Bird Of Paradise	●						Low	
<i>Calliandra californica</i>	Baja Fairy Duster	●				●		Low	●
<i>Calliandra eriophylla</i>	Fairy Duster	●				●		Very Low	●
<i>Calliandra haematocephala</i>	Pink Powder Puff	●						Moderate	
<i>Calliandra tweedii</i>	Trinidad Flame Bush	●						Low	
<i>Callistemon spp.</i>	Bottlebrush	●						Low	
<i>Calycanthus occidentalis (in shade)</i>	Western Spice Bush	●						Moderate	●
<i>Camellia japonica (SHADE IN DESERT)</i>	Camellia	●			●			Moderate	
<i>Camellia sasanqua (SHADE IN DESERT)</i>	Sasanqua Camellia	●			●	●		Moderate	
<i>Carissa spp.</i>	Natal Plum	●	●	●	●	●		Moderate	
<i>Carpenteria californica</i>	Bush Anemone	●						Moderate	●
<i>Ceanothus spp.</i>	Ceanothus	●	●	●	●	●	●	Low	●
<i>Ceanothus arboreus</i>	Island Ceanothus	●	●	●	●	●	●	Moderate	●
<i>Ceanothus "Gloire de Versailles"</i>	Gloire De Versailles Ceanothus	●	●	●	●	●	●	Moderate	
<i>Ceanothus "Joyce Coulter"</i>	Joyce Coulter Ceanothus	●	●	●	●	●	●	Moderate	●
<i>Ceanothus thyrsoiflorus "El Dorado"</i>	El Dorado Ceanothus	●	●	●	●	●	●	Moderate	●
<i>Ceanothus thyrsoiflorus "Skylark"</i>	Skylark Ceanothus	●	●	●	●	●	●	Moderate	●
<i>Cephalanthus occidentalis</i>	Button Bush	●						Moderate	●



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<i>Cistus spp.</i>	Rockrose	●		●	●	●		Low	
<i>Cocculus laurifolius</i>	Laurel Leaf Cocculus	●						Moderate	
<i>Coleonema album</i>	White Breath Of Heaven	●	●	●	●			Moderate	
<i>Coleonema pulchellum (C. pulchrum)</i>	Breath Of Heaven	●	●	●	●			Moderate	
<i>Convolvulus cneorum</i>	Bush Morning Glory	●			●	●		Low	
<i>Coprosma repens</i>	Mirror Plant	●	●	●	●	●		Moderate	
<i>Coprosma x kirkii</i>	Creeping Coprosma	●	●	●	●	●		Moderate	
<i>Cordyline australis</i>	New Zealand Cabbage Tree	●						Moderate	
<i>Cordyline hybrids</i>	Cordyline Hybrids	●						Moderate	
<i>Cordyline stricta</i>	Palm Lily	●						Moderate	
<i>Correa spp.</i>	Australian Fuchsia	●						Low	
<i>Cotinus coggygria</i>	Smoke Tree	●	●		●			Low	
<i>Cotoneaster spp. (shrubs)</i>	Cotoneaster	●		●				Moderate	
<i>Cotoneaster coriaceus (C. lacteus, C. parneyi)</i>	Red Clusterberry	●						Moderate	
<i>Cotoneaster salicifolius</i>	Willowleaf Cotoneaster	●						Moderate	
<i>Crassula spp.</i>	Crassula	●						Low	
<i>Cuphea "David Verity" (all Hybrids)</i>	Large Firecracker Plant	●						Moderate	
<i>Cuphea hyssopifolia</i>	False Heather	●						Moderate	
<i>Cuphea ignea</i>	Cigar Plant	●			●	●		Moderate	
<i>Cuphea llavea</i>	Bat-Faced Cuphea	●			●	●		Moderate	
<i>Cuphea "Strybing Sunset"</i>	Stribing Sunset Cigar Plant	●						Moderate	
<i>Dalea bicolor</i>	Dalea (Bicolor)	●						Low	
<i>Dendromecon harfordii</i>	Island Bush Poppy	●					●	Low	●
<i>Dendromecon rigida</i>	Tree Poppy	●					●	Very Low	●
<i>Dodonaea viscosa</i>	Hopseed Bush	●	●	●	●	●		Moderate	
<i>Dodonaea viscosa "Purpurea"</i>	Purple Hopseed Bush	●		●	●	●		Moderate	
<i>Dryopteris arguta</i>	Coastal Wood Fern	●						Low	●
<i>Dryopteris filix-mas</i>	Male Fern	●						Moderate	●
<i>Echium candicans (fastuosum)</i>	Pride Of Madeira	●		●	●	●		Low	
<i>Elaeagnus pungens</i>	Silverberry	●			●			Low	



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<i>Encelia actoni</i>	Mountain Bush Sunflower	●						Low	●
<i>Encelia californica</i>	Coast Sunflower	●					●	Low	●
<i>Encelia farinosa</i>	Brittle Bush	●					●	Very Low	●
<i>Encelia frutescens</i>	Green Brittlebush	●						Low	●
<i>Erigeron glaucus</i>	Beach Aster	●						Moderate	●
<i>Eriogonum spp. (CA native and non-native spp.)</i>	Buckwheat	●					●	Low	●
<i>Escallonia spp.</i>	Escallonia	●	●	●	●			Moderate	
<i>Euonymus japonicus</i>	Evergreen Euonymus	●	●	●	●	●		Moderate	
<i>Fatsia japonica (SHADE)</i>	Japanese Aralia	●	●	●	●	●		Moderate	
<i>Forestiera pubescens</i>	Desert Olive	●						Low	●
<i>Fremontodendron spp.</i>	Flannel Bush	●						Very Low	●
<i>Galvezia juncea</i>	Baja Bush-Snapdragon	●						Low	●
<i>Gardenia spp.</i>	Gardenia	●		●	●	●		Moderate	
<i>Garrya elliptica</i>	Coast Silktassel	●						Moderate	●
<i>Garrya veatchii</i>	Silk Tassel Bush	●						Very Low	●
<i>Grevillea spp.</i>	Grevillea	●		●	●	●		Low	
<i>Hebe spp.</i>	Hebe	●	●	●	●	●		Moderate	
<i>Heteromeles arbutifolia</i>	Toyon	●	●			●	●	Low	●
<i>Heuchera elegans</i>	Urn Flowered Alum Root	●	●	●	●			Low	●
<i>Heuchera hirsutissima</i>	Idyllwild Rock Flower	●	●	●	●			Low	●
<i>Heuchera maxima</i>	Island Alum Root	●	●	●	●			Moderate	●
<i>Heuchera micrantha</i>	Crevice Alum Root	●	●	●	●		●	Moderate	●
<i>Hibiscus rosa-sinensis</i>	Chinese Hibiscus	●						Moderate	
<i>Hydrangea paniculata hybrids</i>	Peegee Hydrangea	●		●	●	●		Moderate	
<i>Ilex spp.</i>	Holly	●						Moderate	
<i>Iris douglasiana</i>	Douglas Iris	●				●	●	Moderate	●
<i>Iris Pacific Coast hybrids</i>	Pacific Coast Hybrids	●		●		●	●	Moderate	●
<i>Isocoma spp. (Haplopappus)</i>	Goldenbush	●						Very Low	●
<i>Juniperus spp.</i>	Juniper	●	●	●	●	●		Moderate	
<i>Juniperus californica</i>	California Juniper	●	●	●	●	●		Low	●
<i>Justicia brandegeana</i>	Shrimp Plant	●						Moderate	
<i>Justicia californica (Beloperone californica)</i>	Chuparosa	●						Low	●
<i>Lantana spp.</i>	Lantana	●	●	●	●	●		Low	



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<i>Lavandula spp.</i>	Lavender	●	●	●	●	●		Low	
<i>Lavatera maritima</i>	Bush Mallow	●						Moderate	
<i>Leonotis leonurus</i>	Lion's Tail	●						Low	
<i>Leptospermum spp.</i>	Tea Tree	●						Low	
<i>Leptosyne gigantea (Coreopsis gigantea)</i>	Giant Coreopsis	●						Low	●
<i>Leptosyne maritima (Coreopsis maritima)</i>	Sea Dahlia	●						Low	●
<i>Leucadendron spp, hybrids</i>	Conebush	●				●	●	Moderate	
<i>Leucophyllum spp.</i>	Sage	●						Low	
<i>Leucospermum spp</i>	Pincushion Bush	●						Moderate	
<i>Ligustrum japonicum</i>	Japanese Privet	●	●	●	●	●		Moderate	
<i>Lobelia laxiflora</i>	Mexican Lobelia	●		●	●			Low	
<i>Loropetalum chinense</i>	Fringe Flower	●			●			Moderate	
<i>Magnolia figo (Michelia figo)</i>	Banana Shrub	●						Moderate	
<i>Magnolia stellata</i>	Star Magnolia	●						Moderate	
<i>Malacothamnus spp.</i>	Bush Mallow	●						Low	●
<i>Malosma laurina (Rhus laurina)</i>	Laurel Sumac	●						Low	●
<i>Malva assurgentiflora (Lavatera assurgentiflora)</i>	Tree Mallow	●						Low	●
<i>Melianthus major</i>	Honey Flower	●						Moderate	
<i>Mimulus aurantiacus (Diplacus arachnoideus)</i>	Sticky Monkey Flower	●						Very Low	●
<i>Mimulus aurantiacus var. puniceus</i>	Red Bush Monkey Flower	●						Very Low	●
<i>Mimulus hybrids (shrubby) (Diplacus)</i>	Monkey Flower	●						Low	●
<i>Myoporum laetum</i>	Coast Myoporum	●	●	●	●	●		Moderate	
<i>Myrsine africana</i>	African Boxwood	●	●	●	●	●		Moderate	
<i>Myrtus communis</i>	True Myrtle	●						Moderate	
<i>Nandina domestica</i>	Heavenly Bamboo	●			●			Moderate	
<i>Nandina domestica "Purpurea"</i>	Heavenly Bamboo (Nana)	●			●			Moderate	
<i>Nerium oleander</i>	Oleander	●			●			Low	
<i>Oenothera caespitosa</i>	Tufted (White) Evening Primrose	●						Low	●
<i>Oenothera californica</i>	California Evening Primrose	●						Very Low	●
<i>Oenothera elata (E. hookeri)</i>	Hooker's Evening Primrose	●						Low	●
<i>Oenothera speciosa (O. berlandieri)</i>	Mexican Evening Primrose	●						Low	
<i>Osmanthus spp.</i>	Sweet Olive/Osmanthus	●			●			Moderate	



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<i>Otatea acuminata (aztecorum)</i>	Mexican Weeping Bamboo	●			●			Moderate	
<i>Pachycereus marginatus</i>	Mexican Fence Post Cactus	●						Very Low	
<i>Pedilanthus bracteatus</i>	Tall Slipper Plant	●						Low	
<i>Penstemon spp. (SW native)</i>	Penstemon (SW Natives)	●					●	Low	●
<i>Philodendron "Xanadu"</i>	Xanadu Philodendron	●		●	●			Moderate	
<i>Phlomis spp.</i>	Phlomis	●						Low	
<i>Phlox spp.</i>	Phlox	●						Moderate	●
<i>Photinia x fraseri</i>	Fraser's Photinia	●	●	●	●	●		Moderate	
<i>Phyllostachys spp.</i>	Bamboo (Phyllostachys)	●			●			Moderate	
<i>Pittosporum crassifolium</i>	Evergreen Pittosporum	●	●	●	●	●		Moderate	
<i>Pittosporum tenuifolium</i>	Tawhiwhi	●	●	●	●	●	●	Moderate	
<i>Pittosporum tobira</i>	Mock Orange	●	●	●	●	●		Moderate	
<i>Plumbago auriculata (capensis)</i>	Cape Plumbago	●						Moderate	
<i>Polygala fruticosa "Petite Butterfly"</i>	Petite Butterfly Pea Shrub	●						Moderate	
<i>Polygala X dalmaisiana</i>	Sweet Pea Shrub	●						Moderate	
<i>Punica granatum</i>	Dwarf Pomegranate	●		●		●		Low	
<i>Pyracantha spp.</i>	Firethorn	●						Moderate	
<i>Ranunculus californicus</i>	California Buttercup	●						Very Low	●
<i>Rhamnus alaternus</i>	Italian Buckthorn	●						Moderate	
<i>Rhamnus crocea</i>	Redberry	●						Low	●
<i>Rhamnus ilicifolia</i>	Hollyleaf Redberry	●						Low	●
<i>Raphiolepis indica</i>	Indian Hawthorne	●	●	●	●	●		Moderate	
<i>Raphiolepis "Majestic Beauty"</i>	Majestic Beauty	●	●	●	●	●		Moderate	
<i>Raphiolepis umbellata</i>	Yeddo Hawthorne	●						Moderate	
<i>Rhus integrifolia</i>	Lemonade Berry	●						Low	●
<i>Rhus ovata</i>	Sugar Bush	●					●	Low	●
<i>Ribes spp.</i>	Bitter Gooseberry	●						Low	●
<i>Ribes californicum</i>	Hillside Gooseberry	●						Low	●



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Ribes menziesii</i>	Canyon Gooseberry	●						Low	●
<i>Ribes sanguineum</i> varieties	Red Flowering Currant	●					●	Moderate	●
<i>Ribes speciosum</i>	Fuchsia Flowering Gooseberry	●					●	Moderate	●
<i>Roldana oaxacana</i> (<i>Senecio christobalensis</i>)	Red Leafed Velvet Senecio	●						Moderate	
<i>Roldana petasitis</i> (<i>Senecio petasitis</i>)	Velvet Groundsel	●						Moderate	
<i>Romneya coulteri</i>	Matilija Poppy	●					●	Very Low	●
<i>Rosa californica</i>	California Wild Rose	●		●				Low	●
<i>Rosa "Cecile Brunner"</i>	Cecile Brunner Rose	●		●		●		Moderate	
<i>Rosa hybrids</i> spp.	Rose	●	●	●	●	●		Moderate	
<i>Rosmarinus officinalis</i>	Rosemary	●	●	●	●	●		Low	
<i>Ruellia</i> spp.	Petunia	●						Moderate	
<i>Russelia equisetiformis</i>	Coral Fountain	●			●	●		Moderate	
<i>Salvia</i> spp. (limited varieties are native)	Sage	●	●	●	●	●		Low	
<i>Sambucus</i> spp. (CA native and non-native spp.)	Elderberry	●						Low	●
<i>Santolina</i> spp.	Lavender Cotton	●						Low	
<i>Sarcococca ruscifolia</i>	Fragrant Sarcococca	●						Moderate	
<i>Senecio cineraria</i> (<i>Jacobaea maritima</i>)	Dusty Miller	●						Low	
<i>Senecio flaccidus</i> var. <i>douglasii</i>	Douglas Groundsel	●						Low	●
<i>Senna artemisioides</i> (<i>Cassia artemisioides</i>)	Feathery Cassia/Senna	●						Low	
<i>Senna nemophila</i> (<i>Cassia nemophila</i>)	Desert Cassia	●						Low	
<i>Solanum umbelliferum</i>	Blue Witch	●						Low	●
<i>Spiraea</i> spp. (CA native and non native spp.)	Spiraea	●						Moderate	●
<i>Strelitzia nicolai</i> (shade in desert)	Giant Bird Of Paradise	●	●	●	●	●		Moderate	
<i>Strelitzia reginae</i> (shade in desert)	Bird Of Paradise	●	●	●	●	●		Moderate	
<i>Strelitzia reginae</i> var. <i>juncea</i>	Narrow-Leafed Bird Of Paradise	●	●	●	●	●		Low	
<i>Symphoricarpos albus</i> (SHADE)	Snowberry	●						Low	●
<i>Symphoricarpos longiflorus</i> (SHADE)	Desert Snowberry	●						Low	●
<i>Symphoricarpos mollis</i> (SHADE)	Creeping Snowberry	●						Low	●



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Tecoma spp.</i>	Tecoma	●				●		Low	
<i>Tecomaria capensis</i>	Cape Honeysuckle	●	●	●	●	●		Moderate	
<i>Ternstroemia gymnanthera</i>	Japanese Ternstroemia	●						Moderate	
<i>Teucrium chamaedrys</i>	Germander	●						Low	
<i>Teucrium fruticans</i>	Bush Germander	●						Low	
<i>Thevetia peruviana</i>	Yellow Oleander	●				●		Moderate	
<i>Thuja occidentalis</i>	American Arborvitae	●						Moderate	
<i>Trichostema lanatum</i>	Woolly Blue Curls	●						Low	●
<i>Trichostema parishii</i>	Mountain Blue Curls	●						Low	●
<i>Verbena gooddingii (Glandularia gooddingii)</i>	Goodding Verbena	●	●	●	●			Low	●
<i>Verbena stricta</i>	Hoary Vervain	●						Moderate	
<i>Viburnum japonicum</i>	Japanese Viburnum	●	●	●	●	●		Moderate	
<i>Viburnum suspensum</i>	Sandanqua Viburnum	●	●	●	●	●		Moderate	
<i>Viburnum tinus</i>	Laurustinus	●	●	●	●	●		Moderate	
<i>Westringia brevifolia</i>	Small-Leafed Westringia	●						Moderate	
<i>Westringia fruticosa (rosmariniformis) & hybrids</i>	Coast Rosemary	●	●	●	●	●	●	Low	
<i>Westringia longifolia</i>	Winged Westringia	●						Moderate	
<i>Westringia "Wynyabbie Gem"</i>	Wynyabbie Gem Westringia	●	●	●	●	●	●	Low	
<i>Woodwardia fimbriata</i>	Giant Chain Fern	●						Moderate	●
<i>Xylosma congestum</i>	Shiny Xylosma	●	●	●	●	●		Moderate	
<i>Zamia furfuracea</i>	Cardboard Fern/Palm	●						Moderate	
SUCCULENTS									
<i>Aeonium spp.</i>	Canary Island Rose	●	●	●	●	●		Low	
<i>Agave americana</i>	Agave	●	●	●	●			Very Low	
<i>Agave attenuata</i>	Agave	●	●	●	●	●		Low	
<i>Aloe spp. (CA native and non-native)</i>	Aloe	●	●	●	●	●		Low	●
<i>Beaucarnea recurvata (Nolina recurvata)</i>	Ponytail Palm	●			●			Low	
<i>Beschorneria yuccoides</i>	Mexican Lily	●	●	●	●	●		Moderate	
<i>Dasyliiron spp.</i>	Desert Spoon	●			●			Low	



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Dudleya</i> spp.	Dudleya, Live Forever	●						Low	●
<i>Echeveria</i> spp.	Hens And Chickens	●	●	●	●			Low	
<i>Echinocactus</i> spp. (CA native and non-native spp.)	Barrel Cactus	●						Low	●
<i>Euphorbia</i> spp.	Euphorbia	●						Low	
<i>Euphorbia cotinifolia</i>	Carribbean Copper Plant	●						Moderate	
<i>Euphorbia x martinii</i>	Euphorbia	●						Moderate	
<i>Ferocactus</i> spp. (CA native and non-native spp.)	Barrel Cactus	●						Low	●
<i>Fouquieria splendens</i>	Ocotillo	●						Very Low	●
<i>Hesperaloe</i> spp.	Hesperaloe	●	●	●	●	●		Low	
<i>Hesperoyucca</i> spp. (<i>Yucca whipplei</i> , <i>Yucca californica</i>)	Yucca	●	●	●	●			Low	●
<i>Kalanchoe</i> spp.	Kalanchoe	●	●	●	●	●		Low	
<i>Kleinia repens</i> (<i>Senecio repens</i>)	Blue Chalksticks	●	●	●	●	●		Low	
<i>Nolina</i> spp. (CA natives and non-natives)	Bear Grass	●						Very Low	●
<i>Opuntia</i> spp.	Prickly Pear/Cholla	●						Very Low	●
<i>Plectranthus neochilus</i>	Lobster Flower	●						Moderate	
<i>Portulacaria afra</i>	Elephant's Food	●	●	●	●	●		Low	
<i>Sansevieria</i> spp.	Mother-In-Law's Tongue	●	●	●	●			Low	
<i>Sedum</i> spp. (some are <i>Hylotelephium</i>)	Stone Crop	●	●	●	●	●		Low	●
<i>Senecio cylindricus</i> spp.	Chalksticks	●						Low	
<i>Senecio mandraliscae</i> (<i>Kleinia mandraliscae</i>)	Kleinia	●	●	●	●	●		Low	
<i>Senecio serpens</i>	Blue Chalksticks	●	●	●	●	●		Low	
<i>Yucca</i> spp.	Yucca	●	●	●	●			Very Low	
<i>Yucca baccata</i>	Banana Yucca	●	●	●	●			Very Low	●
<i>Yucca brevifolia</i>	Joshua Tree	●	●	●	●			Very Low	●
<i>Yucca schidigera</i> (<i>Y. californica</i> , <i>Y. mohavensis</i>)	Mojave Yucca	●	●	●	●			Very Low	●
GRASSES									
<i>Aristida purpurea</i>	Purple Three-Awn	●	●	●	●	●	●	Low	●
<i>Bouteloua curtipendula</i>	Sideoats Grama	●	●	●	●	●	●	Low	●
<i>Bouteloua gracilis</i>	Blue Grama	●	●	●	●	●	●	Low	●
<i>Calamagrostis x acutiflora</i> cvs. e.g. Karl Foerster	Feather Reed Grass	●	●	●	●	●	●	Moderate	
<i>Carex pansa</i> (grasses)	Sand Dune Sedge	●	●	●	●	●	●	Moderate	●



Juncus effusus



Miscanthus sinensis



Muhlenbergia rigens



Sisyrinchium bellum

Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Carex praegracilis</i> (grasses)	California Field Sedge	●	●	●	●	●	●	Moderate	●
<i>Carex spissa</i>	San Diego Sedge	●	●	●	●	●	●	Low	●
<i>Carex tumulicola</i>	Berkeley Sedge	●	●	●	●	●	●	Low	●
<i>Elymus cinereus</i> (<i>Leymus cinereus</i>)	Basin Wild Rye	●	●	●	●	●	●	Low	●
<i>Elymus condensatus</i> (<i>Leymus condensatus</i>)	Giant Wild Rye	●	●	●	●	●	●	Low	●
<i>Elymus triticoides</i> (<i>Leymus triticoides</i>)	Creeping Wild Rye	●	●	●	●	●	●	Low	●
<i>Festuca amethystina</i>	Sheep's Fescue	●	●	●	●	●	●	Moderate	
<i>Festuca glauca</i>	Blue Fescue	●	●	●	●	●	●	Moderate	
<i>Festuca idahoensis</i>	Idaho Fescue	●	●	●	●	●	●	Moderate	●
<i>Festuca mairei</i>	Maire's Fescue	●	●	●	●	●	●	Moderate	
<i>Festuca muelleri</i>	Mueller's Fescue	●	●	●	●	●	●	Moderate	
<i>Festuca ovina</i>	Sheep Fescue	●	●	●	●	●	●	Moderate	
<i>Festuca "Siskiyou Blue"</i>	Siskiyou Blue Fescue	●	●	●	●	●	●	Low	
<i>Helictotrichon sempervirens</i>	Blue Oat Grass	●	●	●	●	●	●	Moderate	
<i>Imperata cylindrica</i>	Blood Grass	●	●	●	●	●	●	Moderate	
<i>Juncus acutus</i>	Spiny Rush	●	●	●	●	●	●	Moderate	●
<i>Juncus aquatic</i> spp. (native and non-native spp.)	Rush	●	●	●	●	●	●	Moderate	●
<i>Juncus effusus</i>	Soft Rush	●	●	●	●	●	●	Moderate	●
<i>Juncus patens</i>	California Grey Rush	●	●	●	●	●	●	Low	●
<i>Leymus arenarius</i>	Sand Ryegrass	●	●	●	●	●	●	Moderate	
<i>Melica imperfecta</i>	Coast Range Onion Grass	●	●	●	●	●	●	Moderate	●
<i>Miscanthus sinensis</i>	Eulalia Grass	●	●	●	●	●	●	Moderate	
<i>Miscanthus transmorrisonensis</i>	Evergreen Eulalia	●	●	●	●	●	●	Moderate	
<i>Muhlenbergia capillaris</i>	Hairy Awn Muhly	●	●	●	●	●	●	Low	
<i>Muhlenbergia dumosa</i>	Bamboo Muhly	●	●	●	●	●	●	Low	
<i>Muhlenbergia lindheimeri</i>	Lindheimer Muhly	●	●	●	●	●	●	Moderate	
<i>Muhlenbergia rigens</i>	Deer Grass	●	●	●	●	●	●	Moderate	●
<i>Nassella gigantea</i>	Giant Needle Grass	●	●	●	●	●	●	Low	
<i>Phalaris</i> spp.	Ribbon Grass	●	●	●	●	●	●	Moderate	
<i>Sesleria</i> spp.	Moor Grass	●	●	●	●	●	●	Moderate	
<i>Sisyrinchium bellum</i>	Blue-Eyed Grass	●	●	●	●	●	●	Very Low	●
<i>Sisyrinchium californicum</i>	Golden-Eyed Grass	●	●	●	●	●	●	Moderate	●
<i>Sporobolus airoides</i>	Alkalai Sacaton	●	●	●	●	●	●	Low	●



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Sporobolus wrightii</i>	Big Sacaton	●	●	●	●	●	●	Low	●
<i>Stipa cernua</i> (<i>Nassella cernua</i>)	Nodding Needlegrass	●	●	●	●	●	●	Very Low	●
<i>Stipa comata</i>	Needle And Thread Grass	●	●	●	●	●	●	Low	●
<i>Stipa lepida</i> (<i>Nassella lepida</i>)	Foothill Needlegrass	●	●	●	●	●	●	Very Low	●
<i>Stipa pulchra</i> (<i>Nassella pulchra</i>)	Purple Needlegrass	●	●	●	●	●	●	Very Low	●
<i>Stipa tenuissima</i> (<i>Nassella tenuissima</i>)	Mexican Feather Grass	●	●	●	●	●	●	Low	
<i>Zoysia tenuifolia</i>	Korean Grass	●	●	●	●	●	●	Moderate	
GROUND COVER									
<i>Acacia redolens</i>	Prostrate Acacia	●			●	●		Low	
<i>Achillea millefolium</i> (<i>non-native hybrids</i>)	Yarrow (Non-Native Hybrids)	●		●				Low	
<i>Achillea millefolium</i> (<i>CA native cultivars</i>)	Yarrow	●		●				Low	●
<i>Achillea tomentosa</i>	Woolly Yarrow	●					●	Moderate	
<i>Ajuga reptans</i> (<i>shade</i>)	Carpet Bugle	●						Moderate	
<i>Aptenia cordifolia</i>	Ice Plant (Aptenia)	●	●	●	●			Low	
<i>Aptenia</i> "Red Apple"	Ice Plant (Red Apple)	●	●	●	●			Low	
<i>Arctostaphylos edmundsii</i> "Bert Johnson"	Bert Johnson Manzanita	●					●	Moderate	●
<i>Arctostaphylos edmundsii</i> "Big Sur"	Big Sur Manzanita	●						Low	●
<i>Arctostaphylos edmundsii</i> cvs	Manzanita Carmel Sur Etc.	●						Low	●
<i>Arctostaphylos</i> "Emerald Carpet"	Emerald Carpet Manzanita	●		●			●	Moderate	●
<i>Arctostaphylos hookeri</i> "Monterey Carpet"	Monterey Carpet Manzanita	●		●				Low	●
<i>Arctostaphylos</i> "Pacific Mist"	Pacific Mist Manzanita	●						Low	●
<i>Arctostaphylos</i> "Winterglow"	Winter Glow Manzanita	●					●	Moderate	●
<i>Armeria maritima</i>	Sea Pink	●	●	●	●	●		Moderate	●
<i>Baccharis pilularis</i> cvs.	Dwarf Coyote Brush	●	●	●	●	●		Low	●
<i>Berberis aquifolium</i> var. <i>repens</i> (<i>shade</i>)	Creeping Mahonia	●						Low	●
<i>Campanula</i> spp.	Bell Flower	●	●	●	●			Moderate	



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Campanula poscharskyana</i>	Serbian Bell Flower	●	●	●	●			Moderate	
<i>Ceanothus gloriosus</i> spp.	Ceanothus	●	●	●	●	●		Moderate	●
<i>Ceanothus gloriosus</i> "Emily Brown"	Emily Brown Ceanothus	●	●	●	●	●		Moderate	●
<i>Ceanothus gloriosus</i> "Heart's Desire"	Heart's Desire Ceanothus	●	●	●	●	●		Moderate	●
<i>Ceanothus gloriosus</i> v. <i>porrectus</i> "Mt. Vision"	Mt. Vision Ceanothus	●	●	●	●	●		Moderate	●
<i>Ceanothus maritimus</i> "Frosty Dawn"	Frosty Dawn Ceanothus	●						Low	●
<i>Ceanothus maritimus</i> "Popcorn"	Popcorn CA Lilac	●						Low	●
<i>Ceanothus maritimus</i> "Pt. Sierra"	Pt Sierra Ceanothus	●						Low	●
<i>Ceanothus maritimus</i> "Valley Violet"	Valley Violet Ceanothus	●						Low	●
<i>Ceanothus thyrsiflorus</i> var. <i>griseus</i> "Carmel Creeper"	Carmel Creeper Ceanothus	●						Moderate	●
<i>Ceanothus thyrsiflorus</i> var. <i>griseus</i> "Diamond Heights"	Diamond Heights Ceanothus	●						Moderate	●
<i>Ceanothus thyrsiflorus</i> var. <i>griseus</i> "Yankee Point"	Yankee Point Ceanothus	●						Moderate	●
<i>Cerastium tomentosum</i>	Snow In Summer	●			●			Moderate	
<i>Convolvulus mauritanicus</i>	Ground Morning Glory	●					●	Low	
<i>Coprosma petriei</i> "Verde Vista"	Verde Vista Coprosma	●			●			Moderate	
<i>Cotoneaster dammeri</i> var.	Cotoneaster	●						Moderate	
<i>Dichondra micrantha</i>	Dichondra	●	●	●	●			Moderate	
<i>Dichondra sericea</i>	Silver Leaf Pony's Foot	●	●	●	●			Moderate	
<i>Dymondia margaretae</i>	Dymondia	●	●	●	●	●		Low	
<i>Eschscholzia californica</i> (annual in the desert)	California Poppy	●	●	●			●	Very Low	●
<i>Euonymus fortunei</i>	Purple Winter Creeper	●						Moderate	
<i>Fragaria</i> spp. (CA native and non-natives species)	Strawberry	●	●	●	●	●		Moderate	●
<i>Gazania</i> spp.	Gazania	●	●	●	●	●		Moderate	
<i>Geranium</i> spp.	Cranesbill	●	●	●	●			Moderate	
<i>Hypericum calycinum</i>	Aaron's Beard	●						Moderate	
<i>Isotoma axillaris</i>	Rock Isotoma	●						Moderate	
<i>Lampranthus</i> spp.	Ice Plant (Lampranthus)	●	●	●	●			Low	



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Lantana camara</i>	Lantana	●	●	●	●	●		Low	
<i>Lantana hybrids</i>	Hybrid Lantana	●	●	●	●	●		Low	
<i>Lantana montevidensis (sellowiana)</i>	Trailing Lantana	●	●	●	●	●		Low	
<i>Lantana "New Gold"</i>	New Gold Lantana	●	●	●	●	●		Low	
<i>Muehlenbeckia axillaris</i>	Creeping Wire Vine	●						Moderate	
<i>Myoporum parvifolium</i>	Myoporum	●	●	●	●			Low	
<i>Myoporum X "Pacificum"</i>	Pacifica Saltbush	●	●	●	●		●	Moderate	
<i>Osteospermum spp.</i>	African Daisy	●	●	●	●	●		Low	
<i>Parthenocissus henryana</i>	Silver Vein Creeper	●			●			Moderate	
<i>Pelargonium peltatum</i>	Ivy Geranium	●			●	●		Moderate	
<i>Rosmarinus</i>	Trailing Rosemary	●	●	●	●	●		Low	
<i>Salvia "Bee's Bliss"</i>	Bee's Bliss Sage	●	●	●		●		Low	●
<i>Salvia "Dara's Choice"</i>	Sonoma Sage	●	●	●		●		Low	●
<i>Salvia "Mrs. Beard"</i>	Mrs. Beard Sage	●	●	●		●		Low	●
<i>Scaevola "Mauve Clusters"</i>	Fan Flower	●	●	●				Moderate	
<i>Thymus spp.</i>	Thyme	●	●	●	●	●		Moderate	
<i>Trachelospermum asiaticum</i>	Asian Star Jasmine	●	●	●	●	●		Moderate	
<i>Verbena peruviana</i>	Peruvian Verbena	●	●	●	●			Low	
<i>Vinca minor</i>	Periwinkle	●	●	●	●		●	Moderate	
VINES									
<i>Antigonon leptopus</i>	Coral Vine	●	●	●	●			Low	
<i>Asarina antirrhiniflora</i>	Snapdragon Vine	●	●	●	●			Low	
<i>Beaumontia grandiflora</i>	Easter Lily Vine	●	●	●	●			Moderate	
<i>Bignonia capreolata</i>	Cross Vine	●	●	●	●			Moderate	
<i>Bougainvillea spp.</i>	Bougainvillea	●	●	●	●	●		Low	
<i>Cissus antarctica</i>	Kangaroo Vine	●	●	●	●			Moderate	
<i>Clematis armandii</i>	Evergreen Clematis	●	●	●	●			Moderate	
<i>Clematis lasiantha</i>	Pipestem Clematis	●	●	●	●			Low	●
<i>Clematis ligusticifolia</i>	Western Virgin's Bower	●	●	●	●			Low	●
<i>Clematis pauciflora</i>	Small Flowered Clematis	●	●	●	●			Low	●
<i>Clytostoma callistegioides</i>	Violet Trumpet Vine	●	●	●	●		●	Moderate	



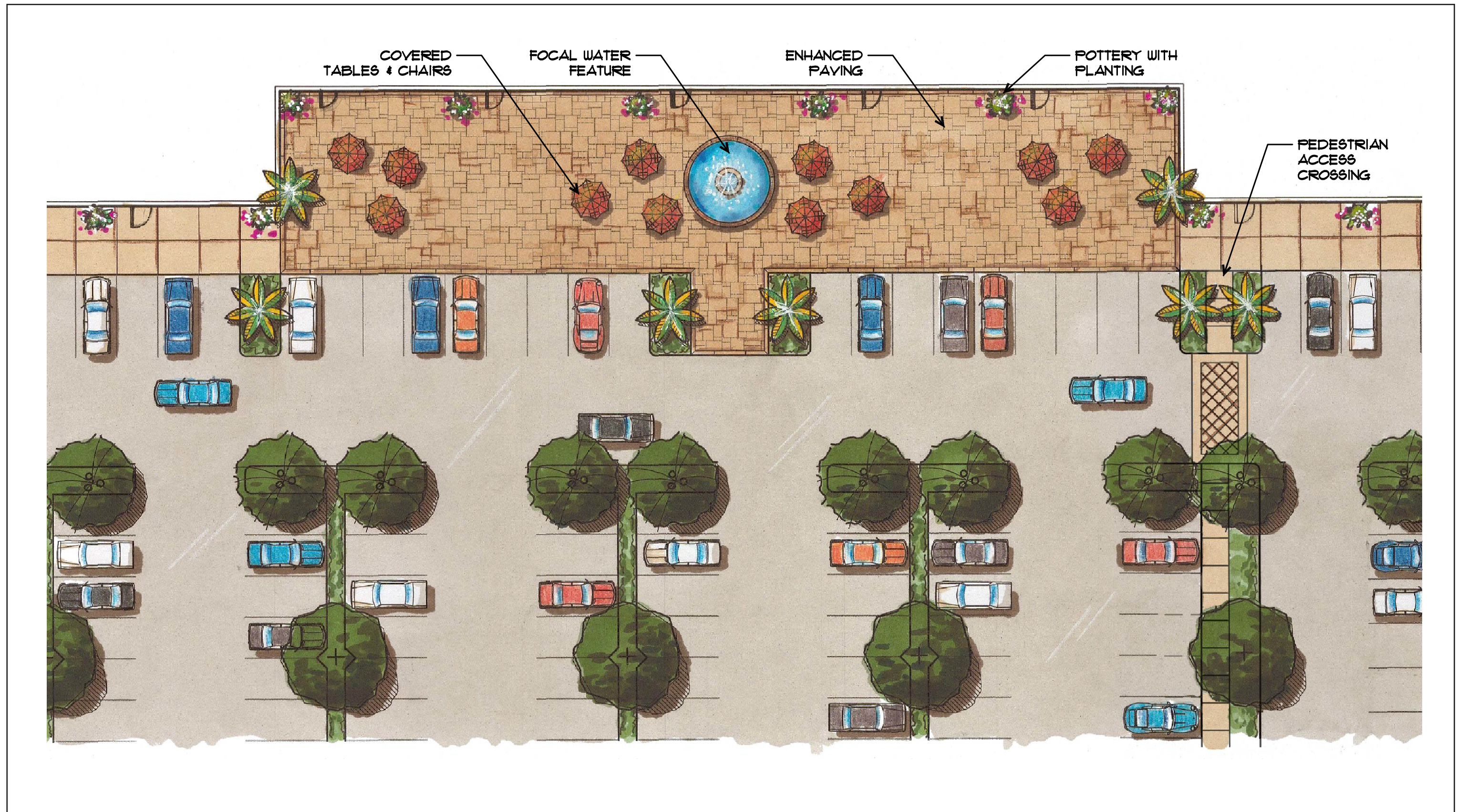
Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Distictis buccinatoria</i>	Blood Red Trumpet Vine	●	●	●	●	●		Moderate	
<i>Distictis "Rivers"</i>	Royal Trumpet Vine	●	●	●	●	●		Moderate	
<i>Euonymus fortunei radicans</i>	Winter Creeper	●	●	●	●			Moderate	
<i>Fallopia baldschuanica (Polygonum aubertii)</i>	Fleeceflower	●	●	●	●			Low	
<i>Ficus pumila (repens)</i>	Creeping Fig	●	●	●	●	●		Moderate	
<i>Gelsemium sempervirens</i>	Carolina Jessamine	●	●	●	●			Moderate	
<i>Grewia occidentalis</i>	Lavender Star Flower	●	●	●	●			Moderate	
<i>Hardenbergia comptoniana</i>	Western Australia Coral Pea	●	●	●	●			Moderate	
<i>Hardenbergia violacea</i>	Lilac Vine	●	●	●	●	●		Moderate	
<i>Hedera canariensis</i>	Algerian Ivy	●	●	●	●		●	Moderate	
<i>Hedera helix</i>	English Ivy	●	●	●	●			Moderate	
<i>Hibbertia scandens</i>	Guinea Gold Vine	●	●	●	●	●		Moderate	
<i>Jasminum polyanthum</i>	Pink Jasmine	●	●	●	●	●		Moderate	
<i>Lonicera spp.</i>	Honeysuckle	●	●	●	●			Moderate	●
<i>Macfadyena unguis-cati</i>	Cat's Claw	●	●	●	●			Low	
<i>Mandevilla laxa (M. suaveolens)</i>	Chilean Jasmine	●	●	●	●			Moderate	
<i>Pandorea jasminoides</i>	Bower Vine	●	●	●	●			Moderate	
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	●	●	●	●			Moderate	
<i>Parthenocissus tricuspidata</i>	Boston Ivy	●	●	●	●	●		Moderate	
<i>Passiflora spp.</i>	Passion Vine	●	●	●	●		●	Moderate	
<i>Pyrostegia venusta</i>	Flame Vine	●	●	●	●	●		Moderate	
<i>Rosa banksiae</i>	Lady Banks Rose	●	●	●	●			Moderate	
<i>Rosa hybrids</i>	Climbing Roses	●	●	●	●			Moderate	
<i>Solandra maxima</i>	Cup-Of-Gold Vine	●	●	●	●			Moderate	
<i>Solanum laxum (jasminoides)</i>	Potato Vine	●	●	●	●			Moderate	
<i>Stephanotis floribunda</i>	Madagascar Jasmine	●	●	●	●			Moderate	
<i>Thunbergia spp.</i>	Black Eyed Susan	●	●	●	●			Moderate	
<i>Trachelospermum asiaticum</i>	Asian Star Jasmine	●	●	●	●			Moderate	
<i>Trachelospermum jasminoides</i>	Star Jasmine	●	●	●	●			Moderate	
<i>Vigna caracalla</i>	Snail Vine	●	●	●	●			Moderate	
<i>Vitis californica</i>	California Wild Grape	●	●	●	●		●	Low	●
<i>Vitis girdiana</i>	Desert Grape	●	●	●	●			Low	●



Botanical Name	Common Name	Residential	Streetscapes	Entries	Commercial	Parks	Drainage Basins	Water Use	Native
<i>Vitis "Roger's Red"</i>	Roger's Red Grape	●	●	●	●		●	Low	●
<i>Wisteria spp.</i>	Wisteria	●	●	●	●	●		Moderate	
<i>X Fatshedera lizei</i>	Botanical Wonder	●	●	●	●			Moderate	

4.5 Commercial Plaza

A pedestrian-scale plaza brings an inviting feel to the commercial center by providing space for shoppers and workers to rest and congregate. This area can also be used for outdoor dining, as well as space for special events. A concept plan for the Commercial Plaza is depicted on Figure 4-18, Commercial Plaza Concept, with the overall Commercial Concept depicted on Figure 4-19.



RANCHO PALMA

Strata Palma, LLC

Figure 4-18

Commercial Plaza Concept



20
 Feet

FORMA
 November 2015



RANCHO PALMA

Strata Palma, LLC

Figure 4-19
Commercial Concept





 November 2015

5 SUSTAINABLE GUIDELINES

5.1 Introduction

One of the goals of the Rancho Palma Specific Plan is to provide a quality development that is designed to limit the use of unrenewable resources. This chapter provides a menu of options that can be utilized to provide a more sustainable project in all facets of the development.

5.2 Green Infrastructure

1. Use pervious paving materials wherever possible to reduce the negative effects of stormwater runoff and to facilitate groundwater recharge.
2. Consider open grid paving – such as dual track driveways in the residential neighborhood for localized drainage.
3. Divert runoff into detention basins to allow water recharge, reduce drainage runoff, and control the rate of storm flows from the site.
4. Encourage the use of stormwater management practices such as the incorporation of infiltration basins and bioswales.
5. When feasible promote dual uses for detention basins for recreation purposes.
6. Utilize bioswales, particularly with native or drought- tolerant grasses, to collect and filter water runoff.

5.3 Landscaping

1. Plant selection shall be based on species that are native, drought tolerant, heat resistant, and hardy.
2. Prohibit the use of large turf areas in landscaping by substituting water-conserving native groundcovers or perennial grasses, shrubs, and trees.
3. For common landscape areas, install Evapo Transpiration based controllers which are weather based controllers providing greater efficiency.
4. Promote the use of mulch and environmentally friendly fertilizers to promote healthy soil condition for healthy growing conditions.
5. Provide landscaping for shade and micro climate control.
6. Provide a landscape palette that includes only non-evasive plants.
7. Encourage the use of deciduous trees to allow sunlight during the winter.
8. Install high efficiency, xeriscape irrigation systems to reduce the amount of water devoted to landscaped areas, such as drip and bubbler irrigation and low-angle, low-flow nozzles on spray heads.
9. To reduce the amount of water used, install programmed automated irrigation systems.
10. Utilize moisture sensors and other similar irrigation technology to ensure that landscaping is watered only as needed.

5.4 Building Materials

1. Consider using 20 percent locally manufactured and produced building materials, defined as materials manufactured or produced within 500 miles of the project.
2. Strive to use rapidly renewable or recycled building materials and products for at least 5 percent of the total value of materials. Flooring alternatives like bamboo, wheatboard, and cork are rapidly renewable materials. Linoleum, exposed concrete, and recycled-content ceramic tiles are also desirable materials.
3. Encourage the installation of insulation with at least 75 percent recycled content, such as cellulose, newspaper, or recycled cotton.

5.5 Indoor Air Quality

1. Use flooring and insulation products that are low emitters of volatile organic compounds (VOC) and formaldehyde.
2. Use low- and zero-VOC paints, finishes, adhesives, caulks, and other substances to improve indoor air quality and reduce the harmful health effects of off-gassing.
3. In compliance with Air Quality Management District Rule 445, new homes are prohibited from permanently installing wood-burning devices unless: they are Environmental Protection Agency (EPA) Phase II-Certified, pellet-fueled, masonry heaters; meet US EPA emission standards, or are dedicated gaseous-fueled fireplaces.

5.6 Lighting

1. Encourage the use of low-contrast lighting and use low-voltage fixtures and energy-efficient bulbs, such as compact fluorescent and light emitting diode bulbs
2. Promote the use automated occupancy sensors in nonresidential buildings that automatically shut off lights when rooms are unoccupied.
3. Utilize solar landscape lights for energy saving when possible.
4. Use shielded fixtures, avoiding overhead lighting of areas such as walkways.

5.7 Building Envelope

1. Install radiant barriers to reduce summer heat gain and winter heat loss.
2. Reduce the amount of energy needed for cooling by using natural ventilation techniques, such as operable windows, to take advantage of airflow for cooling interiors.
3. As practical, design taller windows that start close to the ceiling to optimize daylighting of interiors.
4. Reduce heat gain with the use of "cool roofs," at the commercial center which are painted with a highly reflective coating or employ light-colored materials.

5. Utilize water- and energy-saving fixtures and appliances, such as showerheads, toilets, washing machines, clothes dryers, refrigerators, and dishwashers certified as Energy Star compliant.
6. Consider recirculating hot water systems to reduce the need to heat water, or tankless water heaters that heat water as needed instead of storing hot water in tanks, thus reducing standby energy use.
7. To reduce the need of additional heating and cooling, utilize a minimum insulation value of R30 in ceilings.
8. To provide for more efficient and effective heating and cooling, utilize programmable thermostats.

5.8 Water Conservation

1. Use low-water-consumption, Energy Star-compliant appliances and fixtures to reduce water consumption
2. For the commercial area, install sensor-operated faucets in public restrooms.
3. Utilize dual flush or other toilets using less than 1.6 gallons per flush.
4. Consider waterless urinals in public restrooms in nonresidential buildings.

5.9 Energy Conservation

1. To reduce energy used, utilize energy-efficient windows, such as models with spectrally selective low-e glass and with wood, vinyl, or fiberglass frames.
2. Utilize efficient building materials that take advantage of heat storage or thermal mass to reduce energy needed for heating and cooling interiors.
3. Promote reduced energy used by installing energy saving appliances and fixtures.
4. To reduce heat gain, minimize the number and area of east and west facing windows.
5. To reduce the amount of heat loss, domestic hot water pipes should be insulated.
6. To reduce both the need of cooling and heating, attics should be insulated.
7. To provide for more efficient windows, dual pane and window tinting should be considered.

5.10 Heating, Ventilation and Air Conditioning

1. Design and install HVAC systems according to the standards provided by the Air Conditioning Contractors of America handbooks or other comparable high-performance HVAC standards.
2. Install sealed-combustion/sealed-duct furnaces and water heaters for increased efficiency and indoor air quality.

3. Install only EnergyStar-qualified ceiling fans to circulate air, improve comfort, and reduce the demand on heating and cooling systems.
4. Locate windows and provide operable windows to promote natural cross ventilation.
5. Promote smart climate controls for both residential and commercial buildings to efficiently regulate temperature controls.

5.11 Solar Power and Building Orientation

1. Provide additional roof structure to support solar panels.
2. Provide south facing roof planes to optimize solar use.
3. Encourage overhangs to shade and protect windows from direct sunlight.

6 IMPLEMENTATION

6.1 Authority and Scope

The adoption of the Rancho Palma Specific Plan by the City of San Bernardino is authorized by the California Government Code, Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457. As set forth by the Government Code and the City of San Bernardino Development Code, Chapter 19.64, Specific Plans must contain the information outlined below in either text and/or exhibits. References to the location of this information within the Rancho Palma Specific Plan are shown in **bold**.

- The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan. **(Chapter 2)**
- The proposed distribution, location, extent and intensity of major components of public and private transportation, sewage, water drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan. **(Chapter 2)**
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources where applicable. **(Chapter 3)**
- A program of implementation measures including regulations, public works projects, and financing measures necessary to carry out the above items. **(Chapter 6)**
- A statement of the relationship of the specific plan to the General Plan. **(Chapter 7)**

The Rancho Palma Specific Plan serves both a planning function and a regulatory function. It is the device, which implements the City of San Bernardino General Plan on this property. The plan contains all applicable land use regulations and constitutes the zoning for the Rancho Palma property; the development standards contained in the Specific Plan will take precedence over any other provisions of the Municipal Code. However, where the Specific Plan remains silent, the regulations of the San Bernardino Development Code shall apply.

6.2 Purpose of the Specific Plan

Development of the Rancho Palma property will be achieved through the adoption and implementation of this Specific Plan, which will serve as the comprehensive development control document for the project. The Specific Plan establishes the type, location, intensity, character of development, and the required infrastructure for development of the proposed Planned Community.

The Rancho Palma Specific Plan accommodates the unique planning opportunities related to providing a quality development of needed housing, recreation, and commercial uses for the City of San Bernardino's Verdemon't Heights Community.

The Rancho Palma Specific Plan is a regulatory plan, which will serve as the zoning ordinance for this property. Proposed development plans or agreements, tentative tract maps or parcel maps and any other development approval must be consistent

with this Specific Plan. If there is a conflict found between this Specific Plan and other provisions the City's Zoning Ordinance, the contents of this Specific Plan shall prevail.

6.3 Relationship of the Specific Plan to the General Plan

Pursuant to California Government Code Section 65454, a specific plan shall be consistent with the local jurisdiction's General Plan. The Rancho Palma Specific Plan provides regulations, guidelines, and standards that are consistent with and implement the goals and policies of the City of San Bernardino General Plan. Consistency with the City's General Plan is demonstrated in Chapter 7. Rancho Palma components, which are found to be consistent with the Specific Plan, shall be deemed consistent with the General Plan.

6.4 California Environmental Quality Act (CEQA) Compliance

The Rancho Palma Specific Plan Environmental Impact Report (EIR) was prepared by the City of San Bernardino during the adoption process for the Specific Plan in compliance with CEQA. This document addresses the environmental aspects of the site and impacts due to the implementation of the Specific Plan.

This environmental review is also applicable to future residential and commercial development projects (Precise Plans, Tentative Tract Maps, etc.), which are processed in conformance with this Specific Plan, thus requiring no further environmental documentation except as noted in Sections 15182 and 15162 of the State Guidelines to CEQA.

6.5 Amendments

6.5.1 Requirements and Procedures

This Specific Plan may be amended at any time in the same manner and by the same process by which the plan was originally adopted, as described in Chapter 19.64, Specific Plans, of the City of San Bernardino Development Code. The City's standard environmental review procedures shall be followed.

6.5.2 Administrative Actions

Certain minor changes to provisions in the Specific Plan may be made administratively by the Director of Development Services, subject to appeal to the Planning Commission and subsequently, the City Council. Such amendments do not require additional environmental review. These changes include but are not limited to:

1. The addition of new information to the Specific Plan maps or text that does not change the effect of any concepts or regulations.
2. Changes to the community infrastructure, such as drainage, streets, water, and sewer systems which do not have the effect of increasing or decreasing development capacity in the Specific Plan area, nor change the concepts of the Specific Plan.

3. Boundary adjustments, easement locations, and minor design feature changes.
4. Minor land use district boundary adjustments.
5. Land use area acreage adjustments for acreages shown on the Land Use Plan Summary Table by no more than fifteen percent of the affected area.
6. Other items determined to be appropriate by the Director of Development Services.

6.6 Severability

If any provision of this Specific Plan or the application thereof to any persons or circumstances is held invalid, such invalidity shall not affect other provisions or applications of this Specific Plan, which can be given effect without the invalid provisions or application thereof, and to this end, the provisions of this Specific Plan are severable.

6.7 Effect on Conflicting Provisions

Whenever the provisions of this Specific Plan permit greater flexibility than, or establish regulations different than those imposed or required by the San Bernardino Development Code, the provisions of this Specific Plan shall prevail.

6.8 Phasing

It is intended that the Rancho Palma Specific Plan will be constructed in two phases. Phase 1 will include Planning Areas 1 and 2, as well as the private parks, and dedication of the Ronald Reagan Park expansion to the City of San Bernardino. Phase 2 will include Planning Area 3. Figure 6-1, Phasing Plan, depicts the proposed Phasing Plan. This phasing does not preclude the ability to construct all of the backbone infrastructure in the first phase, nor does it preclude the ability to develop Phases 1 and 2 simultaneously.

6.9 Maintenance

Rancho Palma Homeowners Association will be created. This association will be responsible for the maintenance of the private streets, private parks, gate access, walls/fences, and drainage basin.

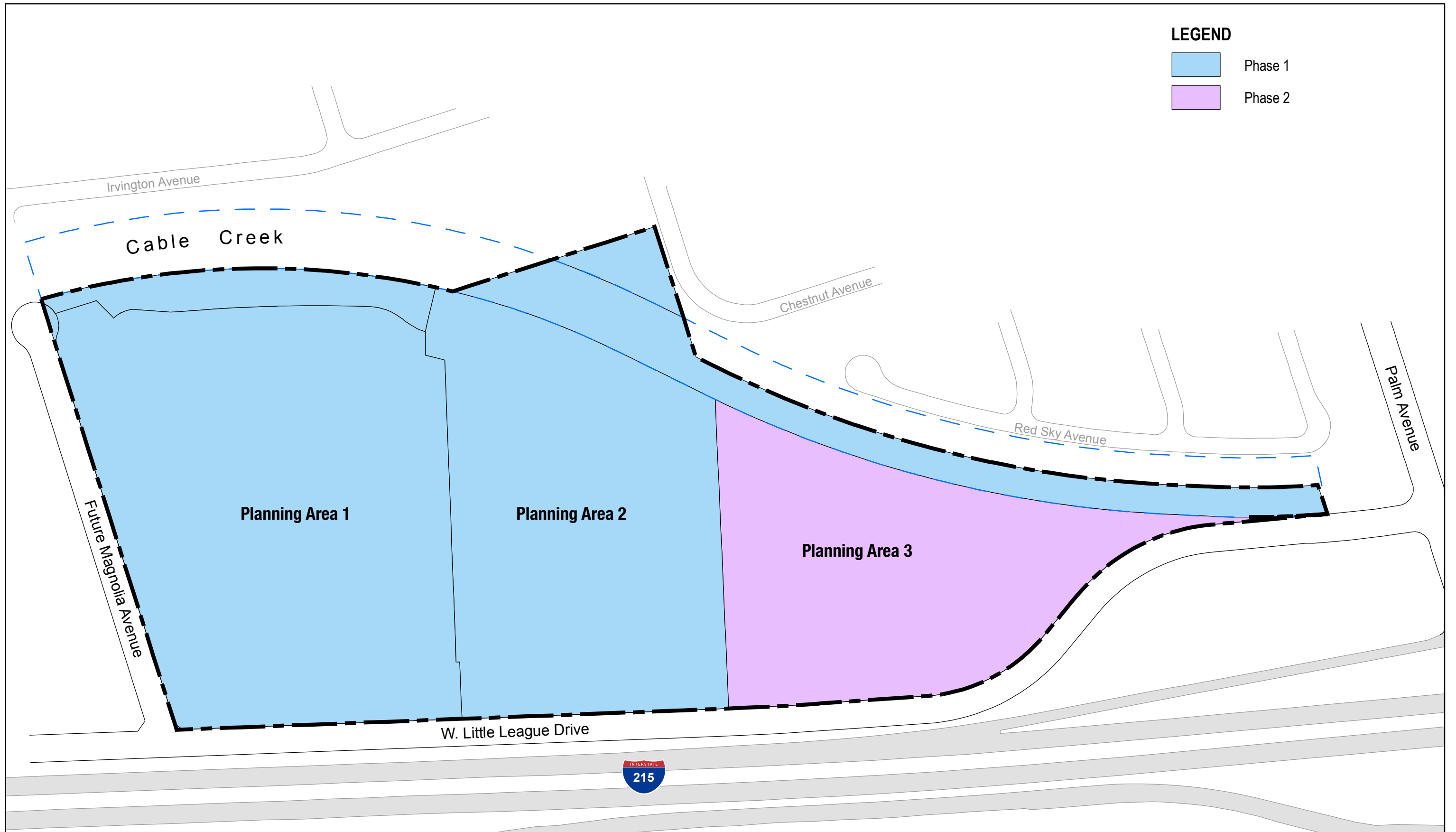


Figure 6-1

RANCHO PALMA

Phasing Plan

7 APPENDICES

7.1 General Plan Consistency Analysis

The Rancho Palma Specific Plan serves as the implementation tool for the City of San Bernardino General Plan for this property. Below is a discussion of how this Specific Plan implements the goals of the General Plan. *The General Plan goals are bold and italicized.*

7.1.1 Land Use Goals

2.1 Preserve and enhance San Bernardino's unique neighborhoods.

The Rancho Palma Land Use Plan is designed to be compatible with the surrounding residential and commercial uses within the Verdemon Heights Community.

2.2 Promote development that integrates with and minimizes impacts on surrounding land uses.

The residential uses proposed are separated from the adjacent existing residential uses by the Cable Creek Channel.

2.3 Create and enhance dynamic, recognizable places for San Bernardino's residents, employees, and visitors.

The Specific Plan Design Guidelines provide for the creation of unique, quality residential and commercial development.

2.4 Enhance the quality of life and economic vitality in San Bernardino by strategic infill of new development and revitalization of existing development.

Rancho Palma is an infill development on a previously disturbed site.

2.5 Enhance the aesthetic quality of land uses and structures in San Bernardino.

The Specific Plan Design Guidelines provide for the creation of unique, quality residential and commercial development.

7.1.2 Housing Goals

Goal 3.1 Facilitate the development of a variety of types of housing to meet the needs of all income levels in the City of San Bernardino.

Rancho Palma provides for two residential lot sizes and corresponding living areas to meet the needs a variety of income levels and resident lifecycles.

7.1.3 Economic Development Goals

Goal 4.1 Encourage economic activity that capitalizes upon the transportation and locational strengths of San Bernardino.

The commercial component of the Specific Plan takes advantage of the site's proximity to the Interstate 215 / Palm Avenue interchange.

7.1.4 Community Design Goals

Goal 5.3 Recognize unique features in individual districts and neighborhoods and develop a program to create unifying design themes to identify areas throughout the City.

The Specific Plan Design Guidelines provide for the creation of unique, quality residential and commercial development.

Goal 5.4 Ensure individual projects are well designed and maintained.

The Specific Plan Design Guidelines provide for the creation of unique, quality residential and commercial development and the residential homeowners association will be responsible for the maintenance of the private streets, parks, and gate houses.

Goal 5.5 Develop attractive, safe, and comfortable single family neighborhoods.

The Specific Plan Design Guidelines provide for the creation of unique, quality residential development.

Goal 5.7 Develop attractive and safe commercial, office, and industrial projects that are creatively designed and intelligently sited.

The Specific Plan Design Guidelines provide for the creation of unique, quality commercial development.

7.1.5 Circulation Goals

Goal 6.1 Provide a well-maintained street system.

The interior local roads will be maintained by the Rancho Palma homeowners association.

7.1.6 Parks, Recreation, and Trails Goals

Goal 8.1 Improve the quality of life in San Bernardino by providing adequate parks and recreation facilities and services to meet the needs of our residents.

The Rancho Palma Specific Plan provides for a variety of private parks, as well as the expansion of the existing Ronald Reagan Park.

Goal 8.4 Provide adequate funding for parkland and trails acquisition, improvements, maintenance, and programs.

The private parks will be improved by the developer and maintained by the homeowners association. The Ronald Reagan expansion parcel will be dedicated to the City of San Bernardino.

7.1.7 Utilities Goals

Goal 9.1 Provide a system of wastewater collection and treatment facilities that will adequately convey and treat wastewater generated by existing and future development in the City's service area.

The Rancho Palma Specific Plan provides for the creation of a wastewater system that will tie into existing facilities.

Goal 9.3 Provide water supply, transmission, distribution, storage, and treatment facilities to meet present and future water demands in a timely and cost effective manner.

The Rancho Palma Specific Plan provides for the creation of a water system that will tie into existing facilities.

Goal 9.4 Provide appropriate storm drain and flood control facilities where necessary.

The Rancho Palma Specific Plan provides for the creation of a drainage system that will tie into existing facilities.

Goal 9.10 Ensure that the costs of infrastructure improvements are borne by those who benefit.

The infrastructure improvements required by the Rancho Palma Specific Plan will be financed by the builder.

7.1.8 Safety Goals

Goal 10.5 Reduce urban run-off from new and existing development.

The Specific Plan Design Guidelines provide a variety of measures to reduce urban run-off, including a drainage basin and bio-swales.

7.1.9 Energy and Water Conservation Goals

Goal 13.1 Conserve scarce energy resources.

The Rancho Palma Specific Plan contains a chapter on Sustainable Guidelines to reduce energy and water use and conserve natural resources.

7.1.10 Noise Goals

Goal 14.1 Ensure that residents are protected from excessive noise through careful land planning.

Through site planning and constructions techniques, Rancho Palma residents will be protected from excessive noise.

7.2 Tentative Tract Map

(to be provided upon approval)