

3Roots San Diego Project  
Environmental Impact Report  
SCH No. 2018041065; Project No. 587128

Appendix T

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Master Planned Development Permit

~~June 2019~~ June 2020





# 3ROOTS



by Mesa Canyon Community Partners



## MASTER PLANNED DEVELOPMENT PERMIT

~~JUNE 2019~~ JUNE 2020



*The 3Roots San Diego Master Planned Development Permit replaces the 1994 Carroll Canyon Master Plan and serves as an amendment to the Mira Mesa Community Plan.*



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# SECTION 1: CONTEXT + VISION



**LEGACY**

**CONNECTIVITY**

**RESPONSIBILITY**

# 01



## INTRODUCTION

### 1.1 Purpose

The 3Roots San Diego Master Planned Development Permit (MPDP) provides for the reuse and development of the former mining site into a residential neighborhood within the Mira Mesa Community. The 3Roots San Diego MPDP provides a framework to create a community in the heart of San Diego's technology hub.

The 3Roots San Diego MPDP is a regulatory document that together with the Vesting Tentative Map (VTM) and Exhibit A, and associated permits, provides for the orderly development of Phase 2 of the Carrol Canyon Master Plan area in the Mira Mesa Community Plan area. The MPDP has been found consistent with the Mira Mesa Community Plan and the Carroll Canyon Master Plan.

### 1.2 Summary of 3Roots San Diego

The 3Roots San Diego MPDP includes up to 1,800 residential units, a maximum of 160,160 square feet of non-residential uses, and a 1.5-acre Mobility Hub. Residential densities range from 5 dwelling units per acre to 72 dwelling units per acre in a mix of single-family attached, single-family detached, and multifamily housing (attached and detached). Ten percent of the units will be designated affordable and located on-site—as part of 3Roots San Diego, affordable housing options shall be provided consistent with the City's Inclusionary

housing recommendations. Nonresidential uses envisioned for 3Roots San Diego include office, business support, commercial services, restaurants, entertainment and retail. The MPDP also describes the restoration and realignment of a portion of Carroll Creek and the preservation of other significant portions of the creek. 3Roots San Diego will dedicate over 180 acres as preserved open space.

### 3ROOTS SAN DIEGO AT-A-GLANCE

3Roots San Diego will provide a mix of land uses close to regional job centers, and will help reduce vehicle miles traveled per person.

- 1,800 new homes—attached and detached single family and a mix of multifamily.
- 160,160 square feet of commercial, retail, and office.
- Over 250 acres of parks and open space
- ~~10 percent on-site affordable housing~~
- Onsite affordable housing, affordable housing options shall be provided consistent with the City's Inclusionary housing recommendations.

*Subject to change in accordance with project review and approval by the City of San Diego.*

# 3ROOTS SAN DIEGO: OF VISION

## CONNECTIVITY

Trails, community invitation, multi modal concepts.

## LEGACY

25 acre community park, creek restoration, 50% of land dedicated as open space, energy conservation.

## RESPONSIBILITY

Supplying housing for all stages of life, walkable local serving retail, Onsite affordable housing, affordable housing options shall be provided consistent with the City's Inclusionary housing recommendations..

## 1.3 Vision

As the 3Roots San Diego site transforms into a vibrant and active neighborhood, it will pay homage to its industrial heritage while embracing lifestyle choices of today and preparing for the technologies of the future. The design elements in the 3Roots San Diego MPDP are inspired by the rich heritage of the Mira Mesa community that surrounds it.

3Roots San Diego hosts a number of groups, loosely categorized as: the “innovators” of the life sciences, semiconductor, cyber security, and other technology-based industries; the “makers” of craft beer, food, and aerospace fabricators; the families atop the mesas directly north; and the military of the nearby Marine Corps Air Station Miramar and the related, large population of veterans in the area.

3Roots San Diego reflects this diversity and creativity through a series of unique amenities and districts that will attract an array of life stages and interests. A network of on-street and off-street pathways physically weave community and industry, artists and manufacturers, young families and more mature residents together with a lively mix of uses and activities.

3Roots San Diego is an open invitation for all to enjoy public parks, trails, restaurants, local artisans, event gathering spaces adjacent to hundreds of acres of preserved open space. The purpose of the 3Roots MPDP is to provide a community stage for local interactions, art, fabrication, and a connectedness to passive and active open space elements that is truly indigenous to San Diego.

## 1.4 Location

3Roots San Diego is on the east side of Camino Santa Fe, approximately midway between Mira Mesa Boulevard and Miramar Road, in the City of San Diego. It consists of approximately 413 acres, of which 256 acres were part of an active mining operation. Figure 1-1 shows the regional location of 3Roots San Diego and Figure 1-2 shows the project vicinity. The site is bounded on the north and east by the residential neighborhoods of the Mira Mesa community, which includes both single-family and apartment homes. Light industrial and business park land uses are adjacent to 3Roots San Diego on the south, east, and west. Directly to the east is an active aggregate mining operation owned and operated by Vulcan Materials; the 270-acre site is also proposed for future mixed-use development.

The primary access to 3Roots San Diego is from Camino Santa Fe, a road improvement project funded by Fenton Development and Hanson Aggregates in 2004 as part of the first phase of the Carroll Canyon Master Plan. Camino Santa Fe is an important north-south connection that links the major east-west corridors of Mira Mesa Boulevard and Miramar Road, both of which provide connections to Interstate 5, Interstate 805, and Interstate 15. Interstate 5 serves commuters traveling north/south and those working in the La Jolla/University Town Center area or in Downtown San Diego; Interstate 805 serves commuters in Downtown San Diego, Mission Valley, and the South Bay; and Interstate 15 connects to both Riverside County and southern San Diego. These major freeways can be accessed within five miles of 3Roots San Diego.

## 1.5 How to Use this Plan

The 3Roots San Diego MPDP is a regulatory document that sets physical design standards for land use, circulation, building form, and architectural character.

### 1.5.1 MPDP Authority and Requirements

When using this MPDP to review future development projects or determine appropriate uses for a site, the applicable zoning regulations of the City's Land Development Code that are not superseded by the design standards and guidelines in this MPDP should also be reviewed to ensure full implementation of this plan.

Where this MPDP is silent, applicable provisions of the Land Development Code shall apply. Where a conflict exists between the 3Roots San Diego MPDP and the Land Development Code, the MPDP standard shall apply.

### 1.5.2 Environmental Review

The 3Roots San Diego MPDP was required by state law to undergo environmental review in accordance with the California Environmental Quality Act (CEQA). Pursuant to state and local CEQA guidelines, the City of San Diego prepared an environmental impact report (**EIR; State Clearinghouse No. 2018041065**) to address the potential environmental impacts of the 3Roots San Diego MPDP. Prior to the approval of the MPDP, the EIR was considered and certified by the San Diego City Council. Any amendments to this MPDP

or discretionary approvals required to implement this MPDP also are subject to the requirements of CEQA.

## 1.6 Organization of the MPDP

Each of the three sections of 3Roots San Diego has a different function and includes related chapters that each address a unique topic.

### 1.6.1 Section 1: Context + Vision

Provides an overview of 3Roots San Diego and describes project elements that are essential to the buildout of the project.

**Chapter 1, Introduction.** Provides an overview and purpose of the MPDP and introduces 3Roots San Diego by describing the setting, location, and background. It also describes the vision for different districts within 3Roots San Diego.

**Chapter 2, Climate Action and Sustainability.** Provides the strategies integrated into 3Roots San Diego to achieve the goals of the City of San Diego Climate Action Plan.

**Chapter 3, Circulation and Mobility.** Describes the circulation network and elements that enhance mobility options including transit, biking, and walking.

**Chapter 4, Infrastructure.** Summarizes improvements for all streets and public rights-of-way, underground utilities, and grading.

### 1.6.2 Section 2: Regulations

Provides regulations that guide future development in 3Roots San Diego.

**Chapter 5, Land Use.** Establishes zoning and development regulations to guide the use and intensity of future development.

**Chapter 6, Administration and Implementation.** Identifies the processes for implementing the standards and guidelines of the MPDP.

### 1.6.3 Section 3: Design Guidelines

Includes design standards for specific topics or areas that apply to future development in 3Roots San Diego, as described in Section 2: Regulations.

**Chapter 7, Design Guidelines for Interface between public and Private Realm.** Includes conceptual sections which demonstrate the relationship between development and the public realm.

**Chapter 8, Root Collective Design Guidelines.** Provides design guidelines for the Root Collective District.

**Chapter 9, Landscape Design.** Details community-wide landscape standards and plant palette.

**Chapter 10, Parks and Open Space.** Provides the framework and standards for active and passive recreation and open space conservation and restoration.

**Chapter 11, Walls and Fences Strategy.** Design guidelines for walls and fences in 3Roots San Diego.

FIGURE 1-1 - REGIONAL LOCATION

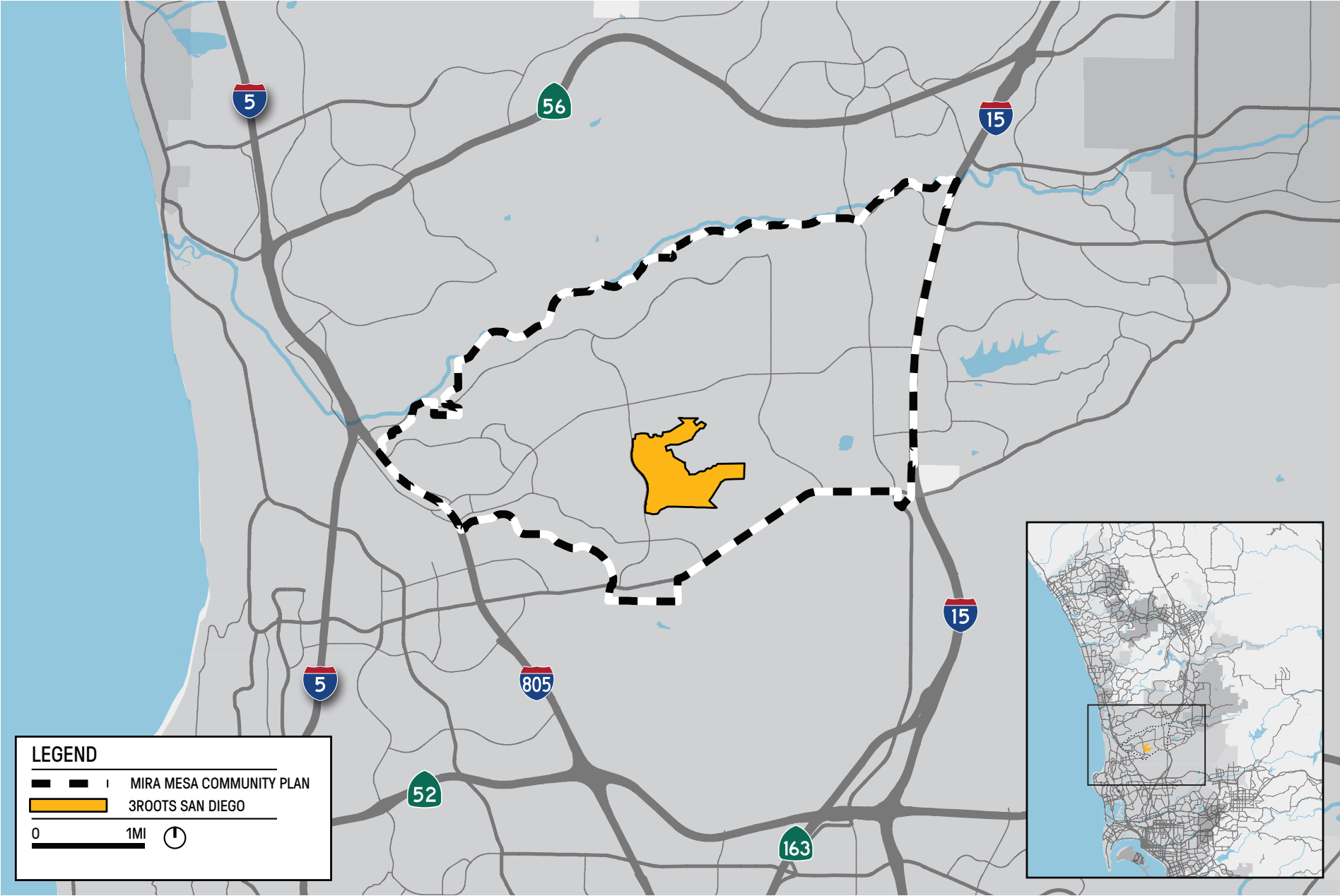




FIGURE 1-2 - PROJECT VICINITY

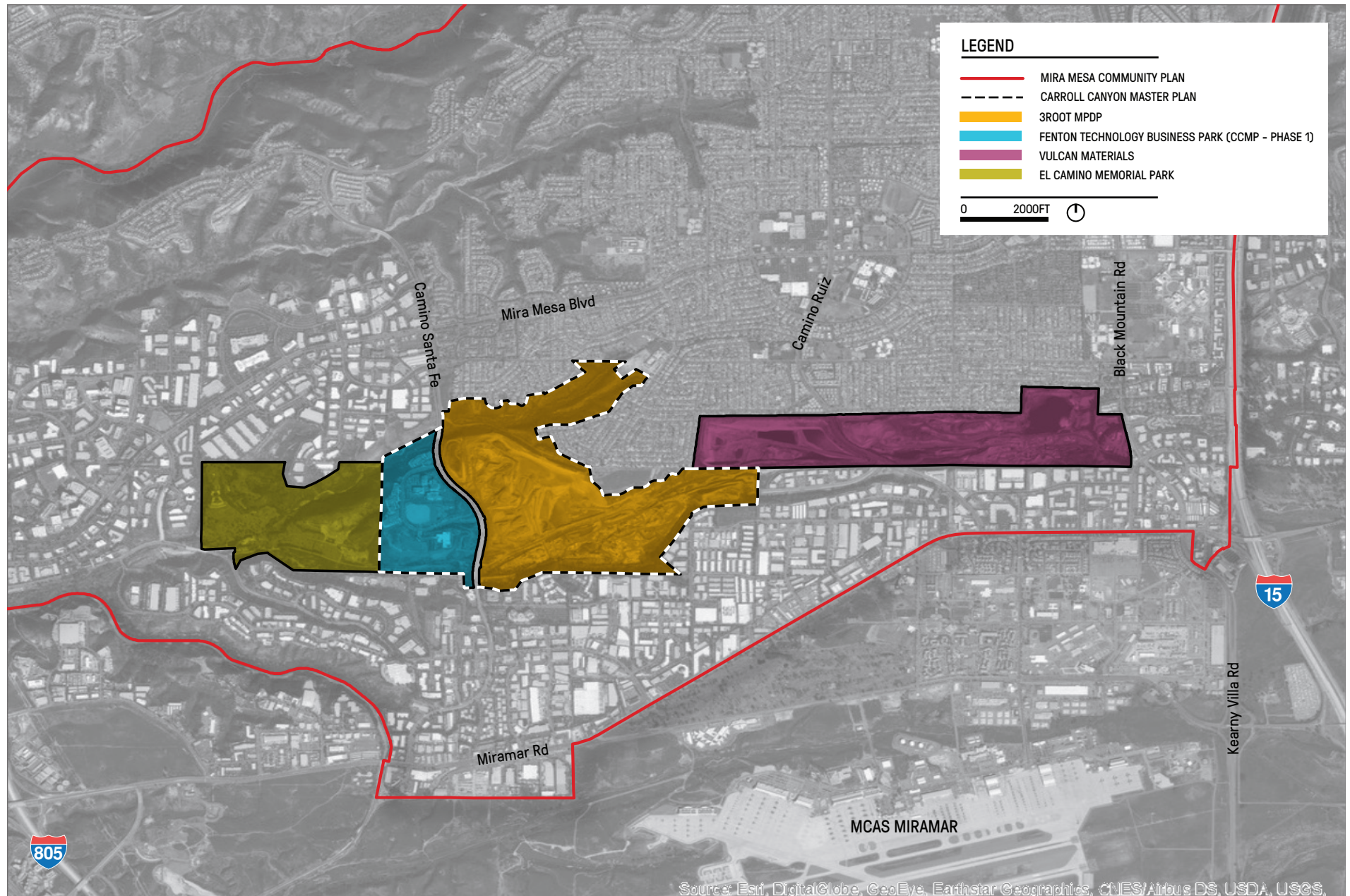


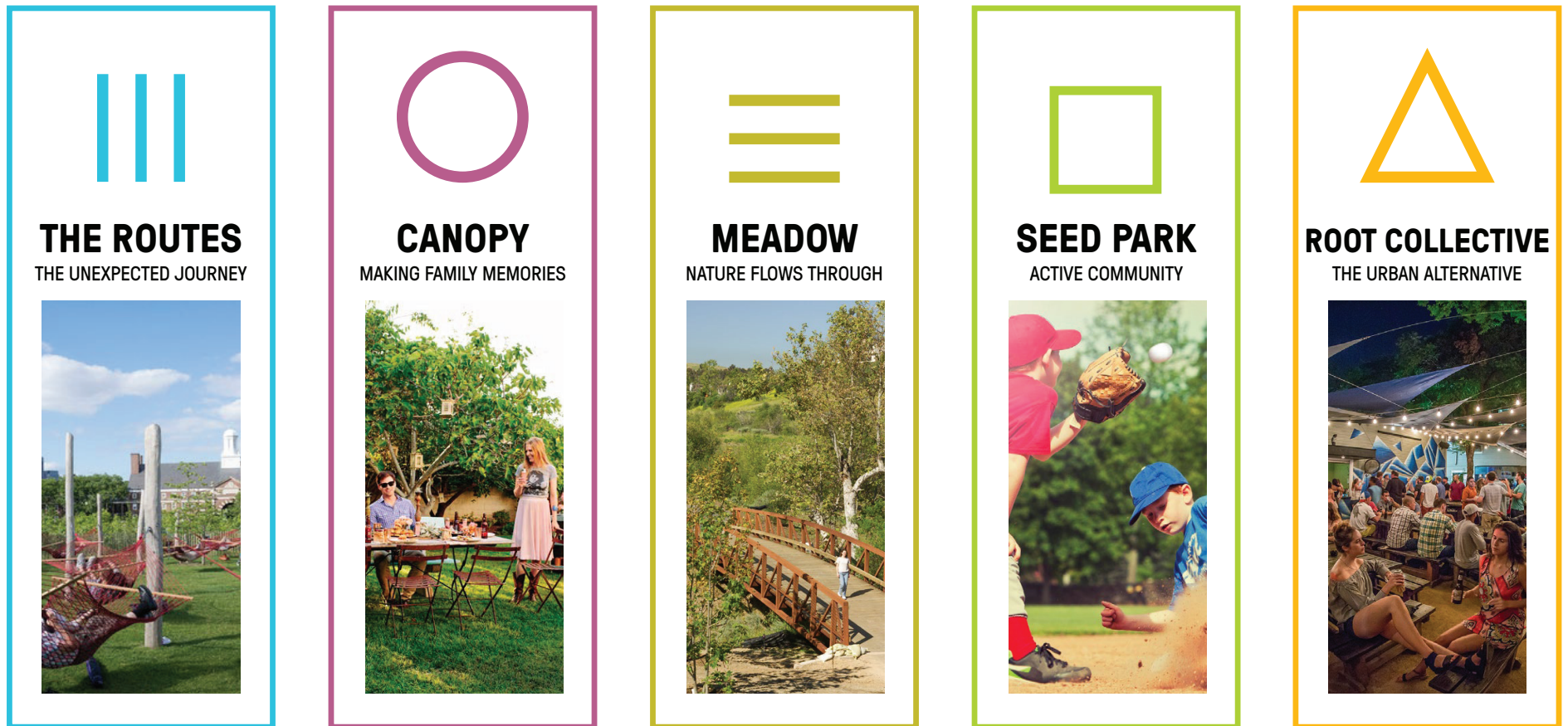
FIGURE 1-3 - DISTRICTS



Note: Carroll Canyon Road shall provide a center-aligned 26-foot Irrevocable Offer of Dedication (IOD) in order to accommodate a Future Rapid Transit (BRT) route and transit stop.



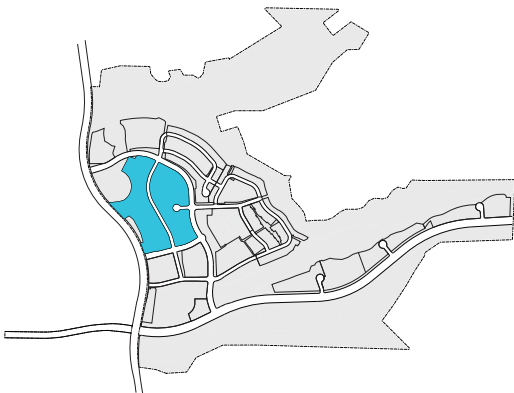
FIGURE 1-4 - DISTRICT IDENTITY



# ROUTES DISTRICT

## 1.7 Routes District Vision

The Routes District includes single-family attached and detached homes grouped together into larger clusters. Each cluster allows homes to have a front-facing presence, some oriented toward a common area such as a paseo or a park. Access will be provided through common driveways or alleys. The Routes District acts as a transitional neighborhood between the multifamily neighborhood of the Root Collective and the single-family detached neighborhood of the Canopy District. Residents of the Routes District will enjoy the pleasure of easy access to open spaces.





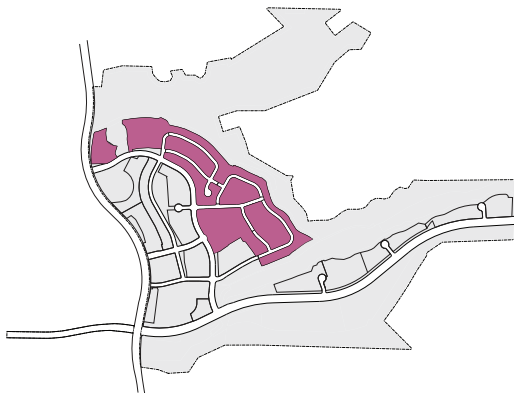




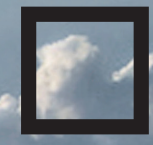
# CANOPY DISTRICT

## 1.8 Canopy District Vision

The homes envisioned in the Canopy District range from two to three stories. Passages among the homes allow breezes, sunlight, and residents to move freely. The styles reflect the vernacular designs commonly found in San Diego, with features like large canopied overhangs, many windows, and landscaped paths. An emphasis on shade creates a timeless style of light and texture unique to 3Roots San Diego. The district is home to the second largest park and private community recreation complex in 3Roots San Diego. The Canopy District creates a buffer between the denser uses of 3Roots San Diego and the existing single-family neighborhoods in Mira Mesa to the north.







Conceptual graphic for illustrative purposes only.

3 Roots San Jose

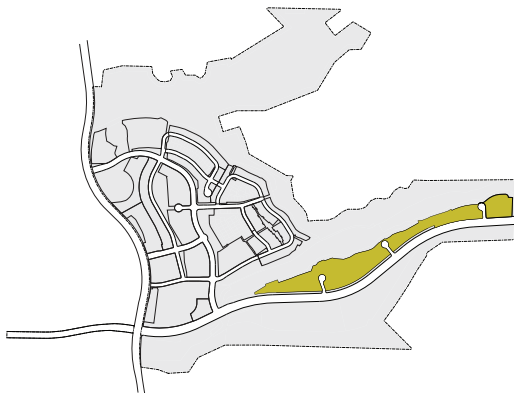


# MEADOWS DISTRICT

## 1.9 Meadows District Vision

The single-family attached and detached homes that line the Meadows District have an architectural presence that is grounded in natural materials, expressing the movement of the Meadows.

Fronting a restored Carroll Canyon Creek, these homes preside over a natural environment that hosts hikers and cyclists along a natural trail in the midst of a city. The Meadows provides a peaceful transition from passive recreation along the creek to the energy-filled Seed Park.







Conceptual graphic for illustrative purposes only.



# SEED PARK

## 1.10 Seed Park Vision

The community park is as important to the vibrant lifestyle of the 3Roots San Diego community as it is to the surrounding residents of Mira Mesa. The 25-acre Seed Park is intended to accommodate soccer, baseball, and a host of organized active sports as well as passive recreation. Carroll Canyon Road acts as a buffer between the residential Meadows District and the lit sports fields of Seed Park.

From July 2018 through October 2018, Mesa Canyon Community Partners and the City of San Diego jointly facilitated a General Development Plan (GDP) process for the Seed Park. Under Council Policy 600-33, the GDP process provided an opportunity for community input into Mira Mesa's future 3<sup>rd</sup> Community Park. After a series of public meetings, the GDP plan was approved on October 9, 2018 by the Mira Mesa Recreation Advisory Board. The approved plan for the Seed Park are included in the 3Roots San Diego VTM. 3Roots San Diego will provide the trails that link the park to the community at large.







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# ROOT COLLECTIVE

## 1.11 Root Collective Vision

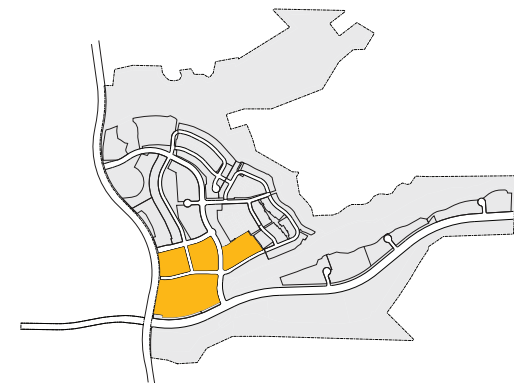
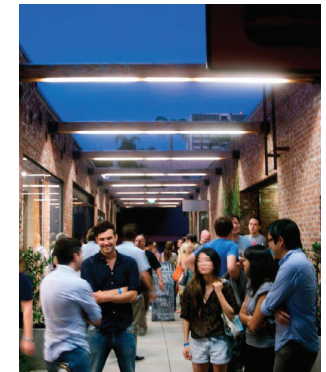
The Root Collective is the active heart of 3Roots San Diego with working spaces, restaurants, entertainment, boutique retail, and other neighborhood-serving commercial uses that are all oriented to a public plaza to create an inviting, active, and safe public space. Creative spaces, studios, public art, and iconic architecture will help identify the Root Collective as an engaging hub of activity.

A range of residential product types are envisioned including 3-5 story apartments, for-sale town homes, and stacked flats. 3Roots San Diego challenges the notion that every trip begins and ends with a car, and the Root Collective incorporates ride-share parking spaces, and meeting spots for private shuttles and on-demand transportation services. For a resident of 3Roots San Diego, the daily commute will begin and end with a pleasant stroll. The Root Collective will also be the social gathering point of the community, where makers, innovators, and residents can flourish. Businesses will reflect the active lifestyle and open design of the Root Collective, fronting public spaces, paths and trails, and other gathering areas. The intent of the Root Collective is to encourage creativity, collaboration, and community.

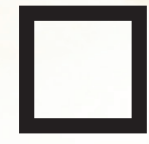
See Chapter 8 - Root Collective Design Guidelines for implementation.



**Community Collective** is the planning term used to replace mixed-use with a more horizontal mixed use planning typology that is the integration of urban and suburban styles.







Conceptual graphic for illustrative purposes only.



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# 02



## CLIMATE ACTION AND SUSTAINABILITY

### *2.1 Introduction*

Climate action and sustainability are core elements of 3Roots San Diego. The vision is to create neighborhoods that provide sustainable urban housing. 3Roots San Diego integrates land use and transportation planning to reduce vehicle miles traveled and achieve reductions in greenhouse gas emissions.

### *2.2 Climate Action Plan (CAP)*

3Roots San Diego strives to advance the goals and ensure consistency with the policies of the City of San Diego's CAP. Many of the strategies in the CAP are incorporated and reinforced throughout the 3Roots San Diego MPDP, including energy- and water-efficient buildings; clean and renewable energy; bicycling, walking, and transit; zero waste; and climate resiliency.

3Roots San Diego seeks to contribute to CAP goals, including:

- Increase commuter walking opportunities.
- Increase commuter bicycling opportunities.
- Reduce vehicle fuel consumption by installing roundabouts / traffic circles.
- Promote effective land use to reduce vehicle miles traveled.
- Increase the urban tree canopy.
- Reduce residential building energy consumption.
- Reduce daily per capita water consumption.
- Add additional renewable electricity supply.

## **2.3 Project-Specific Strategies**

3Roots San Diego has incorporated project-specific strategies that address climate action and sustainability.

### **2.3.1 Cool/Green Roofs**

3Roots San Diego will include materials with a minimum 3-year aged solar reflection and thermal emittance or solar reflection index equal to or greater than the values specified in the voluntary measures under the California Green Building Standards Code (CalGreen).

### **2.3.2 Plumbing Fixtures and Fittings**

The residential components of 3Roots San Diego will include plumbing fixtures and fittings that do not exceed the maximum flow rate specified in the City's Climate Action Plan Consistency Checklist. The non-residential components of 3Roots San Diego will be provided with plumbing fixtures and fittings that do not exceed the maximum flow rate specified in Table A5.303.2.3.1 of CalGreen (voluntary measures). Additionally, the appliances and fixtures for commercial applications would meet the provisions of Section A5.303.3 of CalGreen.

### **2.3.3 Renewable Energy**

All residential units will comply with the solar requirements of Title 24, and all single-family residential units in 3Roots San Diego will include conduit to promote rooftop solar energy generation and battery storage. All new residential buildings built after 2020 will be required to meet the requirements of the 2019 Building Energy Efficiency Standard, including providing roof top solar panels. Solar panels may only be roof-mounted.

### **2.3.4 Electric Vehicle Charging**

The Project will provide Electric Vehicle (EV) charging for a minimum of three percent of the total parking spaces required for multi-family and non-residential land uses to include a listed cabinet, box or enclosure to allow for the future installation of electric vehicle supply equipment for fully functional electric vehicle charging stations. Additionally, at least half of those spaces will have the necessary electric vehicle supply equipment installed to provide active electric vehicle charging stations ready for use. It is anticipated the EV charging stations for the apartments and nonresidential uses would be provided within the respective planning area. The remaining EV charging stations associated with the "for sale" multi-family units will be consolidated in the Mobility Hub Planning Area 20 (PA-20). The non-residential required EV charging spaces with equipment will be on-site at PA-19.

### **2.3.5 Transportation Demand Management**

3Roots San Diego will implement a parking management plan that includes charging employees market-rate for single-occupancy vehicle parking and providing reserved, discounted, or free spaces for registered carpools or vanpools. 3Roots San Diego will also commit to maintaining an employer network in the SANDAG iCommute program and promoting SANDAG's RideMatcher service to tenants/employees, as well as providing flexible work hours and a telework program. 3Roots San Diego will also provide on-site services that reduce the need for residents and other members of the community to drive elsewhere. More detail on transportation demand management is provided in Chapter 3.

### **2.3.6 Mobility Hub**

A Mobility Hub is proposed to be a centralized multi-modal node within 3Roots San Diego. It would provide pick up and drop off staging areas for both public transportation systems (bus service) as well as private multimodal transportation options such as employer shuttles and rideshare services. A bike repair, rental, and maintenance shop would also be included. Solar or standard electric vehicle (EV) charging stations would be provided in the Mobility Hub as well.



### ***2.3.7 Bicycle Parking Spaces***

In addition to the physical infrastructure and neighborhood/site design, the Mobility Hub will provide a centralized location for long- and short-term bicycle parking for the entire project and will include a bike station with bike repair facilities, bike sales, and secure, covered, and publicly accessible bike storage.

### ***2.3.8 Shower Facilities***

3Roots San Diego would be designed to accommodate changing/shower facilities in accordance with the voluntary measures under the California Green Building Standards Code requirements indicating showers and lockers per quantity of tenants. Facilities may either be provided within the respective planning area or concentrated in the mobility hub provided in PA 20.

### ***2.3.9 Designated Parking Spaces***

3Roots San Diego will provide designated parking for a combination of low-emitting, fuel-efficient, and carpool/vanpool vehicles at a rate of 10% of the total parking required for the proposed non-residential uses.

### ***2.3.10 Pedestrian Improvements***

3Roots San Diego includes a series of trails connecting the neighborhoods to the recreational amenities, open space, and Root Collective, as described in Section 3.4. Adjacent to the Mobility Hub, the commercial uses in the Root Collective would provide services and entertainment options connecting with the residential neighborhoods via a pedestrian trail system.

### ***2.3.11 Bicycling Improvements***

The design of 3Roots San Diego incorporates elements to increase bicycling opportunities, consistent with the City's Bicycle Master Plan. The project has been designed to provide bicycle entry from multiple areas and to provide internal bikeways throughout the project site. In addition to the physical infrastructure described in Section 3.5 and neighborhood/site design that promotes bicycling, the Mobility Hub will include a public bike station with bike repair facilities, bike sales, and secure, covered, and publicly accessible bike storage. A bicycle sharing facility to increase access to bicycles will also be provided.

### ***2.3.12 Urban Forestry***

3Roots San Diego will include landscaping throughout the project site, including along the proposed roadways, access drives, plazas, community facilities, parking lots, and streetscapes. The proposed landscape palette, described in Section 9.2, includes a variety of canopy and accent trees, accent and ornamental shrubs, and ground covers to provide a unified theme throughout the site. The strategic locations of these trees throughout the project site would provide shade that would increase pedestrian usability, sequester carbon, and provide protection for pavement as described in the City's Urban Forest Management Plan.

#### ***Tree Canopy Coverage Calculations***

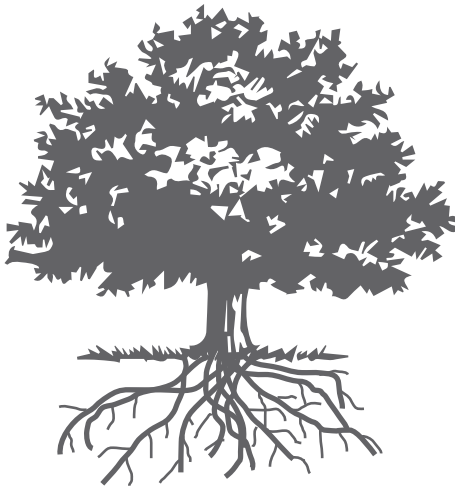
3Roots San Diego includes 413 acres and was an active mining operation that completely disturbed 256 acres as part of mining and reclamation activities. 3Roots San Diego includes a new tree planting palette in areas with proposed development, and preserves 181 acres of dedicated Multi-Habitat Planning Area (MHPA) and creek restoration. In total a goal of over 15% coverage of the tree canopy is achieved. Detailed calculations are provided in Appendix A - Tree Canopy Coverage Calculations.







# 03



## CIRCULATION AND MOBILITY

### **3.1 Introduction**

3Roots San Diego will provide transportation options that will reduce single-occupancy vehicle trips. At the same time, 3Roots San Diego facilitates neighborhood mobility by providing safe, efficient, and enjoyable pedestrian and bicycle infrastructure. The Mobility Hub will integrate all modes of transportation—biking, walking, shuttles, car sharing, vanpooling, carpooling, etc.

### **3.2 Mobility Hub / TDM Features**

The Mobility Hub will integrate multiple transportation options and will be dedicated to the future of transportation and on-demand service. The Mobility Hub will provide residents, visitors, and employees with a variety of transportation options. The purpose of these Transportation Demand Management (TDM) measures is to reduce the project's overall impact on the transportation system and to provide reasonable and viable transportation options for those living, working and visiting the project site. These services will be provided by 3Roots San Diego as a concerted effort to reduce the need to drive alone to work and to choose active modes of transportation for their daily needs.

The Mobility Hub will be a part of the Root Collective and will play a significant role in making it a vibrant, connected activity center. The Mobility Hub will serve a primary connection point for community and regional bicycle facilities, sidewalks, trails, and paseos that connect the neighborhoods, parks, and open space. An example of the Mobility Hub is provided in Chapter 8. Features of the Mobility Hub and other TDM measures are described below.

#### **3.2.1 On-Site Mobility Concierge / TDM Coordinator**

Full time staff person(s) employed by the homeowners association (H.O.A) on-site to manage the real time needs of the residents, business owners and employees within the community. This individual will also work directly with SANDAG in identifying and coordinating TDM programs, ride share programs and other mobility related activities and marketing material on-site.

#### **3.2.2 Dedicated Car Share Space within Mobility Hub**

3Roots San Diego will work with ZipCar and Turo, the car share providers available in the San Diego region, to bring 3-5 car share vehicles to the Mobility Hub. Parking spaces will be provided to serve this car share service.

### ***3.2.3 On-Line Website for Car Share/Vanpool***

A dedicated on-line portal will be developed for the community to share information and coordinate ride share opportunities. Digital resources and on-line “help desk” (to be managed by the On-Site Mobility Concierge) will be available to residents, employees and business owners in the community.

### ***3.2.4 Employment Center Shuttle Service***

Working with the major employers in the region and major employment centers (such as UTC and Sorrento Valley), the project will establish an employment center shuttle service that will link residents to their places of employment. Park and ride spaces will be provided within the Mobility Hub for residents who live within the community but find the Mobility Hub too far to walk to or have mobility restrictions. Funding for the shuttle may be provided either by the rider or through subsidies funded by the employment centers. The on-site TDM coordinator, hired by the H.O.A, will be responsible for developing, implementing and coordinating the Employment Center Shuttle Service.

### ***3.2.5 Uber/Lyft/Car Share Meeting Location***

The Mobility Hub will also provide designated pick up/drop off locations for on-line car sharing programs. In addition, the Mobility Hub will provide on-line kiosks where individuals without access to a smart phone or computer would be able to schedule and pay for on-line car sharing programs.

The on-site Mobility Concierge would be on-hand to assist with the on-site kiosk.

### ***3.2.6 Connection to Public Transportation***

MTS operates commuter shuttle service that connects the community and businesses to the Sorrento Valley Coaster Station (Existing Coaster Connection routes 972, 973, 978 and 979). The project is working with MTS to identify ways to extend the existing shuttle service to the project site once Carroll Canyon Road is constructed from Camino Ruiz to Camino Santa Fe. The Mobility Hub will serve as the gathering place for residents and employees who plan to use public transportation. Park and Ride parking spaces will be provided at the Mobility Hub along with bicycle lockers and bicycle racks.

### ***3.2.7 Bicycle Services***

In addition to providing auto oriented services at the Mobility Hub, bicycle facilities including a bike repair station or shop and bicycle racks will be provided. This will allow residents to ride their bicycle to the Mobility Hub, store their bicycle while they take other modes from the site, and if necessary have their bicycle repaired while they are at work or play.

### ***3.2.8 Bike Share Station***

Although bike share within the community is not a reasonable service given the mix of residential and commercial uses, the Mobility Hub will provide space for a Bike Share Station should

an electric or standard bicycle share program be implemented within the surrounding community. Reasonable connections to the Fenton Business Park, Qualcomm and other surrounding business parks to the south of the site along Carroll Canyon Road could be made on electric bicycles. The TDM coordinator would be responsible for working with the local community on the implementation and integration of bike share services should that program evolve.

### ***3.2.9 Centralized On-Demand Portal***

The Mobility Hub will also serve as a central delivery and service point or meeting point for on-line ordering sites (such as Amazon, Ebay, Craigs List, etc) with drop-offs to be given to the mobility concierge. This service will be available to residents who would prefer those services not occur at their door step or at their home. This will help reduce the trip lengths and number of delivery trucks within the community.

### ***3.2.10 Flexible Work Space***

The commercial center will provide for flexible office space and on-demand office space for telecommuters. Smaller, flexible space allows for as-needed office and meeting space within the community reducing the need for residents to drive long distances to corporate offices.

### ***3.2.11 Retail Office Support Services***

The commercial center retail space will include an office support services store (FedEx, UPS Store,

etc) to provide work at home employees the necessary resources such as mailing, packing/ shipping and printing services.

### ***3.2.12 Retail within ¼ mile Walking Distance of Medium to High Density Housing***

Placing the higher density housing near the commercial center makes the retail center walking and bicycling accessible to a large portion of the population within the community.

### ***3.2.13 Integrated System of Trails and Sidewalks***

The 413-acre site will provide approximately 8 miles of internal off-street trails in addition to sidewalks and pathways along the internal roadways and Carroll Canyon Road.

### ***3.2.14 Integrated Bicycle Network with On-Bicycle Services***

The project site includes an integrated system of bicycle lanes, shared bicycle facilities, and bicycle trails. In addition, bicycle racks are planned throughout the site as well as a Bike Share Station at the Mobility Hub, Fix it Stations at the key park locations and a bicycle shop in the retail center. The Mobility Concierge will be responsible for coordinating bicycle education events for the community to encourage trips by bicycle within the community and into the surrounding communities.

### ***3.2.15 Integrated Network of Low Speed Streets and Roadways***

Internal streets are expected to have posted speed limits ranging from 25 to 35 mph, which is compatible with walking and bicycling along the corridors. Key intersections along the main internal roadway will be controlled by roundabouts, which will encourage slow travel speeds, narrow pedestrian crossing distances and reduced number of conflict points for all modes.

### ***3.2.16 Connectivity to Local Community and Local Resources***

The pedestrian and bicycle network connects to existing trails and sidewalks in the surrounding community. This will encourage non-auto oriented trips from the project site to the local schools and trips from the local community to the retail center. The project will encourage Bike or Walk to School programs to the local elementary school (Salk Elementary), which is located less than 1 mile from center of project with direct trail connection.

### 3.3 Street Network

3Roots San Diego includes an extension of Carroll Canyon Road through the project site to improve regional connections and an internal street network that is designed to provide access to the integrated neighborhoods within the 3Roots San Diego community. Generally, the road designs follow the standards in the City of San Diego Street Design Manual (March 2017); however, modifications are recommended that increase areas within the right-of-way for landscaping and pedestrian walkways, and reduce the overall pavement width. Figure 3-1 provides a map of the street network classifications.

A typical cross-section for each of the street classifications for the 3Roots San Diego street network are identified in Figure 3-2 through Figure 3-12. Additional public and private roads may be created as needed to support circulation and mobility within 3Roots San Diego.

All proposed streets shown on Figure 3-1 are public streets that will be owned and maintained by the City of San Diego.

#### 3.3.1 Carroll Canyon Road

3Roots San Diego will construct the extension of Carroll Canyon Road through the project site as a 6 Lane Primary Arterial. The existing segment of Carroll Canyon Road, from one half-mile west of Camino Ruiz to Camino Ruiz was built to 6-lane Primary Arterial standards but is currently striped with 4 lanes. 3Roots San Diego will also re-stripe Carroll Canyon Road from one half-mile west of Camino Ruiz to Camino Ruiz to provide a total of 6 travel lanes. This segment of Carroll Canyon Road within 3Roots San Diego includes bicycle and pedestrian facilities, creating additional regional connections for pedestrians and bicyclists. A typical cross-section of Carroll Canyon Road is shown in Figure 3-2 through Figure 3-5..

#### 3.3.2 Carroll Canyon Road West

3Roots San Diego will also construct a segment of Carroll Canyon Road west of Camino Santa Fe as a 4 Lane Urban Major to the western boundary of the existing Fenton Technology Park. However, this segment of Carroll Canyon Road will not carry any vehicular traffic until the City's Public Facilities Financing Plan (PFFP) Project T-5A, to construct Carroll Canyon Road from Carroll Road to the Fenton Technology Park western boundary, is completed. This segment of Carroll Canyon Road within 3Roots San Diego includes bicycle and pedestrian facilities, creating additional regional connections for pedestrians and bicyclists. A typical cross-section is provided in Figure 3-6.

#### 3.3.3 Spine Road

The internal Spine Road extends from Camino Santa Fe at the north end of 3Roots San Diego to Carroll Canyon Road at the south end of the project site. With one lane in each direction, a raised, landscaped median, and buffered bicycle lanes, the road design primarily focuses on integrating all modes of transportation along an inviting, slow speed corridor that connects the various neighborhoods throughout the community. The Spine Road has been designed with landscaped parkways with an adjacent trail, and buffered bicycle lanes, which provide for a bicycle and pedestrian travel environment. Three roundabouts are planned along the Spine Road and are designed to maintain slow travel speeds through intersections, reduce potential traffic delays, and reduce pedestrian crossing distances.

According to the City of San Diego Street Design Manual (March 2017), a Two Lane Collector with Two-Way Left Turn Lane Specifications include providing 78 to 94 feet of ROW and a curb to curb width of 54 feet. The Spine Road ROW is 86 feet wide, with a curb to curb width of 53 feet. The Spine Road does not include on-street parking. The space identified in the Street Design Manual for parking has been shifted to the 15' landscaped center median and the 8' buffered bicycle lanes. A typical cross-section is provided in Figure 3-7.

**FIGURE 3-1 - STREET NETWORK CLASSIFICATIONS**

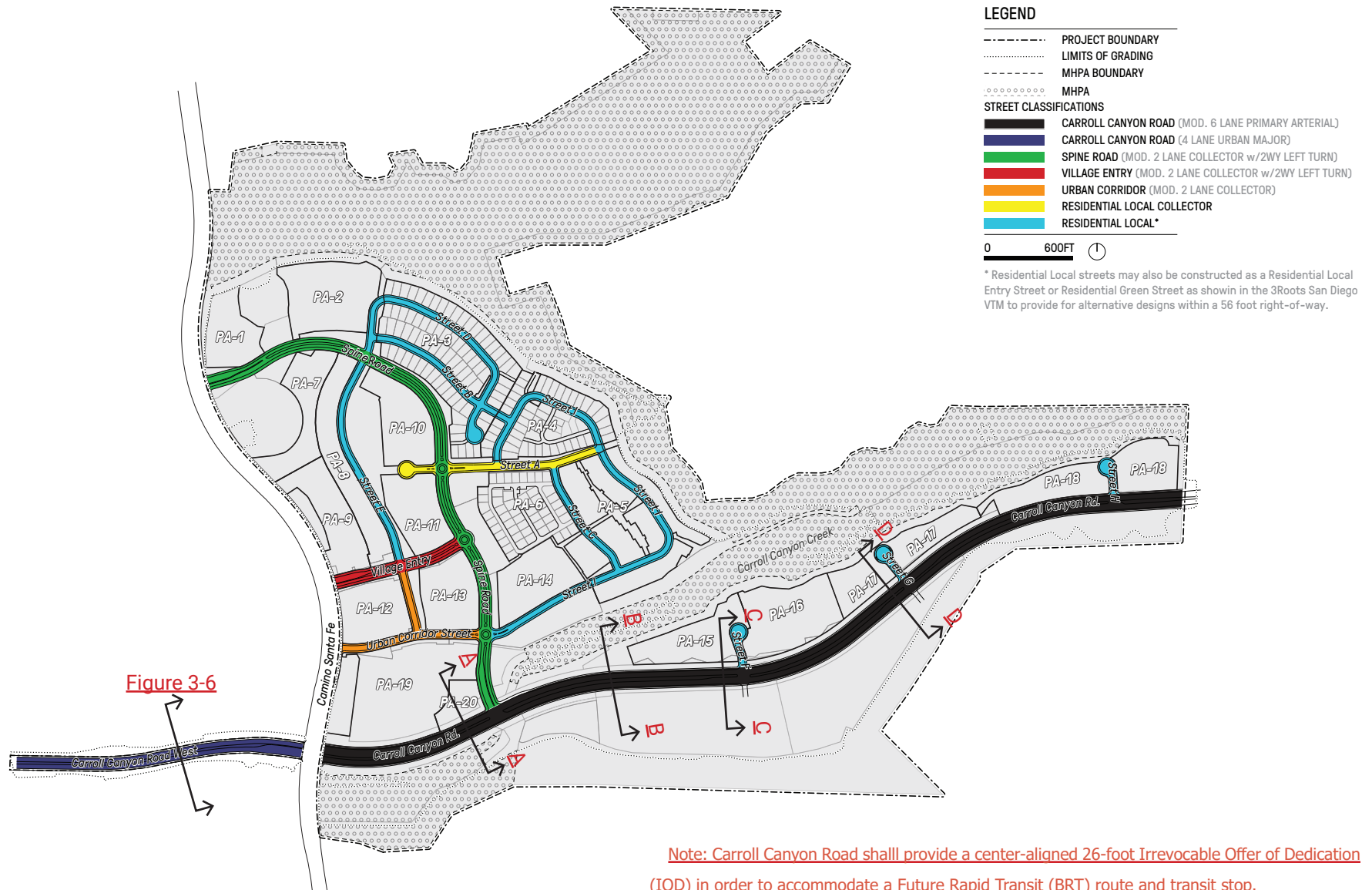
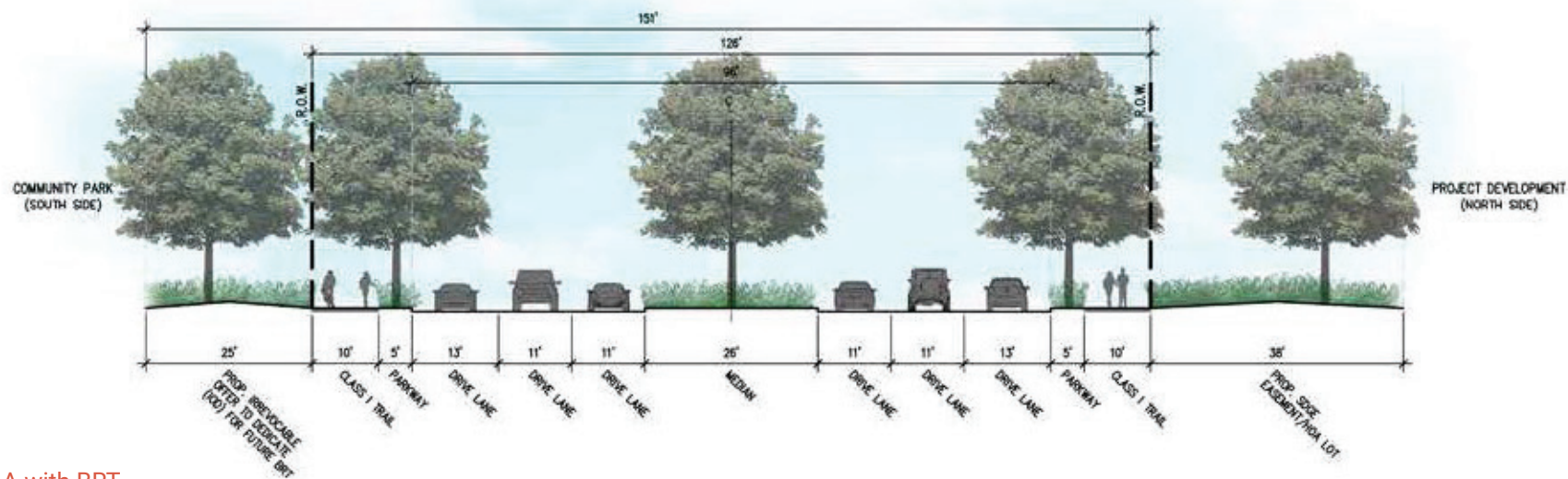


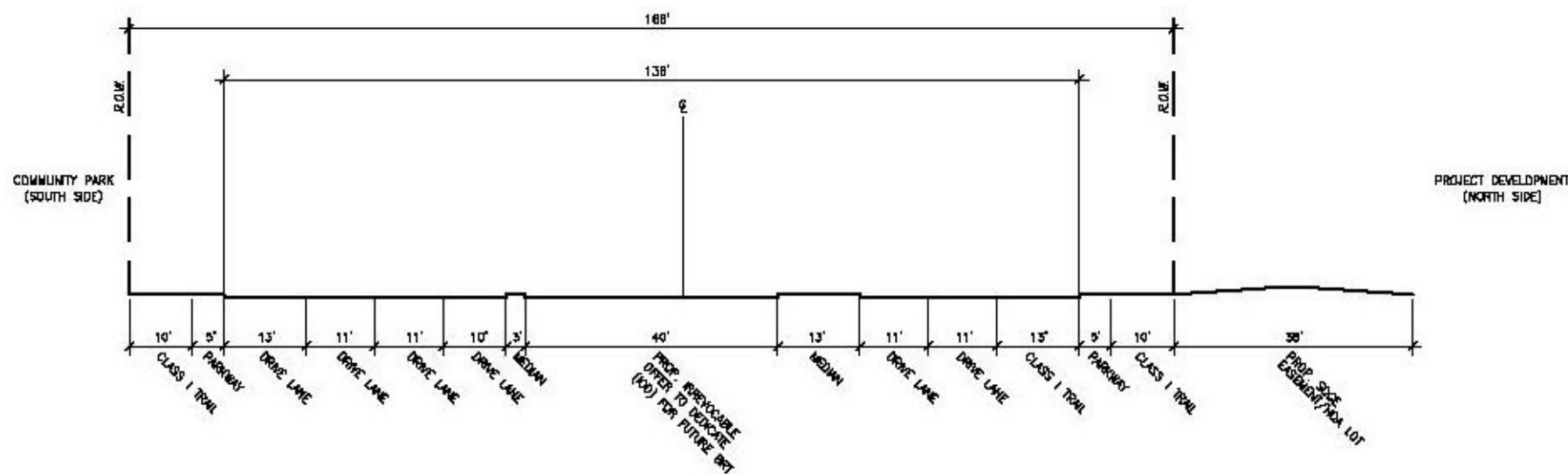


FIGURE 3-2 - STANDARD CROSS SECTION OF CARROLL CANYON ROAD (SECTION A-A)

Note: Carroll Canyon Road shall provide a center-aligned 26-foot Irrevocable Offer of Dedication (IOD) in order to accommodate a Future Rapid Transit (BRT) route and transit stop. Cross sections with BRT represent the to be built condition.



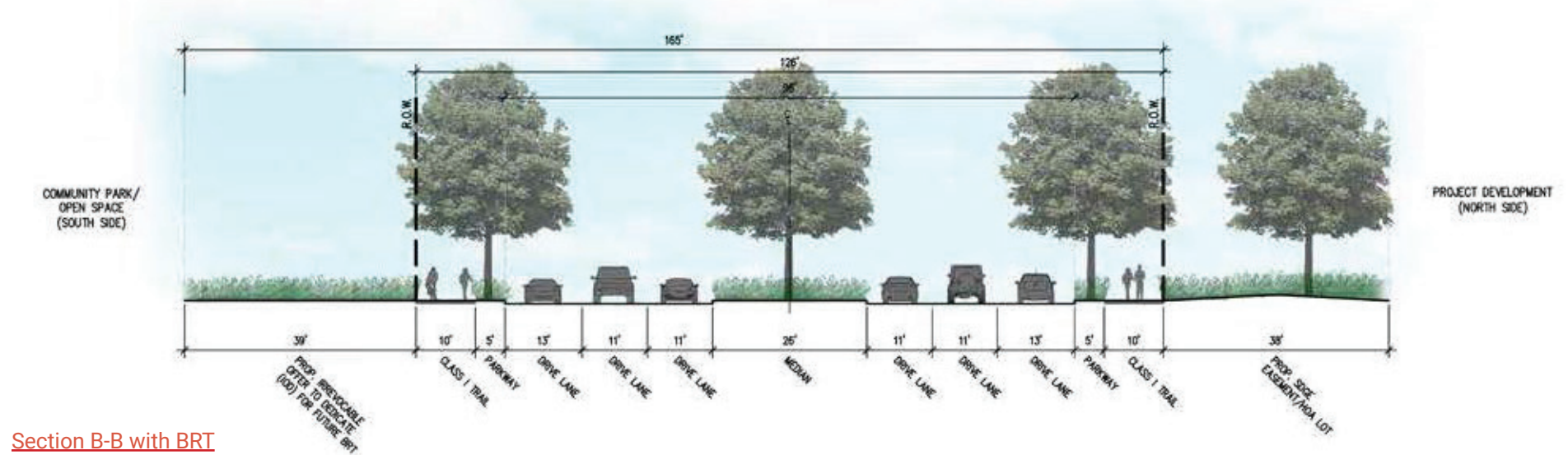
Section A-A with BRT





**FIGURE 3-3 - STANDARD CROSS SECTION OF CARROLL CANYON ROAD (SECTION B-B)**

Note: Carroll Canyon Road shall provide a center-aligned 26-foot Irrevocable Offer of Dedication (IOD) in order to accommodate a Future Rapid Transit (BRT) route and transit stop. Cross sections with BRT represent the to be built condition.



**Section B-B with BRT**

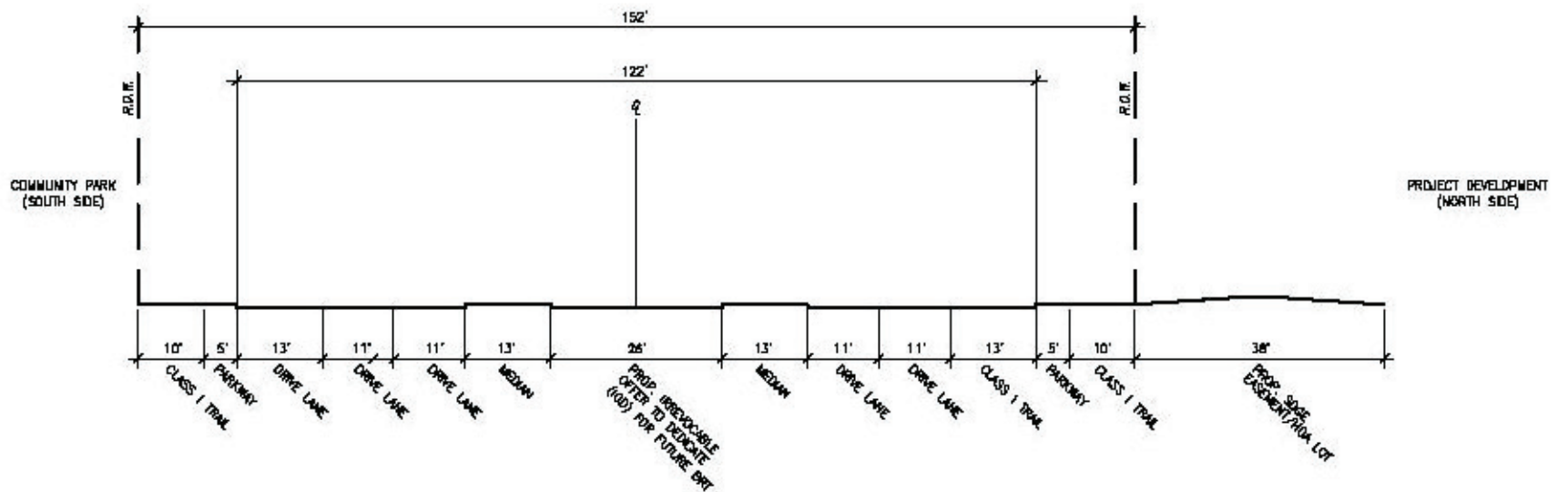
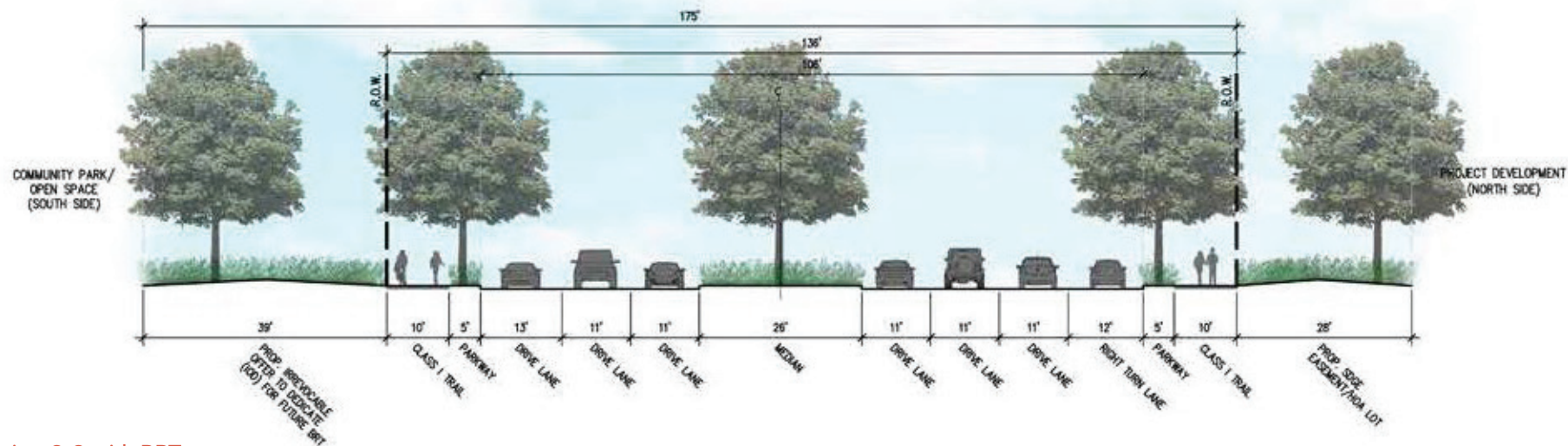
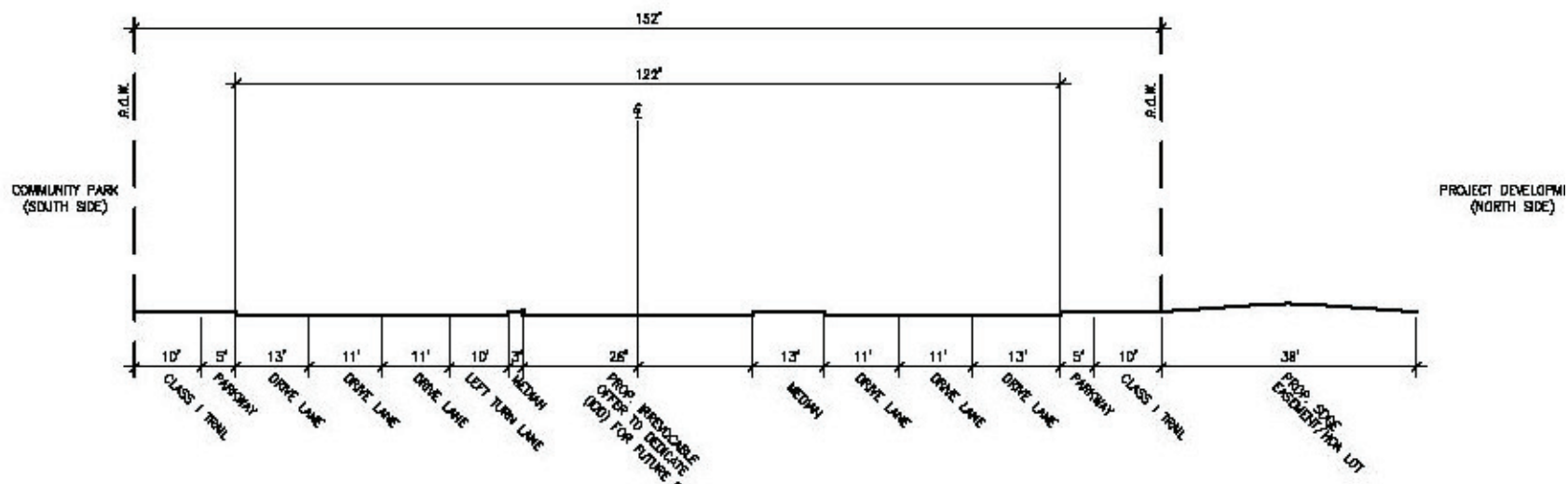


FIGURE 3-4 - STANDARD CROSS SECTION OF CARROLL CANYON ROAD (SECTION C-C)

Note: Carroll Canyon Road shall provide a center-aligned 26-foot Irrevocable Offer of Dedication (IOD) in order to accommodate a Future Rapid Transit (BRT) route and transit stop. Cross sections with BRT represent the to be built condition.

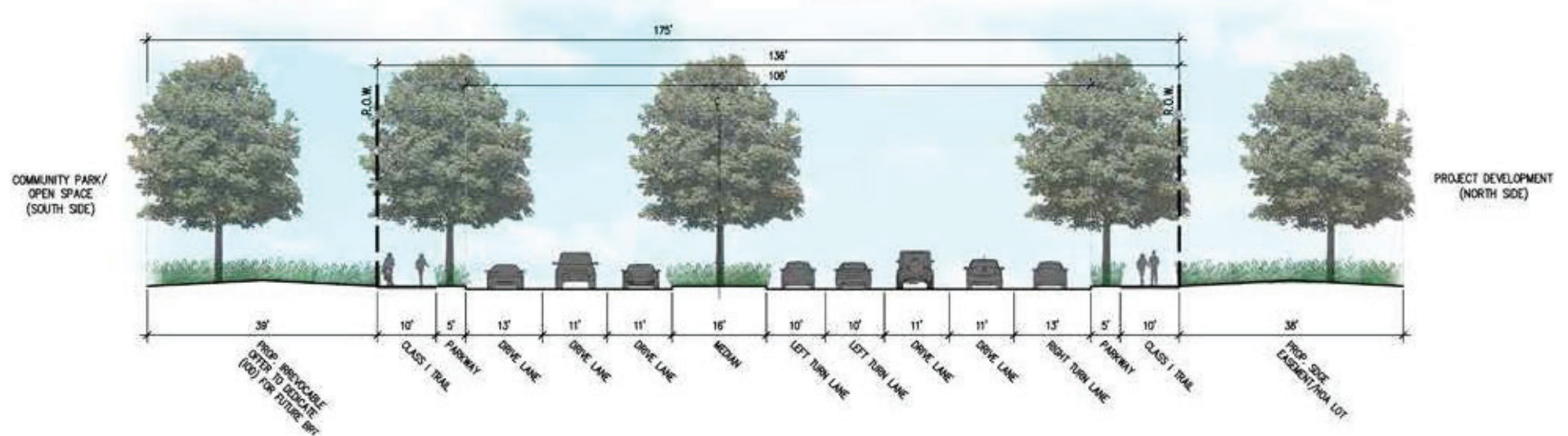


Section C-C with BRT



**FIGURE 3-5 - STANDARD CROSS SECTION OF CARROLL CANYON ROAD (SECTION D-D)**

Note: Carroll Canyon Road shall provide a center-aligned 26-foot Irrevocable Offer of Dedication (IOD) in order to accommodate a Future Rapid Transit (BRT) route and transit stop. Cross sections with BRT represent the to be built condition.



Section D-D with BRT

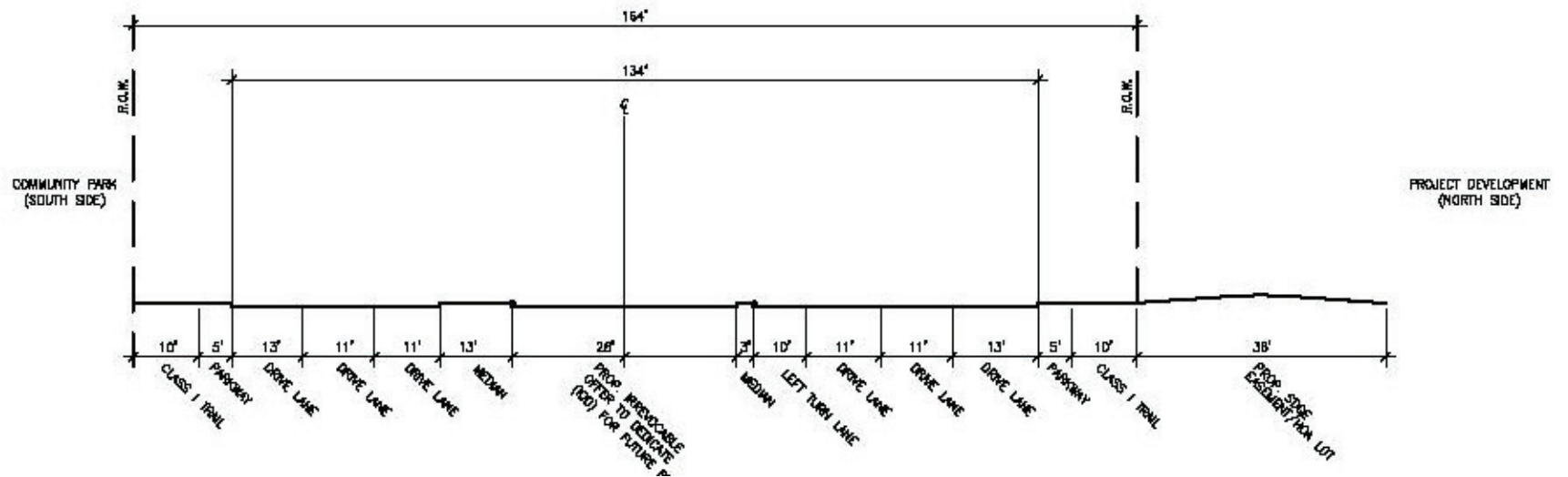
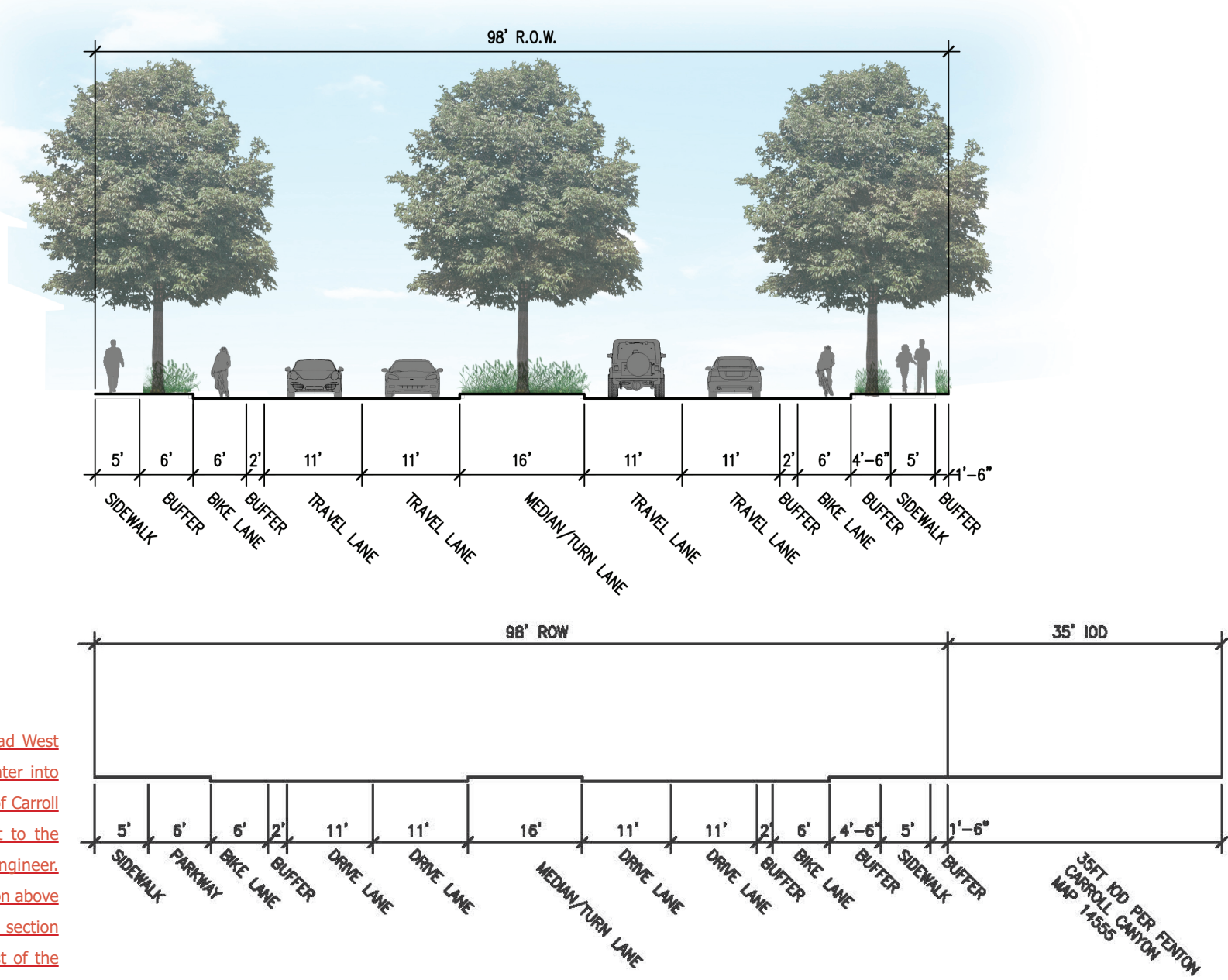


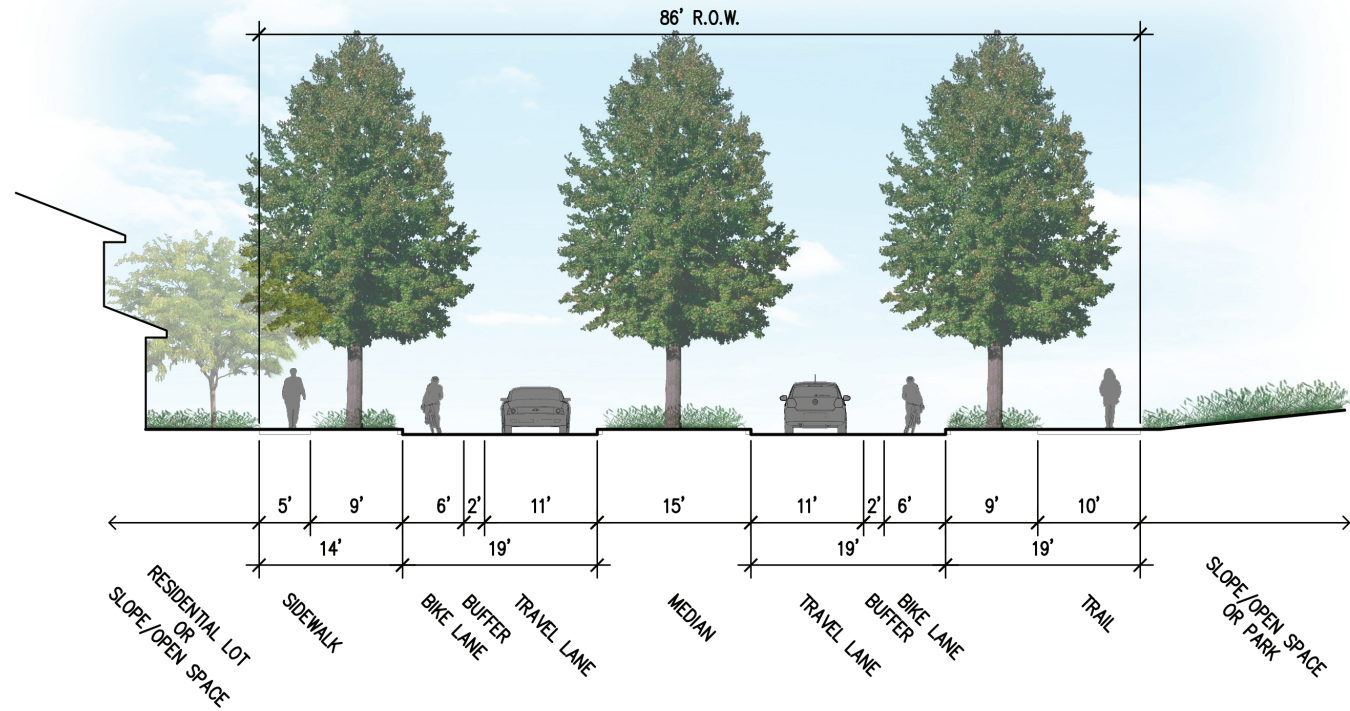


FIGURE 3-6 - *TYPICAL CROSS SECTION OF CARROLL CANYON ROAD WEST (4 LANE URBAN MAJOR)*



Note: Carroll Canyon Road West of Camino Santa Fe will enter into a DIA for the Construction of Carroll Canyon Road West subject to the satisfaction of the City Engineer. Reconfiguration of the section above to be coordinated with the section of Carroll Canyon Road East of the Project's proposed improvements.

FIGURE 3-7 - TYPICAL CROSS SECTION OF SPINE ROAD (MOD. 2 LANE COLLECTOR W/ 2 WY. LEFT TURN)



### **3.3.4 Urban Corridor**

The Urban Corridor is located within the Root Collective area and links the elements within the Root Collective to the Spine Road and the Village Entry Roads. With wide sidewalks and landscape buffers, opportunities are available along the Urban Corridor to integrate landscape and streetscape for pedestrians walking from the surrounding residential communities to the Root Collective. The Urban Corridor will also have sharrows in the travel lanes for bicyclists. Design of the roadway meets the City's Two-Lane Collector standards by The Urban Corridor streets provide landscaped parkways with adjacent sidewalks, on-street parking lanes, 60 feet of right-of-way width, and a curb to curb width of 36 feet. A typical cross-section is provided in Figure 3-8.

### **3.3.5 Village Entry**

The Village Entry Road connects with Camino Santa Fe at the existing signalized intersection of Camino Santa Fe / Summers Ridge Road and extends east connecting at a roundabout with the Spine Road. Designed as an entryway into the community with wide, landscaped parkways and medians, two-travel lanes and buffered bicycle lanes, the Village Entry Road meets the Modified Two Lane Collector with Two Way Left Turn Lane standards. Modifications to the standard have been identified to provide amenities that will encourage pedestrian and bicycle use along this corridor including striping a buffered bicycle lane, restricting on-street parking, and providing a shaded walking

path by planting trees in the wide landscape buffer located between the roadway and the sidewalk. According to the City of San Diego Street Design Manual (March 2017), a Two Lane Collector with Two-Way Left Turn Lane Specifications include providing 78 to 94 feet of ROW and a curb to curb width of 54 feet. The Village Entry right-of-way is 86 feet wide, with a curb to curb width of 52 feet, which is due to not allowing on-street parking. The space identified in the Street Design Manual for parking has been shifted to the 14' landscaped center median and the 8' buffered bicycle lanes. A typical cross-section is provided in Figure 3-9.

### **3.3.6 Residential Local Collector**

The Residential Local Collector connects the residential community located within the Canopy to the Spine Road at one of the three planned roundabouts. The Residential Local Collector meets the design elements of the City's Two-Lane Collector Roadway by providing 12-foot parkways with 5-foot sidewalks, 7-foot on-street parking lanes, 60 feet of right-of-way width, and a curb to curb width of 36 feet. A typical cross-section is provided in Figure 3-10 The wide parkways and slow traffic speeds along the Residential Local Collector accommodate neighborhood bicycle and pedestrian use.

### **3.3.7 Residential Local Street**

Residential Local Streets, Local Entry Roads and Residential Local Green Streets provide access to neighborhoods and connect with parks, trails and the community roadway network. These roadways are designed to carry low traffic volume and cater to pedestrian and bicycle activity by providing direct access to residential driveways and parking areas. Residential Local Streets are generally 32' wide, provide for a 56-foot right-of-way width, and allow on-street parallel parking. These features meet the City of San Diego's Street Design Manual (March 2017) standard for a Residential Local Street, as illustrated in the cross-section provided in Figure 3-11. Residential local streets may also be constructed as a Residential Local Entry Street or Residential Green Street as shown in 3Roots San Diego VTM to provide for alternative designs within a 56 foot right-of-way.

### **3.3.8 Private Drive**

Private Drives may be used within individual planning areas to provide connections from public streets and access to individual homes. The Private Drive is 24 feet wide curb to curb and does not allow for on-street parking, as shown in Figure 3-12. Pedestrians and bicycles will share the right-of-way within the two, 12- foot travel lane.

FIGURE 3-8 - TYPICAL CROSS SECTION OF URBAN CORRIDOR (MOD. 2 LANE COLLECTOR)

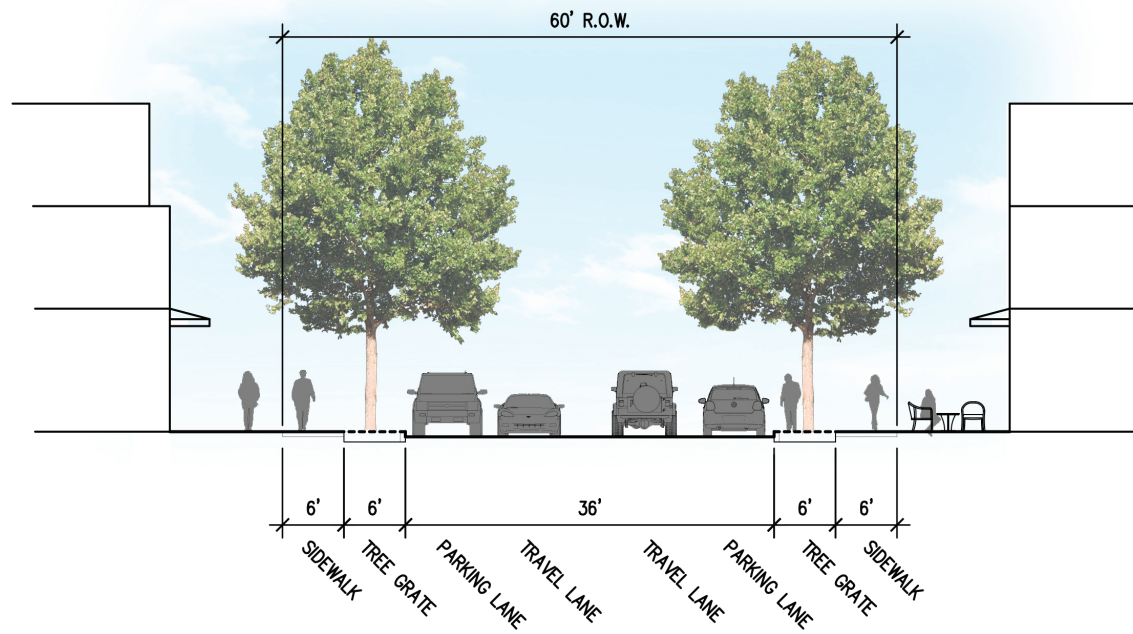


FIGURE 3-9 - TYPICAL CROSS SECTION OF VILLAGE ENTRY (MOD. 2 LANE COLLECTOR W/ 2 WY. LEFT TURN)

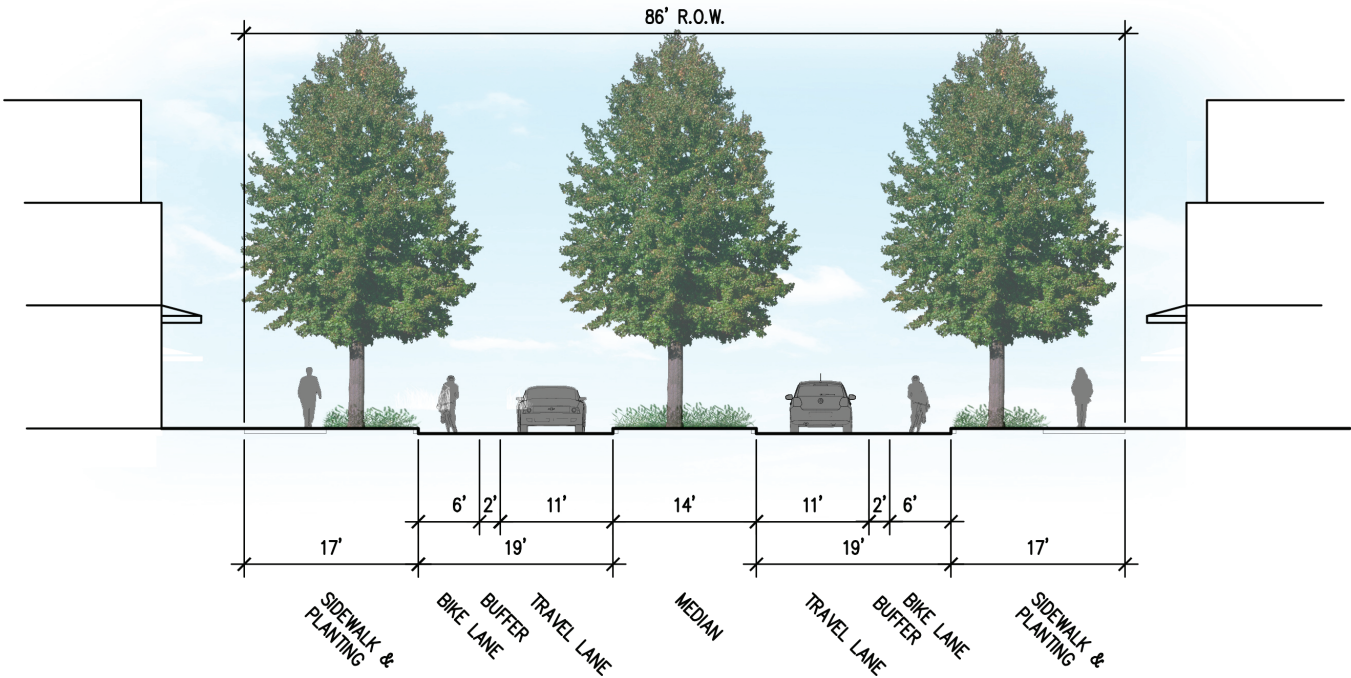




FIGURE 3-10 - TYPICAL CROSS SECTION OF RESIDENTIAL LOCAL COLLECTOR

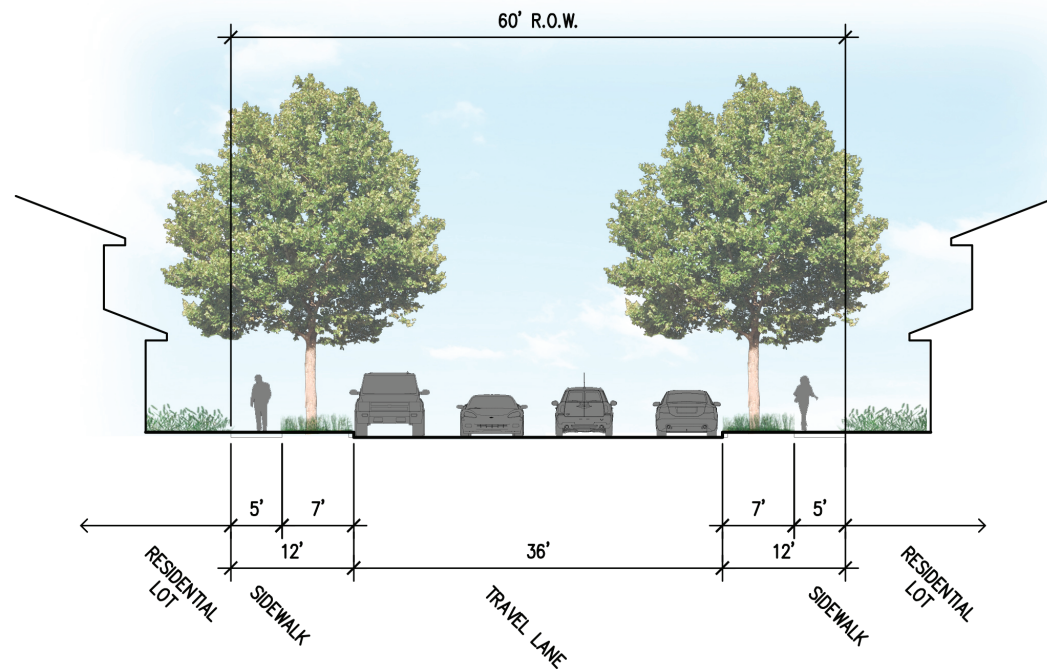
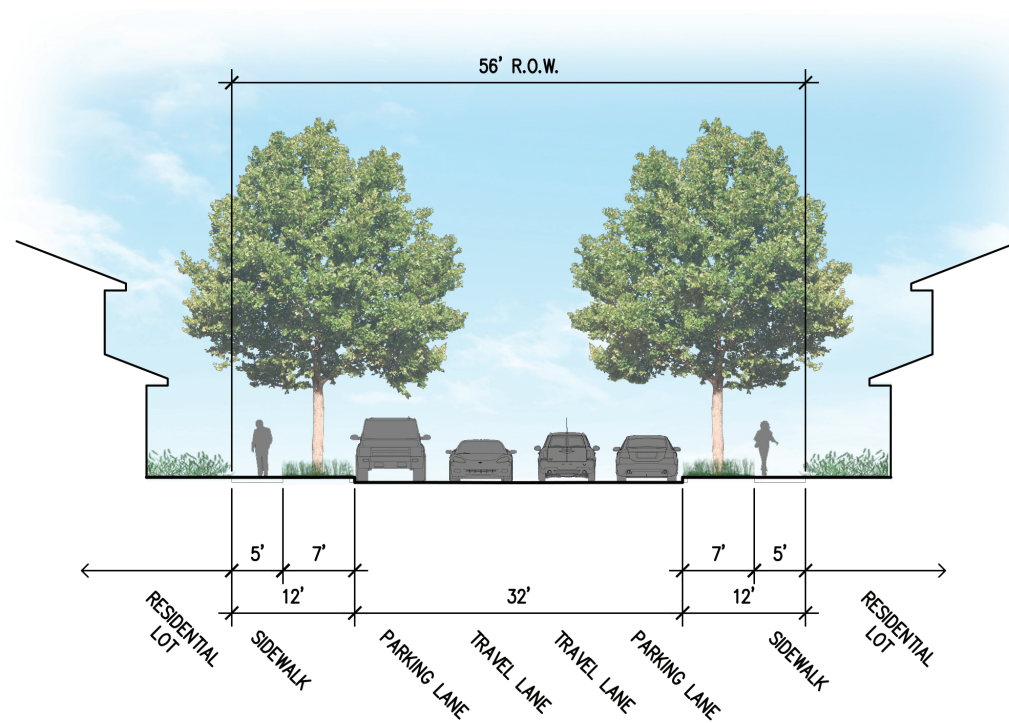


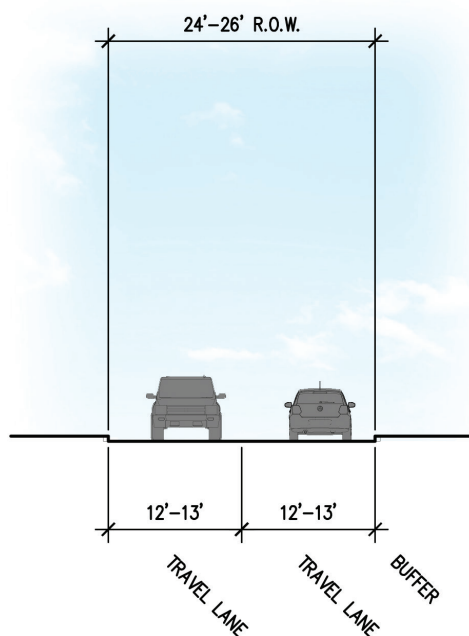
FIGURE 3-11 - TYPICAL CROSS SECTION OF RESIDENTIAL LOCAL STREET



\* Residential local streets may also be constructed as a Residential Local Entry Street or Residential Green Street as shown in 3Roots San Diego VTM to provide for alternative designs within a 56 foot right-of-way.

\*\* Streets F, G, and H may use a 36 foot right-of-way per 3Roots San Diego VTM.

**FIGURE 3-12 - TYPICAL CROSS SECTION OF PRIVATE DRIVE**



### 3.4 Pedestrian Improvements

Pedestrian improvements will help create a safe and enjoyable experience for people to walk to work, to transit, or to visit the Root Collective for everyday needs. People will also have sidewalks and off-street trails to exercise on and can easily access the many parks within 3Roots San Diego, including the Seed Park, by walking. The network of sidewalks and pedestrian improvements that will be provided as part of 3Roots San Diego is shown in Figure 3-13.

### 3.5 Trails and Paseos

A network of trails and paseos will complement the sidewalk network in 3Roots San Diego. Trails will be provided along the north and south sides of Carroll Canyon Creek and connect to the existing trail system in Rattlesnake Canyon. Many of the homes in the Routes and Canopy districts will front or be adjacent to paseos that link to other trails and provide access to the goods, services, and activities in the Root Collective. The material and width of trails and paseos is shown in Figure 3-14.

### 3.6 Bike Network and Improvements

In addition to the bicycle facilities on Carroll Canyon Road (cycle track on the north side and buffered bike lane on the south side), a network of bicycle facilities will be provided within 3Roots San Diego to improve connectivity. This will allow people to easily access the Mobility Hub by bike and to complete trips to the Seed Park and Root Collective without a car. The network of bicycle facilities and the location of proposed bicycle improvements is shown in Figure 3-15.

3Roots will implement a variety of improvements for bicycling, including:

- **Public Bike Station:** A facility with bike repair, bike sales, and secure, covered, and publicly accessible bike storage will be part of the Mobility Hub.
- **Bike Sharing:** The Mobility Hub will also provide space for a bike share station should an electric or standard bicycle share program be implemented within the surrounding community.
- **Public Bike Maintenance Stand:** Basic tools for bicycle repairs will be provided in key locations throughout 3Roots San Diego.
- **Public Bike Racks:** Bike racks will provide secure parking for bikes at key activity centers.



FIGURE 3-13 - TRAILS TYPOLOGY MAP

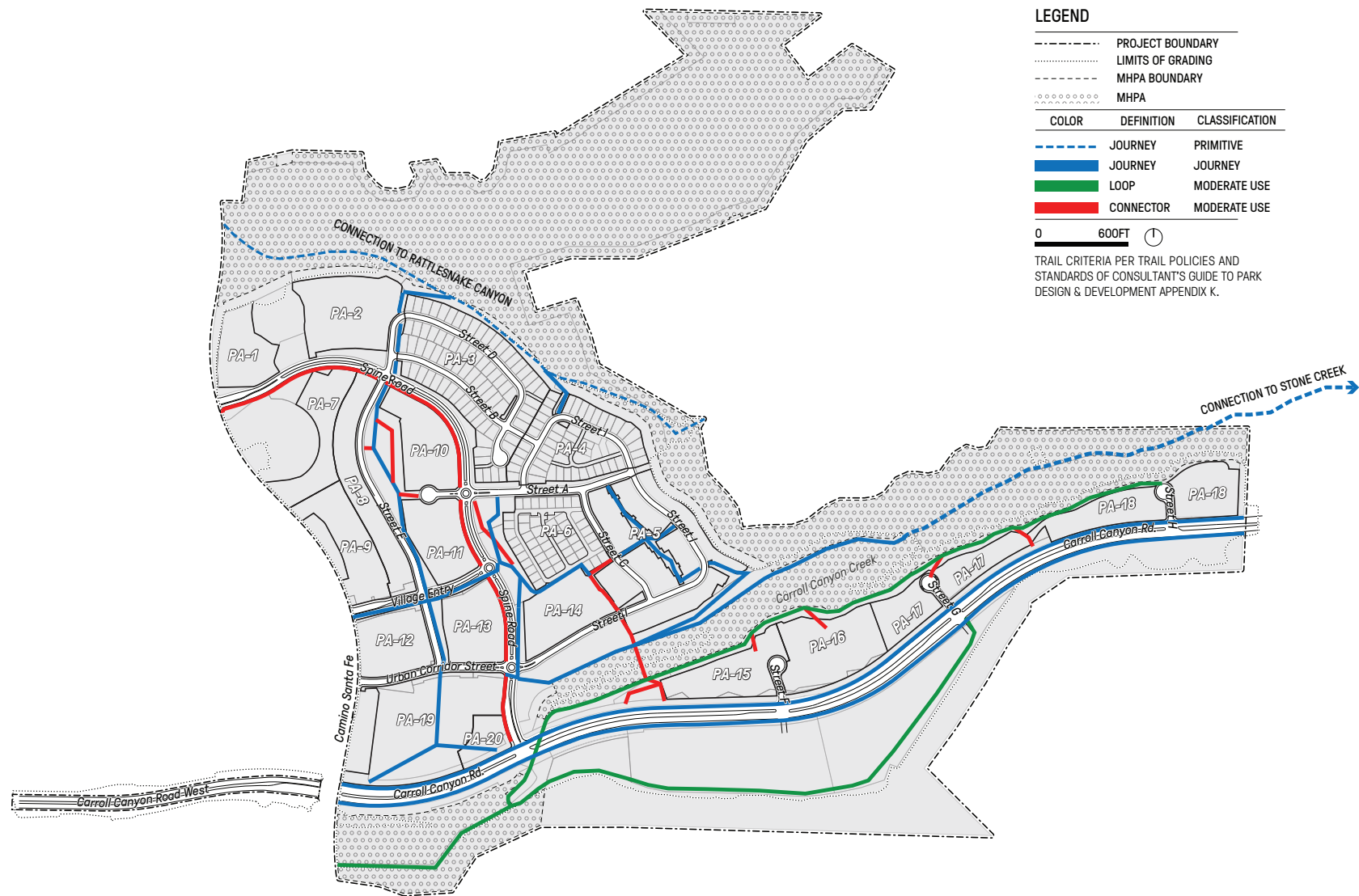


FIGURE 3-14 - TRAIL MATERIALS MAP

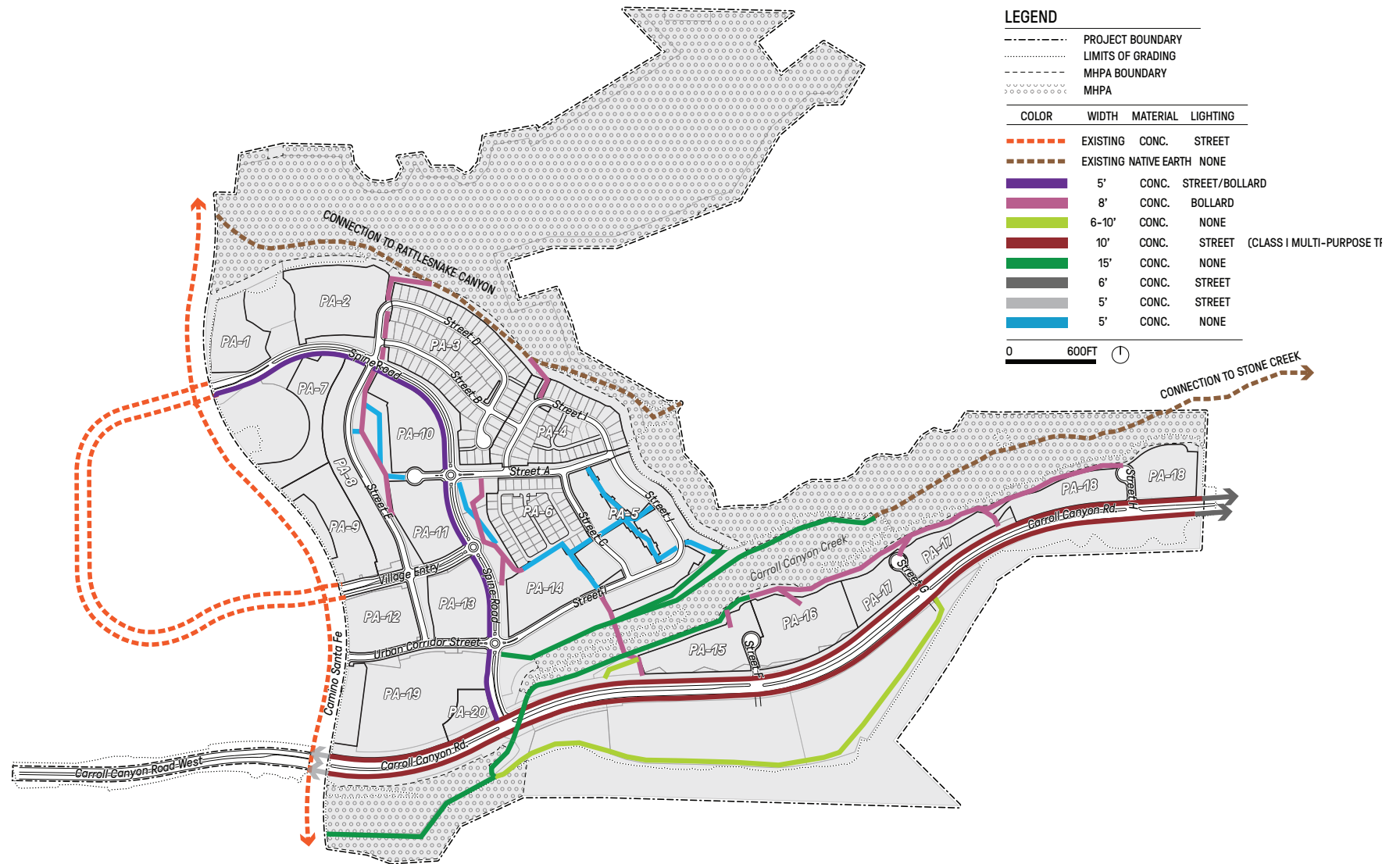




FIGURE 3-15 - BICYCLE NETWORK

