

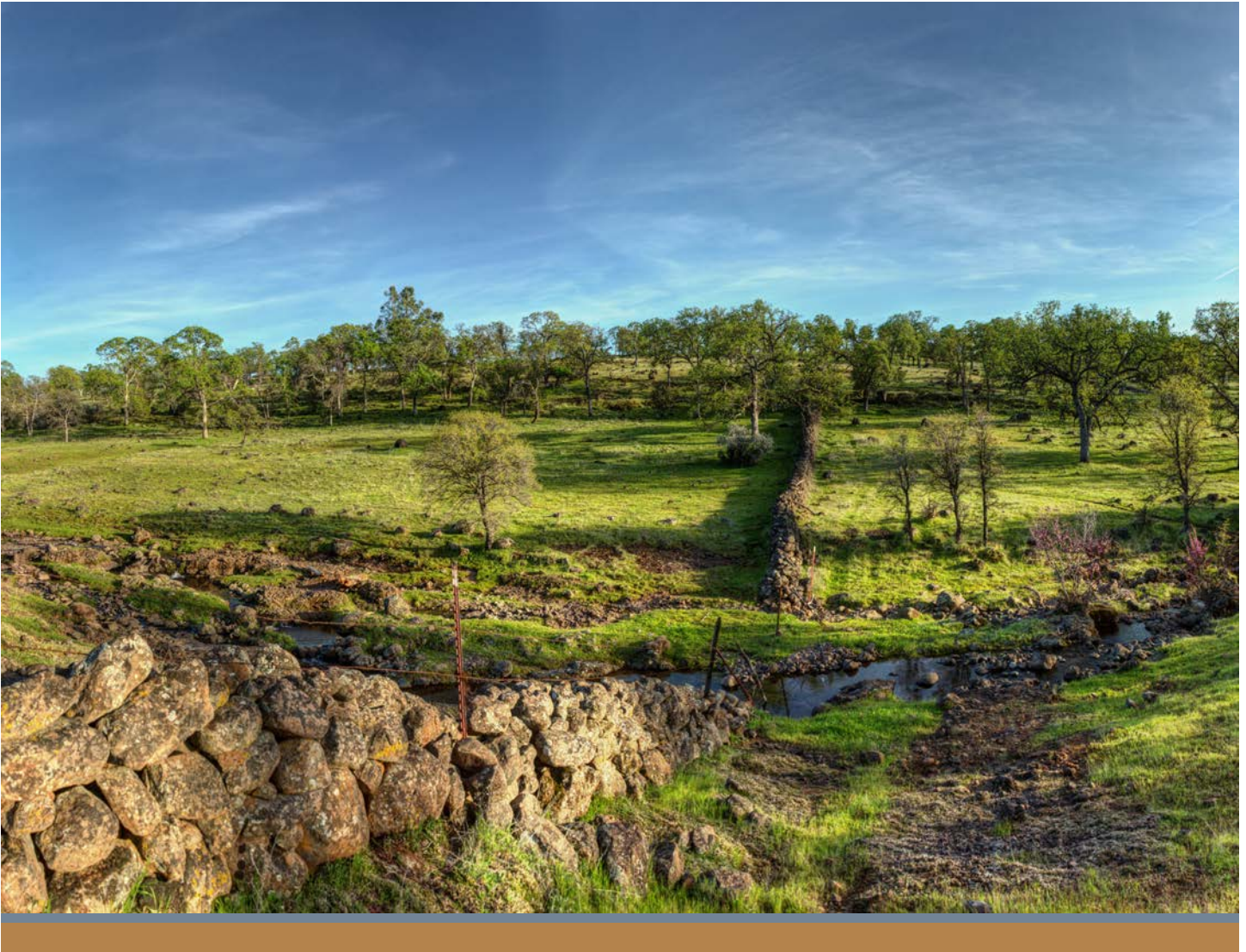


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Circulation & Trails

Chapter 5 - Circulation & Trails

5.1	Introduction	5-1
5.2	Master Circulation Plan	5-1
5.3	Trail System	5-2
5.4	Gateways & Entries	5-8
5.5	Street Classification & Sections	5-12
5.6	Public Transportation	5-21



5.1 Introduction

This Chapter describes circulation and streetscape improvements proposed for the Valley's Edge planning area, including design specifications for the proposed street hierarchy intended to serve the various land uses. The proposed trail network is described to showcase the intended pedestrian- and bicycle-connectivity throughout the community, as well as connectivity to off-site trails.

5.2 Master Circulation Plan

The VESP Master Circulation Plan (Figure 5-1) provides an overview of the major collector street(s) together with more conceptual distribution of minor and local roads serving residential villages. Street classifications are defined, each suited to varying traffic volumes, site characteristics, and abutting land uses.



The final alignment and roadway design will be determined at the tentative subdivision map stage of the development process, guided by the street sections contained in this Chapter. Special consideration shall be given to the final street designs to minimize impacts on natural and landmark features, while maintaining the principles of a connected and open community.

“Roadways, trails, and bikeways will be integrated into the natural landscape to connect the residential areas to parks, open space, offices, public facilities, and services.”

*- CHICO GENERAL PLAN
APPENDIX C -DOE MILL/HONEY
RUN SPECIAL PLANNING AREA*

5.3 Trail System

Trails are an integral component of the VESP’s open space and recreational infrastructure. The network of trails and paths in Valley’s Edge will promote alternative methods of transportation for residents and visitors, as well as support Chico’s active lifestyle. This section describes the role and importance of the trail network in relation to the success of a pedestrian-oriented community.

Table 5.1 Trail System Mileage	
Class I Path	5 - 6 miles
Class II Lanes	2 - 3 miles
Paseo Trails	1 mile
Enhanced Trails	4 - 6 miles
Nature Trails	10 - 12 miles
Total	20 - 25 miles

5.3.1 Trails Master Plan

The VESP’s Trails Master Plan (TMP), depicted in Figure 5-2, illustrates the general routing of many existing and/or anticipated future trails providing internal circulation and external connectivity. The TMP identifies approximately 20 to 25 miles of trails within the open space framework, excluding sidewalks, minor paseos, bike lanes, and road network. The TMP is intended to guide rather than limit the location and routing of trails based on fine-grained surveys, evaluation, programs, and recommendations from the Trails Management Committee (TMC, see Section 5.3.3).

The TMP is comprised of four basic trail types differentiated by setting, surface, character, width, and intended use; Class I Paths, Class II Lanes, Paseo Trails, Enhanced Trails, and Nature Trails. The TMP may introduce additional types of trail classifications, such as Special Use Trails designed for a particular purpose or single user group.



An example of a Class I Path within a rural setting

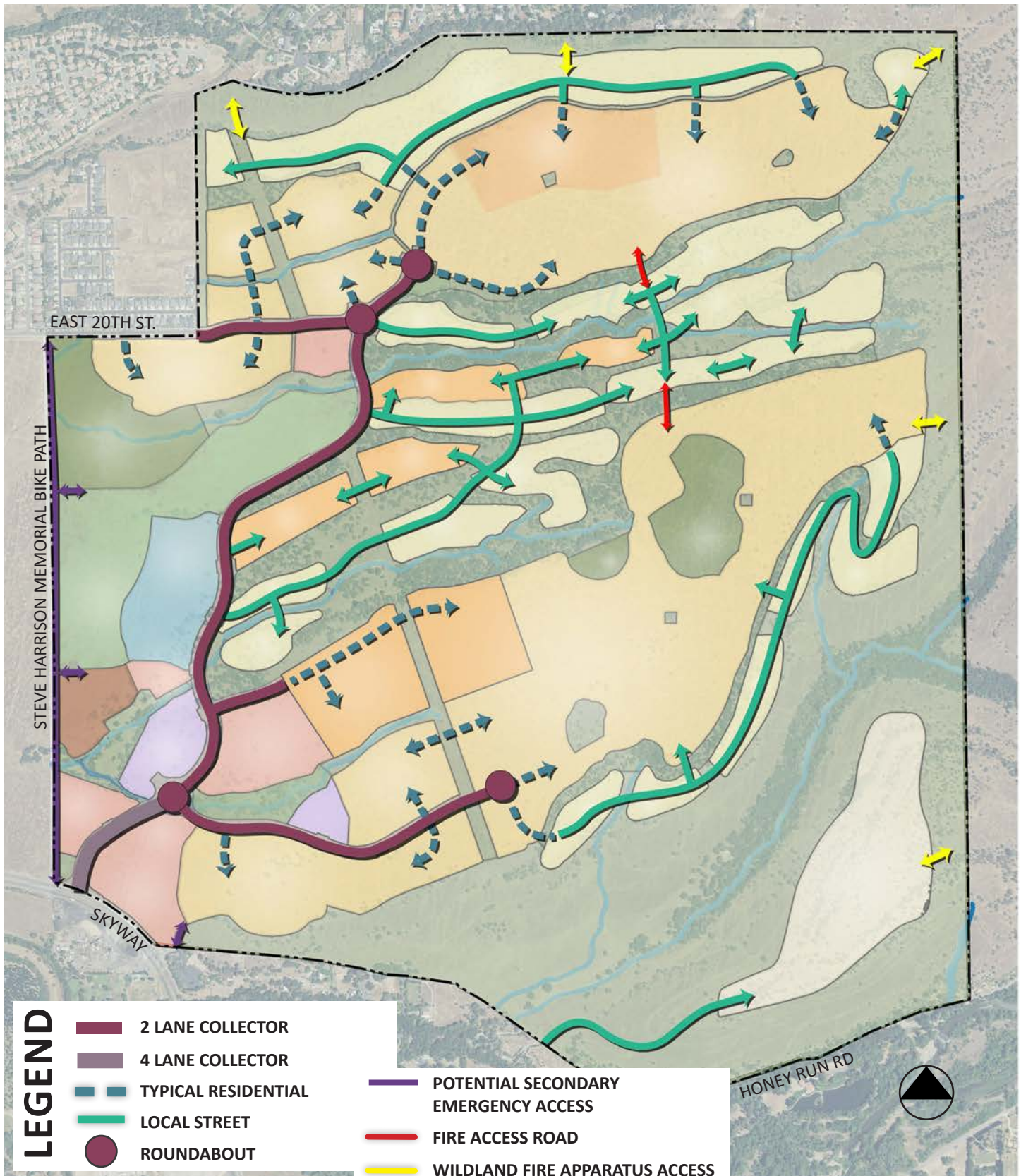


Figure 5-1: Master Circulation Plan



CLASS I PATHS

The TMP identifies approximately five and half miles of surfaced Class I looped pathways connecting open space corridors with residential areas, commercial areas, and the Village Core. Multiple trailheads along the Steve Harrison Memorial Bike Path provide direct and convenient access to and from the community park, elementary school, and other gathering places along the western planning area boundary.

Averaging 8' to 10' in width, Class I bike and pedestrian paths are intended and designed for use year-round as transportation and recreational corridors. A character-defining feature of a Class I Path is that it is entirely separated from vehicular traffic.

CLASS II LANES

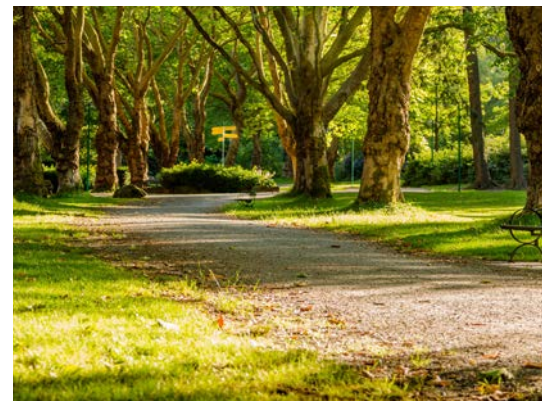
Class II lanes are designated on collector streets and combined with the NEV designated lanes, which provide a striped, on street facility for bicyclists and appropriately NEVs. Additional buffer striping may be incorporated to provide a greater separation between bicyclists and moving vehicles. Refer to Section 5.5.1 Collector Streets. The TMP identifies approximately 2.25 miles of Class II lanes in the VESP area.

PASEO TRAILS

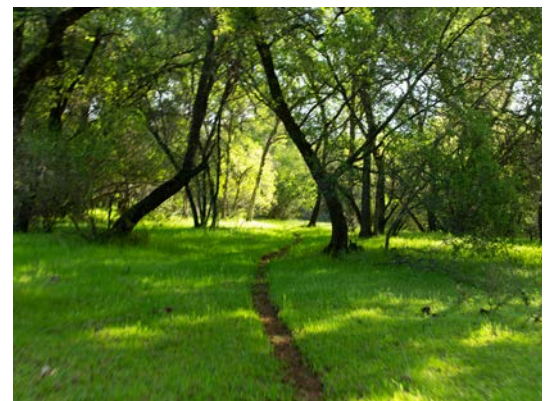
Paseos will provide pedestrian and bicycle connections between development areas and the VESP open space trail network. In addition to connectivity, paseos may also be used to articulate the boundaries of respective residential neighborhoods, or to transition between differing land uses, and/or to accommodate stormwater conveyance systems. The TMP identifies approximately one mile of paseo trails in the VESP area. When properly designed, paseos enhance a neighborhoods' appeal and make adjacent residences desirable. These transitional corridors will generally include 6' to 10' wide paved pathways, context appropriate lighting, landscaping, and other elements pursuant to the VESP's design guidelines in Appendix A. Additional paseo trails extending from residential areas abutting open space would be located and designed at the Tentative Map stage.



A paseo trail offers connectivity while articulating residential boundaries



Enhanced trails require limited maintenance while providing many recreational opportunities



Trail running, mountain biking, hiking, and horseback riding are examples of activities that may utilize nature trails.



ENHANCED TRAILS

Enhanced trails are improved with hardened natural surfaces such as gravel or decomposed granite. These trails promote recreation while providing connectivity to the Class I network. Trail widths may vary depending on natural land characteristics, intended use of the trail and other variables. Trail segments abutting development areas will average 6' to 8' in width (except as noted in Section 4.5: Firewise Guidelines, Standards, and Vegetation Management Requirements), whereas enhanced trails within the regional park or other open space corridors may develop at lesser widths. The TMP identifies an enhanced trail extending across the Old Doe Mill wagon road, separating from the road to exposed sections where wagon ruts are visible. Enhanced trails also serve as fire breaks and routes for fire access (as illustrated on Figures 5-1 and 5-2). The TMP identifies approximately four miles of enhanced trails in the VESP area.

NATURE TRAILS

Nature Trails are trails surfaced with native soil, generally between 2' to 4' in width. These trails emphasize recreation, nature engagement, and are not a primary means of transportation. Nature trails, including pre-existing trails, as well as sanctioned and unsanctioned emerging trails, are more dynamic than other trail types. For example, as the planning area is built out, the TMC may determine that certain nature trails be widened and developed as enhanced trails. The TMC may also conclude a trail section be added or abandoned. A key role of the TMP is to ensure that the environmental and experiential integrity of nature trails are upheld. The TMP identifies approximately 12 miles of nature trails in the VESP area.

KIOSKS

Informational kiosks are placed at key locations to provide wayfinding and educate trail users on their surroundings and key elements, including, but not limited to on-site features, such as pioneer era rock walls and Wagon Road rut heritage. Kiosks also serve as points of arrival for trail visitors, leaving the first and last impression, welcoming visitors, and providing trail information or environmental literacy, such as trail length, complexity, fire protection and vegetation management, maps, public events, species or habitats found in the area, and outlooks throughout the trail.

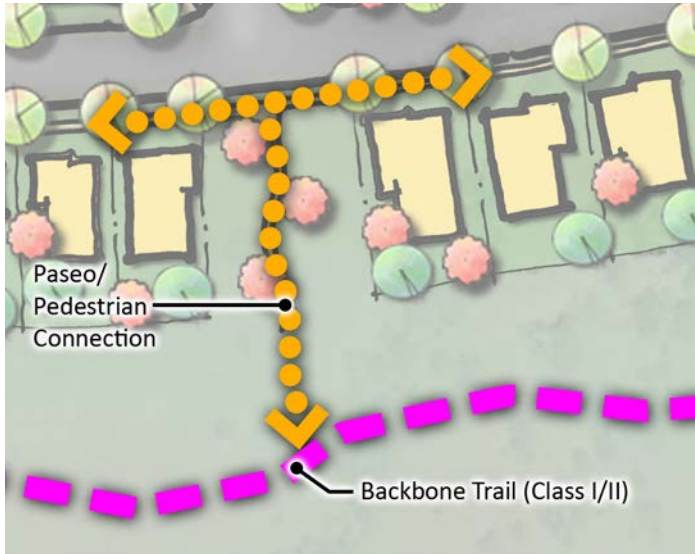
5.3.2 Residential Trail Connections

Depending on site characteristics, subdivision lot patterns, internal streetscapes, and connections between neighborhoods, residential trail connections are made available through short pedestrian paseo trails. In most instances these linkages also serve to enhance the visual prominence of the planning area's natural landscapes and open space elements. These pedestrian connections between residential streets and open space trails will occur at intervals no greater than 350 yards between access points.



MID-BLOCK WALK THROUGH

The mid-block connection occurs where open space directly abuts the edge of the roadway, typically a break in lotting and/or a single loaded road.



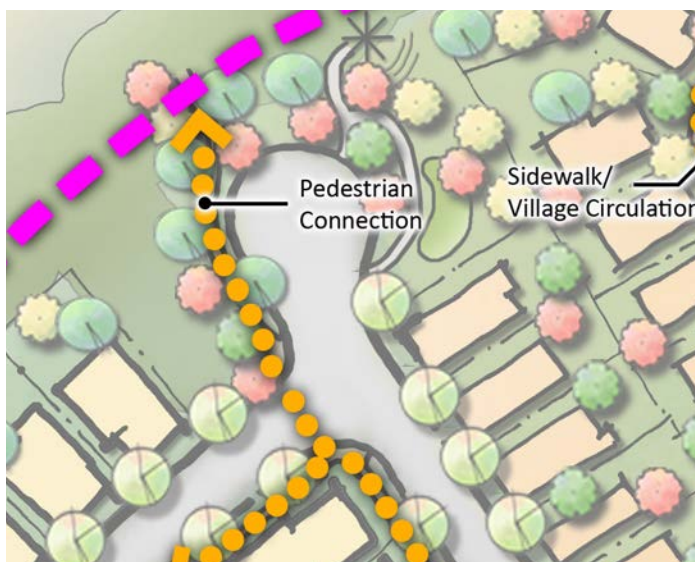
A proposed mid-block walk through



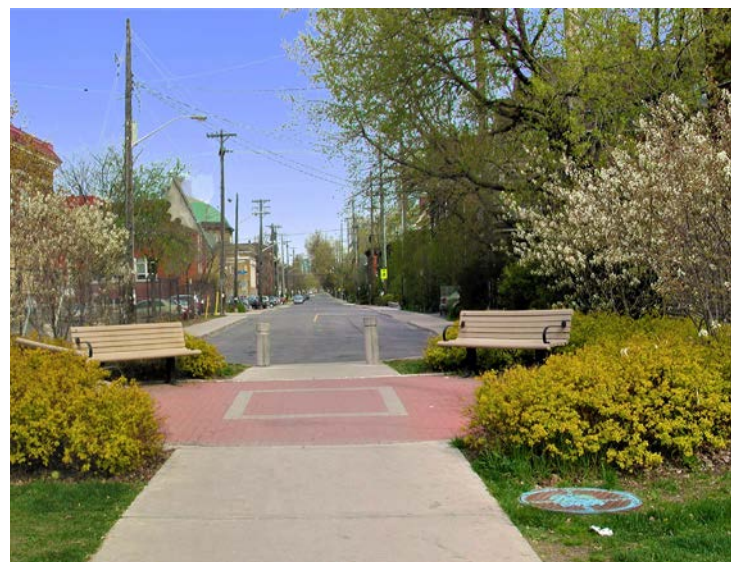
Example of trail connection area

CUL-DE-SAC TRAIL CONNECTION

The cul-de-sac condition occurs where roadway bulb-outs and/or cul-de-sac's create passable corridors into the open space, connecting the main backbone trails to internal pedestrian circulation along streets and sidewalks.



A proposed cul-de-sac connection



Example of cul-de-sac connection featuring bollards and seating

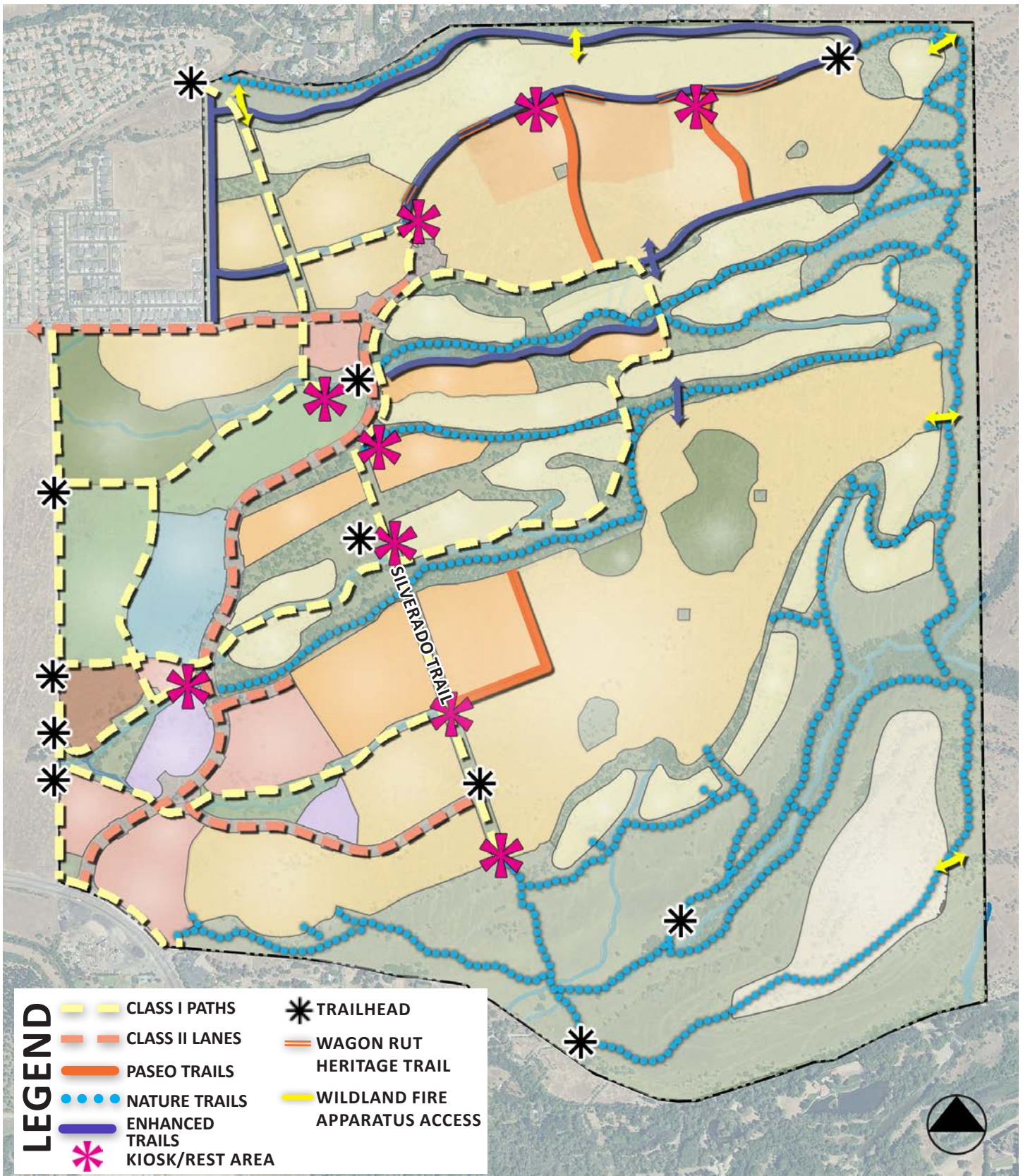


Figure 5-2: Trail Master Plan



5.3.3 The Trails Management Committee

The Trails Management Committee will be comprised of members of the HOA along with non-member partners and advisors such as trail building professionals, biking, hiking, equestrian organizations, and other interested parties.

The work of the TMC will include physical site investigations and visual landform surveys, as well as observations of existing trails and usage patterns. This information will be used to develop programs and policies for incremental planning, design, and construction, as well as related components such as wayfinding and interpretive signage recommendations. The TMC will also develop suitable best practices and standards, examples of which are described in the City of Chico's Adaptive Wet Weather Trail Management Plan.

5.4 Gateways & Entries

Entrances to Valley's Edge are located along the Skyway and East 20th Street. Refer to Figure 5-5 for proposed gateway locations and off-site connectivity. Additional information on gateway design elements is presented in VESP Appendix A: Design Guidelines.

5.4.1 Primary Gateway

SKYWAY ENTRY

As directed by Appendix C in GP 2030, the primary vehicular entrance to Valley's Edge is along Skyway. Initial improvements would include a controlled intersection, and the ultimate design may feature a two-lane roundabout and landscaped center island, with signage welcoming westbound travelers into the City of Chico, acting as a southern gateway into the City. Figure 5-3 illustrates a plan view of the conceptual roundabout.

"Key circulation links will be located at Skyway and East 20th Street."

- GP APPENDIX C -DOE MILL/
HONEY RUN SPECIAL PLANNING
AREA



Conceptual primary gateway concept for Skyway roundabout

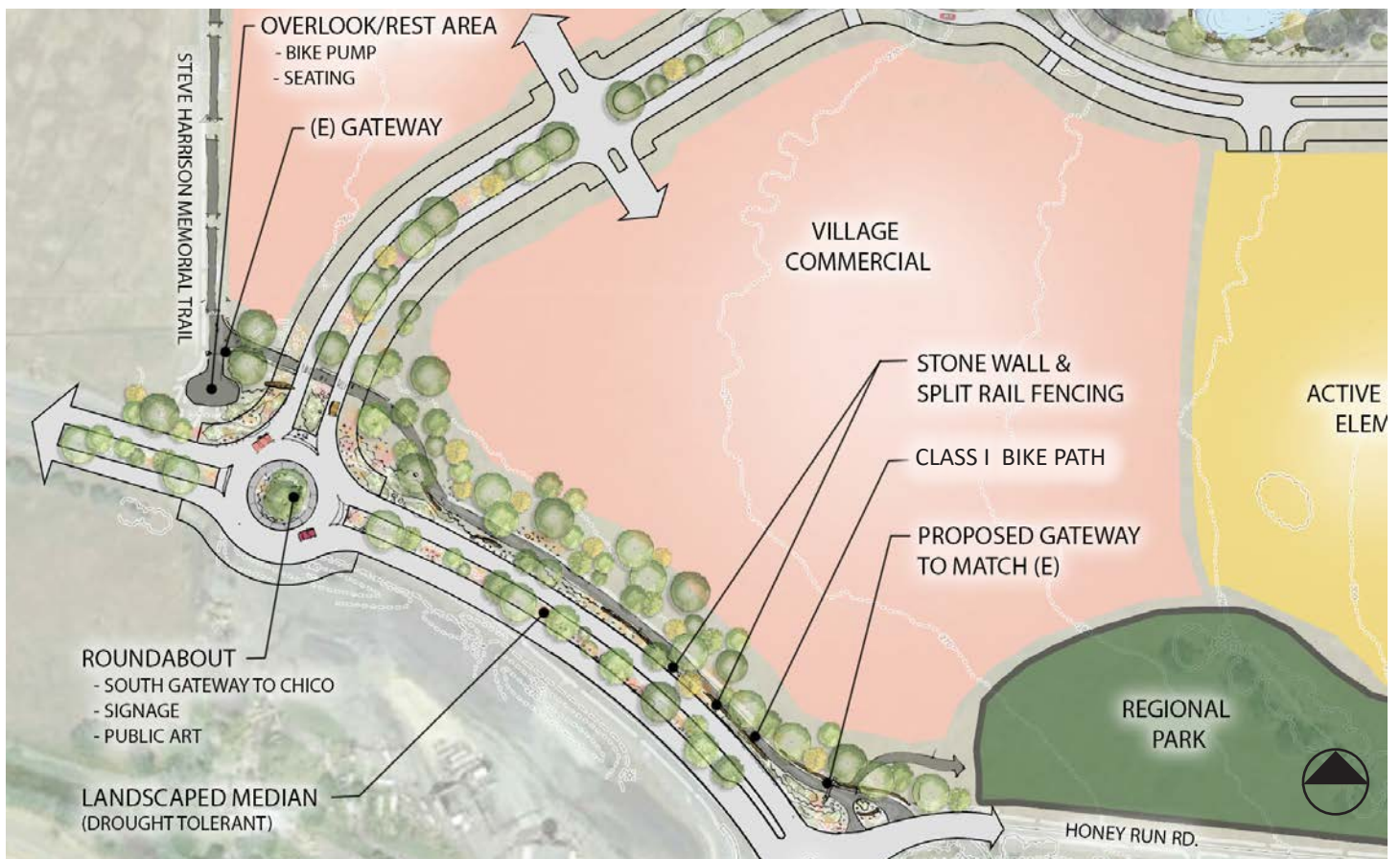


Figure 5-3: Primary Entry Plan View Concept



5.4.2 Secondary Gateway

EAST 20TH STREET

The northern entry into Valley's Edge at the extension of East 20th Street will be a two-lane collector with landscaped median, enhanced to maintain connectivity to the Steve Harrison Memorial Bike Path, which traverses north-south along the western edge of the plan area. Placemaking at this secondary entrance will include accent landscaping, gateway elements and new rock wall segments emulating existing rock walls found elsewhere in the plan area. Off-site and frontage improvements along East 20th will include road widening, landscaping and sidewalk along the south side of East 20th Street transitioning into and exiting the plan area.



Conceptual two-lane collector roadway leading into Valley's Edge from Skyway roundabout



Figure 5-4: Secondary Gateway Entry Concept - East 20th Street

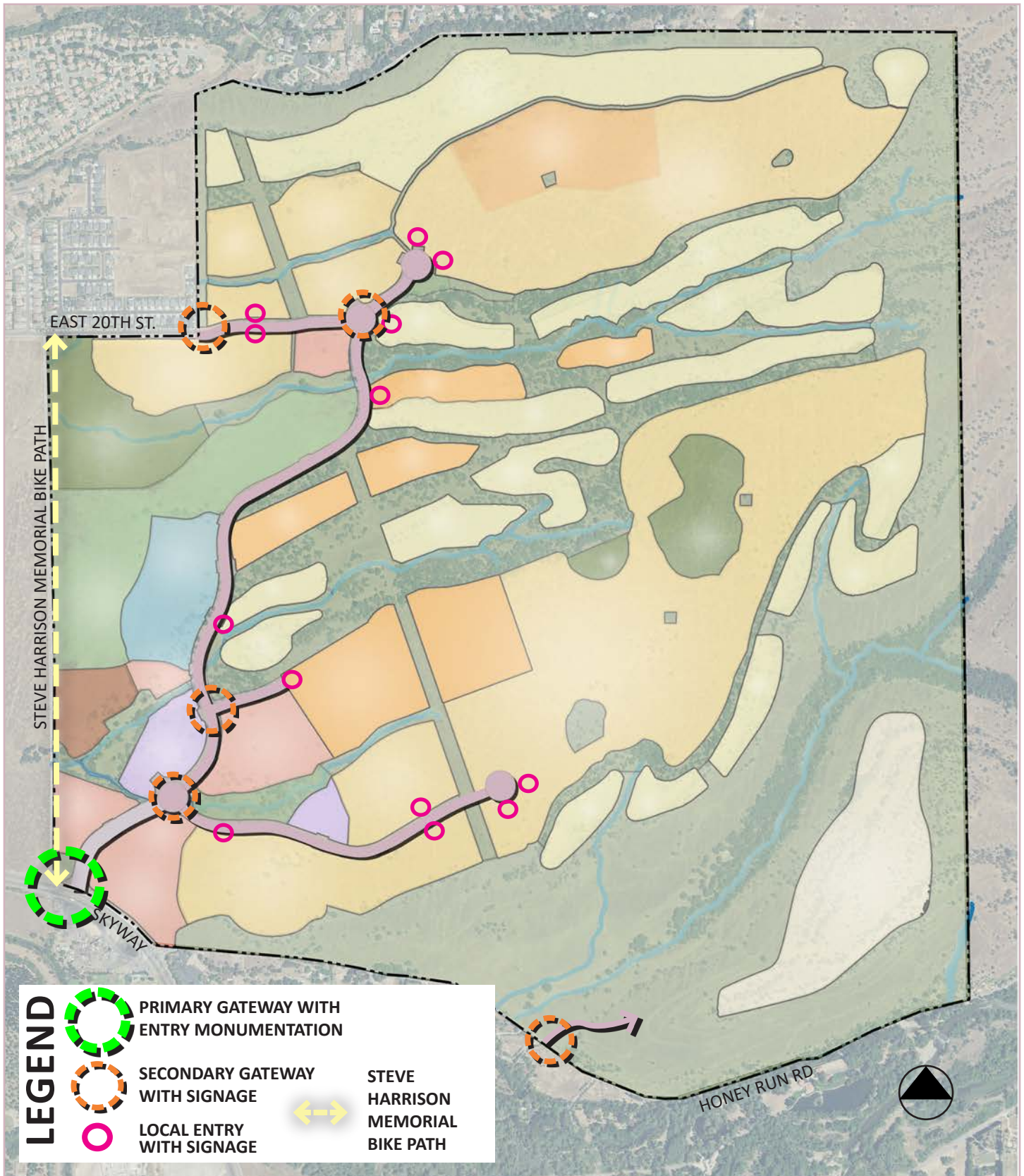


Figure 5-5: Gateways & Off-Site Connectivity



5.5 Street Classification & Sections

There are multiple street classifications throughout the VESP area as needed to accommodate varying traffic volumes, parking, bike lanes, and physical conditions. Streets in Valley's Edge will be curvilinear in design to accommodate existing topography and minimize conflicts with existing oak trees, rock walls, and other natural features. Descriptions and street sections for each street classifications are provided in the following sections, together comprising typical street standards for the plan area. Refer to the Chapter 6: Infrastructure, for Low Impact Development (LID) and sustainable practices in streetscape design. Modifications to the VESP street standards shall be administered as described in Chapter 7.5.1 (Minor Modification to Specific Plan).

5.5.1 Collector Streets

Collector streets generally provide access between arterial streets serving the broader community and neighborhood streets serving residential neighborhoods. The main north-south collector street, serves as the spine connecting the primary and secondary entrances. The curvilinear alignment and meandering median of Valley's Edge Drive reflects the intention to minimize impacts of development to the site's existing oak trees and pioneer era rock walls. This value also extends to the four roundabouts planned on collector streets, each of which have been situated with a stand of existing mature oak trees to serve as the centerpiece. The collector streets will be capable of providing transit service. The collector streets will also provide convenient access to the Community Park, Elementary School, multi-family housing, and the Village Core. Refer to Figures 5-6 through 5-9 for 4 Lane and 2 Lane Collector street sections. Three variations of the Collector Streets are illustrated to provide flexibility and to accommodate physical site constraints or on-site oak trees into a collector street median.

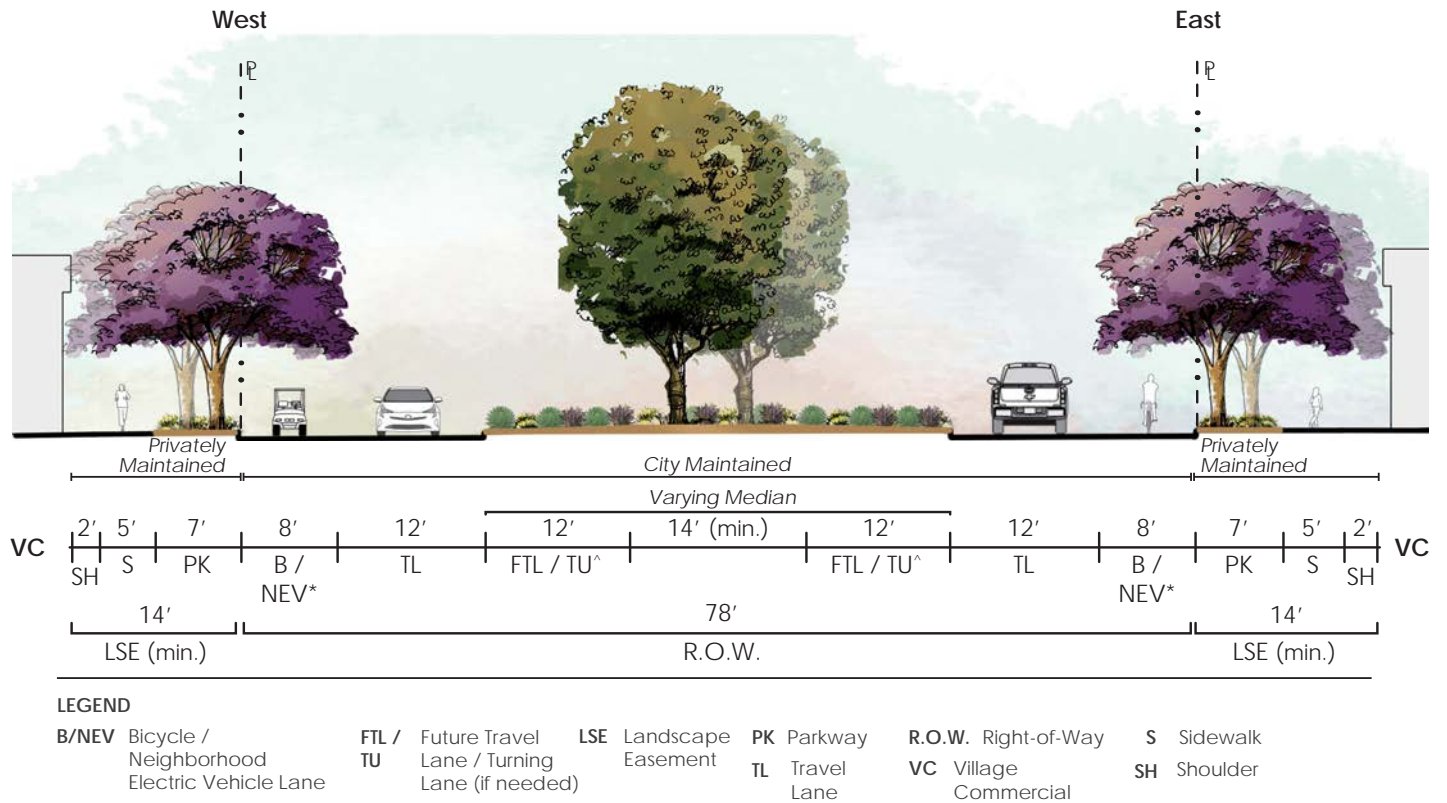


Figure 5-6: 4 Lane Collector with Median

Notes:

* NEV lane will end before Skyway

^ if future travel lane is needed

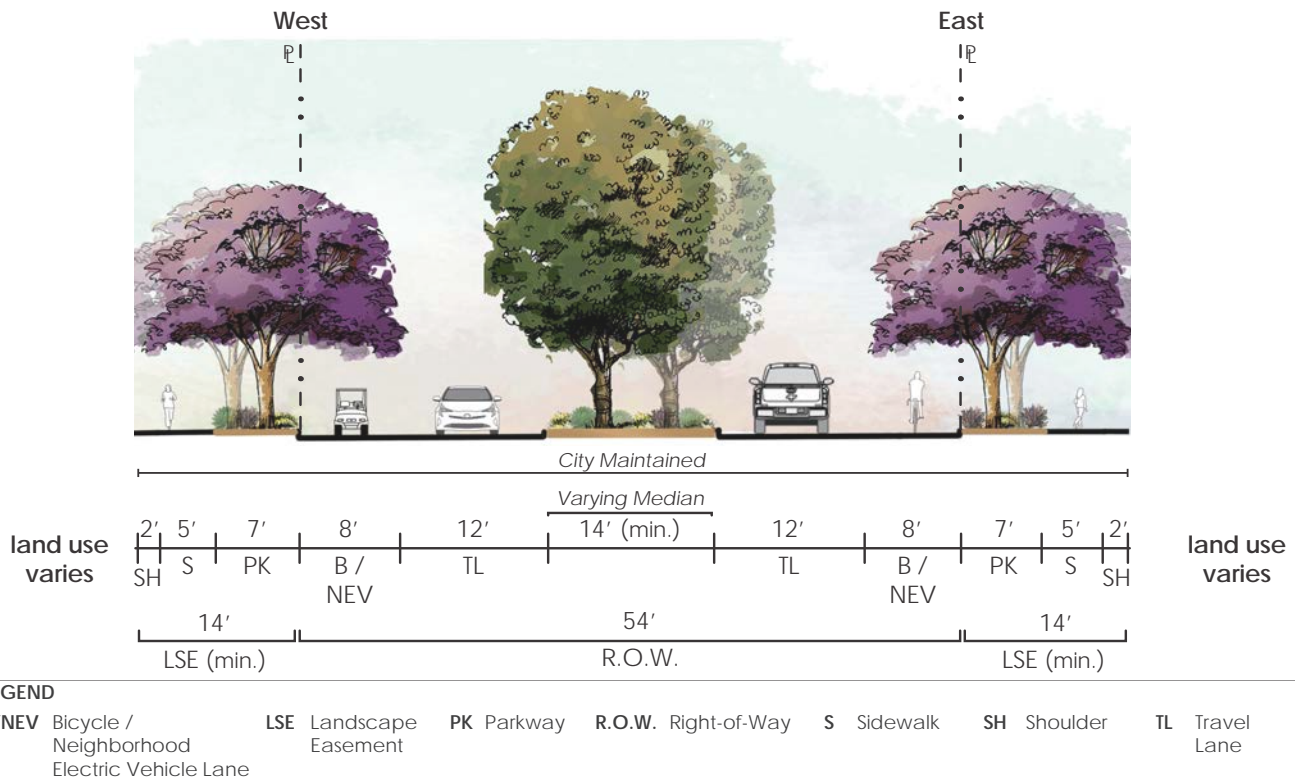


Figure 5-7: 2 Lane Collector with Median

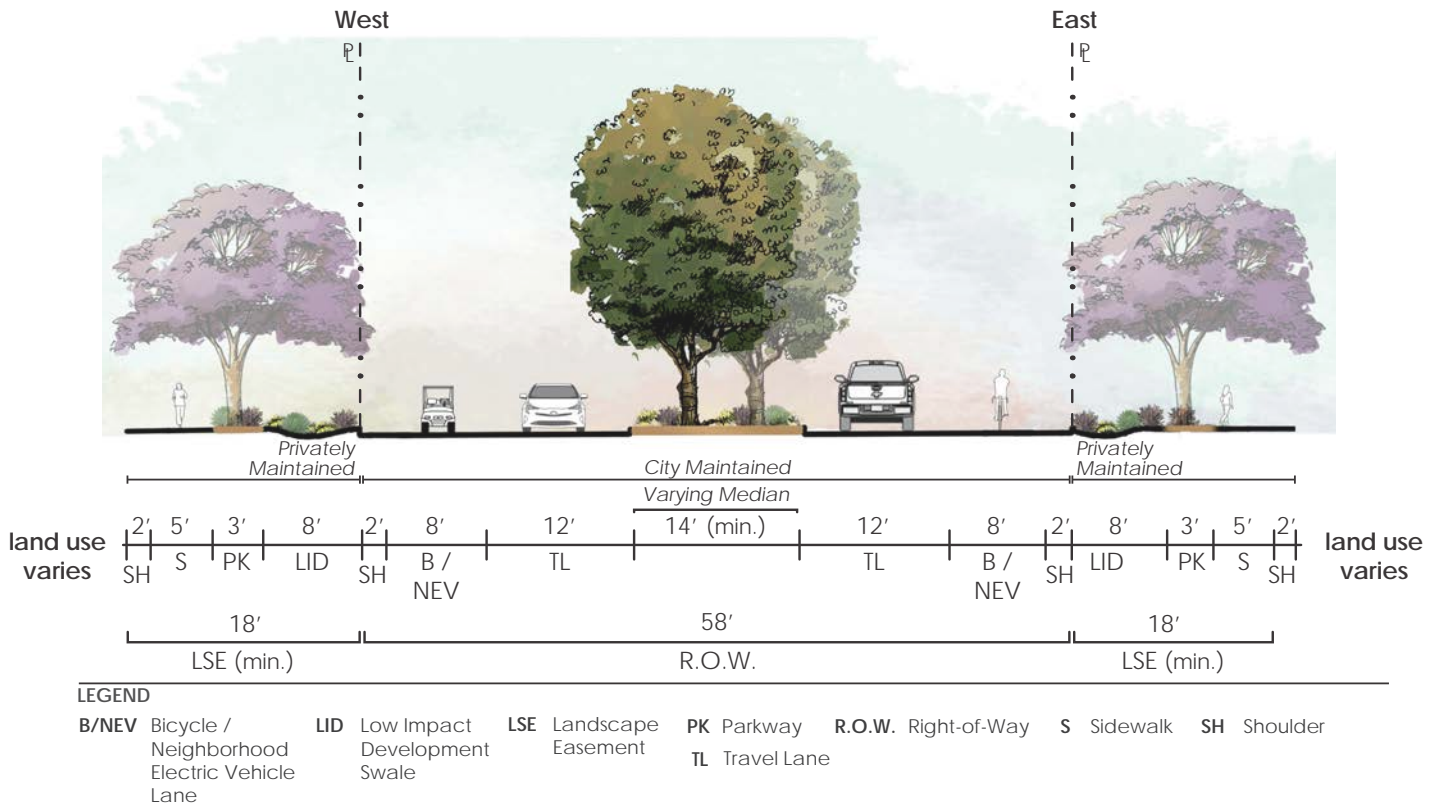
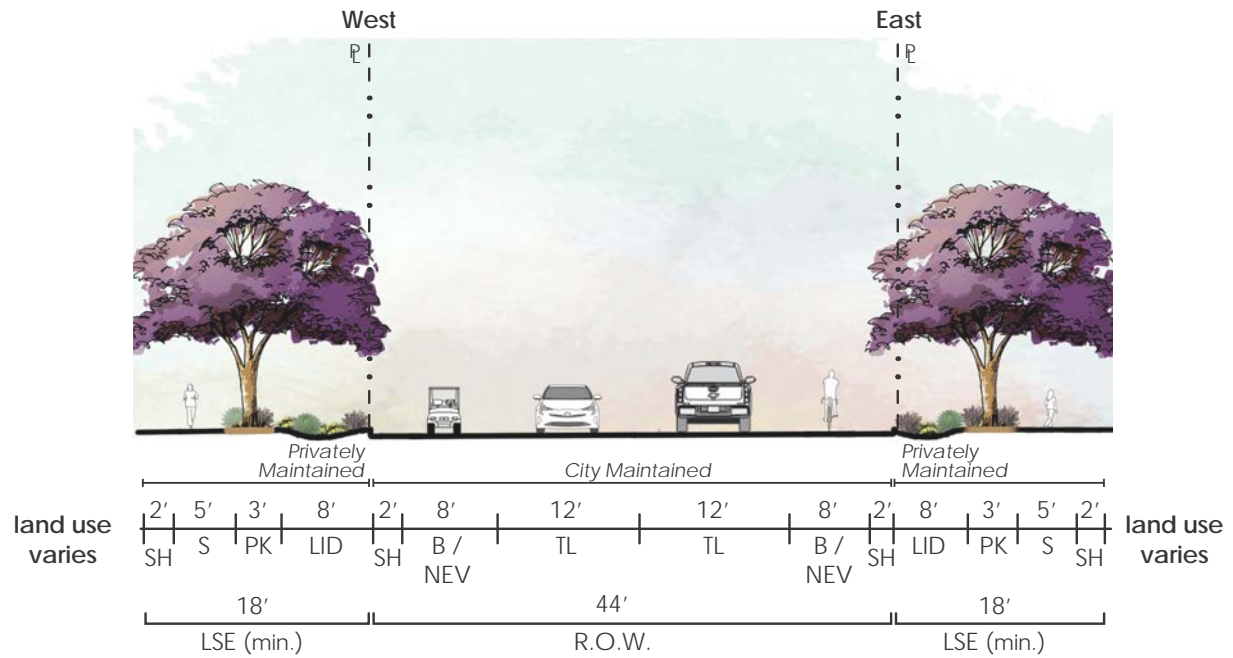


Figure 5-8: 2 Lane Collector with Median and LID Swale



LEGEND

B/NEV	Bicycle / Neighborhood Electric Vehicle Lane	LID	Low Impact Development Swale	LSE	Landscape Easement	PK	Parkway	R.O.W.	Right-of-Way	S	Sidewalk	SH	Shoulder
						TL	Travel Lane						

Figure 5-9: 2 Lane Collector with No Median

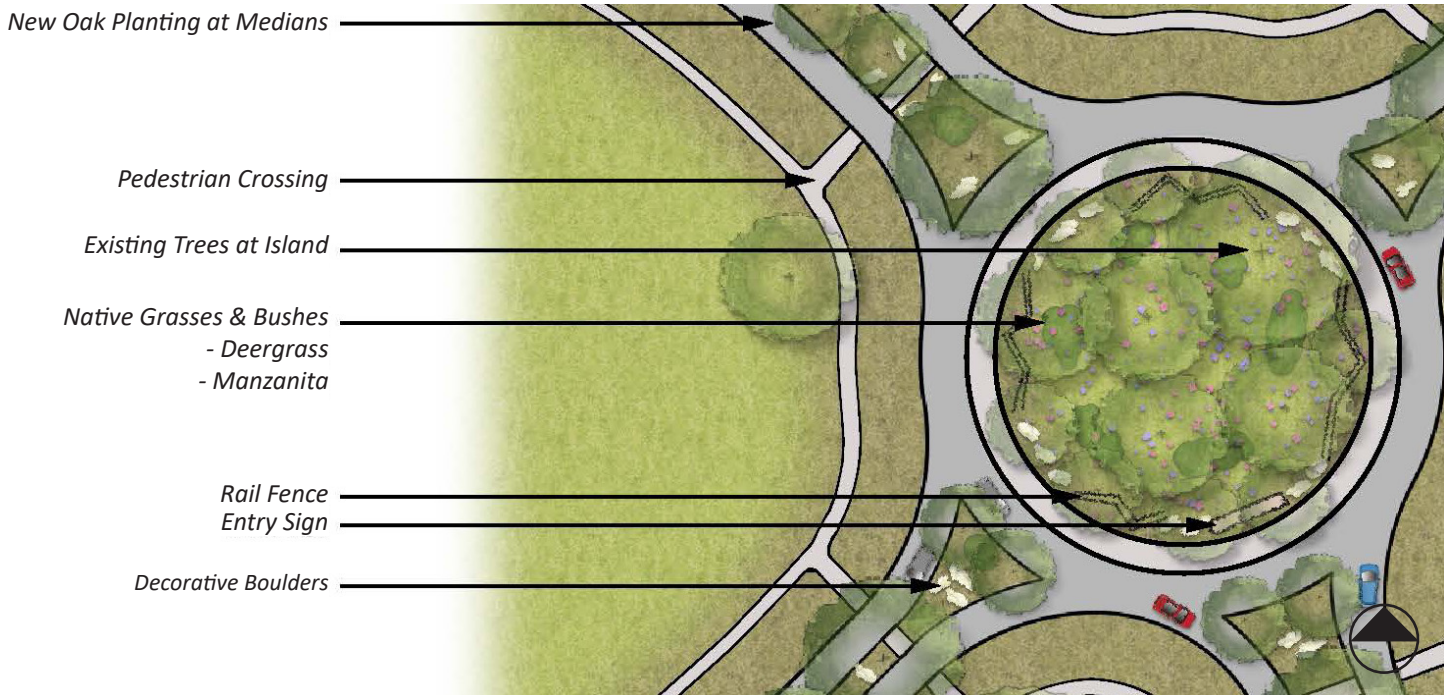


Figure 5-10: Collector Roundabout



Figure 5-11: Roundabout Concept

5.5.2 Neighborhood Electric Vehicle Routes

Neighborhood Electric Vehicles (NEV's) are small, zero emission electric powered personal vehicles that travel at low speeds and make ideal transportation methods for short local trips. NEV's require a driver's license and registration to be operated and are specifically designed to meet federal safety standards for low-speed vehicles.

The Specific Plan supports this use and proposes a street system designed to accommodate safe and convenient NEV travel. See Figure 5-12: Routes with Dedicated NEV Lanes. NEV's can be used on any street that has a posted speed limit of 35 mph or lower. Class II on-street NEV routes are designed to accommodate both NEV and bicycle use.



Neighborhood Electric Vehicle

The NEV routes will allow residents to travel to and from the Village Core without having to use their car which also reduces the traffic impact on internal streets. The Senior community will also utilize the NEV's to access the senior clubhouse and other amenities without having to drive.

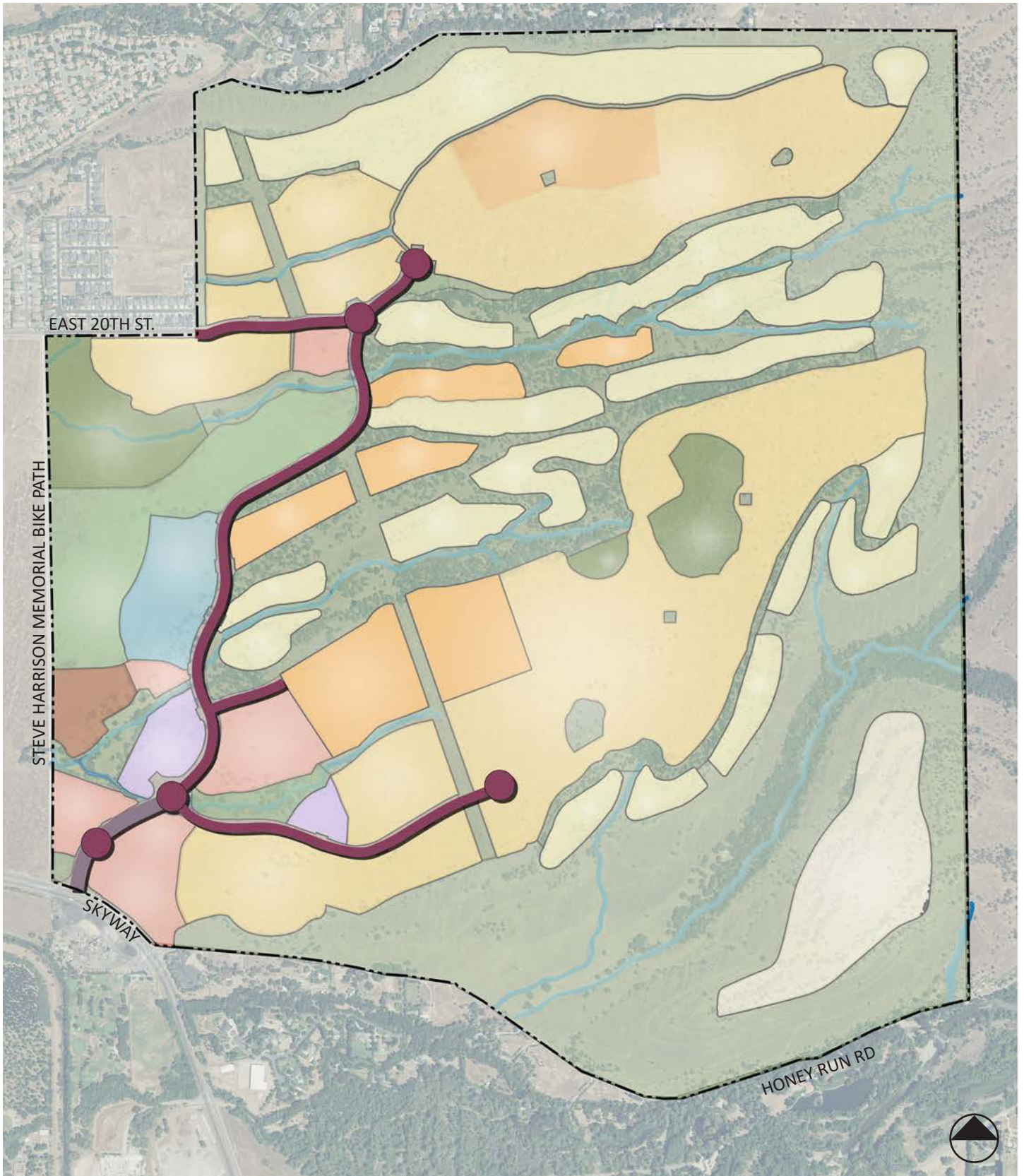


Figure 5-12: Routes with Dedicated NEV Lanes



5.5.3 Residential Streets

Residential streets provide direct access to individual properties that are typically constructed as subdivision improvements for each of the neighborhoods. Neighborhood streets are designed to discourage through-traffic and promote slower speeds than Collector Streets. Residential streets also incorporate a Class III bicycle lane into the street section, which includes streets designated for bicycle travel and shared with motor vehicles.

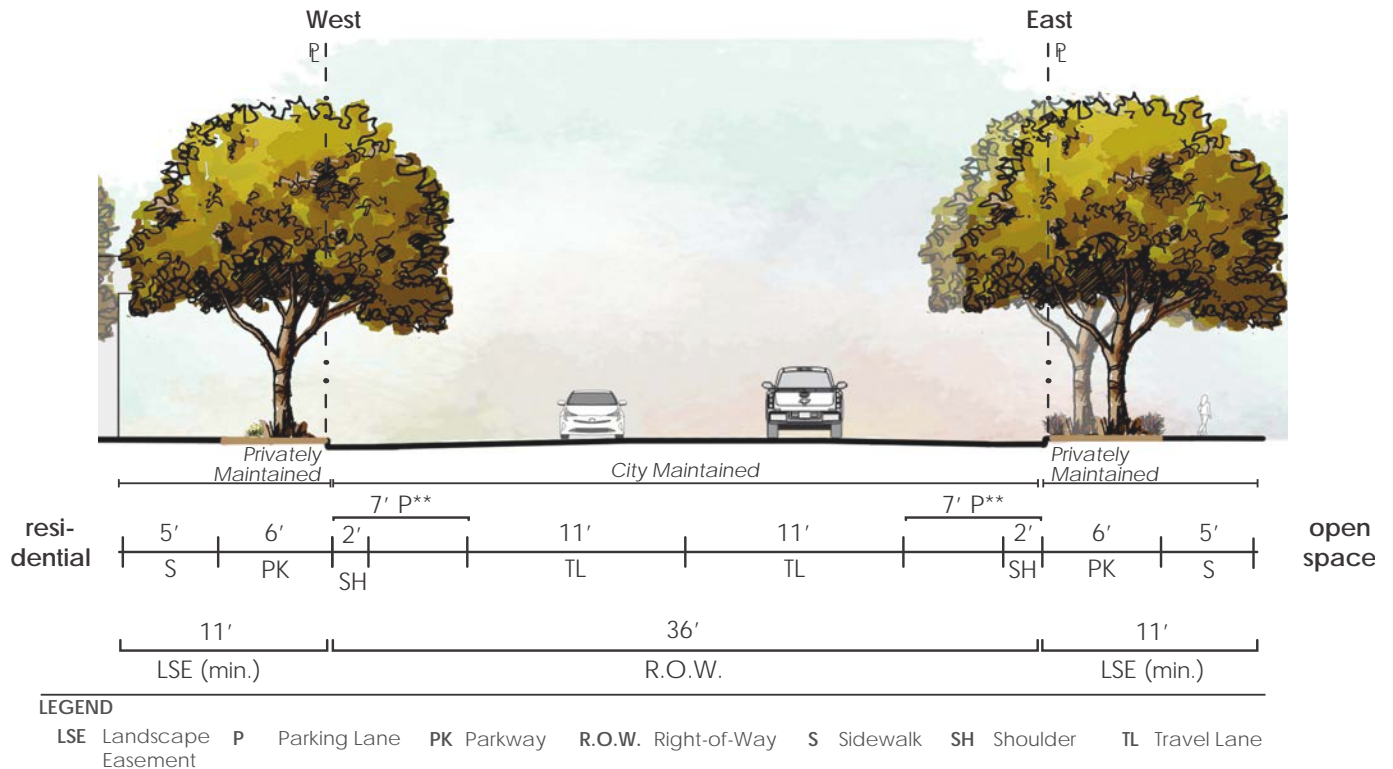


Figure 5-13: Typical Residential Street*

* In some instances, some single-loaded residential streets with an abutting Class I Path, may not have a sidewalk on both sides of the street.

** Two-foot shoulder is encompassed within seven-foot parking.



5.5.4 Local Streets

Local streets provide direct access to VLDR and LDR neighborhood clusters throughout the Specific Plan area. A typical cross section consists of two 11-foot travel lanes with parking in designated areas (see Figure 5-14).

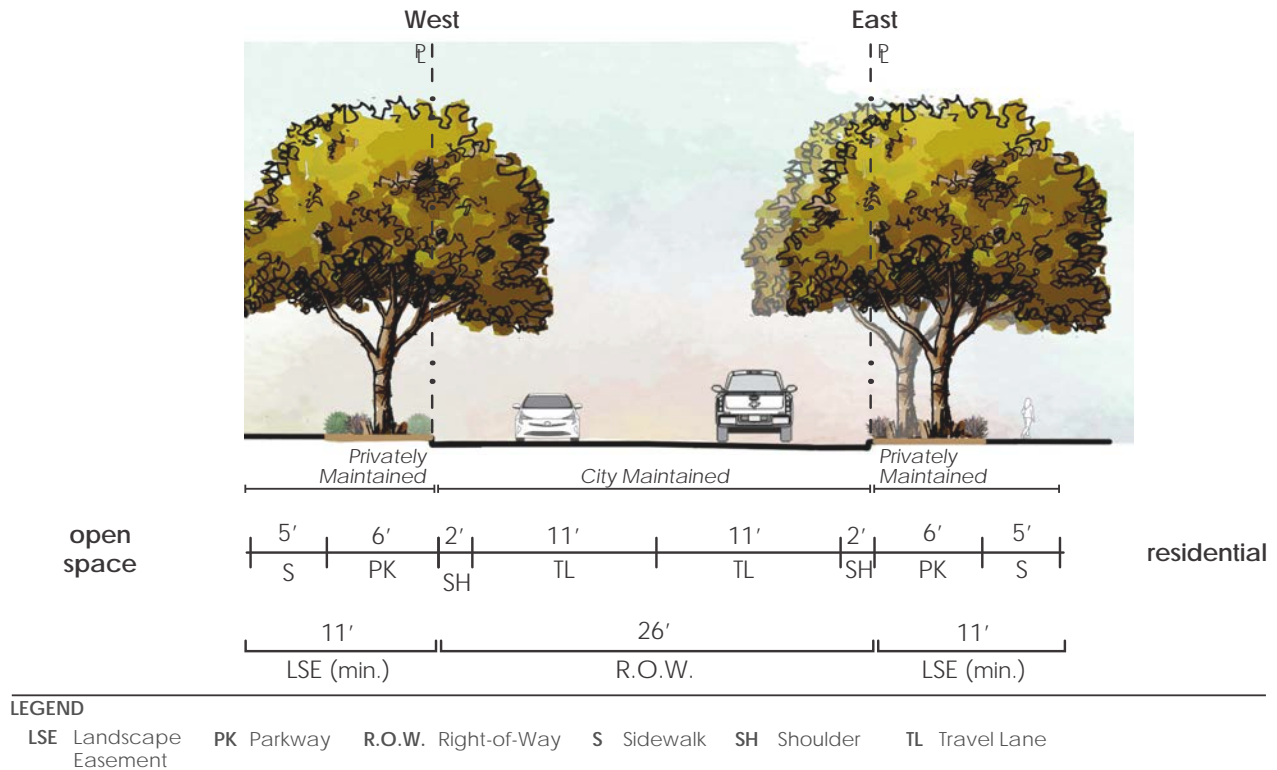


Figure 5-14: Typical Local Street*

* In some instances, some single-loaded residential streets with an abutting Class I Path, may not have a sidewalk on both sides of the street.

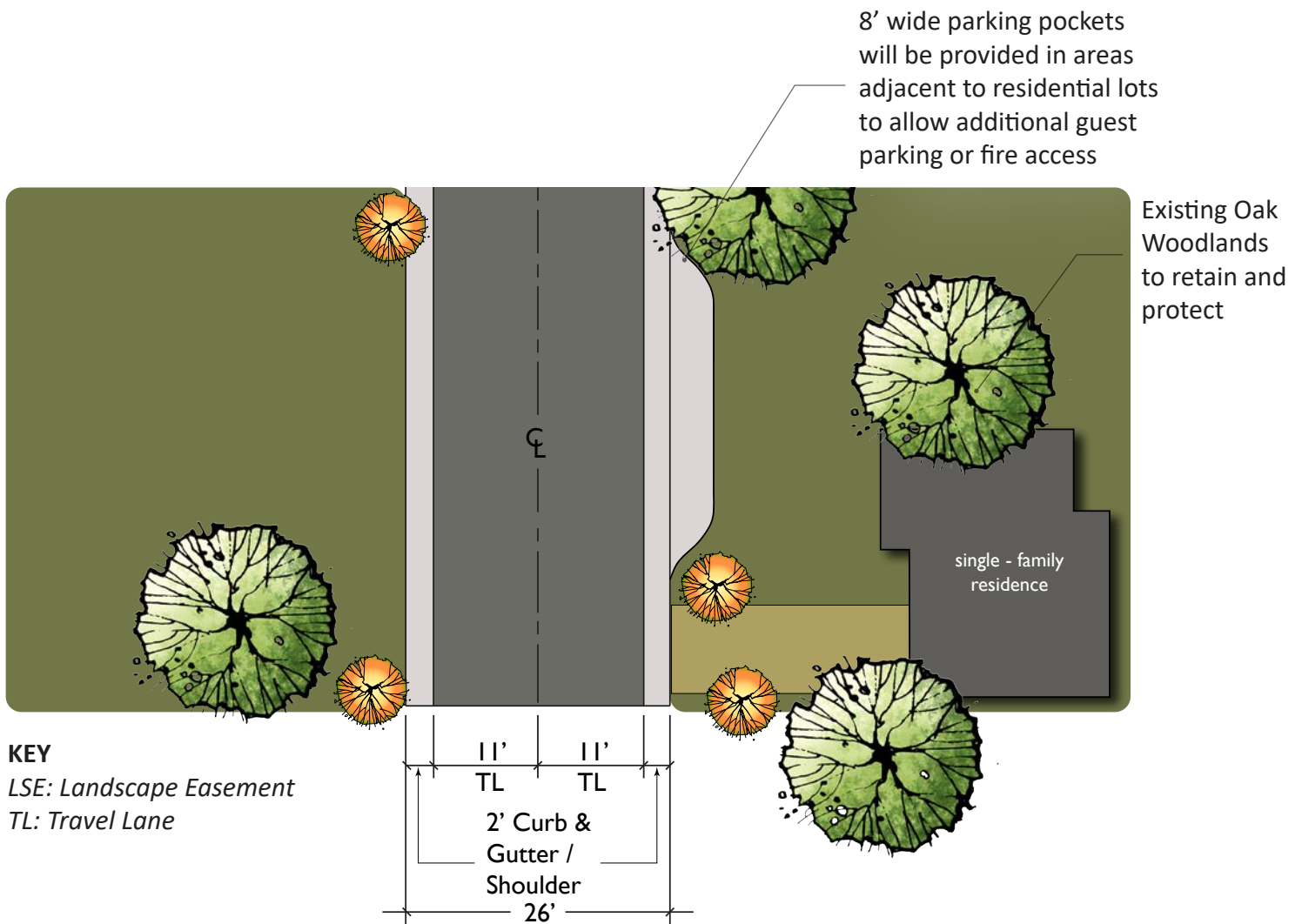


Figure 5-15: Plan View of Local Street with Parking Pocket



5.6 Public Transportation

Valley's Edge is designed to facilitate the integration of multi-modal transportation alternatives, including the provision of public transit amenities. The Butte Regional Transit, commonly known as the B-Line, provides local transit services in Chico, Oroville, and Paradise, as well as smaller communities within Butte County. B-Line runs along Bruce Road, roughly one-half mile west of Valley's Edge.

Future proposed public transportation stops and routes will need to be coordinated, reviewed, and considered by the Butte County Association of Governments (BCAG). Future conditions that may warrant transit service include the development of uses identified in the Village Core: community center, business professional/mixed-use, market, bandstand, senior housing, and light retail uses. Bus stops will be included at the Village Core and elementary school, and community park with initial collector street improvements; final designs and locations to be determined in coordination with BCAG at the time of the improvement.

To help minimize traffic and vehicle trips, a park and ride will be located within Valley's Edge at the Community Park, acting as a hub for commuters and carpoolers. In addition to various future transit stops throughout Valley's Edge, a future connection to the Community Park could be provided by Chico Unified School District (CUSD) as part of an after-school program and serving as a meeting place for children.



Bus shelter