

CHAPTER 3: CIRCULATION



NORTHWEST SPECIFIC PLAN
CITY OF SAN RAMON

CHAPTER 3: CIRCULATION

This chapter describes the Northwest Specific Plan’s circulation system and its relationship to regional and local transportation systems in the City of San Ramon. It includes an overview, and goals, objectives, and policies for the vehicular, and pedestrian and bicycle circulation systems.

The Northwest Specific Plan Area is comprised of two major properties which have independent but linked circulation systems. The circulation plan for the eastern portion of the Plan Area (on the east side of Bollinger Canyon Road), provides a system of curvilinear collector streets along landscaped corridors and neighborhood streets providing direct access to homes. Pedestrians are accommodated with a combination of sidewalks and separated paths along streets, as well as a system of public trails connecting the eastern portion of the site to City streets and the EBRPD trail system. Bicyclists will have access to the eastern portion of the Plan Area on Class II bicycle lanes provided within the main collector roadway. Neighborhood E, located west of Bollinger Canyon Road, is envisioned as a small neighborhood of hillside residential development, served by a series of local neighborhood streets with sidewalks.



CIRCULATION GOALS, OBJECTIVES, AND POLICIES

GOAL 1: To create a safe, convenient, and functional circulation system that balances access for vehicles with choices to walk and bicycle.

Objective A: Provide streets that conform to City standards and a circulation system that provides adequate accessibility to surrounding San Ramon.

Policies:

1. Provide a hierarchy of streets consistent with City engineering and Fire District standards. The eastern portion of the Plan Area includes two classifications of streets, collectors and local neighborhood streets, while the western portion of the Plan Area is comprised of one classification, local neighborhood streets.
2. Ensure that all classifications of streets are designed to accommodate pedestrians with the provision of sidewalks per City standards on both sides of the street, or, along the collector street corridor on at least one side of the street.

3. Provide access that distributes traffic to the City’s arterial street system. The eastern portion of the Plan Area will provide collector street access from Purdue Road in the east connecting with San Ramon Valley Boulevard, and access to Bollinger Canyon Road in the west connecting to Crow Canyon Road. The western portion of the Plan Area will provide local street access to Bollinger Canyon Road.
4. Provide multiple points for emergency access, as required by the appropriate agencies. Because the Plan Area is located in a natural wooded setting with steep terrain, multiple points of emergency access may be required in the event of a fire and need for evacuation. The eastern portion of the Plan Area will provide two points of access with public street connections (Bollinger Canyon Road and Purdue Road) and two additional EVA (Emergency Vehicle Access) points of access via Deerwood Road and Deerwood Drive if required through final project design. The western portion of the Plan Area will provide at least one public street emergency access point and one additional emergency vehicle only access point via Bollinger Canyon or Crow Canyon Roads, if required through final project design.

EXISTING CIRCULATION SYSTEM

Vehicular access to the Plan Area is provided through the City’s arterial street system. San Ramon Valley Boulevard, Crow Canyon Road and the adjacent interchange of Crow Canyon Road/I-680 provide access to the Plan Area at the regional level. Locally, roadways including Bollinger Canyon Road and Purdue Road provide direct access to the Plan Area. Other streets in the vicinity provide indirect access to/from nearby commercial and institutional facilities, and provide pedestrian and bicycle access. These streets include Old Crow Canyon Road, Deerwood Road, Deerwood Drive, Omega Road, and Twin Creeks Drive. The City roadway network connects the Plan Area to greater San Ramon, as well as to the adjacent cities of Dublin and Danville. Figure 3-1 illustrates the existing circulation system in the vicinity of the Plan Area.



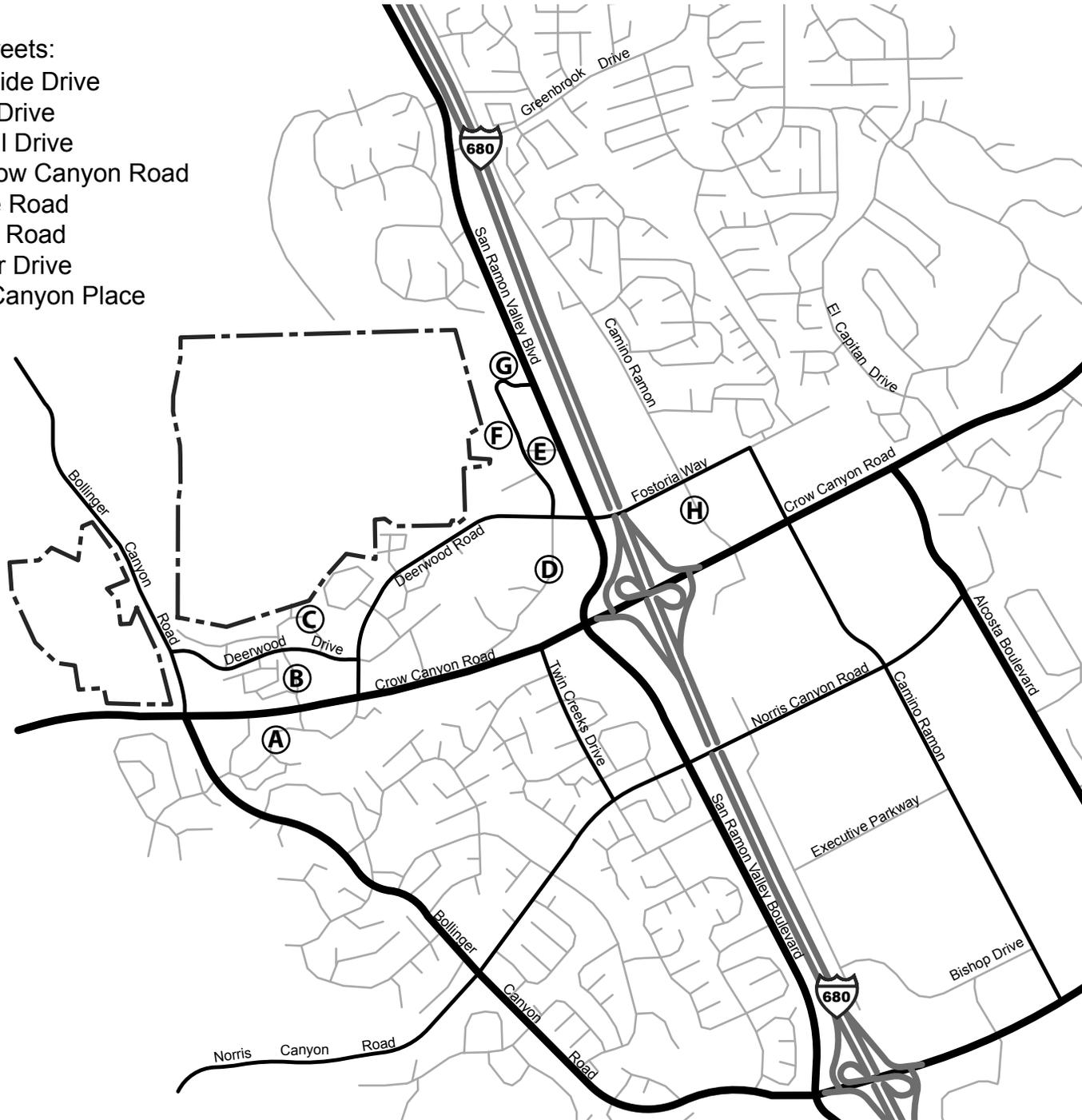
Crow Canyon Overpass across I-680

Key to Streets:

- A. Creekside Drive
- B. Porter Drive
- C. Deerhill Drive
- D. Old Crow Canyon Road
- E. Purdue Road
- F. Omega Road
- G. Hooper Drive
- H. Crow Canyon Place

Legend

-  Arterial Streets
-  Collector Streets
-  Local Streets
-  Freeway
-  Specific Plan Area



Existing Circulation
Figure 3-1



PROPOSED CIRCULATION SYSTEM

The Plan Area is comprised of two development areas with independent circulation systems. The Plan circulation system is directed by the General Plan to provide a system of internal spine road collectors, with connections at Purdue Road and Bollinger Canyon Road. The spine road winds through the Plan Area connecting local neighborhood streets which provide direct access to homes or community facilities. The circulation system for the portion of the Plan Area west of Bollinger Canyon Road will consist of local neighborhood streets serving single family residential development. Figure 3-2 illustrates the proposed circulation system for the Plan Area.

Street System Hierarchy

The streets within the Plan Area will conform to the functional classification system established by the City of San Ramon. The following is a description of each street type. The location of the roadway segments conforming to these street sections is shown in Figure 3-2 (Proposed Circulation).

Bollinger Canyon Road

The City also proposes to improve Bollinger Canyon Road along the frontage of the Plan Area to conform to the existing street section of Bollinger Canyon Road that extends north of Crow Canyon Road. The minimum curb-to-curb width will be 40 feet for this section of Bollinger Canyon Road, to accommodate two 12-foot wide travel lanes and two 4-foot wide Class II bike lanes. Minimum 5-foot wide sidewalks shall also be installed on one side of the street. Additional right-of-way may be included in areas requiring turn lanes or at intersection approaches.

Spine Road Collectors

The following is a description of the typical primary collector streets serving the Plan Area, also illustrated in the typical cross sections in Figure 3-3 and Figure 3-4.

The collector roadways within the Plan Area will be sized to accommodate on-street parking. It is anticipated that the community facilities and amenities will provide adequate parking to serve their needs, and that it will not be necessary to accommodate overflow or shared parking on collectors adjacent to these areas. Additionally, all collector roadways are sized to accommodate Class II bike lanes, per City standards.

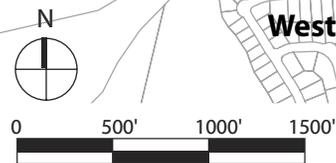
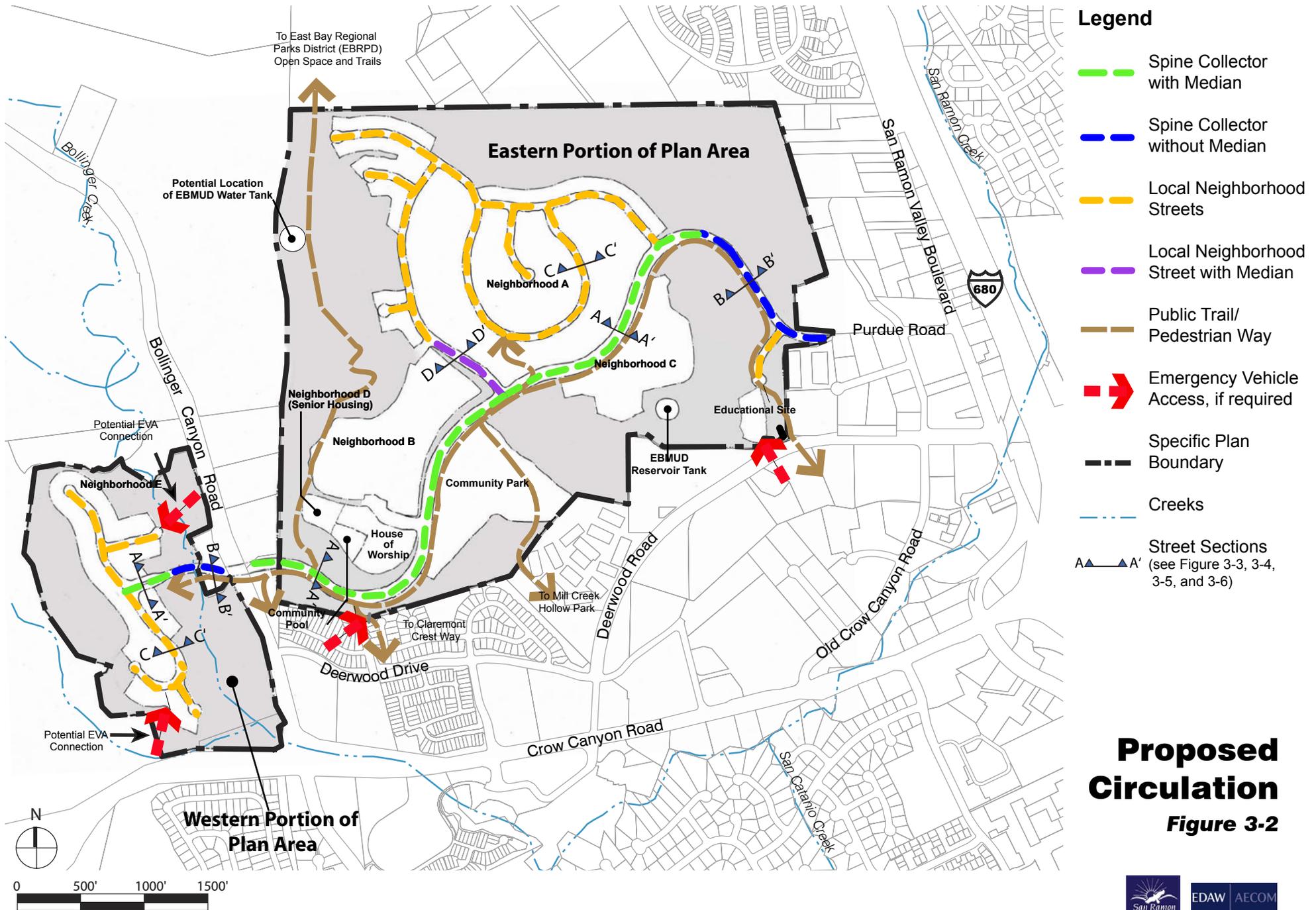
Spine Road Collector with a Median (See Figure 3-3, Section AA’). This street section consists of a 63-foot wide travel way, with one travel lane in each direction and a 15-foot wide raised and landscaped median. The minimum width between the median curb and outside curb face is 24 feet. This width is sufficient to allow for one travel lane, Class II bike lanes, and on-street parking, and conforms to City standards for collectors with on-street parking and Class II bike lanes. A 5-foot wide sidewalk will run along at least one side of the street, separated from the travel way with a planting strip. A minimum 3-foot wide landscape buffer will be provided on the other side of the street. Breaks are provided in the median at intersections with separate left-turn lanes.

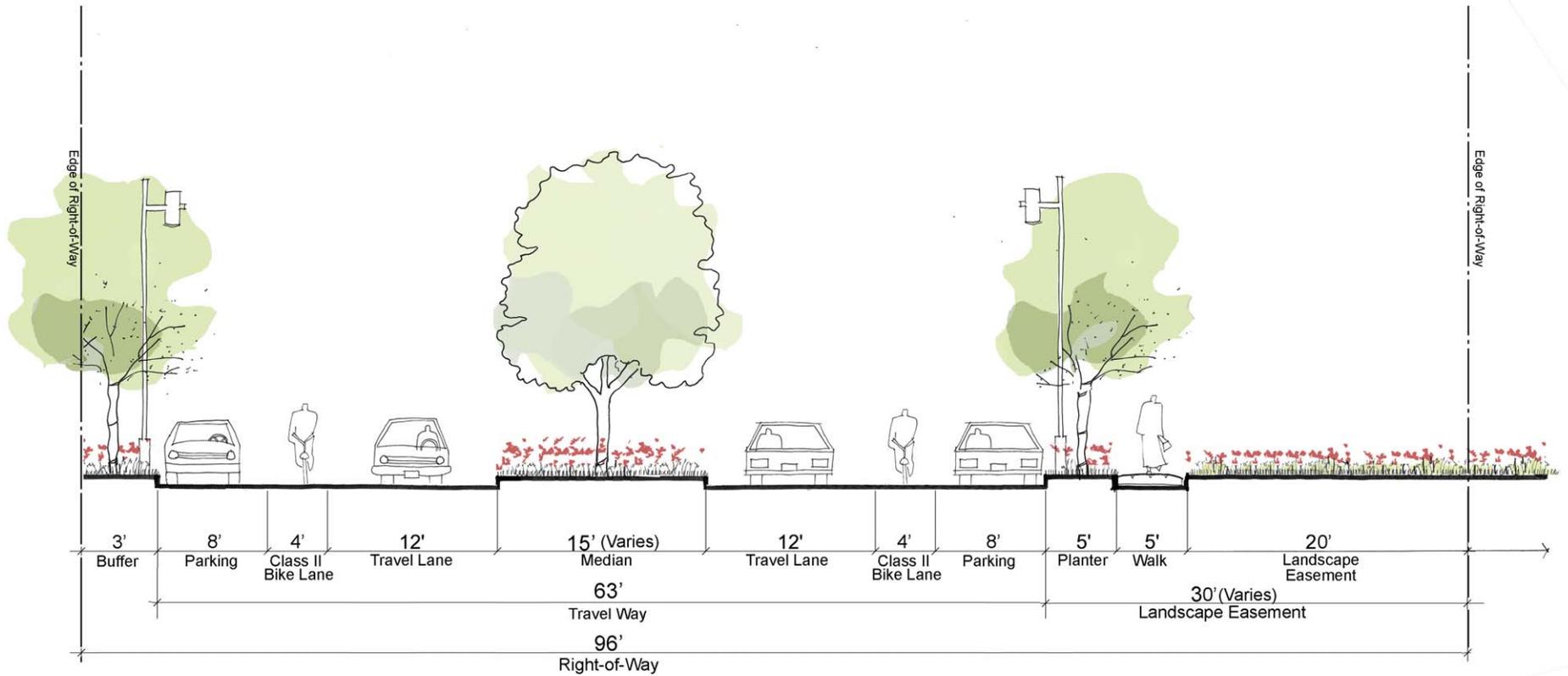
The following roadway segments of the Plan Area will conform to this street section:

- *Entry from Bollinger Canyon Road (serving the Eastern Portion of the Plan Area)* – This entry will meet the requirements as specified for a Spine Road Collector with a median. At the approach to Bollinger Canyon Road, the collector will widen and the median will narrow to accommodate turning lanes.
- *Spine Collector West (serving the western portion of the Plan Area).* The portion of the roadway connecting to the entry from Bollinger Canyon Road and serving the western portion of the Plan Area will widen at the approach to the local neighborhood streets to incorporate a median. This segment of the roadway will consist of a 63-foot wide travel way and 15-foot wide median, consistent with the entry serving the eastern portion of the Plan Area.

Spine Road Collector without a Median (See Figure 3-4, Section BB’). This street section consists of a 40-foot wide travel way to accommodate one travel lane in each direction, Class II bike lanes, and on-street parking on one side. The street width is sufficient to provide striped turning lanes at intersections, and conforms to the City standards for minimum travel-way width to accommodate on-street parking and Class II bike lanes. A sidewalk will be located on at least one side of the street, with a minimum width of 5 feet. A minimum 10-foot wide landscape easement will be provided on the other side of the street.

The following roadway segments of the Plan Area will conform to this street section:



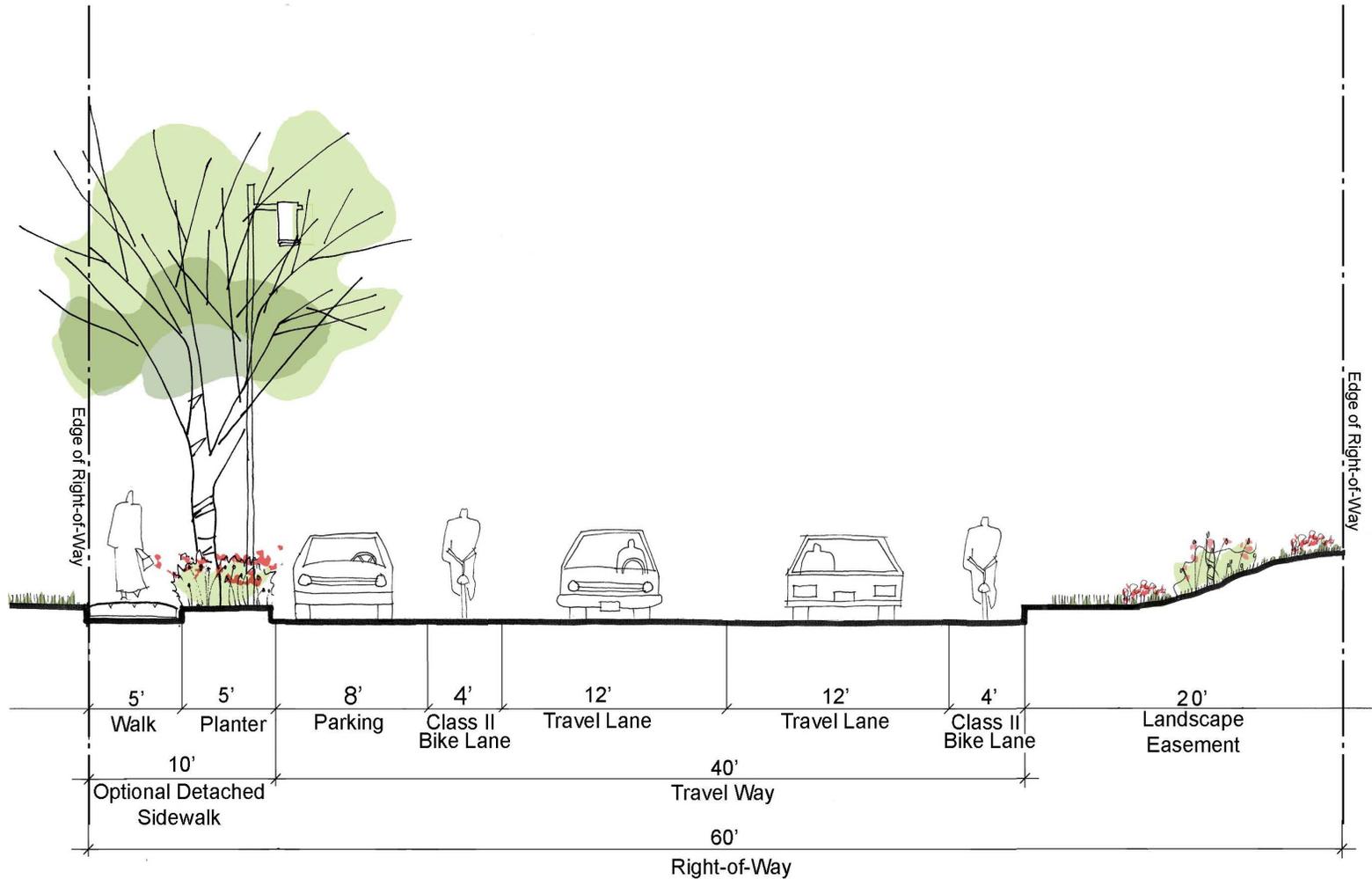


Section AA':

- Entry from Bollinger Canyon Road (serving eastern portion of Plan Area)
- Spine Collector West (serving western portion of Plan Area)

Spine Collector with a Median

Figure 3-3



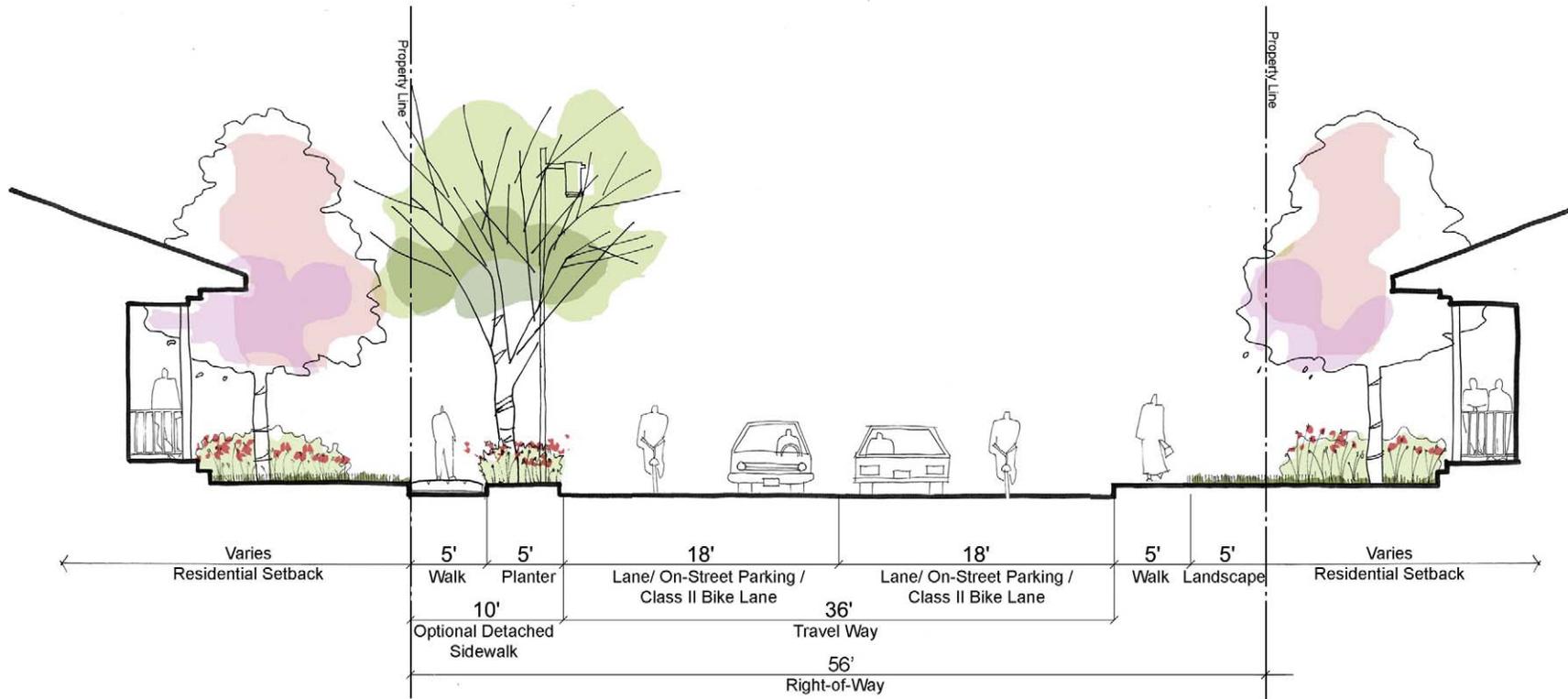
Section BB':

- Entry from Bollinger Canyon Road (serving western portion of Plan Area)
- East Entry from Purdue Road
- Spine Collector East (serving eastern portion of Plan Area)

Spine Collector without a Median

Figure 3-4



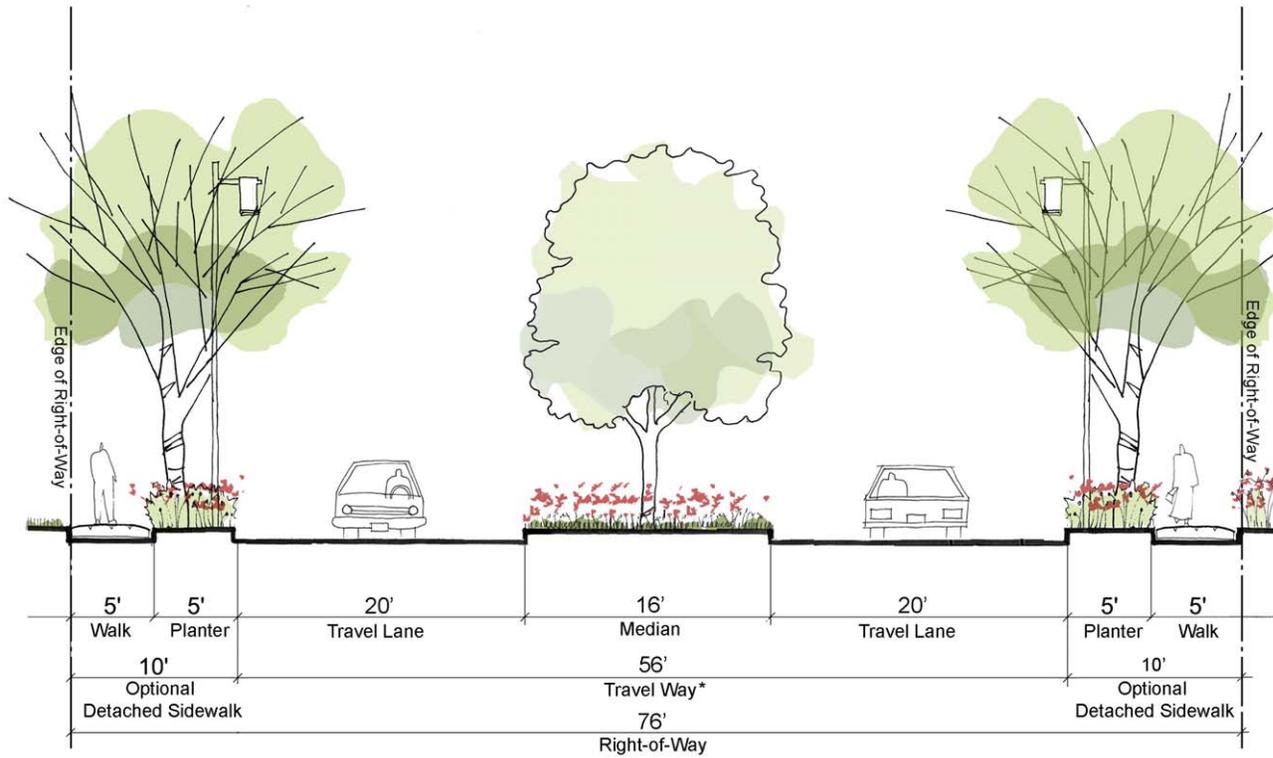


Section CC'

Local Neighborhood Streets

Figure 3-5





Section DD'

Local Street with a Median

Figure 3-6

- *Entry from Bollinger Canyon Road (serving the Western Portion of the Plan Area)* – This entry consists of a divided collector street with a 40-foot travel way width. At the portions of the roadway that intersects with the local neighborhood streets, the road widens to a 63-foot wide travel way to accommodate a median, as discussed in the Spine Collector with a Median section.
- *East Entry from Purdue Road* - The portion of the Eastern Spine Collector street located closest to Purdue Road will conform to this street section.

Local Neighborhood Streets

The following is a description of the typical local streets serving the residential neighborhoods within the Plan Area, also illustrated in the typical cross sections in Figure 3-5 and Figure 3-6.

Local Neighborhood Streets (See Figure 3-5, Section CC). Local neighborhood streets are comprised of a 36-foot wide travel way, with 5-foot wide attached sidewalks on both sides of the street. Detached sidewalks are optional with a minimum 5-foot wide planting strip.

Local Street with a Median (See Figure 3-6, Section DD). A portion of the connecting local street leading to the entries for Neighborhoods A and B will consist of a 40-foot wide travel way with a 16-foot wide raised landscaped median. Detached 5-foot wide sidewalks will be located on one side of the street.

Cul-De-Sacs. Cul-de-sacs will be designed to conform to the City’s standards and Fire District requirements in terms of length, number of homes served, width, and turning radius.

EMERGENCY VEHICLE ACCESS

Emergency access to the Plan Area may be provided by both public streets and gated EVA points. Emergency access to the eastern portion of the Plan Area by public streets is via Bollinger Canyon and Purdue Roads at the western and eastern gateways to the development, respectively. EVA points are only provided from two points, from Claremont Crest Way connecting to the spine collector near the west entry and from Deerwood Road connecting to the educational site near the east entry. No public vehicular access is permitted through the EVA points.



Future Emergency Vehicle Access (EVA) point

The portion of the Plan Area that is west of Bollinger Canyon Road (Neighborhood E) is required to provide at least one public street emergency access point and potentially one EVA point of access. The EVA point of access will be required if this portion of the Plan Area is developed with only a single public street entry. The EVA to this portion of the Plan Area could be from either Bollinger Canyon Road or Crow Canyon Road.

PEDESTRIAN AND BICYCLE CIRCULATION

The following goals and policies address pedestrian and bicycle circulation for the Plan Area.

GOAL 2: A system of sidewalks, paths, and trails that encourages walking and provides alternative connections to surrounding neighborhoods, and institutional and recreational facilities.

GOAL 3: A circulation system that is accessible from the City of San Ramon's bicycle system, and is safe for bicyclists.

Objective B: Provide convenient and safe pedestrian and bicycle facilities that offer a range of transportation options.

Policies:

1. Provide an interconnected system of sidewalks on public streets, off-street paths, and connections to regional recreational facilities such as the EBRPD trail system. It is essential that pedestrian facilities be seamlessly interconnected to encourage walking and provide for safe transitions between facility types.
2. Provide safe and convenient pedestrian crossings at intersections. Many of the planned pedestrian facilities within the Plan Area are off-street paths located on one side of the public street system. As such, it is important that these facilities are channeled to street intersections with crosswalks. Crosswalks will be located at all intersections and can either be painted or delineated with unique paving material such as stamped concrete or pavers.
3. Connect the Plan Area's pedestrian system to adjacent neighborhoods. Streets at the gateways of the Plan Area will have sidewalks that conform with existing streets resulting in a continuous pedestrian system. In addition to streets, pedestrian connections are provided at

EVA points to reduce walking distance to adjacent neighborhoods and to provide access to the Specific Plan’s recreational and institutional facilities and trail connections for those who reside outside of the Plan Area.

4. Ensure public accessibility to the EBRPD trail system. The Specific Plan will provide a public trail that links to the EBRPD regional trail system. Public access to these trails will be provided at the west entry. Anticipated development within the Plan Area will provide a limited amount of public parking to serve the newly created trailhead.
5. Collector streets will be designed to accommodate bicyclists with Class II on-street bike lanes. In conforming to City of San Ramon standards and Fire District requirements, all streets shall provide a minimum 20 foot wide unobstructed travel-way which automobiles and bicyclists can share safely and which can accommodate emergency vehicles.

Pedestrian Access and Connections

Pedestrians traveling to and from the Plan Area are served by sidewalks on arterials, collectors and most public local streets which are built to City standards. There are some sidewalk gaps along the roadways in the vicinity of the Plan Area. These include the undeveloped and private portion of Hooper Drive, one segment of Old Crow Canyon Road, the east side of San Ramon Valley Boulevard (at the Danville Town limit), and along most portions of Bollinger Canyon Road, north of Crow Canyon Road.

Walking to and from the Plan Area to nearby destinations (e.g. commercial, retail, schools and parks) is possible through existing facilities leading up to the Plan Area boundaries (excluding the gaps mentioned above). Development within the Plan Area will provide new pedestrian facilities connecting to these existing facilities.

A system of pedestrian facilities is provided within the Plan Area consisting of sidewalks on public streets, off-street paths, and links to regional trails. These facilities will be integrated to provide a continuous walking system throughout a majority of the Plan Area.



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Bicycle Access and Circulation



The Plan Area is accessible by bicycle facilities on City streets. Class II bike lanes are provided along San Ramon Valley Boulevard, the eastern end of Deerwood Road, westerly section of Fostoria Way, and some segments of Bollinger Canyon Road. Some of the streets with Class III bike routes, such as Deerwood Road, have striped parking lanes or shoulders which are underutilized and serve as de facto bike lanes. Deerwood Drive has a striped parking lane which can also be used by bicyclists. The San Ramon Valley Boulevard bike lanes connect to a series of Class II and III bike facilities on the City's arterial and collector street system.

The Iron Horse Trail is accessible to the Plan Area via Deerwood Road and Fostoria Way. Class II bike lanes are planned for the length of Bollinger Canyon Road, particularly on the northern end accessing the Plan Area once it is improved to City standards.

Bicyclists traveling to and from the Plan Area are adequately served by the existing bicycle system and can access nearly all of the primary citywide facilities by Class II lanes, Class III routes, or non-designated, but low volume streets. Within the Plan Area, bicyclists will be able to share streets with automobiles along local streets with low traffic volumes, utilize adjoining pedestrian/bicycle pathways, or utilize Class II bike lanes along the Spine Collector roadway.