

PHD

SPECIFIC PLAN

PATRICK HENRY DRIVE

Final Adopted Focus Area Plan

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with Hexagon Transportation
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Introduction



The Patrick Henry Drive (PHD) Specific Plan Area is poised to become Santa Clara’s next high-density, mixed-use residential neighborhood. Currently a low-density, underutilized industrial district, the area is ideally suited to offer residents an urban lifestyle near transit, freeways, trails, and jobs. The PHD Specific Plan is a strategic, action-oriented document that presents a community-based vision, along with specific policies and actions necessary to spur investment and change. Building on the community’s vision, the PHD Specific Plan identifies ways to enhance form and design, encourage high-quality development, advance the City’s housing goals, strengthen multimodal connections, and transform Northern Santa Clara into a regional urban center over the long term.

1.1 SETTING AND LOCATION

Situated at the southern tip of San Francisco Bay, about 45 miles south of San Francisco, the City of Santa Clara is a regional hub and hotbed for redevelopment and urban transformation (see Figure 1.2: Context). The Patrick Henry Drive Specific Plan Area (PHD Specific Plan Area) is located within Northern Santa Clara in the employment rich “City North,” the City’s first truly urban district.

The PHD Specific Plan Area covers approximately 73.59 acres and is bounded by Sunnyvale and Calabazas Creek to the west, the Southern edge of San Francisco Public Utilities Commission right-of-way to the north, Great America Parkway to the east, and Mission College to the south (see Figure 1.1: Plan Area Aerial Map). There are a range of regional destinations and amenities in the vicinity, including Levi’s Stadium, Great America Theme Park, and the Santa Clara Convention Center. The VTA light rail station at Old Ironsides and Tasman Drive is just over a half-mile, or approximately a 10-minute walk, from the center of the PHD Specific Plan Area.



PHD Specific Plan Area Context

In 2010, the City adopted its comprehensive 2010-2035 General Plan to guide decision making and provide a roadmap for future development. The General Plan identifies nine Focus Areas throughout the city, including major corridors and destinations, new centers of activity, areas around transit stations, and new high-density residential neighborhoods.

These Focus Areas are intended to: foster new development tailored to the unique character of each area; offer opportunities to enhance the City’s quality of life; and support the City’s economic base. The PHD Specific Plan Area, previously known as the Great America Parkway Focus Area, was identified as a prime location for more intensive development. In order to ensure the most strategic and comprehensive planning for this high-potential area, the City requires an approved Specific Plan prior to redevelopment.



FIGURE 1.1: PLAN AREA AERIAL MAP

- Study Area Parcel
- Park/Open Space
- City Boundary
- Creeks/Water Bodies
- VTA Light Rail Line
- Community Destination



1.2 PLAN PURPOSE

The PHD Specific Plan is a tool that will be used by the City of Santa Clara, residents, businesses, and developers to shape a vibrant urban center over a 25 to 30-year horizon. Primary functions of the Plan are to outline a community-based vision for the future and provide the necessary steps to guide future public and private investment in the PHD Specific Plan Area.

In the State of California, a Specific Plan is one of the many policies and regulatory tools used by local governments as a complement to a General Plan, the overarching policy document for the entire city. Specific Plans implement a city or county's general plan through the development of more detailed policies, programs, and regulations for a localized area. The PHD Specific Plan's primary tools for stimulating, regulating, and guiding development activity include:

- Allowable uses;
- Development standards;
- Design guidelines;



Low-density Office Building on Patrick Henry Drive

- A strategic set of policies related to land use and zoning, circulation and parking, open space, and utilities and infrastructure; and
- Implementation actions and recommendations for financing proposed public improvements.

Because Specific Plans are mechanisms for executing the goals and policies of a community's general plan, state law requires that Specific Plans must be consistent with a city's General Plan. As such, the PHD Specific Plan must be consistent with all the goals, policies, objectives, and standards included in the City of Santa Clara 2010-2035 General Plan. The City's General Plan will be amended to include the new land use designations of this PHD Specific Plan.

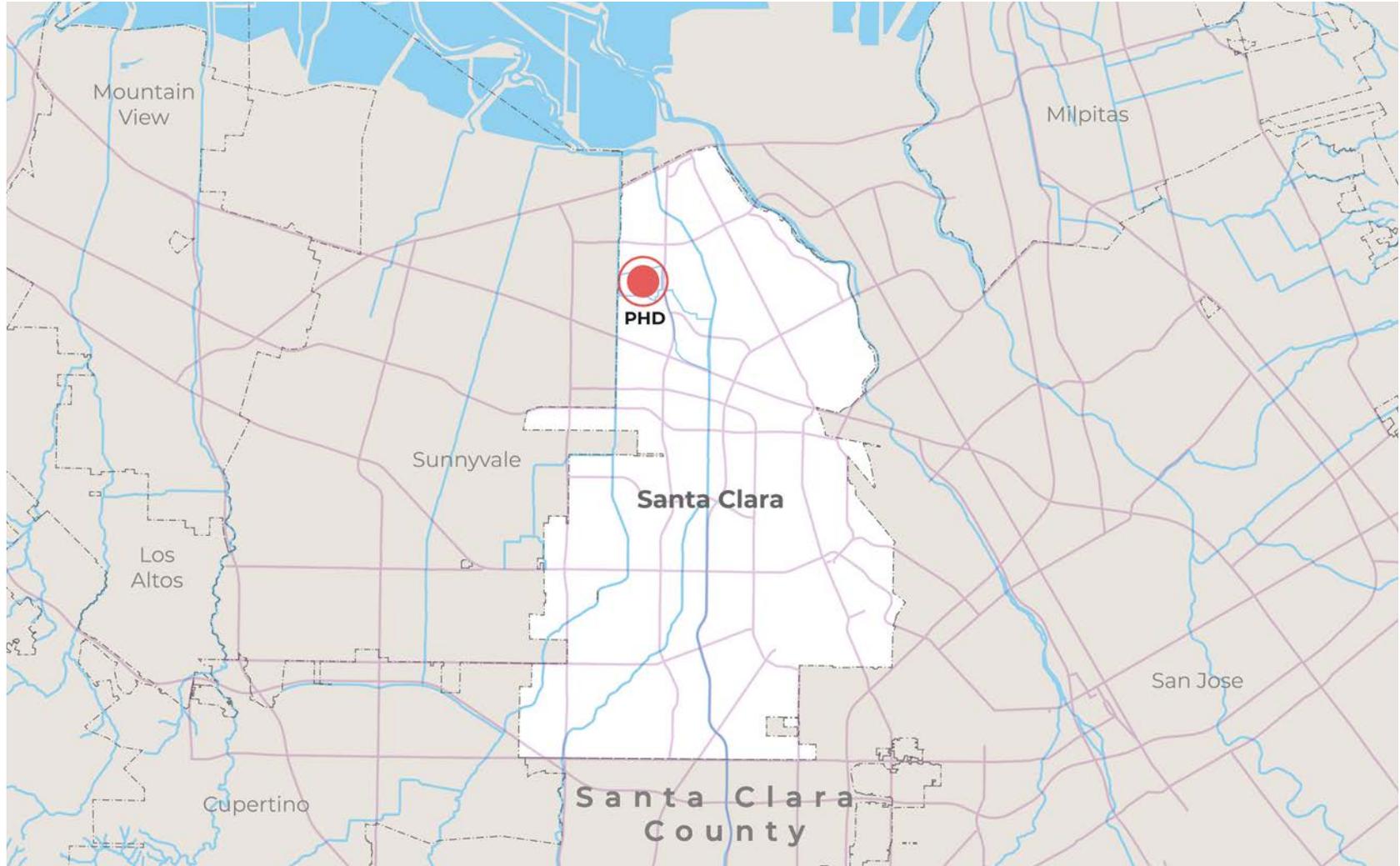


FIGURE 1.2: CONTEXT MAP

- City of Santa Clara
- City Boundary
- Santa Clara County
- Alameda County
- Water Bodies
- PHD Plan Area
- Highways



1.3 PROJECT DESCRIPTION

The PHD Specific Plan is the result of a collaborative planning effort between the City, area property owners, and the Santa Clara community. Plans for the PHD Specific Plan Area provide for a 73.59-acre high-density, residential neighborhood located near regional destinations, including job-centers, transit, and other amenities.

At buildout, the project will accommodate up to 12,000 new residential dwelling units or 785,000 square feet of office space (replacing the existing 200,000 square feet of office space) and 10,300 residential units, and 310,000 square feet of non-residential uses, including 200,000 square feet of other new neighborhood-serving retail and public facilities, such as libraries and community spaces. New and improved pedestrian and bicycle connections, trails, and parks will link neighborhoods and enhance connections to nearby amenities and recreation destinations. Careful planning will ensure adequate infrastructure and services to support the proposed new development.

Target residential densities range from a minimum of 51 dwelling units per acre (du/ac) to a maximum of 250 du/ac. These densities will help

meet the demand for housing that addresses job and retail growth in the City and region. Further, the development provides opportunities to reach housing goals identified in the City's share of the State-required Regional Housing Needs Allocation (RHNA).

1.3.1 Goals and Objectives

The PHD Specific Plan establishes a blueprint for how the area will look, feel, and function in the future. A planning framework with a vision, goals, policies, and design standards tailored to the PHD Specific Plan Area will advance overarching General Plan goals, while also providing for flexibility and encouraging reinvestment in the area.

The primary goal of the PHD Specific Plan is to transform underutilized office and industrial parks into a vibrant urban neighborhood characterized by compact, pedestrian-friendly, transit-oriented development. Key objectives include the following:

- Ensure an economically vibrant, safe, healthy, and sustainable neighborhood that supports a range of users, including residents, business owners, and visitors.
- Bring clarity and consistency to the regulation of individual development proposals within the PHD Specific Plan Area boundaries. Foster strong connectivity, access, and circulation for a mix of travel modes, including walking, cycling, driving, and transit.
- Plan parkland and open space standards consistent with City Code 17.35 to support a high quality of life within an urban environment.
- Provide community amenities and public facilities to support a “complete” neighborhood.
- Adopt infrastructure and funding plans to ensure infrastructure will adequately support planned densities and intensities.
- Support the City's affordable housing goals by requiring 15 percent of all developed residential units to be affordable to households at or below 80 percent of the Area Median Income (AMI).
- Engage the entire community in a robust, creative, and ongoing participation process.

1.4 DOCUMENT OVERVIEW

This document is structured to provide a thorough and detailed account of all facets of the Specific Plan, ranging from its vision and conceptual framework to the implementation strategy that will bring it to fruition. The PHD Specific Plan is organized into the following seven chapters.

Chapter 1: Introduction

This chapter introduces the project and the planning context, defines its primary goals and objectives, and outlines the organization of the Specific Plan document.

Chapter 2: Existing Conditions

This chapter describes both the project setting and local policy context, highlighting regional and local land uses, circulation networks, demographics, and the overarching regulatory environment governing development.

Chapter 3: Community Process and Vision Framework

This chapter details the robust community engagement process and establishes the overarching vision and planning principles articulated during outreach efforts.

Chapter 4: Development Framework

This chapter outlines the comprehensive redevelopment framework planned for the PHD Specific Plan Area, including land use changes, urban design concepts, circulation improvements, parking standards, and parks and open space.

Chapter 5: Design Standards and Guidelines

This chapter identifies the standards and guidelines required to enhance the character and quality of both public and private streets, open spaces, and buildings.

Chapter 6: Infrastructure

This chapter provides conceptual plans and programs for the improvement of infrastructure serving the study area, including transportation, wet utilities (water, sewer, and storm drainage), solid waste disposal, and energy (gas and electric) services and systems.

Chapter 7: Implementation

This chapter describes the regulatory framework that will be utilized to implement the PHD Specific Plan; it outlines processes for administration and subsequent development approvals and recommends development phasing, financing, and implementation responsibilities.

2

Existing Conditions



The Patrick Henry Drive (PHD) Specific Plan Area is situated at the heart of Silicon Valley, adjacent to regional activity nodes and accessible via highways and existing transit networks. Capitalizing on its strategic location and reputation as a hub of employment and entertainment, the City of Santa Clara has identified this area as an ideal location for future higher-density, transit-oriented development, and revitalization that minimizes impacts on established, lower-density neighborhoods south of Highway 101.

This chapter summarizes existing conditions findings related to demographics, land use, urban form, circulation, and infrastructure. The assessment informs PHD Specific Plan policies and actions that will foster economic growth, support high-quality development, and encourage public and private investment in the PHD Specific Plan Area.

In 2010, the City of Santa Clara adopted its comprehensive 2010 – 2035 General Plan to provide a vision and constitution for long-term development. The Plan contains the City’s policies for land use, transportation, housing, design, environmental resources, health, and safety. To ensure future development is supported by the appropriate level of infrastructure and services, the Plan is organized into three planning phases reflecting short-term (Phase I: 2010 to 2015); medium-term (Phase II: 2015 to 2025); and long-term (Phase III 2025 to 2035) planning horizons. For each phase, the plan identifies Focus Areas throughout the city,

each representing opportunities for more intense development and future economic growth. The purpose of these Focus Areas is to encourage improvements and new development tailored to the unique character and quality of these distinct areas. Additional planning is a prerequisite for development of these Focus Areas, and all plans for the Focus Areas must conform with the City’s overarching General Plan goals and policies.

The General Plan originally designated the PHD Specific Plan Area as a Future Focus Area (Phase III); however, due to significant interest in redevelopment, the timeframe was

accelerated to Phase II. The City anticipates the transformation of the existing office parks into a cohesive, high-density, mixed-use community that fosters economic vitality, enhances the quality of life for those that live, work, and recreate in the area, and helps ameliorate the City’s and State of California’s housing shortage.

2.1 REGIONAL AND LOCAL SETTING

Centrally located in Santa Clara County, one of the most affluent counties in California, the City of Santa Clara is situated at the geographic heart of Silicon Valley adjacent to the cities of Sunnyvale, Campbell, San Jose, and Milpitas. Important regional centers located in the vicinity of the PHD Specific Plan Area include Downtown Sunnyvale (6.5 miles distance), Downtown Santa Clara (5.5 miles distance), and Downtown San Jose (8.5 miles distance). The San Jose Norman Y. Mineta International Airport (SJC) is located along Santa Clara's eastern edge and provides air transportation services that link the region to the world.

As Silicon Valley became known worldwide for its commitment to technological innovation, entrepreneurship, and the meteoric rise of start-ups, Santa Clara likewise has evolved into a hub for high-tech research, development, and manufacturing.

The City is served by five state highways, including El Camino Real, and three County expressways, in addition to three light and heavy rail corridors, VTA bus service, and future BART and High-Speed Rail service.



de Saisset Museum at Santa Clara University

As the City's vibrant residential neighborhoods and job centers continue to grow and evolve, future higher-density residential development at key locations throughout the city, including the PHD Specific Plan Area, is supported by the City's accessible highway infrastructure and transit networks.

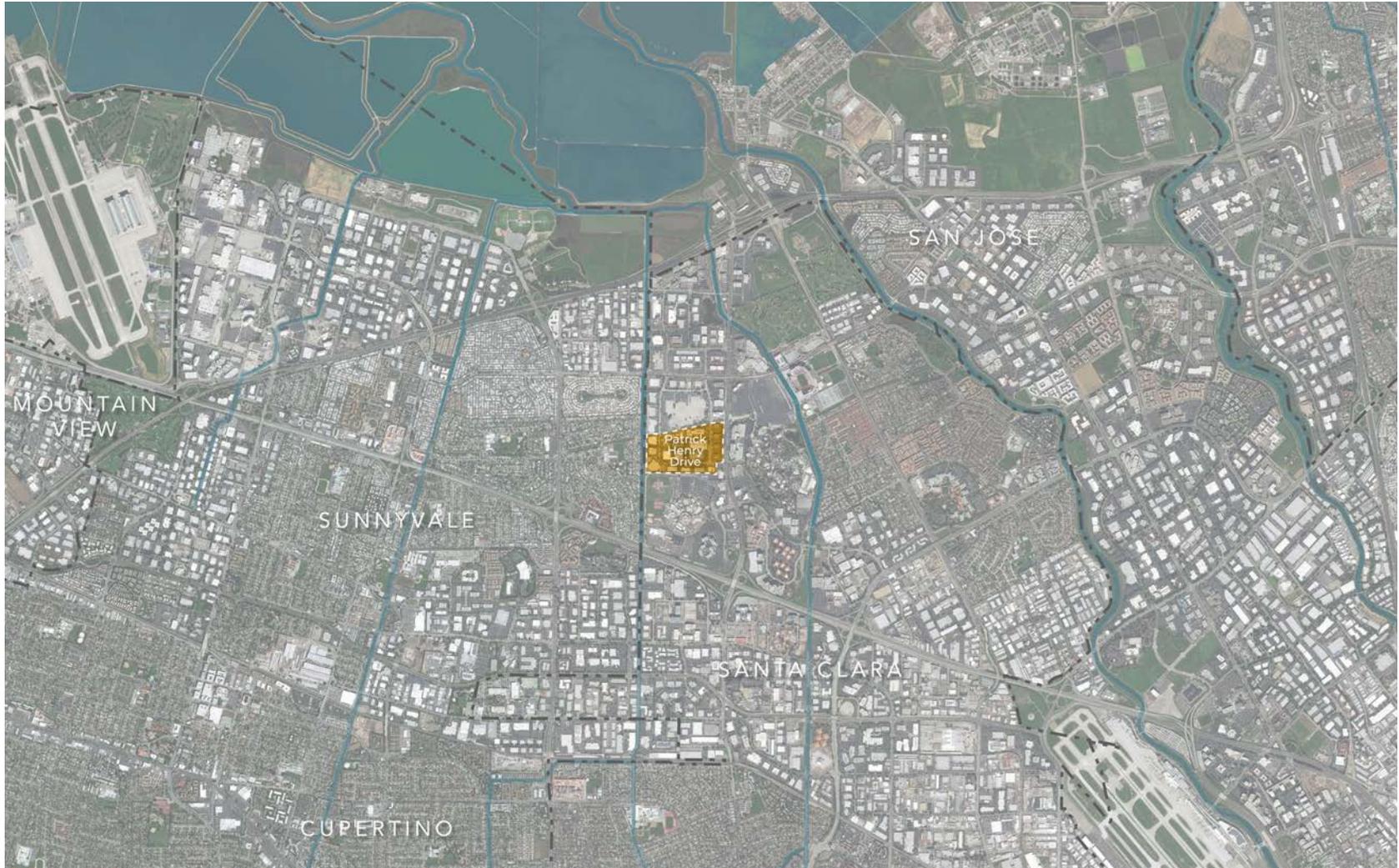


FIGURE 2.1: REGIONAL SETTING

- Specific Plan Area
- City Boundary
- Creeks/Water Bodies



2.1.1 North Santa Clara: Development Evolution

Bounded by Highway 101 to the south, State Route 237 to the north, Calabazas Creek to the West, and San Tomas Aquino Creek to the east, the northernmost portion of Santa Clara has the City's most diverse mix of uses including office/research and development (R&D), light industrial, and regional entertainment and sports uses, including California's Great America Theme Park, the Santa Clara Convention Center, Levi's Stadium, and the San Francisco 49ers training facility. Several major office parks are supported by a modest range of commercial services, including hotels, cafes, chain restaurants, and a movie theater.

As of 2010, the City's remaining vacant residential land had been developed and the City was essentially built out. Over the past decade, this employment-rich North Santa Clara district has become the central focus of redevelopment activity and intensification of existing uses due to its status as an employment and entertainment district and distance from single-family residential neighborhoods.

North Santa Clara is the city's first truly urban district, transforming through a series of City-initiated plans and high-profile mixed-use development projects (see Figure 2.1: Regional Setting). The existing underutilized moderate-intensity office and industrial parks are evolving into a higher intensity mixed-use district. At full buildout, these projects combined will add over 15,000 new housing units, 10 million square feet of office space, nearly 2 million square feet of retail amenities, and 114 acres of open space.

2.1.2 PHD Specific Plan Area Location

The PHD Specific Plan Area is situated along the southeast side of North Santa Clara, surrounded on all sides by major regional assets. Directly to the north of the PHD Specific Plan Area is a San Francisco Public Utilities Commission right-of-way and Levi's Stadium Parking Lot B, which is slated to redevelop as a high-density commercial mixed-use district.

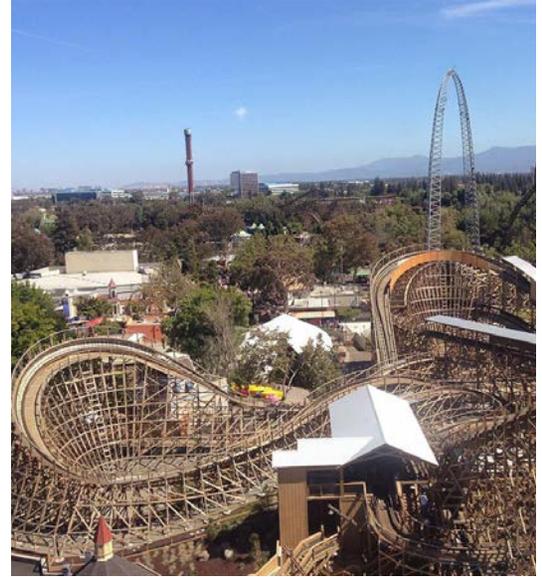
Mission College, a two-year community college that serves the broader Silicon Valley community, lies directly to the south. Great America Parkway, the major north-south arterial, borders the PHD Specific Plan Area to the east, separating the site from the Great America Theme Park. The Calabazas Creek Trail runs along the western border of the PHD Specific Plan Area and continues northward to the San Francisco Bay, separating Santa Clara from the City of Sunnyvale. The trail provides open space and a variety of active recreational uses such as walking, jogging, and cycling.



VTA Light Rail and Levi's Stadium



Santa Clara Convention Center



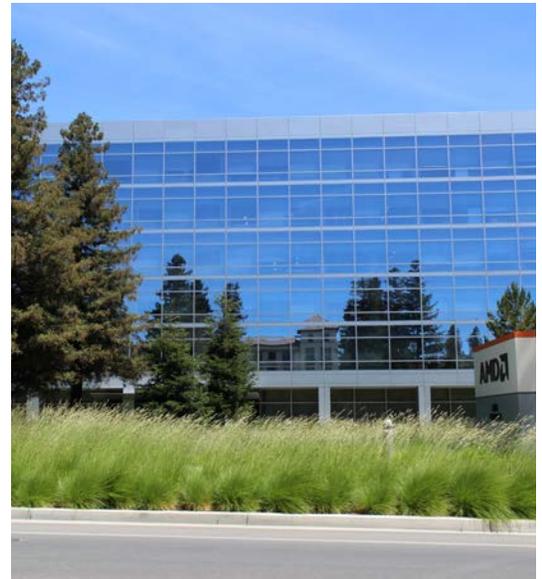
Great America Theme Park



Great America Parkway



Mission College



Technology Office Building

2.2 DEMOGRAPHICS AND ECONOMICS

Santa Clara has seen increases in population growth and changes in demographics and market conditions over the past decade. These trends inform this Specific Plan's community needs and strategies. This section provides background information on population, households, projected future housing demand, and economic trends.

2.2.1 Population and Households

Santa Clara County is one of the fastest growing counties in California with a population of about 1.9 million. Following San Jose and Sunnyvale, the City of Santa Clara is the third most populous jurisdiction in Santa Clara County with a 2018 population of approximately 130,000. Between 2010 and 2018, the City's population increased 11.3 percent, or 1.3 percent per year, compared to the County, which grew by 9.8 percent or 1.2 percent per year. By 2040, the 2010 Santa Clara Housing Element projects that the City's population will increase 33.1 percent. The City attracts a population that is diverse in both ethnicity and age. In 2019, the City's population comprised: 42 percent Asian and Pacific Islander, 17.4 percent Hispanic, 2.9 percent African American, and 5.7 percent other ethnicities.

The remaining 43 percent of the population is White. The Regional Housing Needs Allocation (RHNA) undertaken by the Association of Bay Area Governments (ABAG), projects housing needs by income levels for local jurisdictions. The total projected RHNA for the City of Santa Clara is just over 4,000 units for the 2015 – 2023 planning period with the greatest housing needs identified in the very low and above moderate categories.

Comparing the City of Santa Clara to the United States as a whole, in 2019, median household income for the City was approximately \$56,000 more than the national average at \$116,000 and \$60,000, respectively. In addition, the median value of an owner-occupied home was just over \$927,000 in the City of Santa Clara, compared to an average cost of \$205,000 for the United States.

Currently, single-family homes are the most common type of residence in Santa Clara, comprising over fifty percent of the city's housing stock. To provide opportunities to reach the City's housing goals, adopted policies promote the redevelopment of underutilized industrial areas into higher-density, compact, transit-oriented development, while preserving established single-family neighborhoods.



Intel Headquarters

2.2.2 Economic Trends

Silicon Valley is the nation's epicenter for high-tech innovation and development, attracting global talent and startup companies. In recent decades Santa Clara has evolved into an important stronghold in Silicon Valley's technology industry, with several major high-tech corporations. The City of Santa Clara has shifted from an agricultural community to a predominately low-density community characterized by residential subdivisions in the southern half of the city and industrial and employment centers in the northern half of the city. Employment density is highest in central and northern Santa Clara along El Camino Real, Lawrence Expressway, Central Expressway, and US 101. Within the northern part of the city, major employers include Avaya, EMC Corporation, and Intel.

In total, the City is home to over 120,000 total jobs, with a projected growth in employment to over 145,000 jobs by 2040.

Service-providing industries, including information, technology, finance, and other traditional consumer-related services, account for roughly two-thirds of the employment base, while goods-production industries, which include construction, manufacturing, mining, and agriculture, account for most of the remaining one-third. Since rebounding from the 2008 "Great Recession," the City has experienced relatively steady employment growth. Service providing industries grew by 33 percent from 2005 to 2015. This growth is primarily driven by a 67 percent increase in professional services such as information, technology, and finance. In contrast, goods-production industries declined by 11 percent during the same period.

Santa Clara is a "job rich" community, where the number of jobs far exceeds the number of housing units. According to the Association of Bay Area Governments (ABAG), the jobs-to-housing ratio in the City of Santa Clara was estimated at 2.50 in 2010. Despite the high employment and growth, the majority of Santa Clara residents commute to work in surrounding cities. Only 15.9 percent of commuters who live in Santa Clara also work in Santa Clara.

2.3 LAND USE AND COMMUNITY FORM

North Santa Clara and the PHD Specific Plan Area have a variety of land uses and building forms that can be built upon to create a more dynamic environment. This section describes surrounding development context, existing uses, and physical patterns and characteristics in the PHD Specific Plan Area. It also reviews current regulatory documents and efforts that govern use in the area and will help shape desired change in tandem with this PHD Specific Plan.

2.3.1 Surrounding Land Use Character and Urban Form

The City of Santa Clara is bisected by Highway 101 and the Caltrain Corridor. Low-density, low-rise residential development characterizes the land use pattern south of the Caltrain Corridor; however, higher-density residential sections have sprung up along arterial streets. Intermixed within these residential zones are neighborhood-serving parks and public schools.

Auto-oriented strip commercial development is prevalent along major thoroughfares, and the most significant retail activity is found along the El Camino Real corridor, Santa Clara's most identifiable commercial corridor, which passes east-west through the City.

Downtown Santa Clara and the area surrounding the Santa Clara station are identified for future revitalization and reinvestment efforts.

North of the Caltrain Corridor, land uses are predominantly office and industrial with some higher-density housing development (see Figure 2.3A: Land Use Distribution). Today North Santa Clara is dominated by office and industrial uses, including the campuses of several high-tech companies such as Intel, Oracle, McAfee, and Broadcom, Inc. Unique regional attractions, namely Levi's Stadium, California's Great America Theme Park, and the Santa Clara Convention Center, draw hundreds of thousands of visitors a year to the area. North of Highway 101, the area is supported by a modest range of neighborhood amenities including hotels, cafes, chain

restaurants, and a movie theater, but residential neighborhoods and parks are limited. Current redevelopment trends in Northern Santa Clara include intensification of the City's office/R&D uses in former light industrial areas with large parcel sizes and convenient transportation access, particularly transit access along Tasman Drive, Great America Parkway, and Bowers Avenue.

2.3.2 Land Use Character and Urban Form: PHD Specific Plan Area

Much like the surrounding neighborhood, the PHD Specific Plan Area is characterized by several commercial/industrial superblocs with ample surface parking, deep setbacks, and significant space between buildings. The PHD Specific Plan Area is relatively flat and developed with low-intensity one- and two-story buildings on the south and west of Old Ironsides Drive, and moderate intensity four- to five-story buildings on the east side of Old Ironsides Drive fronting Great America Parkway.

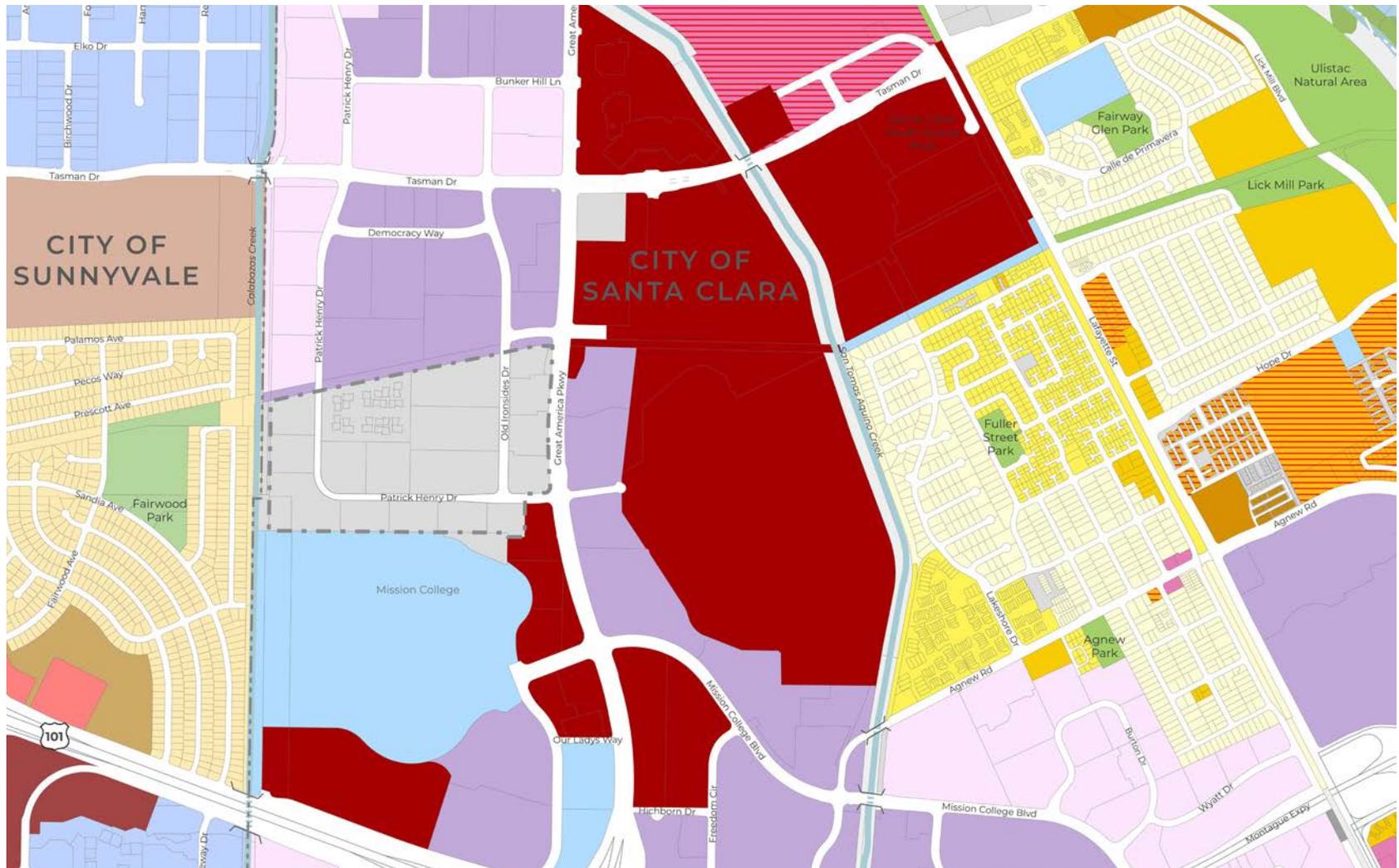


FIGURE 2.3A: LAND USE DISTRIBUTION



These buildings are generally occupied by light industrial (including manufacturing uses), office (including R&D, software, software training institutes, and company headquarters), and various commercial uses (such as electrical supply stores and a business park cafe). These uses rely on large surface parking lots with limited on-site vegetation. The San Jose New Hope Church occupies a one-story building at the corner of Patrick Henry Drive and Old Ironsides Drive. There are no residential land uses, public parks, or historic structures located on-site.

The building stock, developed primarily in the 1970s and 1980s, is outdated and does not provide either the internal or external spaces or amenities valued by contemporary firms. Some of the buildings are vacant and the area is generally underutilized.



A Single-story Building Set Back from the Street

2.3.2.1 Streetscape Infrastructure

The character and development of the PHD Specific Plan Area and its surroundings is relatively inhospitable to pedestrians and bicyclists. The size of blocks and lack of interconnected roadways or internal circulation limits movement through the area. As a further deterrent to pedestrian activity, the streetscape in the PHD Specific Plan Area is auto-dominated, with missing sidewalks and few pedestrian crossings.

Visible on-site infrastructure includes local streets and utilities, such as streetlights, as well as the Hetch Hetchy easement that runs along the site's northern border.



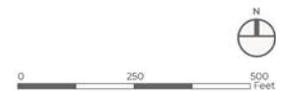
FIGURE 2.3B: EXISTING LAND USE

Santa Clara Existing Land Use

- Study Area
- Low Density Office/R&D
- Creeks/ Water Bodies
- City Boundary
- High Density Office/R&D
- Regional Commercial

Sunnyvale Existing Land Use

- Public/Quasi Public
- Low Density Residential
- Light Industrial
- Mobile Home Park
- Public Facilities



2.3.2.2 Parkland

The PHD Specific Plan Area is poorly served by parkland infrastructure. Although the area abuts the Calabazas Creek Trail, there are no access points to the trail from within the PHD Specific Plan Area. The nearest access points to the trail are located to the north of the area at Tasman Drive and on the southern boundary at Mission College Boulevard. Two neighborhood parks, Agnew and Fuller Street Parks, are located about a mile east of the PHD Specific Plan Area. The 10-acre Youth Soccer Park is in the North Santa Clara area. Each of these facilities is more than a 30-minute walk from the PHD Specific Plan Area.



San Tomas Aquino Trail



Calabazas Trail



Parkway Plaza



Patrick Henry Drive



Great America Parkway

2.4 LAND USE AND ZONING

2.4.1. Land Use

The entire PHD Specific Plan Area, including the entirety of developable land, is designated Light Industrial (ML). This land-use classification is intended to accommodate manufacturing, distribution, and warehousing uses within an enclosed building (see Figure 2.3B: Existing Land Use Map).



Electronic Manufacturing and Sales in PHD

2.4.2 Zoning

The PHD Specific Plan Area is predominately zoned Light Industrial (ML). This zoning permits a variety of industrial, manufacturing, and commercial uses at varying scales and intensities. Although this zoning is consistent with the General Plan's land use designations, it is inconsistent with the long-term vision for the site established by both the General Plan and the Specific Plan.

A 9-acre portion of the PHD Specific Plan Area located along the northern border is zoned PD-Planned Development, which allows a novel mix of land uses, creative planning, subdivision, and/or ownership structure not allowed in other zoning districts.



FIGURE 2.4: EXISTING ZONING

Santa Clara Existing Zoning

- Study Area
- City Boundary
- Creeks/ Water Bodies
- PD - Planned Development
- ML - Light Industrial
- B - Public/Quasi Public
- A - Agricultural
- MP - Planned Industrial
- CP - Commercial Park
- CT - Thoroughfare Commercial

Sunnyvale Existing Zoning

- R0 - Low Density Residential
- RMH - Residential Mobile home
- PF - Public Facilities



2.5 REGULATORY CONTEXT

The City of Santa Clara 2010-2035 General Plan is the overarching policy document governing future uses within the PHD Specific Plan Area. The Specific Plan is a zoning and development tool that will implement the General Plan, which envisions revitalization of North Santa Clara and the PHD Specific Plan Area into a district composed of higher-density residential and mixed-use neighborhoods with a full complement of supportive services. Along with the General Plan, several other documents and planning efforts that provide direction for the future are described below.

2.5.1 City of Santa Clara 2010-2035 General Plan

The City's General Plan establishes a guiding framework applicable to all future land use planning and development efforts. Contained within this framework are long-range goals and policies that are applicable to all land uses within the City to:

- Reduce dependence on single occupancy vehicles;



- Ensure consistency between new development, the General Plan, Zoning Ordinance, Capital Development Program, and other implementing regulations;
- Encourage development that minimizes vehicle miles traveled, capitalizes on public investment in transit and infrastructure, and is compatible with adjacent uses; and
- Identify opportunities for public participation in the review process for new development and other planning efforts, including Specific Plans. As described in

the General Plan, Santa Clara is largely built out, with approximately 97 percent of its land area developed in a predominately low-intensity suburban pattern. As a result, new businesses and residences need to be directed to areas where existing development can be enhanced and intensified to achieve denser, more efficient land use patterns. This planned growth can enhance the community's quality of life and foster economic vitality with minimal to no adverse effects on surrounding areas that the City wishes to preserve.



To plan the future of North Santa Clara, the City has completed several large-scale planning efforts within the vicinity of the PHD Specific Plan Area. The intent is to transform North Santa Clara into a complete community of distinct complementary neighborhoods composed of high-intensity residential, office and entertainment uses, each with a unique sense of place.

2.5.2 Pedestrian Master Plan (2019)

The City's Pedestrian Master Plan recognizes challenges for pedestrian access in Santa Clara due to dispersed land uses, and several major roadways and transit lines that act as barriers with limited pedestrian crossing opportunities. The Pedestrian Master Plan provides a blueprint for creating safe, comfortable, and enjoyable conditions for walking.

2.5.3 Bicycle Master Plan (2018)

The City adopted the Bicycle Master Plan Update to further enhance bicycle access and infrastructure throughout Santa Clara. The City invested in a 70-mile bicycle network that includes over 11 miles of car-free shared-use paths over the past five years. However, bike lanes along major arterials, barriers, and gaps in the system still prevent cyclists from reaching many employment, transit, schools, and retail destinations.

2.5.4 Multimodal Improvement Plan (2018)

The City of Santa Clara Multimodal Improvement Plan (MIP) was prepared in response to Congestion Management Program deficiencies identified in connection with the Related Santa Clara project. The MIP includes projects that would benefit the North Santa Clara area, including the Great America Intermodal Station Master Plan. The Station Master Plan project will be led by VTA with support of the City of Santa Clara, Altamont Commuter Express (ACE) and Capitol Corridor. The scope of the study will look at long-term improvements, connections to other modes and nearby land uses, accommodating ACE and Capitol Corridor expansion plans, and developing station concepts.

2.5.5 Creek Trail Expansion Feasibility Study (2013) and Expansion Master Plan (2021)

The City adopted a Creek Trail Network Expansion Feasibility Report that evaluated three key corridors including the Calabazas Creek and Hetch Hetchy corridor. In 2020, it began a Master Plan to build on this work and recent investments. The plan identifies both the SFPUC right-of-way and the Calabazas Creek in the vicinity of the PHD Specific Plan Area as potential Class I facilities.

2.5.6 Tasman East Specific Plan (2018)

The Tasman East Specific Plan applies to an existing 45-acre industrial neighborhood bounded by Tasman Drive to the south, the Guadalupe River to the east, the Santa Clara golf course to the north, and Lafayette Street to the west.

The plan creates a framework for the development of a high-density, transit-oriented neighborhood with supportive retail services and amenities, and improved transit access. At full buildout (estimated by 2040), approximately 4,500 dwelling units, and 100,000 square feet of retail space are anticipated.

2.5.7 Great America Theme Park Master Plan (2017)

The Santa Clara City Council approved the Great America Theme Park 20-Year Master Plan, which included rezoning the 112-acre theme park from Thoroughfare Commercial (CT) to Planned Development (PD) and establishing specific development and use standards. The Master Plan and PD Zoning addresses the installation of new rides, replacement of rides and attractions, expansion to a year-round operation, expansion of current hours of operation and the construction of a year-round commercial/entertainment district that includes restaurants, concert venues, night clubs, and shops open to the public outside of the theme park gates. At full buildout in 2040, the Plan anticipates 100,000 square feet of new retail space and the repurposing of 40,000 square feet of existing building square footage.

2.5.8 Related Santa Clara (2016)

A General Plan Amendment for the 240-acre Related Santa Clara (formerly City Place Santa Clara) project site anticipates construction of a new multi-phased, mixed-use development by the year 2030 including: up to 9.16 million gross square feet of office buildings, retail, and entertainment facilities; 1,800 residential units; hotel rooms; surface and structured parking facilities; new open space; landscaping, roads; and new/upgraded/expanded infrastructure and utilities.

2.5.9 Mission Point by Kylli

A General Plan Amendment for the 46-acre Mission Point site (formerly Kylli/Democracy Way, located just north of the PHD Specific Plan Area) amends the designation of a 9-acre portion of the property from High-Intensity Office/Research to a newly established mixed-use designation to allow for a high-intensity mix of office, commercial and residential uses.

2.5.10 Freedom Circle Focus Plan Area (2021)

The City is developing a Future Focus Area Plan for Freedom Circle in northern Santa Clara to establish future capacity and an overall vision for a new, mixed-use community. Significant redevelopment interests have provided impetus for the City to explore the inclusion of housing in the area to fulfill citywide goals and policies.

2.5.11 Mission College Facilities Master Plan (2018)

Mission College is bounded by 101 Freeway to the south, the FC Specific Plan Area to the east, the PHD Specific Plan Area to the north, and Calabazas Creek to the west. The Facilities Master Plan envisions the physical redevelopment, renovation, and expansion of Mission College over the next 10-20 years. Anticipated development on the existing campus will include several new sports facilities, a storage facility, a police center, portable buildings, and an interdisciplinary plaza. A new Community/Lecture/Performance venue will also extend the campus north into the adjacent parking lot.

2.6 CIRCULATION

Improving circulation and enhancing overall multimodal mobility throughout the PHD Specific Plan Area are important initiatives of the PHD Specific Plan. This section provides an overview of the existing transportation network and systems serving the area.

2.6.1 *Highway and Major Road Network*

Santa Clara is generally well served by the regional transportation system (see Figure 2.6A: Regional Road Network). Its geographic location at the center of the Valley provides strategic highway access, and commuter and light rail connections to cities and attractions throughout the Bay Area.

The eight-lane US Highway 101 (US 101) traverses east-west through the center of Santa Clara, while State Route 237 (SR 237) runs just to the north, and Interstates 880 (I-880) and 280 (I-280) about the southeast and southwest corners of the City, respectively. The El Camino Real corridor passes east-west through Santa Clara and serves as an important east-west thoroughfare linking Santa Clara, San Jose, and Sunnyvale.

Regional access within Northern Santa Clara is provided via US 101 and SR 237 via their interchanges with Great America Parkway, Lawrence Expressway, and Montague Expressway. Running north-south through Santa Clara, Great America Parkway/Bowers Avenue is a mainly six-lane arterial street that begins at US 101 and extends northward to SR 237. South of US 101, it is also known as Bowers Avenue/Kiely Boulevard. Tasman Drive a four-lane east-west arterial runs from Morse Road in adjacent Sunnyvale to I-880 in Milpitas where it becomes Great Mall Parkway.

2.6.2 *Collector and Local Street Network*

While the PHD Specific Plan Area is adjacent to several major arterial roads, the local street network within the site is limited and not designed to accommodate multiple modes of transportation, nor does the existing bicycle and pedestrian network connect to public amenities and destinations. Consistent with the rest of North Santa Clara, vehicular access to the PHD Specific Plan Area is facilitated by area freeways (US 101 and SR 237), major arterial roads, and a handful of collector streets.

Tasman Drive, located approximately one half-mile north of the PHD Specific Plan Area, serves as an important transit corridor along which several light rail stations are located. Great America Parkway serves as the eastern boundary of the PHD Specific Plan Area and provides connections to both regional highways and local destinations including the Great America Theme Park. Mission College Boulevard, another large arterial located west of Great America Parkway provides the southern boundary of the PHD Specific Plan Area and access to the community college campus.

Patrick Henry Drive is a low-traffic collector street in the PHD Specific Plan Area that extends west from Great America Parkway before looping north up to Tasman Drive. Old Ironside Drive, another low-traffic collector street, extending north from Patrick Henry Drive to the Hetch Hetchy right-of-way at the area's north border. While not within the PHD Specific Plan Area, Democracy Way runs just south and parallel to Tasman Drive and provides a short 0.3-mile alternate low-traffic connection between Patrick Henry Drive and Old Ironside Drive. Due to the large-lot industrial development pattern and limited number of roadways within the PHD Specific Plan Area, linkages and connectivity across the site are poor.

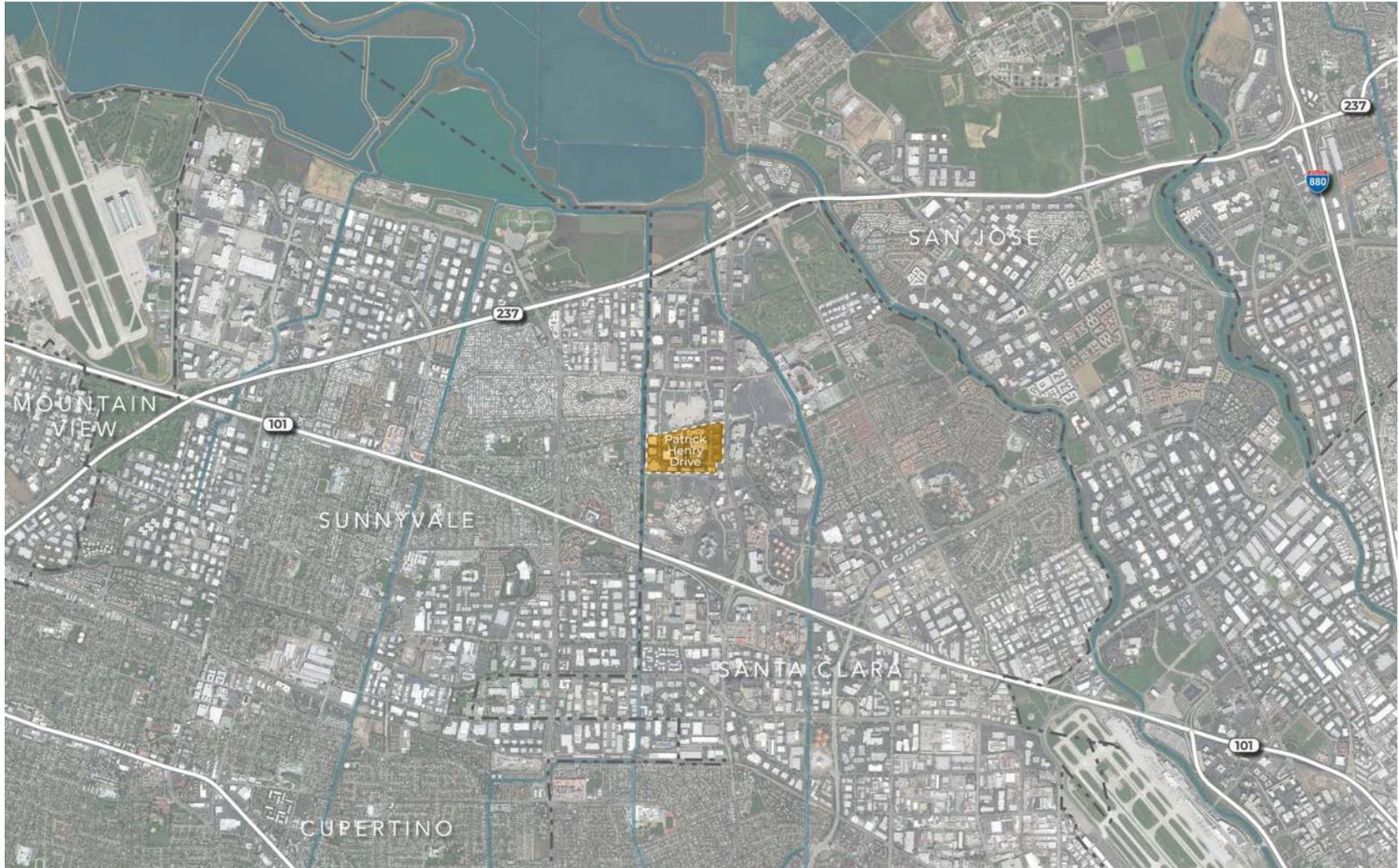


FIGURE 2.6A: REGIONAL ROAD NETWORK

- Specific Plan Area
- Freeways
- City Boundary
- Creeks/Water Bodies





Tasman Light Rail



Patrick Henry Drive Shuttle



Great America Santa Clara Station



Surface Parking Lot Along Patrick Henry Drive

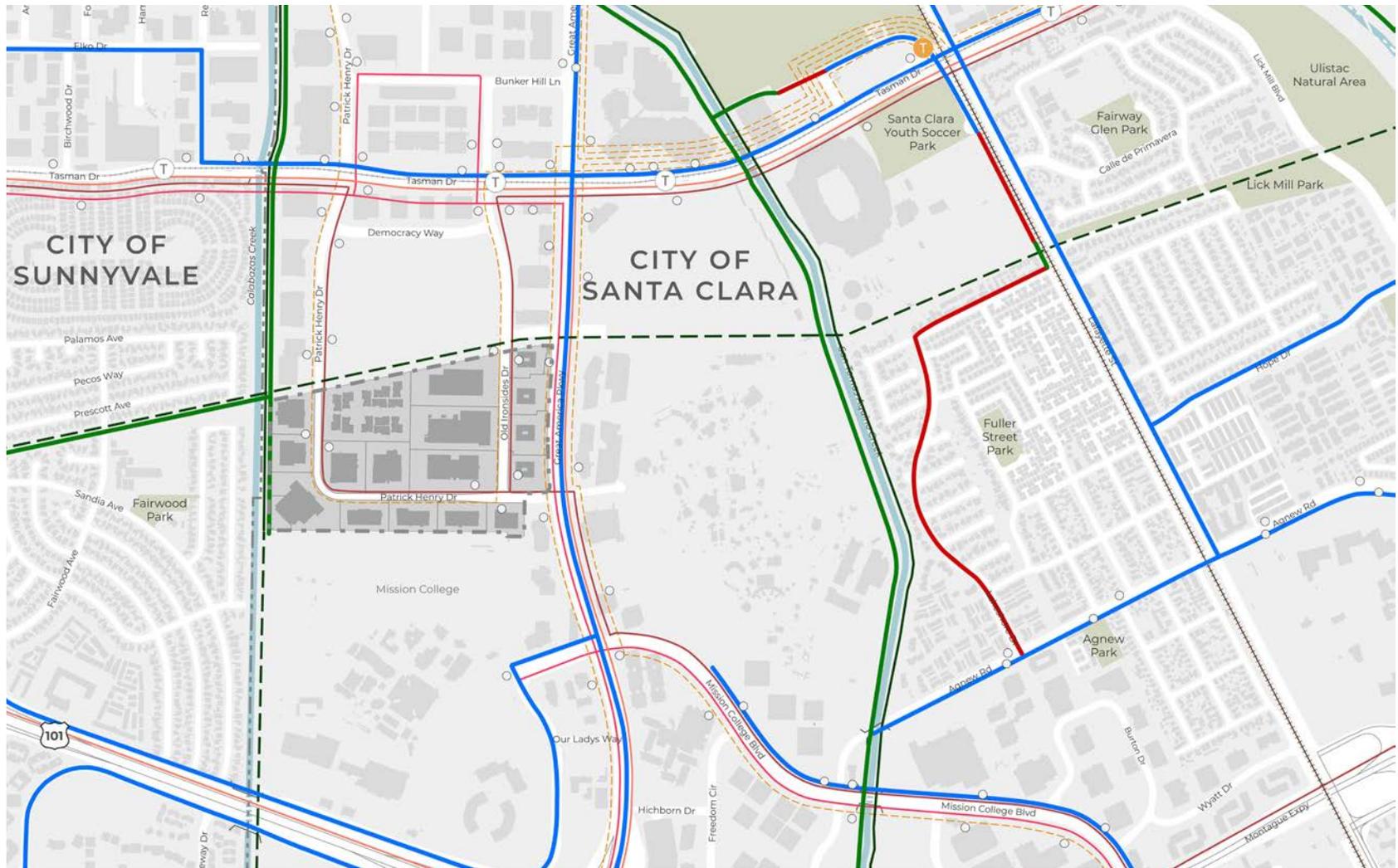


FIGURE 2.6B: ACTIVE TRANSPORTATION NETWORK



2.6.3 Pedestrian and Bicycle Facilities

In Northern Santa Clara, existing pedestrian facilities include sidewalks, crosswalks, and pedestrian signals at signalized intersections. However, sidewalks are missing on portions of both arterial and connector streets, making navigating the area by foot difficult.

Sidewalks or separated pedestrian pathways exist along most of the streets surrounding the Specific Plan Area but are missing on one side of the street along portions of Tasman Drive, Patrick Henry Drive, Old Ironside Drive and Democracy Way. In addition, at many intersections, crosswalks on one or more approaches do not comply with the requirements of the Americans with Disabilities Act (ADA).

While bike lanes and bike paths/trails are limited in Northern Santa Clara, many of the collectors and local streets are wide enough to accommodate future bike lanes. The City's current Creek Trail Network Expansion Master Plan project proposes Class I paths along the Calabazas Creek and Hetch Hetchy corridors. The Calabazas and San Tomas Aquino Creek Trails both run north south and are the primary bicycle and pedestrian routes through the area (see Figure 2.6B: Active Transportation Network). In the vicinity of the PHD Specific Plan Area



The Calabazas Creek Trail Offers Opportunity for Improved Bicycle and Pedestrian Travel

there are several bike lanes and bike paths/trails. However, there are currently no marked bike lanes on Patrick Henry Drive, Old Ironsides Drive, or Democracy Way. However, per the City's Bicycle Master Plan, future streetscape improvements and multimodal enhancements in the area will include new dedicated bike pathways, including separate Class IV facilities along Patrick Henry Drive, Old Ironsides, and Great America Parkway. Further, the Hetch Hetchy and Calabazas Creek corridors provide opportunities to expand off-street bicycle and pedestrian facilities.

2.6.4 Transit Service

Santa Clara is served by several transit providers and routes that offer connections to local and regional destinations. Caltrain connects to San Jose to the south and runs north up the peninsula to San Francisco. Amtrak and Altamont Commuter Express (ACE) trains connect to the East Bay and Sacramento regions, and the Santa Clara Valley Transportation Authority (VTA) offers bus and light rail service. Future transit plans include a new Bay Area Rapid Transit (BART) Station to be located at the Santa Clara Caltrain Station.

Within Northern Santa Clara, existing transit service includes: bus and light rail transit provided by the VTA; the ACE commuter rail service between the Central Valley and Silicon Valley with shuttles that connect City North to the Great America Transit Station provided by the San Joaquin Regional Rail Commission (SJRRRC); and passenger train service between San Jose and Sacramento and the foothills of the Sierra Nevada with stops at the Great America Transit Station.

Transit Stations or Transit Centers are concentrated near high-intensity development along major transportation corridors like Great America Parkway.

Transit service within one-half mile of the PHD Specific Plan Area includes multiple VTA local, limited stop, and express bus routes, and VTA Light Rail Orange and Green Lines along the Tasman Corridor, which is an approximately 10-minute walk or 4-minute bike ride from any portion of Plan Area. The 2019 New Transit Service plan redesigned the transit network to increase ridership and expand the network of frequent routes. As a result, the Plan Area is served by Route 57 along Great America Parkway (at Old Glory Lane and Patrick Henry Drive), which operates at 15-20 minute weekday and Saturday frequency and 30-minute Sunday frequency. There are several other bus stops served by VTA routes on Tasman Drive and Mission College Boulevard.

Although not within the Plan Area, local commuters also use Caltrain, which provides commuter rail service from San Francisco in the north through San Mateo County to Santa Clara County in the south. Commuters to the Plan Area can access the Sunnyvale and Santa Clara Caltrain Stations, which are located approximately five miles from the site, via bus Routes 55 and 60.

Commuter rail service connection to the Capitol Corridor Amtrak Santa Clara at the Great America station is approximately one mile (or ten-minute bike ride) from the Plan Area and accessible by the ACE Green Shuttle along Patrick Henry and Old Ironsides Drives. Amtrak connects to Oakland and other East Bay destinations as well as Sacramento and San Jose.

The Mountain View-Alum Rock Orange light rail line runs along Tasman Drive in the project vicinity with east-west connections between Mountain View and Alum Rock Station. The Orange Line's Old Ironsides and Great America Stations are nearest to the Plan Area. The Orange Line also provides connections to BART at the Milpitas BART station stop. The Old Ironsides – Winchester Green Line runs along Tasman Drive and provides north-south connections between Campbell and Old Ironsides station through Downtown San Jose.

2.7 INFRASTRUCTURE

A strong backbone of efficient and flexible infrastructure is vital for supporting a high-caliber quality of life and amenities for future residents, businesses, and visitors in the PHD Specific Plan Area. This section summarizes baseline conditions of the existing public and private utilities that serve the PHD Specific Plan Area.

2.7.1 Water Supply and Infrastructure

A 12-inch water main runs along Great America Parkway at the project's eastern boundary line from Old Glory Lane to Patrick Henry Drive. In addition, there are two recycled water mains running through PHD Specific Plan Area.

2.7.2 Wastewater Conveyance and Treatment

Wastewater from the PHD Specific Plan Area is conveyed through the City of Santa Clara's wastewater collection system to the San Jose/Santa Clara Regional Wastewater Facility (SJ/SC RWF). The SJ/SC RWF Plant provides wastewater treatment for the cities of San Jose, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno. The existing sanitary sewer system serving the PHD Specific Plan Area consists of predominately 12-inch vitrified clay pipe (VCP). It is anticipated that the existing pipe will need to be upsized to a 15-inch sewer line to increase capacity.

2.7.3 Storm Drainage and Treatment

The current network of storm drain pipes in the PHD Specific Plan Area drains to San Tomas Aquino Creek through the Westside Storm Drain Pump Station on Old Mountain View-Alviso Road. The City of Santa Clara's Storm Drain Master Plan does not require any improvements to be completed within the PHD Specific Plan Area.

2.7.4 Dry Utilities

Gas, electricity, telecommunications, and cable television services will be provided to the site by PG&E, Silicon Valley Power (SVP), AT&T, and Comcast, respectively. Costs to provide gas and electricity to each development area will be borne by the developers, to the extent off-site infrastructure is required.



3

Community Process & Vision Framework

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SECTION TO TRAILS /

PLAN - ENCOURAGE BIKING.

DABLE HOUSING

OF INCOME LEVEL

PROVIDE NEAR-TERM

OPPORTUNITIES

WALKING

RED CENTRALISED PARKING

- ACCESSIBILITY / CONVENIENCE

ONOMOUS VEHICLES - DYNAMIC

OP-OFF ZONES

DID SEA OF PARKING

VISION FOR THE FUTURE!

TRANSIT-ORIENTED DEVELOPMENT

CONNECTIVITY

BALANCE

BICYCLE MASTER PLAN

INNOVATIVE

GREAT STREETS!

SERVICES

PHYSICAL PROGRAMMATIC

CLARE GOLF AND TENNIS CLUB

ACADEMY SAN JOSE

LINK MILL PARK

WALKABLE PEDESTRIAN ENVIRONMENT

SCHOOLS

PARKS

HOUSING

JOB DESTINATIONS

MIX OF HOUSING TYPES

RANGE OF HEIGHTS / SCALES

"PLAY" DESIGN!

ROLE DIST

STADIUM

CO-LOCATION

TRANSPORT IMPACTS

PLANNING

SHARED PARKING

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DESTINATION

Community participation was foundational to the development of the Patrick Henry Drive (PHD) Specific Plan. Community members, stakeholders, and property owners shaped a vision for the PHD Specific Plan Area and provided feedback and guidance throughout the planning process, resulting in an implementable Specific Plan with a broad base of support. This chapter describes the engagement process and outlines the planning framework that emerged to spur transformation of the underutilized industrial and commercial area into a high-density, mixed-use residential community with walkable streets and a range of neighborhood-serving amenities, including new public parks, interconnected pedestrian and bicycle infrastructure, vibrant ground-floor retail, and new community spaces.

3.1 COMMUNITY ENGAGEMENT STRATEGY AND PROCESS

The project team carried out a multi-pronged community engagement strategy that solicited input and feedback from community stakeholders at every phase of planning. This included one-on-one and small group stakeholder interviews, Technical Advisory Committee and Stakeholder Steering Group meetings, Community Workshops, and several staff-led Study Sessions with City Council and the Planning Commission. Meetings and events were scheduled around project milestones to ensure engagement and input at critical decision points.

3.1.1 Technical Advisory Committee

The Technical Advisory Committee (TAC) is an advisory group representing the diverse perspectives of several City departments and local agencies. The group was consulted throughout the planning process to provide substantive input into PHD Specific Plan direction, project feasibility, and implementation strategies.

The first of the two TAC meetings provided an overview of the planning principles and preliminary concepts for the PHD Specific Plan. The feedback helped the team refine the vision for the PHD Specific Plan Area and informed the plan concepts and priorities.

The TAC reconvened to review the administrative draft plan. In this second meeting, the group provided feedback and input on a variety of mobility, land use and urban design issues.

In addition to participation in these meetings, TAC members and other City and agency staff were consulted on an ad-hoc basis throughout the development and review of the Specific Plan, providing the project team with critical input and feedback.

3.1.2 Stakeholder Steering Group

The Stakeholder Steering Group (SSG) was composed of developers, property owners, and other representatives from the PHD Specific Plan Area, including the project funding partners. Early in the planning process, the consultant team

held one-on-one and small group interviews with property owners and developers representing each property in the PHD Specific Plan Area, as well as other interested stakeholders. These initial meetings identified concerns, challenges, opportunities, and priorities for the PHD Specific Plan Area.

The planning team convened a series of SSG meetings dedicated to refined PHD Specific Plan Area concepts and a proposed cost-sharing framework that would distribute infrastructure and redevelopment costs equitably among stakeholders. Following the third meeting with the SSG, the team followed up with area stakeholders in large and small group settings to both obtain detailed information regarding intended development programs and address outstanding questions, comments, and other information regarding the planning process.

The project team, including City staff, agency representative and members of the consultant team, met regularly with the SSG during PHD Specific Plan development and environmental review to coordinate efforts, track progress, and provide strategic input and focused feedback on draft work products.

3.1.3 Community Workshops

Two community workshops provided opportunities for community members to learn more about the PHD Specific Plan process and provide input on key concepts.

Community Workshop #1: Vision

The focus of the first workshop was multifold: to present planning principles for the PHD Specific Plan and Freedom Circle areas and learn about community priorities in order to refine the overarching vision and identify emerging concepts for the urbanizing area. The workshop was conducted as a joint session with the Mission Point project.

The workshop included an introductory presentation followed by an interactive open house with four stations: North Santa Clara, Patrick Henry Drive, Freedom Circle, and Mission Point. Open house exercises prompted participants to rank examples of height, scale, and intensity for the different project areas, as well as share ideas about parks and open space, community amenities, and transportation.

Community members directed the project team to create a “complete community” within the PHD Specific Plan Area, including ample community amenities such as a library, community meeting space, and neighborhood-serving commercial uses. Participants supported high residential densities and tall buildings as long as the street level provided a mixed-use environment.

Community Workshop # 2: Draft Plan. The second community workshop was held via Zoom to adhere to public health directives during the COVID-19 pandemic. The project team presented the draft PHD Specific Plan, focusing on land use and urban design. Community feedback included support of a new mixed-use community with affordable housing. Residents expressed concern about traffic impacts.

3.1.4 City Study Sessions

The planning team held study sessions with City Council and the Planning Commission to ensure that City leadership was up-to-date on progress, provided direction on key policy issues and supported the draft Specific Plan policies and implementation actions. City leaders provided input to ensure housing growth and density were delivered in a sustainable manner that contributed vibrancy and benefits to the overall Santa Clara community.

3.2 VISION AND PLANNING PRINCIPLES

Community and stakeholder input informed a vision and planning principles for the PHD Specific Plan Area.

3.2.1 *Vision*

The overarching vision for Santa Clara City North is to develop as a complete community of distinct, complementary neighborhoods, each with its own unique identity built on placemaking, and an attractive public realm. As one of these distinctive neighborhoods, the PHD Specific Plan Area is set to transform into a new mixed-use urban residential neighborhood composed of a fiscally sustainable mix of land uses including high-density residential, office, and supportive services complemented by the necessary infrastructure. There are two planning scenarios A and B, including residential and office development uses, to enable properties to flexibly respond to market conditions over time.

Embraced by both City leadership and area stakeholders, higher-density residential development can help address the City's housing needs and create a vibrant and diverse community. The PHD SP targets the development of up to 12,000 residential units at full build-out, with densities ranging from 65 to 250 dwelling units per acre. A minimum of 15 percent of all units within the PHD Specific Plan Area will be affordable by deed restriction to households making at or below 80 percent of the area median income.

These land use and density changes will provide a net positive impact on the area's fiscal sustainability. New development will contribute to significant growth in the land value and property tax base and increase sales tax revenue resulting in fiscally positive land uses and reduced per capita service costs. Not only will high-density development, in the form of 5-to 25-story residential and commercial buildings, result in more efficient land utilization, but it will also help protect established neighborhoods from development pressures.

New development will be complemented by an attractive street environment complete with a highly walkable pedestrian realm and innovative mobility options. Twenty-two percent or more of the total PHD Specific Plan Area will be used as dedicated public parks or other open spaces. Full build-out of the site is anticipated to occur over the next 20 years, as the development responds to the fluctuations of local and global market conditions.

3.2.2 Planning Principles

The following planning principles draw on community and stakeholder engagement and support Santa Clara General Plan vision and policies. The principles respond to unique PHD Specific Plan Area assets and opportunities and ensure the resulting community will reflect the priorities, values, and vision of the Santa Clara community.



1. COMPLETE NEIGHBORHOOD

The PHD Specific Plan Area will evolve into a self-sufficient neighborhood composed of a rich variety of places to live, play, gather and engage. New land-use designations and zoning will provide a mix of core community uses to ensure adequate access to goods and services for the thousands of new residents. Residents will also enjoy easy access to nearby job opportunities.



2. VARIED HOUSING OPTIONS

An array of multi-family residential types will attract a broad range of residents and households, contributing to neighborhood character and a sense of community while meeting demand. Affordable housing units will ensure the area is accessible to more residents and support a diverse population.



3. BALANCED MULTI-MODAL MOBILITY

Patrick Henry Drive will be transformed from an auto-dominated environment into a neighborhood that supports all travel modes including walking, cycling, transit, and driving. Retrofitted and new street design will ensure a welcoming, comfortable, and safe environment for pedestrians and cyclists, while efficiently moving necessary vehicle traffic. Pedestrian-friendly streetscapes will: be accessible to all; help activate street frontages; and stimulate use of community amenities. The new environment will accommodate rideshare, shuttle, and other mobility innovations.



4. TRANSIT-ORIENTED DEVELOPMENT

An improved local mobility and circulation network will support the use of existing and future transit infrastructure, including VTA light rail along the Tasman Corridor, bus transit along Great America Parkway, and multi-use trails along Calabazas Creek and the Hetch Hetchy right-of-way. Patrick Henry Drive residents and employees will be connected to local amenities as well as regional destinations via transit options.



5. HUMAN-SCALE PUBLIC REALM

Community amenities will activate public spaces and create hubs of social activity with a library, parks, plazas, and pathways. Elevated urban and streetscape design will create an active, comfortable pedestrian realm at a human scale and a cohesive neighborhood environment, while accommodating high residential densities.



6. DIVERSE OPEN SPACES

The PHD Specific Plan Area will be served by a connected network of parks, plazas, and open spaces that provide opportunities for passive and active recreation, events, programs, and informal or structured social gathering. Traditional parks will complement urban plazas and active streetscapes. The open space network will provide a variety of spaces that are flexible enough to accommodate a variety of activities and uses for all ages and abilities.



7. BUILDING A VIBRANT MIDDLE CLASS

Encourage the use of a local construction workforce and local business sourcing in the buildout within the Plan area. The employment of a local construction workforce that pays family-supporting wages will generate sales tax revenue for the City as those wages are recirculated within the City's business community. The availability of a trained construction workforce is essential for the success in implementing the PHD Specific Plan therefore the employment of apprentices in State of California approved training programs will also be encouraged.

4

Development Framework



Drawing on stakeholder input and detailed planning and design analyses, the Development Framework includes policies to guide future development within the PHD Specific Plan Area. The Development Framework will bring the community-based PHD Specific Plan Area vision and principles from Chapter 3 to life and provide the foundation for the detailed design standards and guidelines in Chapter 5.

This chapter addresses the following elements, along with related policies, that are vital to creating the desired, cohesive improvements in the PHD Specific Plan Area.

- Development Capacity
- Urban Design
- Allowable Land Uses
- Affordable Housing
- Parks, Recreation and Open Space
- Mobility, Circulation, and Parking
- Sustainability

4.1 DEVELOPMENT CAPACITY

There are two potential PHD Specific Plan Area buildout scenarios anticipated for implementation by 2040 (see Table 4.1: Development Capacity). Both scenarios envision a vibrant, mixed-use residential neighborhood with local amenities, while providing property owners the flexibility of determining new uses for their sites depending upon market conditions. Either scenario would be estimated for implementation by 2040.

4.2 URBAN DESIGN

The following urban design principles and policies ensure that investment and new development projects in the PHD Specific Plan Area work cohesively to evolve the area into a distinct, vibrant urban neighborhood (see Figure 4.2: Urban Design Framework). The Design Guidelines in Chapter 5 provide specific direction to ensure exceptional design while allowing a variety of architectural styles.

Table 4.1: Development Capacity

	Residential Units	Non-Residential Uses		Total Parks and Open Spaces
Scenario A	12,000	Retail	150,000 SF	14.46 Acres
		Flex	90,000 SF	
		Community	70,000 SF	
		Office	-	
Scenario B	10,300	Retail	150,000 SF	12.29 Acres
		Flex	90,000 SF	
		Community	70,000 SF	
		Office	785,000 SF	

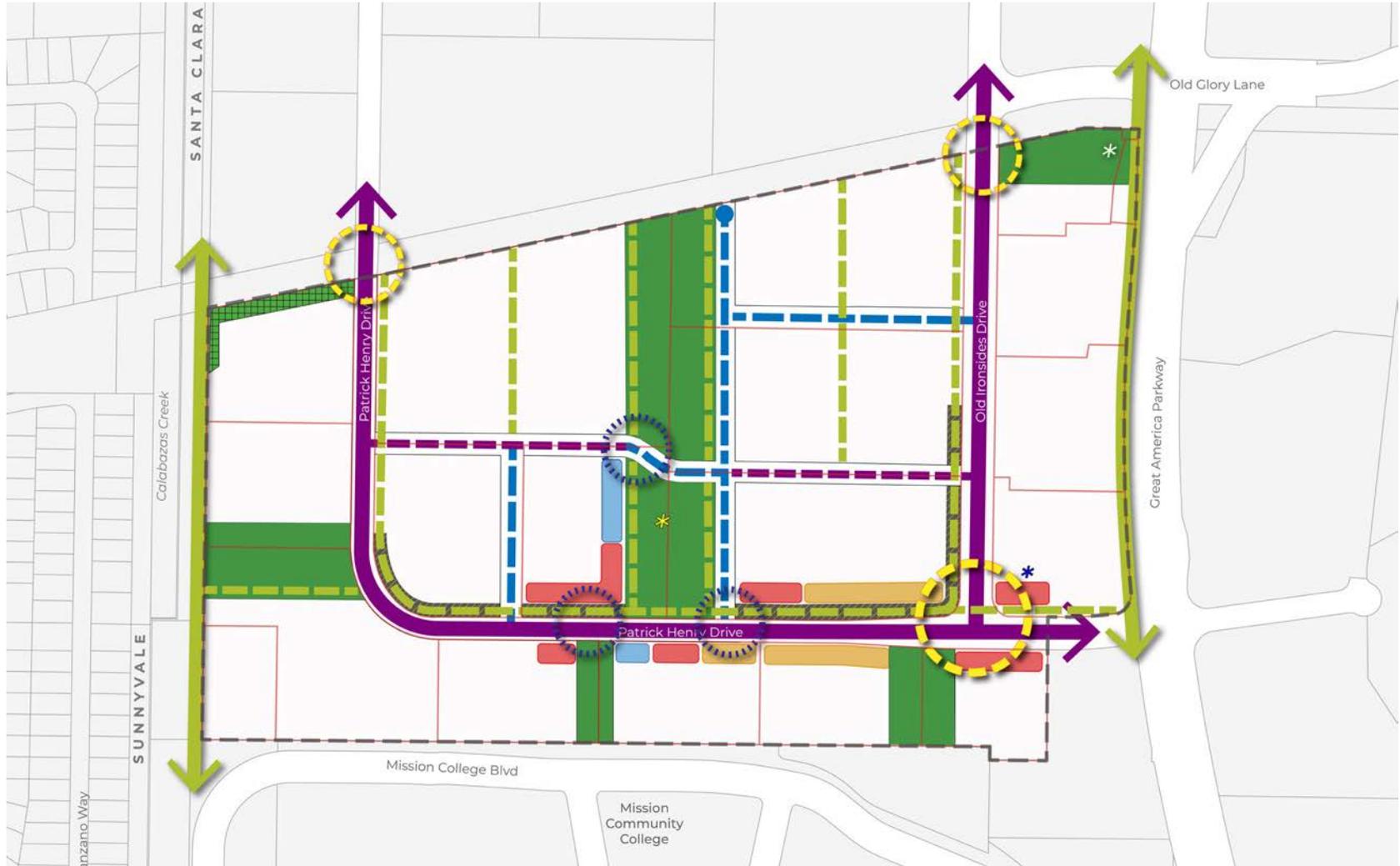


FIGURE 4.2: URBAN DESIGN FRAMEWORK

Study Area	Plaza	Potential Trail and Landscape Dedication	Existing Roadway	Activity Nodes
Existing Parcel (City of Santa Clara)	Retail	Existing Greenway	Proposed Roadway	Gateways
Existing Parcel (Study Area)	Community / Civic	Proposed Greenway	Slow Street	
Open Space	Flex (Office, Retail)			

Public parkland only required with residential development
 Conceptual location of a future Library/Community Center
 No retail required if office is developed

N
 0 250 500 Feet

4.2.1 Urban Design Principles

The following urban design and planning principles draw on community and stakeholder input to articulate the priorities for the built environment.

- Create a human-scaled public realm with a distinctly urban feel.
- Enliven the street environment and create multi-use activity nodes.
- Prioritize the safety and comfort of pedestrians of all ages and abilities.
- Provide diverse parks, plazas, and open spaces.
- Create a fine-grained network of pedestrian paths.
- Transition building heights adjacent to lower-density neighborhoods.
- Accommodate diverse architectural styles.
- Use landscaping to create a comfortable pedestrian realm and contribute color and depth.
- Provide signature architectural elements on buildings at gateways and activity nodes.
- Use signage appropriate in scale and orientation to the primary audience: pedestrians or motorists.

4.2.1.1 ACTIVITY NODES

- Cluster retail, flex, and community uses to create activity nodes that include places to socialize, shop, play, and relax.
- Create synergies of use to support the viability of neighborhood-serving retail and community spaces.
- Center activity nodes at intersections with ground-floor retail and where the library opens onto the public park.
- Encourage interaction of people with spaces.

4.2.1.2 GATEWAYS

- Use architecture, art, and signage to mark neighborhood entries and contribute to local identity and character, inviting visitors and creating a destination.
- Create a major gateway at the intersection of Patrick Henry Drive and Old Ironsides Drive and minor gateways at connections to the SFPUC right-of-way, and Mission College.

4.2.1.3 HEIGHTS, EDGES AND TRANSITIONS

- Ensure building heights respect and respond to the character of areas adjacent to the PHD Specific Plan Area while accommodating high-density development.
- Locate the tallest buildings in the interior of the PHD Specific Plan Area so that the overall scale of the area decreases as it approaches the PHD Specific Plan Area edges.
- Use height restrictions and building stepbacks along the Calabazas Creek to ensure a more gradual transition between the single-family residential neighborhoods in the City of Sunnyvale.
- Ensure wide streets and parcels along the eastern and northern edges to allow for high-density buildings, while maintaining a human-scale, street-level environment.
- Soften the transition between neighborhoods with open spaces along the west, north, and northeast borders by creating active human-scale environments

and variation in the street wall. Building heights on the south edge of the Plan Area adjacent to Mission College are mitigated by the surface parking lots and sports fields.

4.2.1.4 CONNECTIONS

- Connect residents to destinations, including parks and open spaces with wide sidewalks and bike lanes throughout the PHD Specific Plan Area. Use greenways to create a finer-grained circulation network and break up large parcels.
- Ensure that new roadways allow for better ingress/egress into new development and improve east-west connectivity while maintaining vehicle traffic flow.
- Build new “slow streets” to allow shared space between automobiles, pedestrians, bicyclists, and differently-abled users and create a safe, active environment for all modes.

4.2.1.5 CHARACTER AND ARCHITECTURE

- Accommodate density while creating a distinct, livable, and memorable neighborhood.
- Create visual interest and break down the building mass to ensure a human-scale environment with distinct building design, fenestration, articulation, and transparency for pedestrians.
- Include thoughtful design of ground-floor building entrances in select areas to make them welcoming and engaging.
- Soften the urban environment through setbacks, greenways, and alleys with ample space for landscaping and greenery.

4.3 LAND USE

The Land Use Plan for the PHD Specific Plan Area supports the City’s goals of creating a new high-density residential neighborhood, adding housing opportunities and mixed-use environments near regional transit infrastructure and employment centers, and developing complete, self-sustaining communities to reduce auto dependency. Land use in the PHD Specific Plan Area is regulated through land use classifications, policies, and a map (see Figure 4.3A: Land Use Plan).

A critical approach to land use in the PHD Specific Plan Area is to provide clear guidance, yet still allow flexibility in construction type, building height, and density. This flexible approach allows property owners to adapt and respond to market conditions while accomplishing City and community goals.

4.3.1 Land Use Policies

- Distribute retail nodes so that all new residential development is within a 10-minute walk of at least 20,000 square feet of neighborhood-serving commercial uses.
- Co-locate active uses—including parks, plazas, retail, flex, and community uses—to enliven the street environment and create neighborhood destinations.
- Identify a location for a new City branch library and publicly accessible community meeting spaces.
- Provide for a range of housing products and residential options at various price points to support the City’s housing goals and improve residential opportunities for all households.
- Ensure a portion of residential units are affordable to households with incomes below the area median.
- Create a connected system of diverse parks and open spaces to provide outdoor recreation options for residential areas, facilitate pedestrian mobility, and enable habitat preservation and restoration.

4.3.2 Land Use Plan and Classifications

Properties in the PHD Specific Plan Area have one of six land use classifications:

1. Very High-Density Residential (PH-R5)
2. Urban Village (UV)
3. Urban Center (UC)
4. High-Density Flex (HD Flex)
5. Village Residential (VR)
6. Parks and Open Space (P/OS)

A mixed-use overlay can be applied to some parcels to provide neighborhood services and amenities and an active pedestrian environment.



FIGURE 4.3A: LAND USE PLAN

- | | | |
|---------------------------------------|---|--|
| Study Area | Very High Density Residential (51-99 du/ac) | High Density Flex (60-149 du/ac ; 2.0 FAR) |
| Existing Parcel (City of Santa Clara) | Urban Village (100-149 du/ac) | Village Residential (60-149 du/ac) |
| Existing Parcel (Study Area) | Urban Center (120-250 du/ac) | Potential Trail and Landscape Dedication |
| Open Space | | |

Conceptual location of a future Library/Community Center Public parkland only required with residential development



4.3.2.1 VERY HIGH-DENSITY RESIDENTIAL (PH-R5)

- Residential Density: 51 to 99 du/acre
- Height Range: 5-12 stories

The purpose of the PH-R5 Patrick Henry Very-High-Density Residential Zone is to provide land areas for the construction, use, and occupancy of high density and intensity multi-family developments (i.e., low-rise, mid-rise, and high-rise apartments and condominiums). It is the intent of this zone to encourage development to use innovative site planning, provide on-site recreational amenities and be located near major community facilities, business centers, transportation corridors, and/or major thoroughfares.

4.3.2.2 URBAN VILLAGE (UV)

- Residential Density: 100-149 du/acre
- Height Range: 5-12 stories

The purpose of the UV Urban Village Zone is to accommodate transit-oriented, multi-family residential development at very-high densities between 5-12 stories within the Patrick Henry Specific Plan. These urban-scale developments feature pedestrian-oriented facades and frontages. Urban Village developments include structured or below-grade parking and shared outdoor spaces proximate to transit. The residential density range for this zone is 100-149 dwelling units per acre.

4.3.2.3 URBAN CENTER (UC)

- Residential Density: 120-250* du/acre
- Height Range: 12+ stories consistent with Federal Aviation Administration (FAA) requirements

The purpose of the UC Urban Center Zone is to accommodate transit-oriented, multi-family residential development at very-high densities with no height limits except those imposed by the FAA due to flight paths for the San Jose International Airport, within the Patrick Henry Specific Plan. These urban-scale developments feature pedestrian-oriented facades and frontages. Urban Center developments include structured or below-grade parking and shared outdoor spaces proximate to transit. The residential density range for this zone is 120-250 dwelling units per acre.

*Densities over 250 du/acre may be allowed for the provision of community benefits agreed upon with the City and formalized in a development agreement. This zone implements the High-Density land use designation in the General Plan.

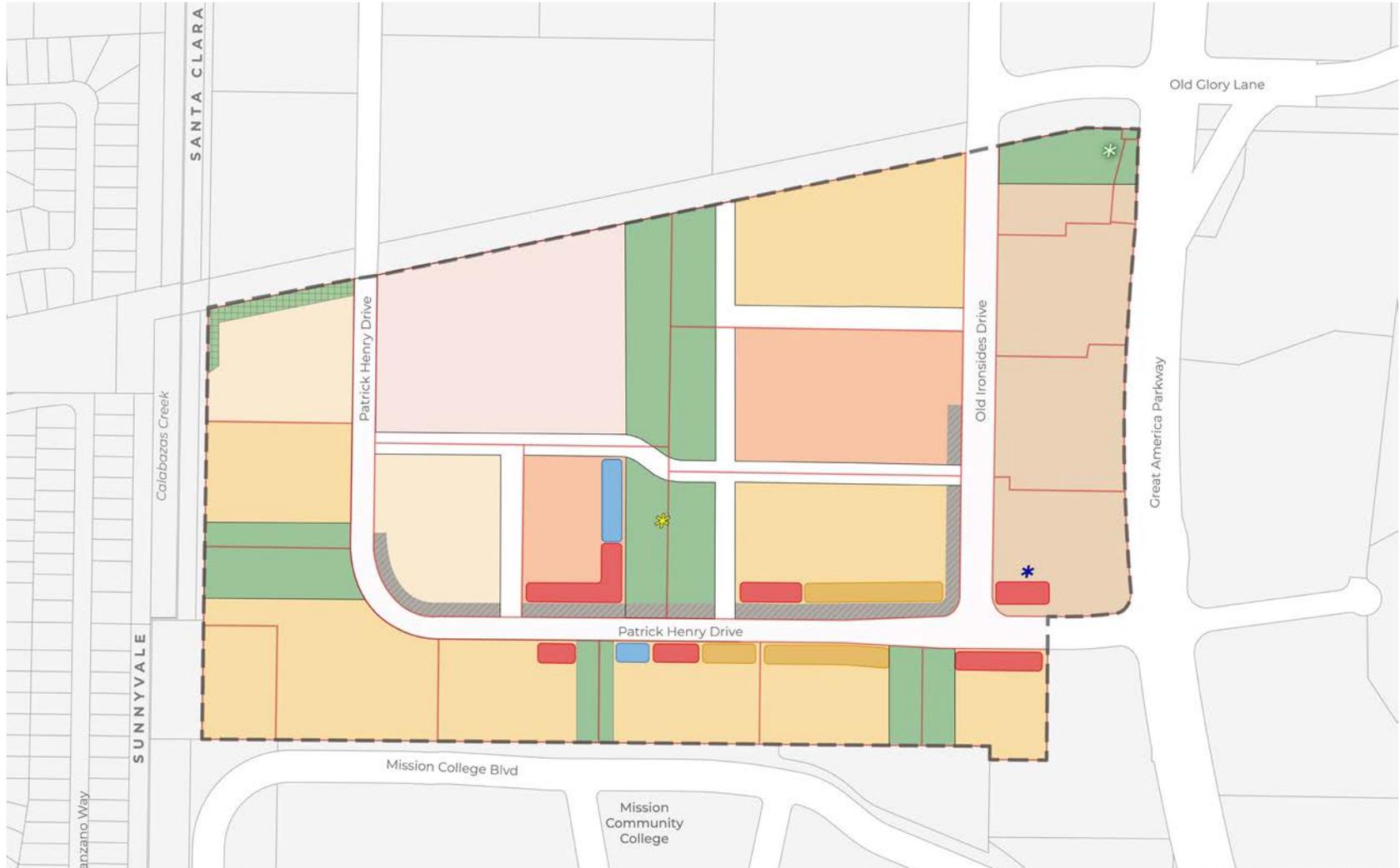
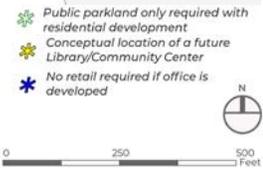
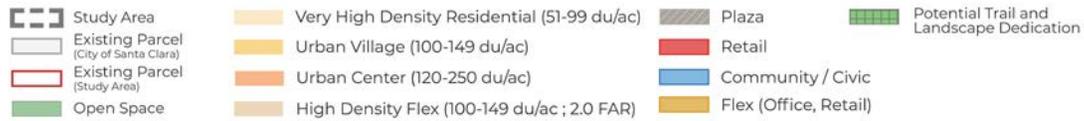


FIGURE 4.3B: GROUND FLOOR ACTIVATION



4.3.2.4 HIGH-DENSITY FLEX (HD FLEX)

- Residential Density: 60-149 du/acre
- Maximum Non-Residential FAR: 2.0
- Height Range: 5-12 stories

The purpose of the HD Flex High Density Flex Zone is to accommodate transit-oriented, multi-family residential development interspersed with office on four parcels along the eastern edge of the Patrick Henry Specific Plan Area. Allowable height ranges between 5-12 stories. The residential density range for this zone is 60-149 dwelling units per acre. Office development is allowed up to 2.0 FAR using the development standards of the HO-RD district, per the choice of property owners.

4.3.2.5 VILLAGE RESIDENTIAL (VR)

The purpose of the Village Residential Zone is to accommodate multi-family residential development at very-high densities between 5-12 stories within the Specific Plan. The residential density range for this zone is 60-149 dwelling units per acre.

- Residential Density: 60-149
- Height Range: 5-12 stories

4.3.2.6 PARKS AND OPEN SPACE (OS)

The purpose of the OS Parks/Open Space Zone is to provide land areas for improved and unimproved park and open space facilities, managed natural resource areas, and outdoor recreation areas (e.g., neighborhood parks, community parks, regional parks, public golf courses, recreational facilities, nature preserves). It is the intent of this zone to provide open space and outdoor recreational opportunities for the community.

4.3.2.7 ZONING GUIDELINES

The following Tables 4.2 and 4.3 include zoning standards and allowed uses in the PHD Specific Plan Area. Additional detail can be found in the City Zoning Code.

Table 4.2: Patrick Henry Residential Zone Development Standards

Development Feature (minimum unless otherwise indicated)	PH-R5	UV	VR	UC	HD Flex
Parcel Area (minimum) area required for each NEWLY CREATED parcel.					
Parcel Area	10,000	10,000	10,000	8,500	8,500
Street Frontage (feet)	70	70	70	60	70
Structure Coverage (maximum percentage)					
Parcel Area (less than 10,000 sq. ft.)	None	None	None	None	None
Parcel Area (less than 10,000 sq. ft.)	None	None	None	None	None
Setbacks (minimum) - Setback lines are measured from the back of walk.					
Residential (front, side corner and interior)	10	10	10	10	10
Mixed-Use (front, side corner and interior)	0	0	0	0	0
Office (front, side corner and interior)	0	0	0	0	0
Setback Encroachments (i.e., awning, balconies, stoops)	Setback encroachments are allowed per the quantitative standards of the PHD plan.				
Height (maximum) measured in feet					
Height (within 20 feet of the R1-6L, R1-8L, and R2 zones)	32	32	32	32	32
Height (all other zones)	135	160	160	FAA	160
Number of Stories (maximum)					
Number of Stories (all other zones)	10	12	12	FAA	12
Gross Residential Density (minimum to maximum) shown in number of dwelling units per acre					
Allowable Density	51-99	100-149	60-149	120-250	60-149
Recreation Space for Multi-Family Dwellings (minimum) measured in square feet per dwelling unit					
Private Recreation Space (required for a minimum of 50 percent of units)	Per the PDO and PHD plan				
Common Recreation Space (per unit)	Per the PDO and PHD plan				

Table 4.3: PHD Residential Zones Allowed Uses and Permit Requirements

Residential Zones (Permit Requirements)	
	P Allowed by Right MUP Minor Use Permit (Chapter 18.124) CUP Conditional Use Permit (Chapter 18.124) TUP Temporary Use Permit (Chapter 18.122) -- Not allowed
Land Use (see Article 8 for land use definitions).	PHD Residential Zones
Dwelling, Accessory Units	P
Dwelling, Multifamily	P
Dwelling, Second Unit	-
Dwelling, Single-Family	-
Dwelling, Two-Family	-
Employee Housing	P
Home Occupations	P
Live-Work Facilities	MUP
Mobile Home Park	-
Organizational Houses	-
Rooming and/or Boarding Houses	-
Supportive Housing	P
Transitional Housing	P
Assisted Living Facilities	CUP
Day Care Homes, Up to 14 Children	P
Community Care Facilities, Small	P
Community Care Facilities, Large	CUP
Emergency Shelters	-
Community Gardens	P
Parks and Public Plazas	P

Places of Assembly	CUP
Public Schools*	CUP
Private Schools*	CUP
Public Safety Facilities	P
Wireless Telecommunications Facilities, Co-location/ Small Cell	P
Bed and Breakfast Inns	-
Retail and Office Uses (ground floor only, in mixed-use buildings only)	
Retail	P
Off-sale of alcohol	P
Restaurants, including on-sale of alcohol	P
Bars	CUP
Office Uses	P

* New school facilities will be considered and planned through collaboration with the Planning Department and Santa Clara Unified School District.

Table 4.3: PHD Office and Industrial Zones Allowed Uses and Permit Requirements

Office and Industrial Zones (Permit Requirements)	
	P Allowed by Right MUP Minor Use Permit (Chapter 18.124) CUP Conditional Use Permit (Chapter 18.124) TUP Temporary Use Permit (Chapter 18.122) -- Not allowed
Land Use (see Article 8 for land use definitions).	HD Flex
Residential Uses	
Caretaker Housing	CUP
Transitional Housing Facilities	-
Human Services Uses	
Community Care Facilities, Small	-
Community Care Facilities, Large	-
Emergency Shelters	-
Recreation, Education, and Public Assembly Uses	
Cemeteries and Mausoleums	-
Crematories	-
Fitness Facilities	P
Parks and Public Plazas	P
Public Schools	-
Private Schools	-
Public/Private Colleges and Universities	-
Equipment/Machine/Vehicle Training Facilities	CUP
Vocational/Trade Schools	-
Utility, Transportation, and Communication Uses	
Broadcasting and Recording Studios	-
Fuel Storage and Distribution Centers	-
Park and Ride Facilities	P
Parking Facilities	CUP

Wireless Telecommunications Facilities and Towers, Co-location/Small Cell	P
Wireless Telecommunication Facilities and Towers, Minor (less than 70 feet)	MUP
Wireless Telecommunication Facilities and Towers, Major (70 feet or higher)	CUP
Transit Stations and Terminals	P
Utility Facilities and Infrastructure	CUP

Table 4.3: PHD Office and Industrial Zones Allowed Uses and Permit Requirements (Continued)

Retail, Service, and Office Uses	
Ambulance Services	P
Banks and Financial Establishments, General	P
Banks and Financial Establishments, Stand-alone ATM	P
Business Support Centers	P
Call Centers	P
Data Centers	P
Equipment Sales and Rental Facilities	P
Hotels and Motels	P
Kennels	-
Maintenance and Repair Services	P
Offices	P
Outdoor (Ancillary), Dining and Seating	-
Personal Services (Ancillary)	P
Restaurants (Ancillary)	P
Retail Establishments (Ancillary)	P
Vehicle Oriented Uses	
Mobile Fueling Delivery	P
Vehicle Service Stations	-
Vehicle Repair Facilities, Minor	-
Vehicle Repair Facilities, Major	-
Vehicle Storage Facilities	P
Vehicle Dismantling Facilities	-

Industrial, Manufacturing, and Processing Uses	
Freight Yards/Truck Terminals	-
Hazardous Material Storage Facilities	-
Industrial, Minor	P
Industrial, Major	-
Laundry and Dry-Cleaning Plants	-
Printing and Publishing Facilities	P
Recycling Facilities	
Reverse Vending and Collection Boxes	-
Collection Small	-
Collection, Processing, and Transfer	-
Research and Development Facilities	P
Storage	
Personal Storage Facilities	-
Warehouse	P
Wholesaling and Distribution Centers	CUP

4.4 AFFORDABLE HOUSING

Providing affordable housing is a high-priority goal of the City of Santa Clara. As one of the City's first high-density residential neighborhoods, Patrick Henry Drive will add thousands of units to better balance the City's jobs-housing ratio, a share of which will be income-restricted to help meet regional and local affordability goals. In recognition of the conversion of employment uses to residential land, the PHD Specific Plan calls for a higher level of affordability than is required by ordinance.

Santa Clara City Code (SCCC) Chapter 17.40 (Citywide Affordable Housing Requirements) requires affordable housing to assist in meeting the City's share of regional housing needs. Chapter 17.40 requires that all new residential and mixed-use construction integrate affordable units or that the developer pay in-lieu and impact fees into the City's affordable housing fund.



Affordable Residential Units will be Integrated into the PHD Neighborhood

4.4.1 Affordable Housing Policies

Affordable housing requirements for the PHD Specific Plan Area are to provide 15% affordable units split equally between three affordability levels of 50%, 80%, and 120% Area Median Income (AMI). This standard aligns with the City's need to produce affordable units at a variety of income levels, not impair project feasibility, and align with legal requirements.

Should the Citywide affordable housing ordinance be updated after the PHD Specific Plan adoption, subject projects in the PHD Specific Plan Area that are not deemed complete or do not receive Architectural Review approval by a certain date may be required to meet any future new citywide affordable housing requirements.



FIGURE 4.3C: BUILDING HEIGHT

- Study Area
- Existing Parcel (City of Santa Clara)
- Existing Parcel (Study Area)
- 5 - 12 Stories
- 12+ Stories

Conceptual location of a future Library/Community Center

Public parkland only required with residential development



4.5 PARKS, RECREATION AND OPEN SPACE

The PHD Specific Plan Parks, Recreation and Open Space Plan include policies and requirements to create a diverse network of public parks, publicly-accessible green infrastructure, and private recreational spaces that support the physical, social and environmental health of the neighborhood while integrating with the community-wide City public parks and recreation system. This includes providing adequate park spaces of sufficient size, shape, and location within the PHD Specific Plan Area.

The public parks and private open space recreational amenities should allow for both individual and large group recreational activities, sustainable natural habitat, and opportunities for healthy living throughout the PHD Specific Plan Area (see Figure 4.5: Parks and Greenways).

The goal is to provide adequate park and recreational space to meet the needs of thousands of new residents in an urban, high-density environment while preventing the overburdening of existing parks and community facilities throughout the city. The PHD Specific Plan area will include a mix of traditional neighborhood parks, community facilities and recreational amenities while allowing for urban-style parks and plazas. Greenways and smaller specialized and programmed park spaces will support connectivity throughout the area.

The following policies establish the basis for providing parks, open spaces, and greenways in the PHD Specific Plan Area, including dedication requirements. Properties in the PHD Specific Plan Area are subject to City and Specific Plan requirements as described below. Design guidelines for the siting, sizing, design and programming of open spaces are included in Chapter 5: Design Guidelines.

Table 4.5: Required Public Parkland and Private Open Spaces

	Gross Residential Area (Acres)	Net Residential Area (Acres)	Total Parks and Open Space	Dedicated Public Parkland	Private Open Spaces
Scenario A	73.59	62.26	14.46	10.23	4.23
Scenario B	63.72	52.40	12.29	9.15	3.14



FIGURE 4.5: PARKS AND GREENWAYS

- Study Area
- Existing Parcel (City of Santa Clara)
- Existing Parcel (Study Area)
- Open Space
- ↔ Existing Trail/Greenway
- - - Proposed Trail/Greenway
- POPOs (Privately Owned Public Open Spaces only required with residential development) - subject to acceptance by City
- Private Open Space (50% Credit) - subject to SCCCI7.35
- Potential Trail and Landscape Dedication
- ★ Conceptual location of a future Library/Community Center
- ★ POPOs exclude office development
- ★ Public parkland only required with residential development



4.5.1 Parks, Recreation and Open Space Policies

- Require at least 22 percent of total residential developable land to be allocated for public parks or publicly accessible open spaces, including not less than 11 percent of land dedicated to the City in fee title as public parkland.
- Implement Santa Clara City Code 17.35 to provide public parks and indoor community facilities which may be connected by publicly accessible private greenways and open spaces that serve the neighborhood.
- Distribute and site public parks so all residents can easily access a neighborhood park within a five to ten-minute walk.
- Allow public parks to be jointly sited between two or more existing parcels. New public parks will be mapped and dedicated to the City in fee title as new parcels.
- Connect parks and plazas with publicly accessible private greenways to provide safe, comfortable access while supporting connectivity throughout the PHD Specific Plan Area. Plazas and greenways are subject to minimum dimensions and programming.
- Provide connections from public parks to existing and planned trails on the north and west of the PHD Specific Plan Area.
- Site and size public parks and indoor community facilities (e.g., library, gym), to serve a variety of populations and programs throughout the day, from dawn to 10 pm.

4.5.2 Parkland Dedication Ordinance

A minimum of 11 percent of the total developable residential land within the PHD Specific Plan Area is required to be dedicated to the City of Santa Clara for use as public parks. A total of 14.46 acres shall be dedicated under Scenario A or 12.29 acres in Scenario B. The approximate size and location of these parks (shown in Figure 4.5: Parks and Greenways) shall be improved and programmed prior to dedication to the City, except at the discretion of the City. Specific requirements for public parkland size and design are included in Chapter 5: Design Guidelines.

All development within the PHDSP area is subject to the City's Park and Recreational Lands Ordinance requirements. Per the policies established within City Code Section 17.35, each project will have a developed parkland obligation which may be met through a combination of land dedication, and/or payment of in-lieu fees. At the discretion of the City, qualifying dedicated private recreational amenities may be eligible for 50% credit against of the Plan's parkland dedication requirement.

The Director of Parks and Recreation Department shall determine the conditions necessary to comply with the requirements of City Code

Chapter 17.35 (e.g., parkland dedication, private open space, recreational amenities) per the criteria established within the Ordinance. Private open space within the project area may be able to meet part of the Ordinance requirements per the staff evaluation. Related to parkland dedication encumbered by an easement, the land value for such dedication may be reduced due to encumbrance and other items required in City Code. The value of dedicated land is determined through the Ordinance and the Supplemental Instructions adopted by Council on June 7, 2016.

4.5.3 Specific Plan Open Space Requirements

Projects within the Specific Plan area are subject to these requirements:

4.5.3.1 LAND DEDICATION

Consistent with the Specific Plan Land Use Diagram – residential projects are required at a minimum to dedicate land areas identified in the Specific Plan as dedicated parkland as part of their fulfillment of the Park & Recreational Land Dedication Ordinance. This area totals 10.23 acres* (or a reduced amount if the flex parcel is developed as commercial use), or more if the City accepts additional unencumbered public parkland dedicated in fee title adjacent to required parkland dedication.

4.5.3.2 GREENWAYS

Greenways are privately owned, publicly accessible linear open spaces that provide off-road connections for pedestrians, cyclists, scooter riders, and the like while providing additional green space throughout the PHD Specific Plan Area. Projects are required to incorporate publicly accessible greenways into their design consistent with the Land Use Diagram.

4.5.3.3 OPEN SPACE

Residential projects must provide at a minimum the specified amount of open space in addition to the minimum land use dedication. If the High Density Flex designated property is developed at residential, this open space is 4.23 acres, allocated on a proportional basis to each property so that it is provided when that parcel is developed. This requirement applies to both residential and commercial uses. This open space requirement may be satisfied through any of the following:

- Land dedicated specifically as public parkland in excess of 10.23 acres under Scenario A or 9.15 acres under Scenario B and adjacent to the minimum amounts depicted on the land use plan or of sufficient size, shape and acceptable location to be activated as public parkland as determined by City.

- Land designed and designated through easement as a publicly accessible Greenway, plaza, or other accessible open space.
- Private open space designed per criteria established within the Specific Plan. These areas, subject to in the requirements of SCC17.35, may also receive credit if it meets the Ordinance standards. Up to 50 percent of private space is eligible for credit towards the PHD Specific Plan requirements at the discretion of the Parks and Recreation Department.

4.6 MOBILITY, CIRCULATION, AND PARKING

4.6.1 Introduction and Intent

This Mobility Framework ensures the PHD Specific Plan Area will provide balanced, multimodal internal circulation as well as easy access to nearby destinations and transit stations. The framework includes policies that support safe, active and sustainable travel options for residents and visitors. These policies are supported by diagrams and tables that provide specific guidance on meeting City goals and the vision and principles of this Specific Plan.

The following policies establish the basis for circulation, mobility and parking in the PHD Specific Plan area.

- Prioritize the comfort and safety for pedestrians and cyclists.
- Retrofit the right-of-way to accommodate all travel modes including walking, cycling, driving, micro-mobility, and transit.
- Support access to transit stops on Tasman Drive and Great America Parkway.

- Improve infrastructure for pedestrians, cyclists and micro-mobility (e.g., scooters) to mitigate the impact of urban-scale development on traffic congestion.
- Improve connections to the Calabazas Creek Trail and other trails and greenways.
- Design flexible street environments that allow for innovative transit and ride-share options (e.g., jitneys) as well as emerging technology (e.g., autonomous vehicles).
- Use Transportation Demand Management (TDM) strategies in partnership with area employers and property owners to minimize vehicle miles traveled.
- Limit vehicle parking spaces for residences and businesses, and
- Reduce carbon emissions from transportation.

4.6.2 Mobility Plan

The mobility plan (see Figure 4.6.2: Circulation Diagram) is based on Complete Streets principles that ensure safe, comfortable mobility options for people of all ages and create a welcoming street environment. A fine-grained network of streets, roadways, greenways and bicycle paths connect community destinations, break down big blocks, and activate the public realm.

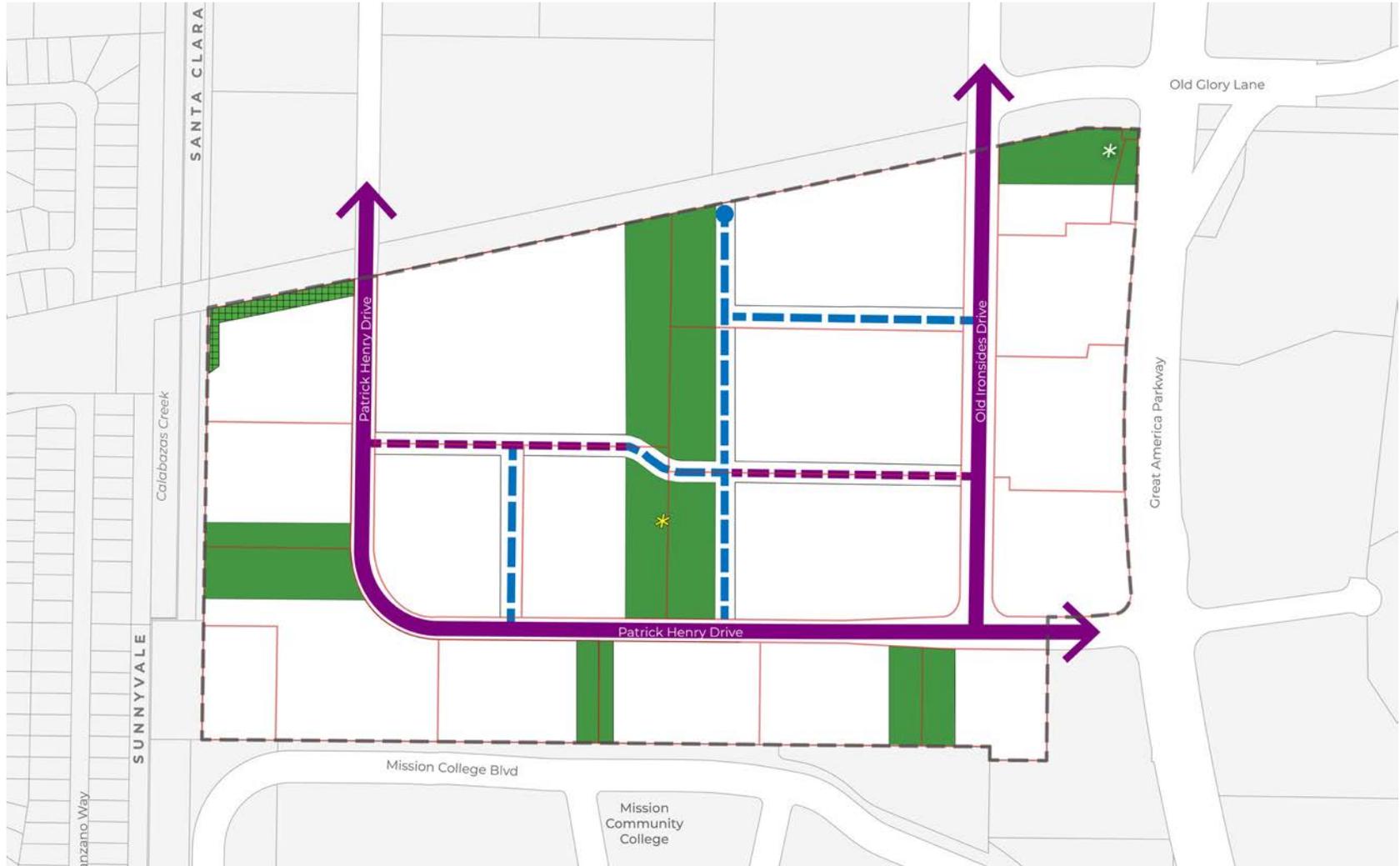


FIGURE 4.6.2: CIRCULATION

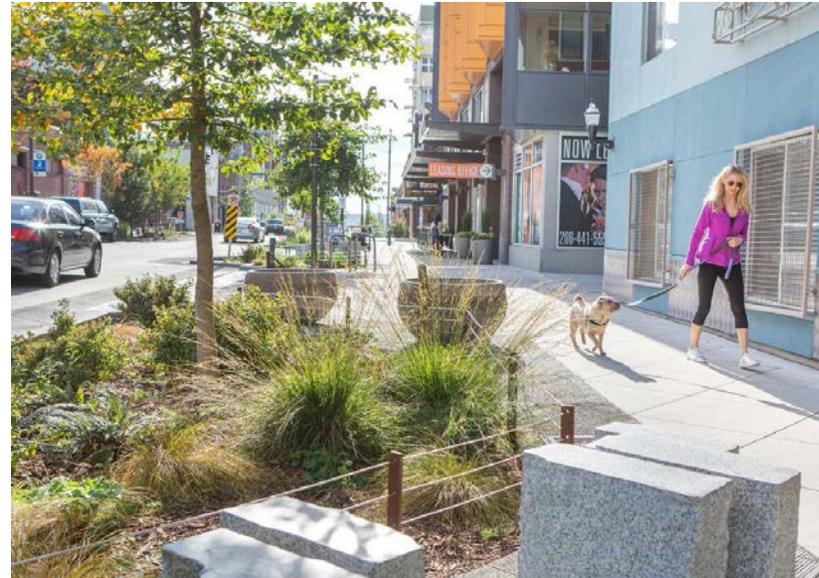
- Study Area
- Existing Parcel (City of Santa Clara)
- Existing Parcel (Study Area)
- Open Space
- Existing Roadway
- Proposed Roadway
- Slow Street
- Potential Trail and Landscape Dedication

Conceptual location of a future Library/Community Center
 Public parkland only required with residential development





Bike Parking Next to Building Entrance



Public Realm Landscaping and Seating



Ground Floor Community Use



Shared Roadway with Parking



FIGURE 4.6.2.1A: STREET TYPES AND EXISTING EASEMENTS

- Study Area
- Existing Parcel (City of Santa Clara)
- Existing Parcel (Study Area)
- Roadways (Public)
- New Roadways (Private)
- Slow Streets (Private)
- PG&E Easements
- Electric Easements
- Sidewalk Easements



4.6.2.1 VEHICULAR NETWORK

There are four types of streets in the PHD Specific Plan Area, and each is designed to accommodate vehicular traffic balanced with other modes (see Figure 4.6.2.1A: Street Types and Existing Easements). Specific standards and designs for each street type are included in Chapter 5.

Patrick Henry Drive and Old Ironsides Drive are collector streets that provide primary access into and through the PHD Specific Plan area. They are designed to accommodate the highest level of vehicle traffic in the PHD Specific Plan Area as well as generous space for bicycle lanes, sidewalks, and streetscape amenities. Transit stops, signalized intersections, on-street parking, and drop-off/pick-up zones are also accommodated in strategic locations on Patrick Henry Drive and Old Ironsides Drive.

New Roadways function as local streets and improve east-west connectivity in the plan area as well as access to residences and the central linear park. New Roadways will contribute significantly to the pedestrian- and bicycle-friendly character of the street environment by providing tree-shaded, traffic-calmed travel ways. The New Roadway design is flexible and will vary based on several factors, including the unique needs of uses fronting the street, smooth traffic regulation, and the amount of through and destination traffic.

The PHD Specific Plan process included analyses of potential roadway connections from Patrick Henry Drive to Mission College Boulevard. In December 2021, the the Mission College Board of Trustees voted to not approve of the proposed connector road from the Patrick Henry Drive plan area.

Slow Streets are low-traffic-volume roadways designed to calm vehicle traffic and prioritize pedestrians, cyclists, and people using mobility devices and contribute to the neighborhood. The street design encourages abundant street trees, allows a variety of uses and flexible spaces that can be used as spaces for kiosks, outdoor seating, gatherings, and public art.

A series of traffic signals and stop signs (see Figure 4.6.2.1B: Vehicular Network) ensures the orderly and efficient movement of automobiles while controlling speeds and providing safe conditions for pedestrians and cyclists crossing the street. As shown in Figure 4.6.2.1B, intersection traffic signals are planned at all major intersections and stop signs at minor intersections throughout the PHD Specific Plan Area. Selected intersections are identified for beacons, such as rectangular rapid flashing beacons (RRFB) to support safe pedestrian crossing.



FIGURE 4.6.2.1B: VEHICULAR NETWORK



4.6.2.2 PEDESTRIAN AND BICYCLE NETWORK

The pedestrian and bicycle network within the PHD Specific Plan Area includes a system of sidewalks and bike lanes in the right-of-way and roadways complemented by off-street trails, greenways and alleys throughout the neighborhood (see Figure 4.6.2.2: Pedestrian and Bicycle Network)

These facilities also accommodate mobility and micro-mobility devices consistent with City and other safety standards and practices.

The 2018 Bicycle Master Plan establishes a strong network of safe bicycle lanes to accommodate riders of all ages and abilities. Each street in the PHD Specific Plan Area includes either a separated bikeway (Class IV) or Bicycle Route (Class III), as shown in Figure 4.6.2.2. Bicycle facilities will connect to infrastructure in adjacent neighborhoods and provide improved connections to area destinations including transit stations on Tasman Drive and the local and regional trail network. Specific standards and guidelines for bicycle facilities and sidewalks are included in Chapter 5.

A system of greenways within the PHD Specific Plan area provides additional connections to support a human-scaled environment and easy safe circulation for pedestrians, cyclists and mobility device users. Greenways will connect to residences, parks, activity nodes, the Calabazas Creek trail and other greenways. These spaces also enhance the environment between buildings to support a human-scaled ground-floor experience. Specific standards and guidelines for greenways are included in Chapter 5.

4.6.2.3 TRANSIT NETWORK

VTA's New Transit Service Plan (2019) does not call for transit service within the PHD Specific Plan Area. However, this Specific Plan plans for potential ride-share and transit within the PHD Specific Plan Area to allow for shuttle or other microtransit services provided by VTA, a Transportation Management Agency (TMA), or private provider. Figure 4.6.2.1B shows the preferred locations for these transit stops on Patrick Henry Drive and Old Ironsides Drive.

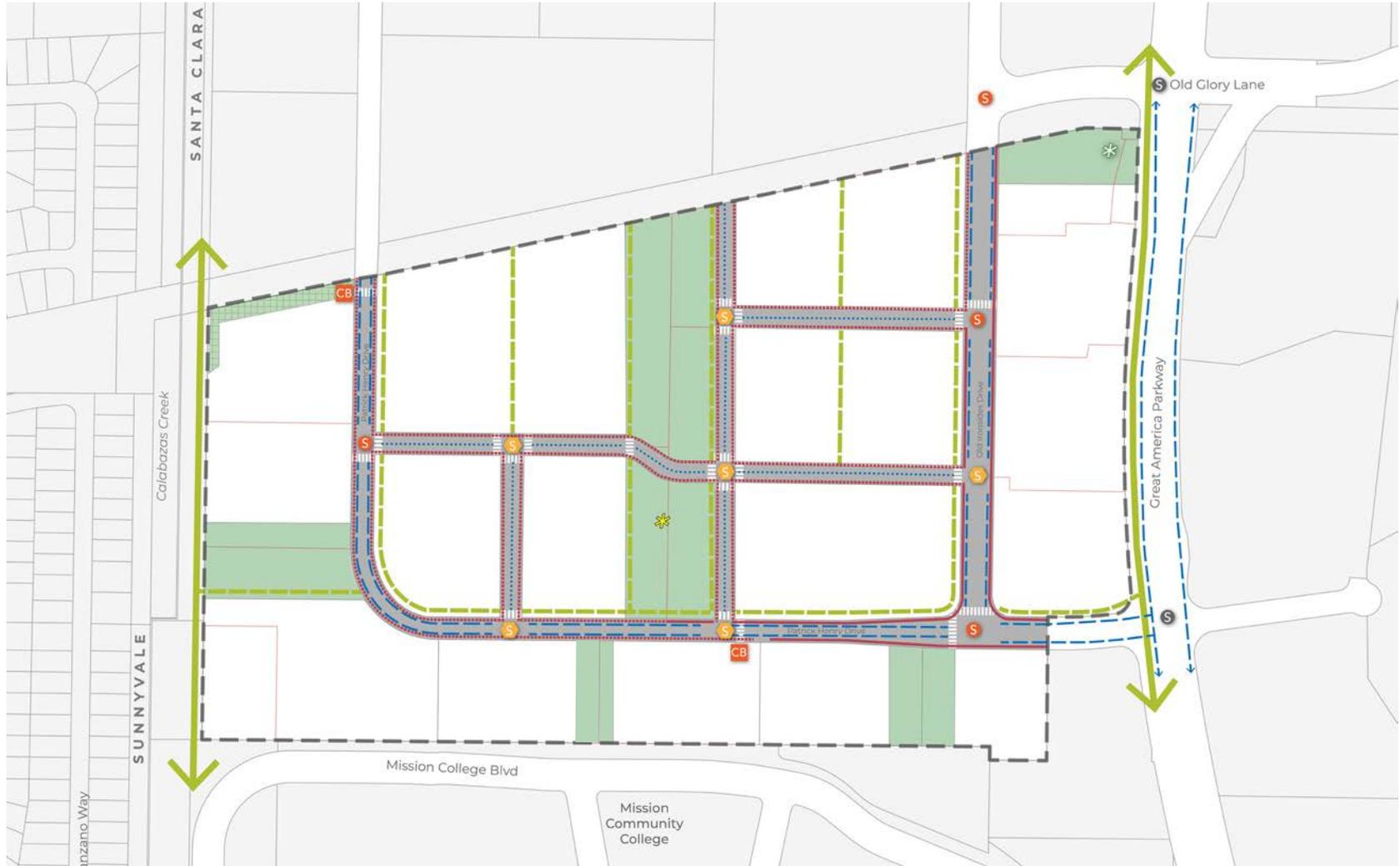


FIGURE 4.6.2.2: PEDESTRIAN AND BICYCLE NETWORK

Study Area	Improved Sidewalk	Proposed Crosswalks	Existing Signalized Intersection	Potential Trail and Landscape Dedication
Existing Parcel (City of Santa Clara)	Proposed Sidewalk	Class IV Separated Bikeway	Proposed Signalized Intersection	Conceptual location of a future Library/Community Center
Existing Parcel (Study Area)	Existing Greenways	Class III Bicycle Route	Proposed Stop Sign Intersection	
Open Space	Proposed Greenways		Proposed Crosswalk Beacon	



4.6.3 Parking Network

Limiting vehicle parking in the PHD Specific Plan Area is critical to supporting goals for land use, mobility and the public realm. The standards in this plan are intended to meet market demand for private parking without adversely affecting building or neighborhood design.

4.6.3.1 PARKING RATIOS AND RESTRICTIONS

- Parking spaces must be provided as per the minimums set forth in Table 4.6.3.1. For any other uses not listed, private off-street parking shall be provided consistent with the parking standards in the Santa Clara Zoning Ordinance.
- Parking is not allowed as a stand-alone use. All parking must be structured and/or underground and included as an accessory use for residential, mixed-use or office development.

Table 4.6.3.1: Parking Ratios and Requirements

Use	For Residents / Employees	For Visitors / Customers
Residential	Minimum 1 space per unit for units greater than 550 SF Minimum 0.5 spaces per unit for units less than 550 SF	Minimum 0.05 spaces per unit
Retail / Flex	None required	Minimum 1 space per 1,000 SF
Office	Minimum one space for each 500 SF of gross floor area	Minimum 1 space per 3,000 SF
Community/Civic	None required	None required

- Surface parking is only allowed as a temporary or interim use.
- Shared parking is encouraged.
- Mechanical parking stackers/lifts and tandem parking may be used to satisfy minimum requirements.
- Parking for public parks should be shared with residential visitors and retail parking. Any on and off-street parking adjacent to the park should enhance accessibility to public uses.

4.6.3.2 CAR SHARING

Car sharing programs provide on-demand access to a shared fleet of vehicles on an as-needed basis and have been shown to reduce automobile ownership and vehicle miles traveled (VMT).

Developers/property owners are encouraged to provide car share spaces at a rate of at least one space per 400 residential units, with no more than two spaces per development. Cars should be available and accessible to the general public with dedicated car share vehicles near the building and/or parking structure entrance.

4.6.3.3 ELECTRIC VEHICLE (EV) PARKING

EV parking shall be provided, consistent with any adapted Reach Codes, to meet growing EV usage. On lower parking floors, a large empty conduit should be run to locations where future electrical breaker panels could be located; or exposed conduit could be installed for future charging locations. The actual installation of electrical wiring, chargers, and billing methods could be carried out by an independent operator where the energy used for vehicle charging is paid for by the user.

4.6.3.4 BICYCLE PARKING

Convenient and secure bicycle parking encourages bicycle ridership by offering riders the same level of access and security as motorists. On-site bicycle parking shall be provided to include bike lockers, bike cages, or indoor long-term bicycle parking for residents and on-site employees, plus convenient short-term racks for visitors. Bike storage facilities shall include one electrical outlet per 10 bicycle parking spots and one bicycle repair station in each project.

Santa Clara's ordinance includes two types of bicycle parking:

- Class One spaces are spaces in secure, weather-protected facilities intended for use as long-term, overnight, and workday bicycle storage. Class One bicycle parking includes bicycle lockers, bicycle rooms or cages where each bicycle can be locked.
- Class Two racks accommodate two bicycles and are located in a publicly accessible, highly visible locations intended for short-term use by visitors, guests, and customers.

Short-term and long-term bicycle parking spaces should be provided in prominent and convenient locations in all buildings. Bicycle parking spaces shall be provided as follows:

- Residential developments: One Class One bicycle parking space per unit and one Class Two racks per 15 units.
- Mixed-use developments: One Class One space per 30 employees and one Class Two rack for every 1,000 square feet of retail, flex or community use.
- Office developments: One space per 6,000 square feet with 75 percent as Class One and 25 percent as Class Two racks.

4.6.4 Transportation Demand Management

Transportation Demand Management (TDM) involves a suite of policies, programs and projects that reduce vehicle trips, parking demand and VMT. These measures provide incentives and opportunities to choose alternative modes such as walking, bicycling, transit, or ridesharing and apply to residential and employment uses.

The implementation of TDM measures in the Plan Area should be consistent with the requirements outlined in the City of Santa Clara's adopted Climate Action Plan and General Plan. The PHD Specific Plan Area is in the City's Transportation Management District 1 (North of Caltrain) and is required to achieve a minimum VMT reduction of 20 percent, including 10 percent through TDM measures. In the 2013 Climate Action Plan in addition to the land use, mobility and parking requirements of this Specific Plan, new development will be required to implement a TDM program to reduce drive-alone trips.

4.7 SUSTAINABILITY

The City of Santa Clara established environmental sustainability as one of its five major strategies in the Santa Clara General Plan. The City adopted its first Climate Action Plan (CAP) in 2013 and began an update in 2020 to assess greenhouse gas emissions (GHG) levels and incorporate new statewide requirements. One of the CAP's primary goals is to establish land uses and transportation options that minimize single-occupant vehicle use.

The PHD Specific Plan will guide the redevelopment of this low-intensity, auto-oriented area into a high-density, mixed-use environment. By providing housing units near employment centers, designing smaller blocks, creating robust pedestrian and bicycle infrastructure, and facilitating access to transit, the PHD Specific Plan will help realize this citywide goal while advancing multiple sustainability objectives. The mixed-use environment will ensure neighborhood services and amenities are within easy reach of residents, minimizing the need for vehicle trips for day-to-day needs.

The CALGreen code establishes statewide standards for sustainable building practices. As of late 2021, the City is in the process of adopting Reach Codes that exceed state requirements and support the major sustainability strategies. All development within the PHD Specific Plan Area will be required to comply with the most recent adopted CALGreen code and the following sustainability policies. Individual projects are expected to consider additional measures to advance sustainability through building and site design, recycled water use, and Transportation Demand Management (TDM). Additional detail on site and building measures are included in Chapter 5: Design Guidelines and TDM is discussed in Chapter 7: Implementation.



5

Design Guidelines



This chapter identifies standards and guidelines to ensure that all future development is consistent with the vision, principles, and policies outlined for the PHD Specific Plan Area. The standards establish minimum requirements, and the guidelines provide direction, while also allowing for flexibility.

The chapter is divided into the following sections:

- Travel Ways
- Pedestrian Amenities
- Street Design
- Parks, Recreation and Open Spaces
- Site Layout and Design
- Building Design

5.1 TRAVEL WAYS

Overarching multimodal transportation goals for the PHD Specific Plan Area include the following.

- Create a system of safe, interconnected travel ways for all modes.
- Promote walking and biking.
- Facilitate resident and employee access to and from the PHD Specific Plan Area via transit.
- Promote slow vehicle speeds in residential neighborhoods.
- Improve connections to destinations within and near the PHD Specific Plan Area.
- Provide universal access for all ages and abilities.
- Facilitate provision of emergency services.
- Accommodate emerging transportation and micro-mobility modes.
- Prioritize use of curb space for multi-function and high turnover purposes.

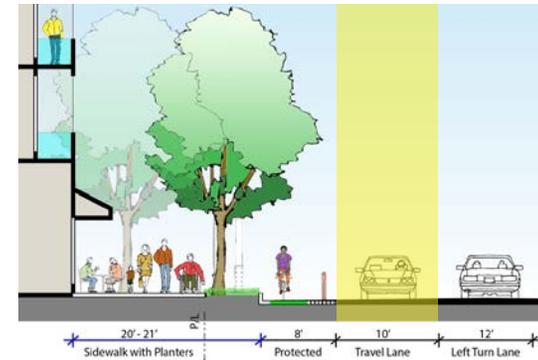
Standards and guidelines to implement these broader goals are organized into topic areas related to vehicle travel ways, on-street parking, bicycle lanes, transit facilities, and intersections. More specific guidance by street and street type (with street sections and plans) is provided in the “Street Design” section of this chapter.

5.1.1 Vehicle Travel Ways

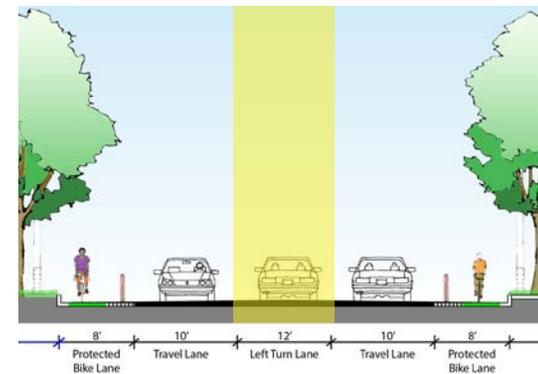
Intent: Create and maintain complete streets that promote safe conditions and comfortable access and travel for users of all ages and abilities by managing vehicle traffic speeds, promoting walkability, incorporating bicycle facilities, and integrating bus or shuttle transit.

Standards

-
- 5.1.1.1 Provide 10-foot-wide travel lanes on all roadways within the plan area.
-
- 5.1.1.2 Provide 12-foot-wide left-turn pockets/center turn lanes on Patrick Henry Drive and Old Ironsides Drive. For any additional left turn pockets allow a minimum of 10-foot-wide turn lanes.
-
- 5.1.1.3 In the event VTA re-establishes bus routes on internal roadways, left-turn pockets/center turn lanes can reduce to a minimum of 10-foot and travel lanes can become 11 feet so that the lane can be shared by standard vehicles, buses, and/or shuttles.



5.1.1.1 - 10-foot-wide Travel Lanes



5.1.1.2 - 12-foot-wide Center Turn Lanes

Guidelines

5.1.1.4 Where enough space exists in the right-of-way, allocate space to center turn lanes and narrow vehicle lanes to create sufficient space for U-turns, discourage speeding, and calm traffic.

5.1.1.5 Employ traffic-calming techniques to slow vehicle traffic on shared streets and increase pedestrian and cyclist safety. Options may include:

- Patterned pavement (see Figure 5.1.1.5A);
- Mid-block crosswalks (see Figure 5.1.1.5B);
- Speed bumps with mid-block crosswalks;
- Bollards;
- Rumble strips (see Figure 5.1.1.5C);
- and
- Gateway elements.



5.1.1.5A- Patterned Pavement



5.1.1.5B - Mid-block Crosswalk on Slow Street



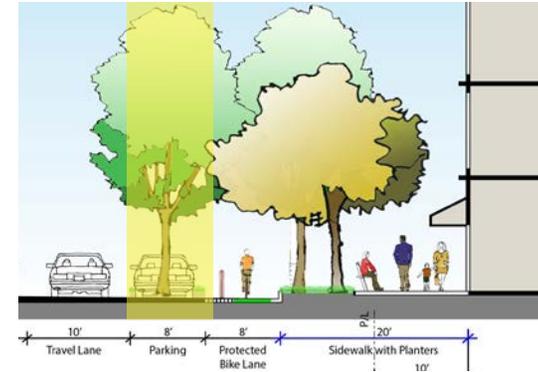
5.1.1.5C - Rumble Strip Along Travel Lanes

5.1.2 On-Street Parking

Intent: Create on-street parking lanes in designated areas to serve residents and businesses and to provide additional protection from vehicular traffic for cyclists.

Standards

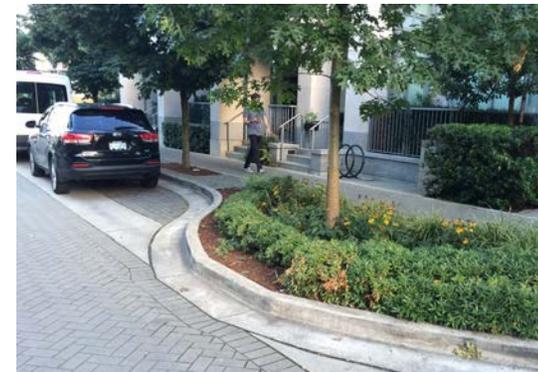
- 5.1.2.1 Provide eight-foot-wide on-street parallel parking lanes on Old Ironsides Drive and New Roadways. Allow eight-foot-wide occasional drop-off/delivery locations on Patrick Henry Drive.
- 5.1.2.2 Provide stormwater planters in between parking spaces in mid-blocks.



5.1.2.1 - Eight-foot-wide On-street Parking



5.1.2.2A - Stormwater Planters in Between Parking Spaces



5.1.2.2B - Permeable Pavers for Stormwater Management

Guidelines

-
- 5.1.2.3 Allow parking spaces to be used for parklets and flexible uses, including seating, dining, habitat or interpretive areas, public art, etc.
- Allow parklets at least 25 feet in length to create outdoor seating spaces. Design and maintain parklets as a partnership between the City and local businesses, residents, or neighborhood associations; and
 - During special event days and underutilized periods, re-purpose parking spaces as temporary open spaces.
-
- 5.1.2.4 Consider installation of permeable interlocking concrete pavers for parking spaces for stormwater management and traffic calming.
-
- 5.1.2.5 Where possible, allow excess roadway between parking and travel lanes to be re-purposed as parking assist areas to allow doors to be opened and for vehicles to enter and exit spaces.



5.1.2.3A - Parklets



5.1.2.3B - Parklets with Outdoor Dining



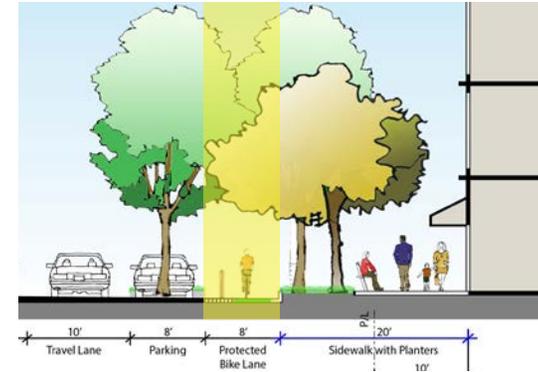
5.1.2.4 - Permeable Pavers

5.1.3 Bicycle Facilities

Intent: Create bicycle facilities that maximize safety, minimize the potential for conflict, and are comfortable to use for people of all ages and abilities. Bicycle facility width standards shall be based on available right-of-way and best practices.

Standards

-
- 5.1.3.1 Design bicycle facilities per Caltrans and NACTO Standards.
-
- 5.1.3.2 Include Class IV separated bikeways on Patrick Henry Drive and Old Ironsides Drive to be consistent with the Bicycle Master Plan.
-
- 5.1.3.3 Design Class IV separated bikeway with the following considerations:
- Provide bicycle lane facilities along the curb to the right of traffic flow;
 - On Old Ironsides Drive and Patrick Henry Drive, design Class IV separated bikeway to be five feet wide with a three-foot-wide buffer with bollards;
 - Provide three-foot-wide buffers next to parallel parking to allow cyclists to ride outside the door zone;
 - Install bollards every eight feet (measured center-to-center) at the outer edge of the three-foot striped buffer space to maximize flat space for bicycles



5.1.3.2 - Class IV Separated Bikeway



5.1.3.3A - Class IV Separated Bikeway with Planters



5.1.3.3B - Colored Pavement in Class IV Separated Bikeway

- Use colored pavement in areas where conflict is more likely, including intersections and transition zones.

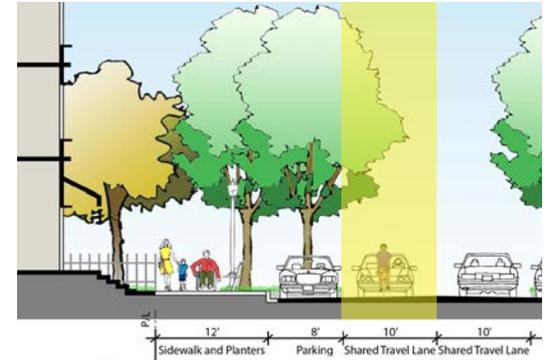
5.1.3.4 Allow gutter pans as part of bicycle lane design.

5.1.3.5 Require New Roadways and Slow Streets to be shared streets with marked, shared Class III bicycle boulevards as per MUTCD standards.

Guidelines

5.1.3.6 Explore installation of permeable interlocking concrete pavers for bike lanes at roadway level.

5.1.3.7 Explore placing bicycle lanes at sidewalk level.



5.1.3.5 - Class III Bicycle Boulevards



5.1.3.6 - Permeable Pavers in Bike Lanes



5.1.3.7 - Elevated Bike Lanes

5.1.4 Transit Facilities

Intent: Provide facilities that promote transit and shuttle ridership, enhance passenger comfort and safety and supports compact, intensified development.

Standards

-
- 5.1.4.1 Provide 11-foot roadways if needed to accommodate any future VTA service.

Guidelines

-
- 5.1.4.2 Relocate all near-side shuttle/bus stops to the far side of intersections to improve safety for pedestrians and efficiency of travel. Where bicycle lanes overlap with bus zones, demarcate green stripe for the bicycle to show a mixing zone to allow for the travel lane to be shared between bicycle and bus. (See Figure 5.1.4.2 – Far Side Bus Stop).
-
- 5.1.4.3 Along VTA routes, work with VTA to install transit amenities like shelters, seating, trash cans, real-time bus information system at transit stops.
-
- 5.1.4.4 Install bus stops in accordance with VTA guidelines.



5.1.4.2 - Far Side Bus Stop

5.1.5 Intersections

Intent: Create compact intersections and smaller turning radii that increase pedestrian safety by shortening crossing distances, increasing pedestrian visibility, and decreasing vehicle turning speed.

Standards

-
- 5.1.5.1 Program pedestrian signals to allow enough time for all pedestrians to cross the street. Pedestrian signal timing should be consistent with the California MUTCD.

Guidelines

-
- 5.1.5.2 Avoid free-flowing traffic movement, including right turns, and pedestrian movements at intersections to increase safety for all.
-
- 5.1.5.3 Design corner bulbouts at intersections to function as pocket plazas with pedestrian amenities, such as landscaping, art, seating, trash receptacles, and bicycle racks.
-
- 5.1.5.4 Allow curb extensions (bulbouts) to extend the pedestrian zone into the parking lane to narrow the roadway and provide additional pedestrian space at key locations.
-
- 5.1.5.5 Safety lighting should be provided at one intersection corner. It is preferred to provide a safety light for each crosswalk at an intersection corner.



5.1.5.2 - Safer Pedestrian Crosswalk



5.1.5.4 - Bulbouts at Intersection



Brooklyn Ave

5.2 PEDESTRIAN AMENITIES

The following overarching goals will help create a safe, comfortable pedestrian environment throughout the PHD Specific Plan Area.

- **Create easily navigable crosswalks.**
- **Establish well-maintained landscaping and stormwater management features.**
- **Provide pedestrian amenities.**
- **Incorporate gateway and wayfinding elements.**

Standards and guidelines to implement these broader goals are organized into topic areas related to pedestrian zone, crosswalks, amenity zones that include landscaping, street furniture, and gateway signage and wayfinding, and public-private interface. More specific guidance by street and street type (with street sections and plans) is provided in the “Street Design” section of this chapter.



Pedestrian Amenities



Planter Wells Between Sidewalk and Roadways



Safer Crosswalks

5.2.1 Pedestrian Zone

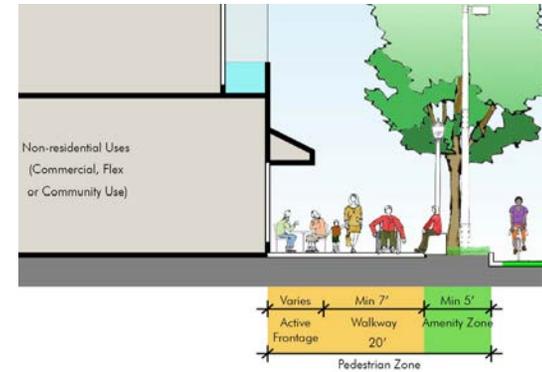
Intent: Design infrastructure and pedestrian amenities to activate the public realm and augment safety for pedestrians of all ages and abilities. Safety improvements include creating a pedestrian zone that are continuous, wide, and canopied with trees; painted crosswalks with directional ramps and reduced distances; and curb bulbouts.

Standards

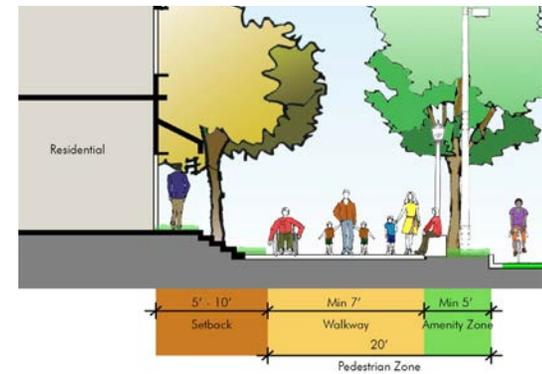
- 5.2.1.1 Have clear, contiguous, and unobstructed seven-foot ADA accessible walkways on both sides of the streets except in areas constrained by above-grade utility structures where a five-foot-wide walkway are acceptable.
- 5.2.1.2 Create 20-foot-wide continuous pedestrian zone on Patrick Henry Drive and Old Ironsides Drive, inclusive of the walkway, amenity zone and activity frontage.
- 5.2.1.3 Ensure that all other streets in the PHD Specific Plan Area to have continuous pedestrian zone with a width of at least 10 feet.



5.2.1.1 - Clear Walkways for Pedestrians



5.2.1.A - Mixed-use Pedestrian Zone



5.2.1.B - Residential Pedestrian Zone

-
- 5.2.1.4 Design the amenity zone along the edge of the curb to include planters and street furniture. Ensure walkways are clear of obstruction and meets ADA standards.
-
- 5.2.1.5 Provide streetscape elements, such as seating, trash receptacles, bicycle parking, streetlights, pedestrian lights, traffic signals, street signage, street trees, and planting areas in the amenity zone located on the curbside areas adjacent to the roadway.
-
- 5.2.1.6 Where necessary to accommodate ADA-accessible sidewalks, streetscapes, and amenities in constrained rights-of-way, create an easement in the private realm between the sidewalk and building edge to accommodate street trees, furniture, and utilities.
-

Guidelines

-
- 5.2.1.7 Design pedestrian zone adjacent to ground-floor retail, flex space, and community space to be used as an active place of commerce, outdoor dining, informal food kiosks, etc., especially on streets with generous sidewalks and adjacent land uses that contribute to active street life.
-
- 5.2.1.8 Minimize the use of curb cuts and driveways along pedestrian zones to reduce the impact on pedestrian movement and to improve the overall quality of the pedestrian environment. Driveways should have a spacing of at least 150 feet where feasible.
-
- 5.2.1.9 Explore use of permeable interlocking concrete pavers for non-vehicular pavement.
-



5.2.1.5 - Streetscape Amenities Along Curbside



5.2.1.6 - Easements to Accomodate Street Furniture



5.2.1.9 - Permeable Pavers in Sidewalks

5.2.2 Crosswalks

Intent: Provide clearly marked crossings that help pedestrians move safely, conveniently, and predictably across roadways. When treated with decorative paving material, crosswalks also create a unique streetscape design that emphasizes a pedestrian's presence and unifies design treatments throughout the district.

By law, crosswalks are required at all approximately right-angle intersections unless the pedestrian crossing is specifically prohibited.

Standards

-
- 5.2.2.1 Provide clearly marked crosswalks at any signalized intersections and at intersections of key streets.
- Install continental crosswalks (high-visibility roadway markings using thick vertical striping) at uncontrolled intersections to improve pedestrian safety;
 - Crosswalks must be at least 12 feet wide (10 feet clear between stripes); and
 - In locations with high pedestrian demand or existing narrow crosswalks, allow crosswalks to be wider.
-

5.2.2.2 Ensure all crosswalks have directional ramps that meet ADA standards:

5.2.2.3 Ensure crosswalks are designed to establish clear sight lines for pedestrians and vehicles approaching the crosswalk.

5.2.2.4 Prevent landscaping from encroaching on the crosswalk access path.



5.2.2.1 - Three-foot Deep Detectable Warning Surface



5.2.2.2 - Directional Ramps with ADA Access

Guidelines

5.2.2.5 Explore using special crosswalk paving material such as permeable interlocking concrete pavers at key intersections to heighten visibility and support a distinct identity for the area.

5.2.2.6 Enhance crosswalks with additional signage and pavement markings to improve safety for pedestrians and vehicles.



5.2.2.5 - Permeable Pavers in Crosswalks

5.2.3 Landscaping

Intent: Use street trees and landscaping along corridors to beautify the streetscape, act as a buffer between vehicular traffic and pedestrians and cyclists and provide the environmental benefits of heat island reduction and carbon sequestration. Create and maintain a streetscape system that captures stormwater runoff, filters pollutants, replenishes groundwater supplies, and supports the City's environmental goals.

Standards

-
- 5.2.3.1 Locate minimum 60-inch-wide planter areas within the amenity zone to provide a safety buffer for pedestrians. Where right-of-way is constrained, allow tree grates.
-
- 5.2.3.2 Maintain at least a 12-foot vertical canopy clearance from the sidewalk elevation to the tree understory. Provide clear emergency and service access that does not block light from pedestrian-scale streetlights.
-
- 5.2.3.3 Plant trees 20 to 40 feet apart to maintain consistent shade for pedestrian and cyclists.
-
- 5.2.3.4 Require that property owners of new development projects be responsible for maintaining landscaping and new street trees within public parkways.



5.2.3.1 - Planters Along the Edge of Curb

5.2.3.5 Locate all trees consistent with required utility offsets.

5.2.3.6 Any landscaping within 10 feet of a driveway or within a visibility sight triangle must be less than 3 feet or greater than 10 feet in height.

5.2.3.7 Ensure trees and landscaping do not obstruct the visibility of any pedestrian signage or transit facilities.

5.2.3.8 Maximize opportunities for installation of stormwater planters in pedestrian zone and in between on-street parking spaces in accordance with the City's Green Stormwater Infrastructure Plan (GSI Plan) standards.

- Install stormwater tree well filter system consisting of an excavated pit or vault that can be filled with bio-retention soil media, planted with a tree and underlain with drain rock and an underdrain pipe in the amenity zones next to the edge of the curb.
- Incorporate bio-retention areas that consist of a ponding area, mulch layer, plants, and a special bioretention soil media, underlain by drain rock and an underdrain, if required in between parking spaces.
- Incorporate stormwater bio-retention system in the curb extension or bulbouts that extends into the roadway. Potential locations are intersection bulbout, mid-block and in-between on-street parking spaces.



5.2.3.8A - Stormwater Planters in Pedestrian Zone



5.2.3.8B - Stormwater Planters in Bulbout



5.2.3.8C - Stormwater Planters in Parking Bulbout

Guidelines

5.2.3.9 Where the parkway planting strip is constrained to five feet or less, explore the use of structural soil in planting strips and under sidewalks in lieu of standard aggregate base. Where used, such structural soil should be at least three feet deep and eight feet long.

5.2.3.10 Select tree species that are climate appropriate; emphasize shade; reduce heat gain, light and glare impacts; and minimize future maintenance.

5.2.3.11 Consider locating street trees within bulbouts in parking lanes where pedestrian zones are narrow, or to create a double row of trees at key locations. Ensure trees do not obstruct clear sight lines for vehicular movement.

5.2.3.12 Consider installation of porous pavement into a gravel-filled storage area prior to infiltrating into underlying soils. This can include permeable interlocking concrete pavers. These pavers can be installed in sidewalks, crosswalks, plazas, on-street parking surfaces, driveways, and Class IV separated bikeways.



5.2.3.9 - Use of Structural Soil Underneath Sidewalk



5.2.3.10 - Tree Canopy

5.2.4 Street Furniture

Intent: Provide amenities and features that encourage pedestrians to stop, gather, and enjoy the street and that provide a comfortable environment for non-motorized travel. Street furniture elements include benches and seating, bollards, flower stands, kiosks, public art, signs, refuse/recycling bins, and similar features.

Standards

5.2.4.1 Ensure street furniture does not obstruct the five-foot clear walkways and is placed inside the amenity zone.

5.2.4.2 Site street furniture:

- At least two feet from any driveway or wheelchair ramp and five feet from the ramp landings;
- Eighteen inches minimum from the curb;
- Five feet minimum from any fire hydrant and at least two feet from a standpipe; and
- At least eight feet from any transit loading and unloading areas.



5.2.4.1 - Street Amenities Clear of the Walkways

5.2.4.3 Street lighting, including roadway and pedestrian lighting in the public right-of-way, will be installed per the following SVP standards. Any deviation or additional lighting shall be handled by special facility agreement with developer(s) for a lighting district where the developer owns and maintains the lighting within the public right of way with the approval of SVP.

- SVP street lighting standard is a 30-foot pole with an 8-foot mast arm with LED fixture.
- Ensure street lighting does not impede access to buses or shuttles at transit stops.

5.2.4.4 Provide refuse and recycling receptacles at regular intervals to help keep the streets and pedestrian zone clean and free from litter. As a preference, select receptacles that include separate but adjacent bins for refuse and recyclables, with the separate purposes clearly identified. Receptacles should be sited according to the following guidelines:

- Provide a maximum of one receptacle every 200 feet along streets. Additional receptacles should be provided only if a private sponsor provides continued maintenance;
- Provide one receptacle at each corner of intersections; and
- Locate receptacles clear of the ADA accessible path of travel.



5.2.4.3 - Pedestrian-oriented Lighting



5.2.4.4 - Trash Receptacles

5.2.4.5 Provide bicycle parking and locker facilities on development sites consistent with VTA Bicycle Technical Guidelines and CALGreen requirements:

- Ensure parking and locker facilities are at the main entrance or highly visible areas
- Ensure at least three feet of clearance between bicycles parked at racks and any other street furniture;
- Where pedestrian zones are wide enough, design bicycle racks that allow parked bicycles to be perpendicular to the curb and not projecting into pedestrian pathways. Where this space is not available, bicycle racks should be positioned parallel to the curb;
- Bicycle racks may be placed at either edge of a tree basin but must be a minimum of two feet from the edge to allow a person to easily pull the bicycle in and out; and
- Ensure racks offer a minimum of two points of support for bicycles.

Guidelines

5.2.4.6 Provide a variety of seating in different locations and arrangements to enhance pedestrian comfort and facilitate leisurely activity:

- Consider a variety of seating, including benches, seat walls, and elements integrated into other furnishings, such as planters;
- Prioritize seating in mixed-use commercial areas, at or near transit stops, adjacent to active spaces, and at a key node; and
- Consider moveable seating that allows for flexibility and increased comfort along New Roadways, and Slow Streets.



5.2.4.5A- Bicycle Parking on Sidewalks



5.2.4.5B - Bicycle Parking Clear of ADA Sidewalks

5.2.5 Gateway Signage and Wayfinding

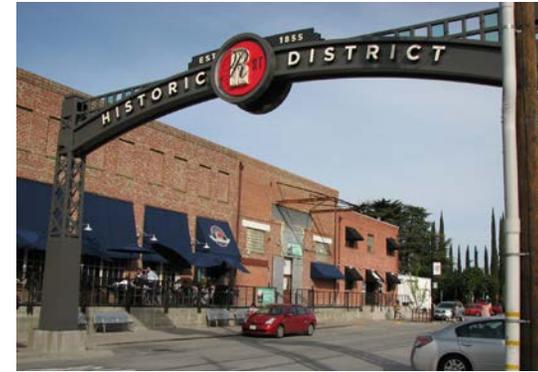
Intent: Use signage that helps street users navigate the public realm in ways that reinforces each segment's unique character, emphasizes key locations or destinations, and promotes neighborhood identity.

Standards

- 5.2.5.1 Install signage and amenities at gateway intersections and at or near the entrance to multi-use trails, such as the Calabazas Creek Trail, Hetch Hetchy, Patrick Henry Drive, and Old Ironsides Drive to provide a sense of arrival for automobiles, pedestrians, and cyclists. Provide for these features to be elegantly designed and contributory to the character of the area.
- 5.2.5.2 Employ public signage for vehicular, pedestrian, and cyclist wayfinding to transit facilities and nearby destinations.

Guidelines

- 5.2.5.3 Create well-defined gateways using distinctive signage, plant selection and placement, and public art.
- 5.2.5.4 Coordinate colors, shapes, and graphics of signage with the signage system of the City of Santa Clara.



5.2.5.1 - Gateway Signage



5.2.5.2 - Wayfinding



5.2.5.3 - Public Art

5.2.6 Public-Private Interface

Intent: Use creative design approaches that integrate the public and private realms in a manner that emphasizes pedestrian accommodation and creates a recognizable, defined district.

Standards

-
- 5.2.6.1 Require the planting of trees within the private realm where the right-of-way is too constrained to accommodate street trees in the amenity zone.
-
- 5.2.6.2 Restrict fences along the residential units to no higher than three feet so that they do not create a barrier between the public and private realms.
-
- 5.2.6.3 Planting trees and landscaping within the front setbacks of residential uses to provide additional shade and amenities to pedestrians.

Guidelines

-
- 5.2.6.4 Establish easements for sidewalks and bus stops where the right-of-way is constrained.
-
- 5.2.6.5 Use residential setbacks fronting streets to encourage the design of raised porches and entrances to keep “eyes on the street.”



5.2.6.1 - Porches Help Provide Privacy and Security



5.2.6.2 - Restrict Fences to Three-foot High



5.3 STREET DESIGN

Overarching multimodal transportation and street design goals for the PHD Specific Plan Area include the following.

- **Facilitate resident and employee access to and from the PHD Specific Plan Area via transit.**
- **Create a system of safe, interconnected travel ways for all modes.**
- **Promote walking and biking.**
- **Facilitate slow vehicle speeds in residential neighborhoods for safety.**
- **Improve connections to destinations within and near the PHD Specific Plan Area.**
- **Ensure universal access for all ages and abilities.**
- **Facilitate provision of emergency services.**
- **Provide on-street parking for businesses and residents.**
- **Improve transit service and facilities.**
- **Accommodate emerging and evolving transportation modes.**

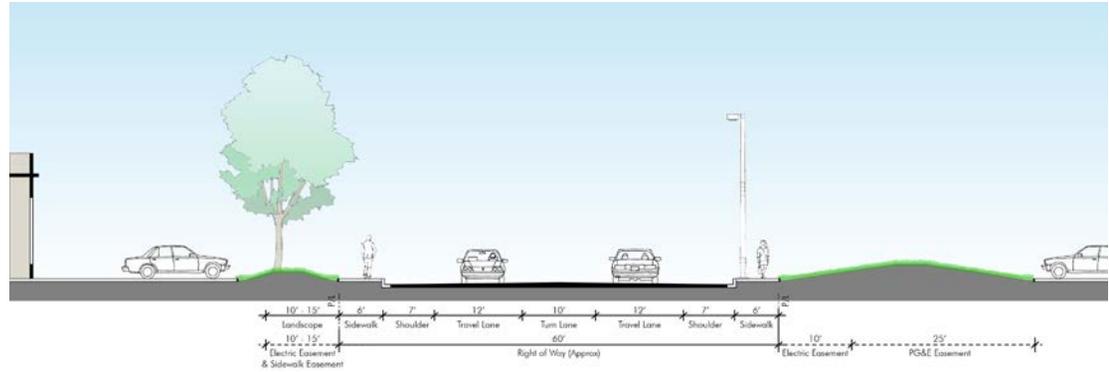
All street cross-sections and figures shown in this section of the PHD Specific Plan depict the intent and vision for the individual rights-of-way. Should conflicts with utilities or easements make the right-of-way cross sections infeasible, adjustments to cross sections may be approved at the discretion of the Director of Community Development.

5.3.1 Patrick Henry Drive

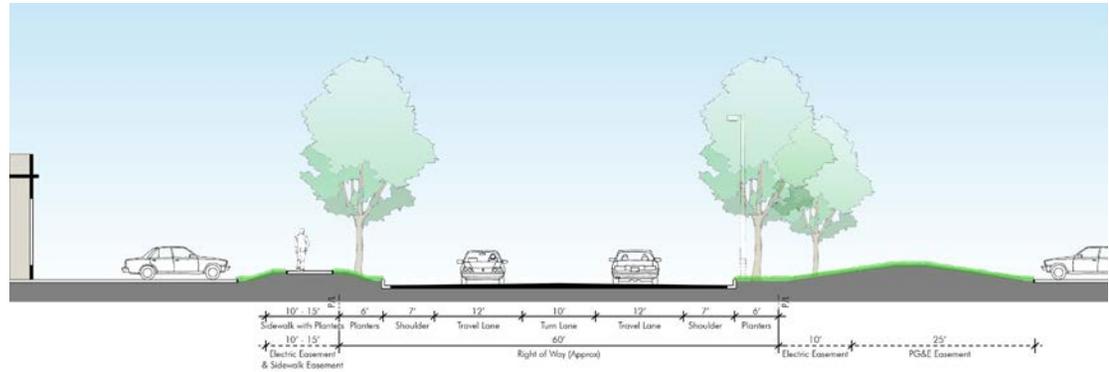
Intent: Patrick Henry Drive will be redesigned to have a more efficient use of space and balance infrastructure for different modes of travel, including automobiles, shuttles, bicycles, and pedestrians. Patrick Henry Drive will continue to be the primary route into and out of the PHD Specific Plan Area, providing access to new parks, residences, commercial uses, and community amenities.



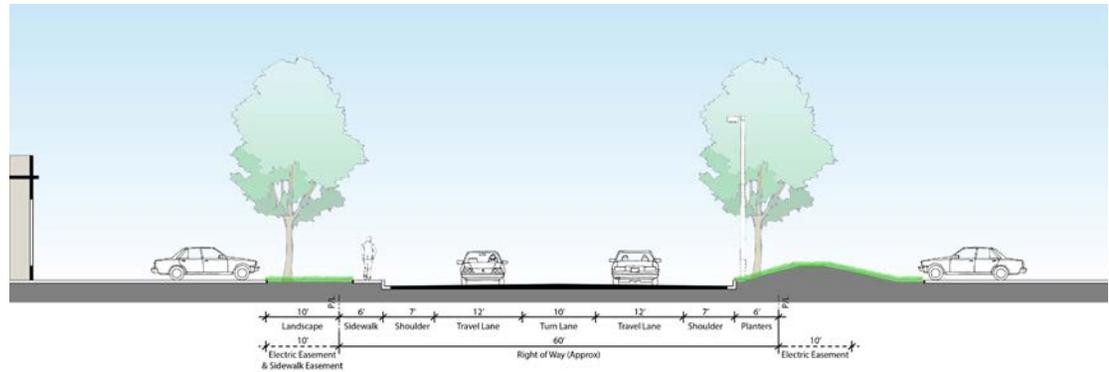
Key map



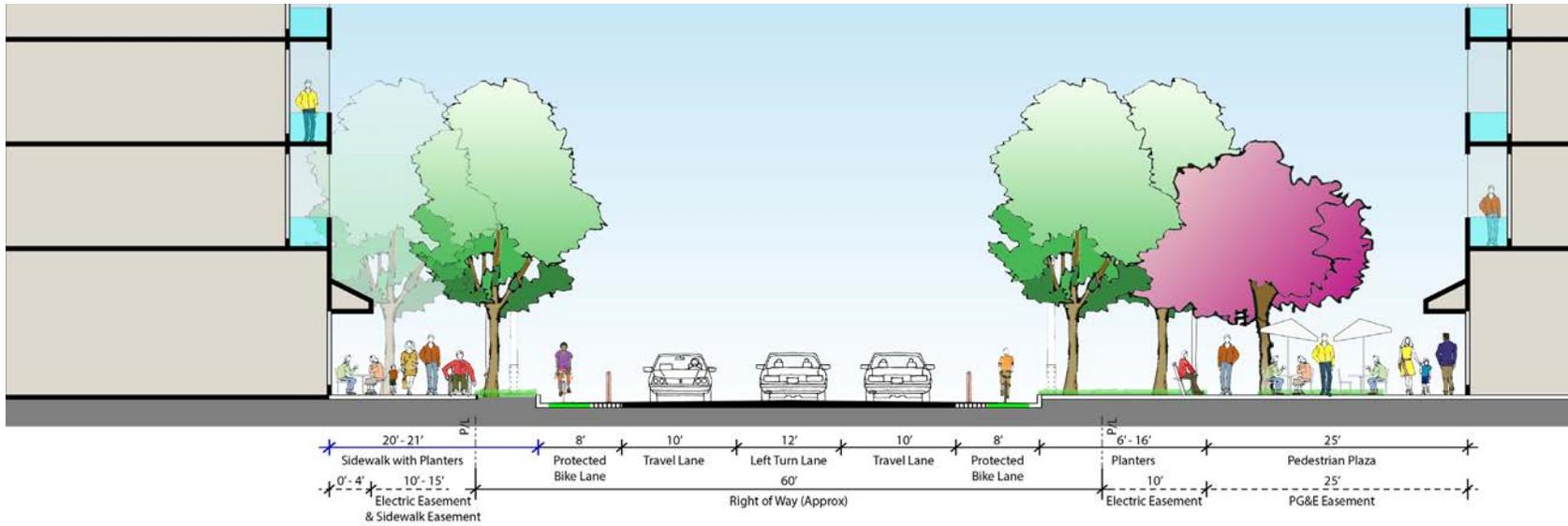
5.3.1A - Patrick Henry Drive Location 1 - Existing



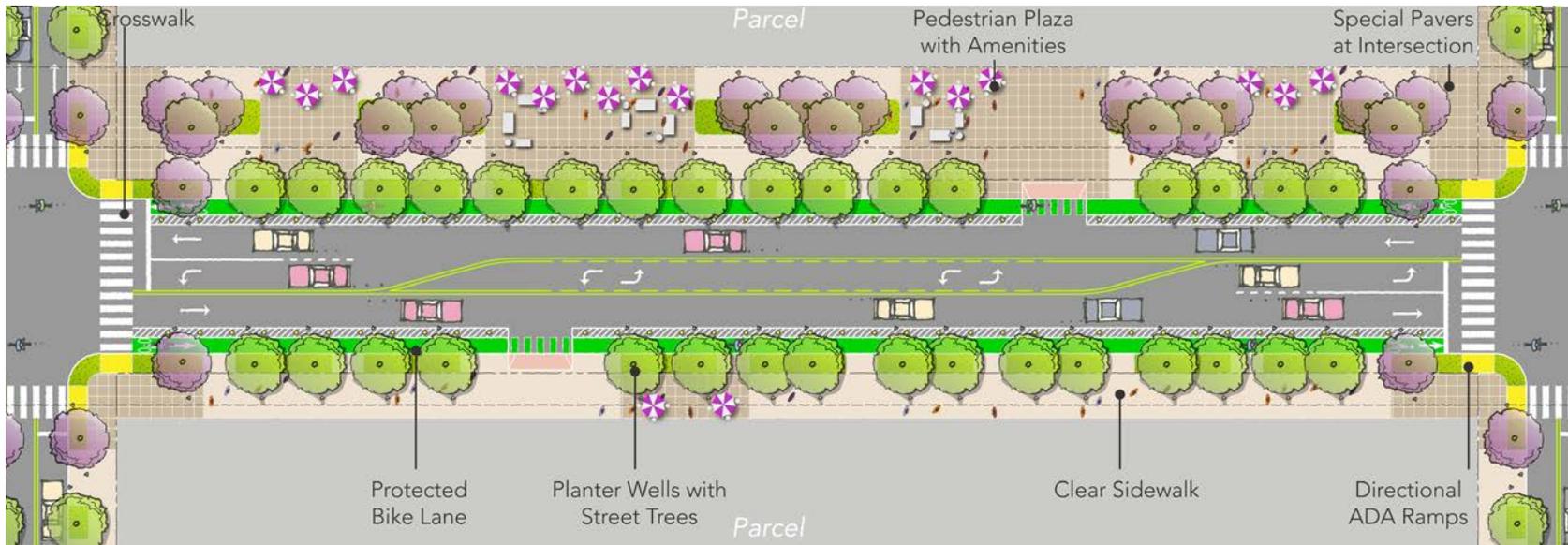
5.3.1B - Patrick Henry Drive Location 2 - Existing



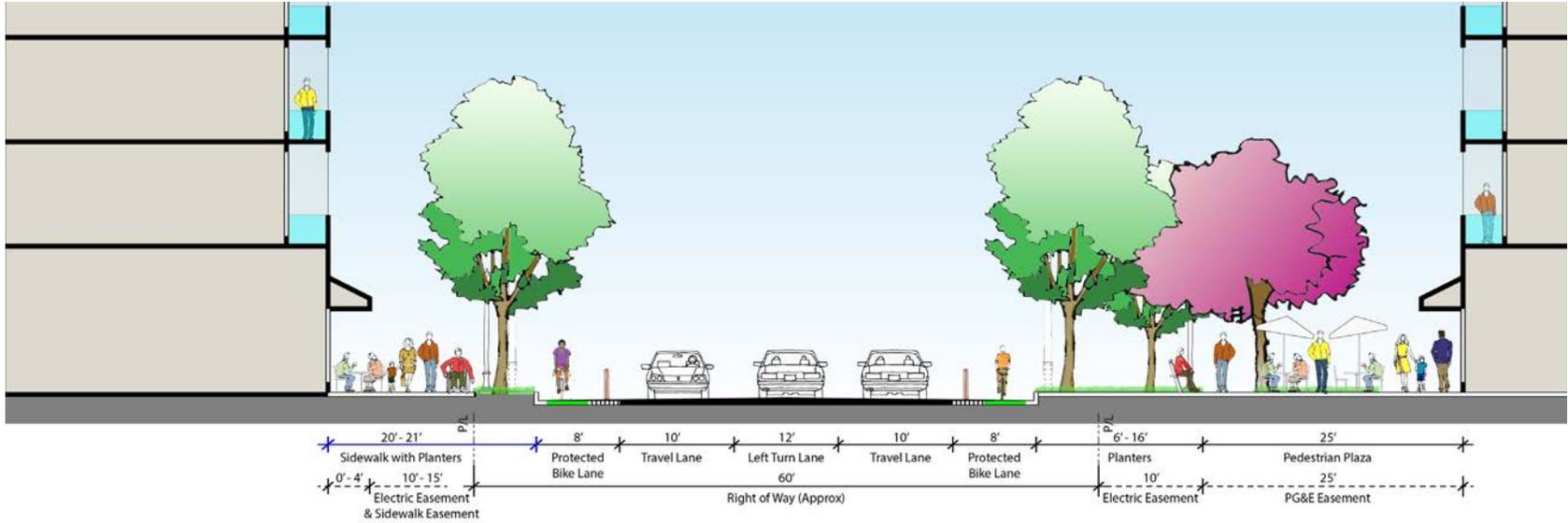
5.3.1C - Patrick Henry Drive Location 3 - Existing



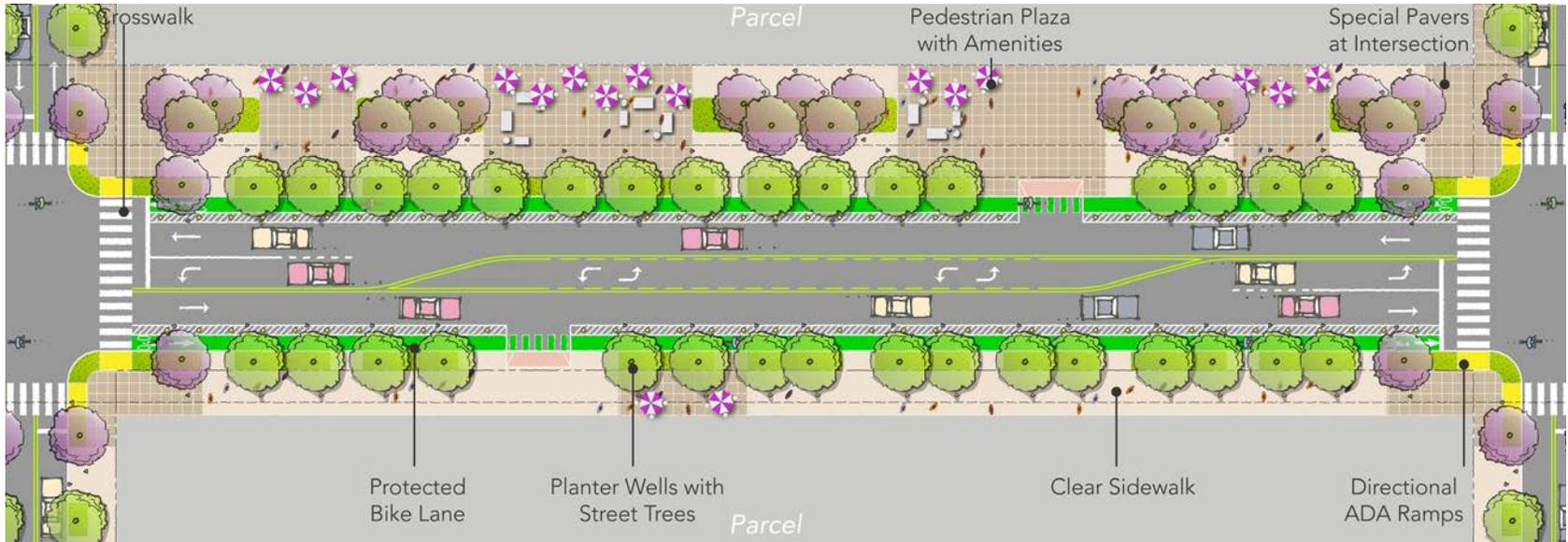
5.3.1D - Patrick Henry Drive Location 1 - Proposed Prototypical Option



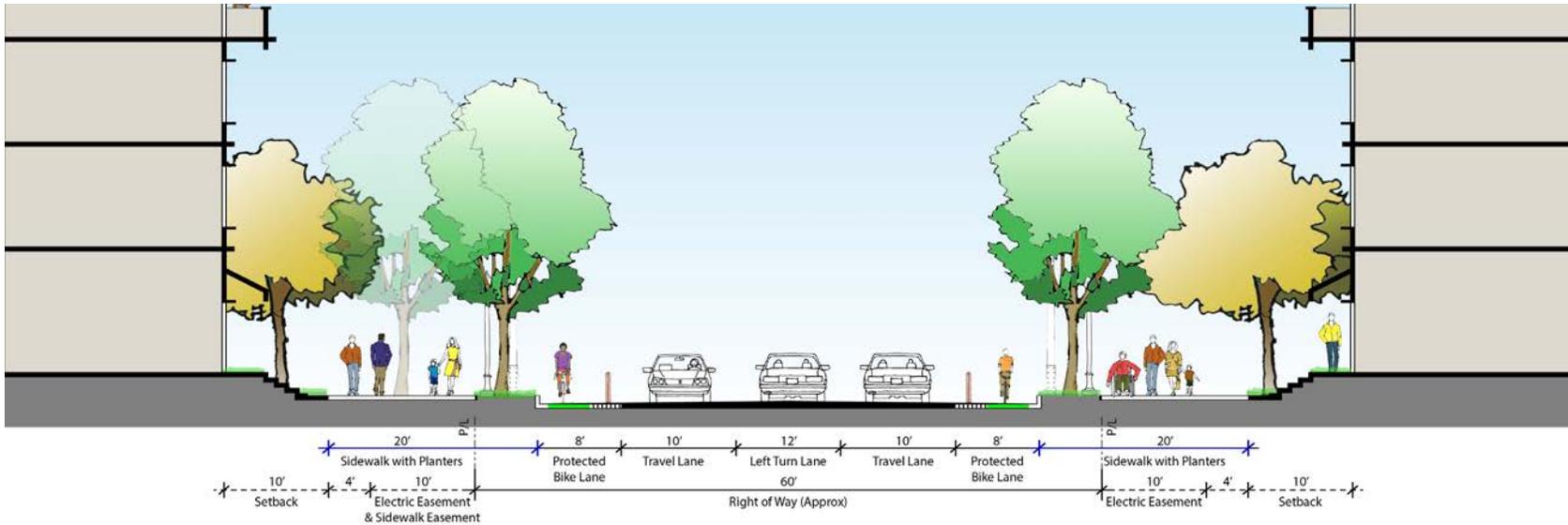
5.3.1E - Patrick Henry Drive Location 1 - Proposed Prototypical Plan View Option



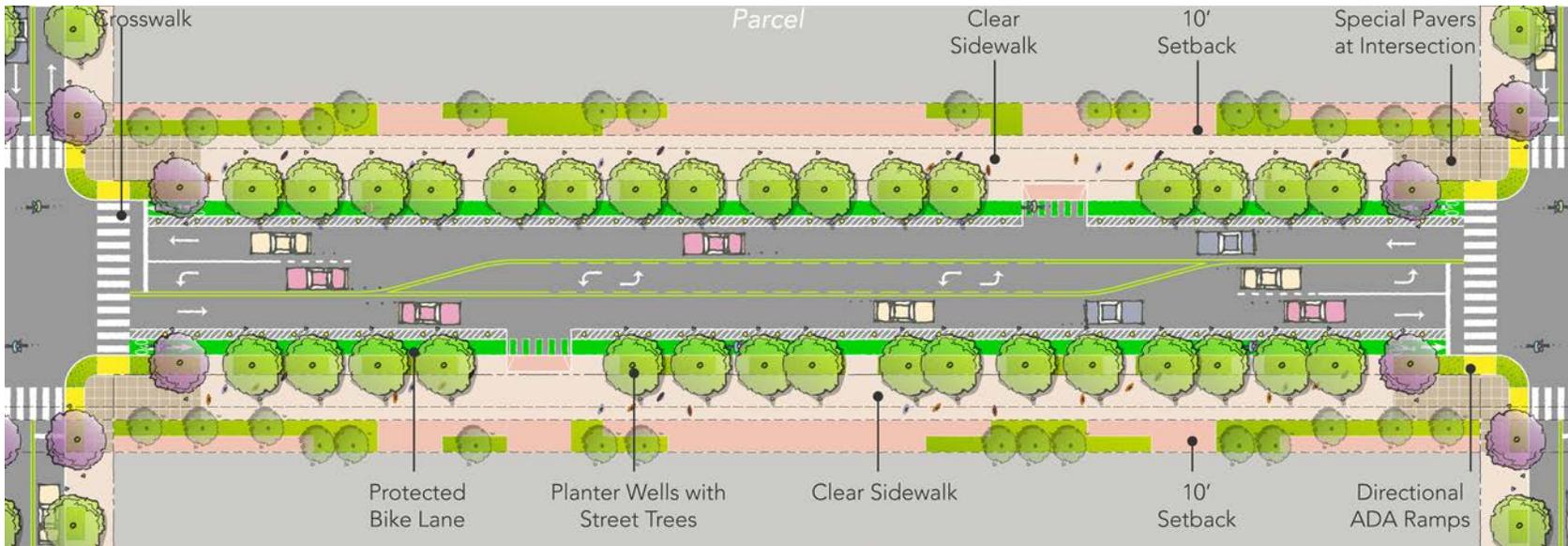
5.3.1F - Patrick Henry Drive Location 2 - Proposed Prototypical Option



5.3.1G - Patrick Henry Drive Location 2 - Proposed Prototypical Plan View Option



5.3.1H - Patrick Henry Drive Location 3 - Proposed Prototypical Option



5.3.1I - Patrick Henry Drive Location 3 - Proposed Prototypical Plan View Option

Standards

-
- 5.3.1.1 Provide 10-foot-wide travel lanes on either side of the street, with a 12-foot-wide two-way left-turn lane.
-
- 5.3.1.2 Install an eight-foot-wide Class IV separated bikeway, including a three-foot-wide striped buffer zone with bollards to allow space between cyclists and vehicular traffic.
-
- 5.3.1.3 Create a 20-foot-wide continuous pedestrian zone including seven-foot wide clear walkway; and an amenity zone along the curb for trees, planters and street furniture. Allow 5-foot walkways where above-grade utility structures are present. Mixed-use frontages shall also include an activity zone adjacent to the building.

Guidelines

-
- 5.3.1.4 Allow installation of pick-up/drop-off locations for rideshare and other vehicles per City discretion.
-
- 5.3.1.5 Ensure pick-up/drop-off locations are located near the parcel lines to facilitate sharing between properties to minimize impacts to pedestrian zone and amenity zone and to avoid conflict with bicycle facilities.



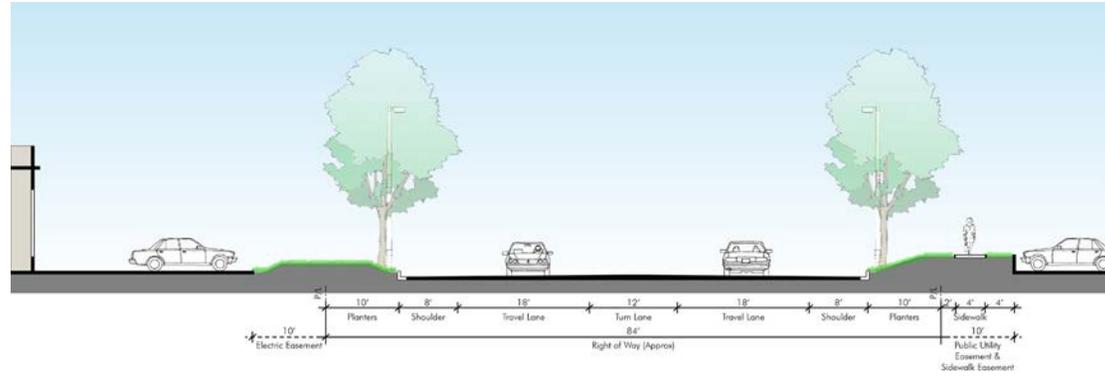
5.3.1.3A - 20-foot-wide Pedestrian Zone



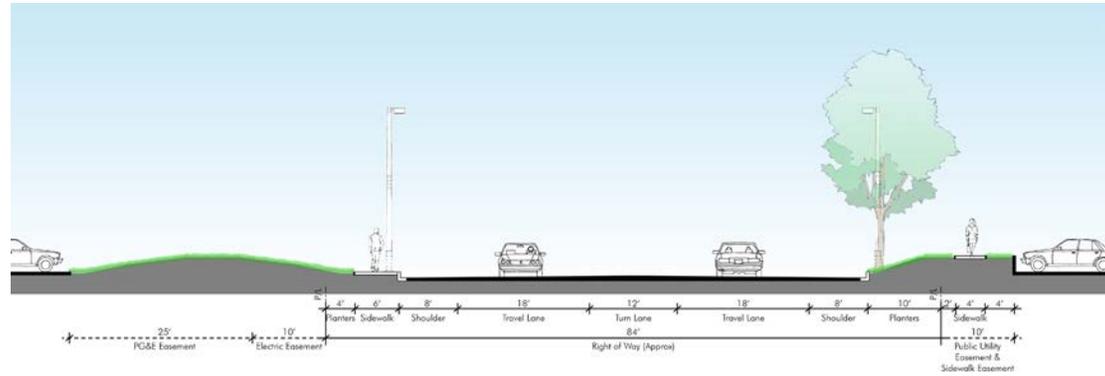
5.3.1.3B - Variety of Amenities in Pedestrian Zone

5.3.2 Old Ironsides Drive

Intent: Old Ironsides Drive has a generous right-of-way and curb-to-curb width that will allow the road to accommodate vehicle traffic, on-street parking, separated bicycle facilities, street trees, and creative streetscape design for street activations.



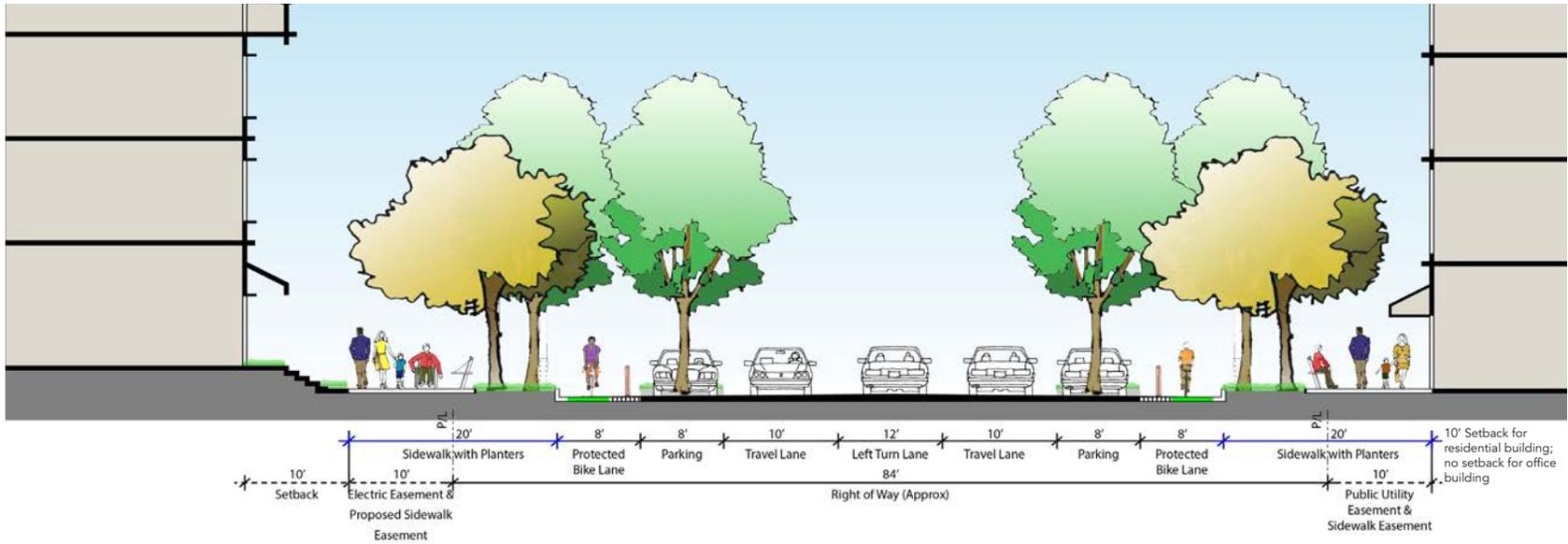
5.3.2A - Old Ironsides Drive Location 1 - Existing



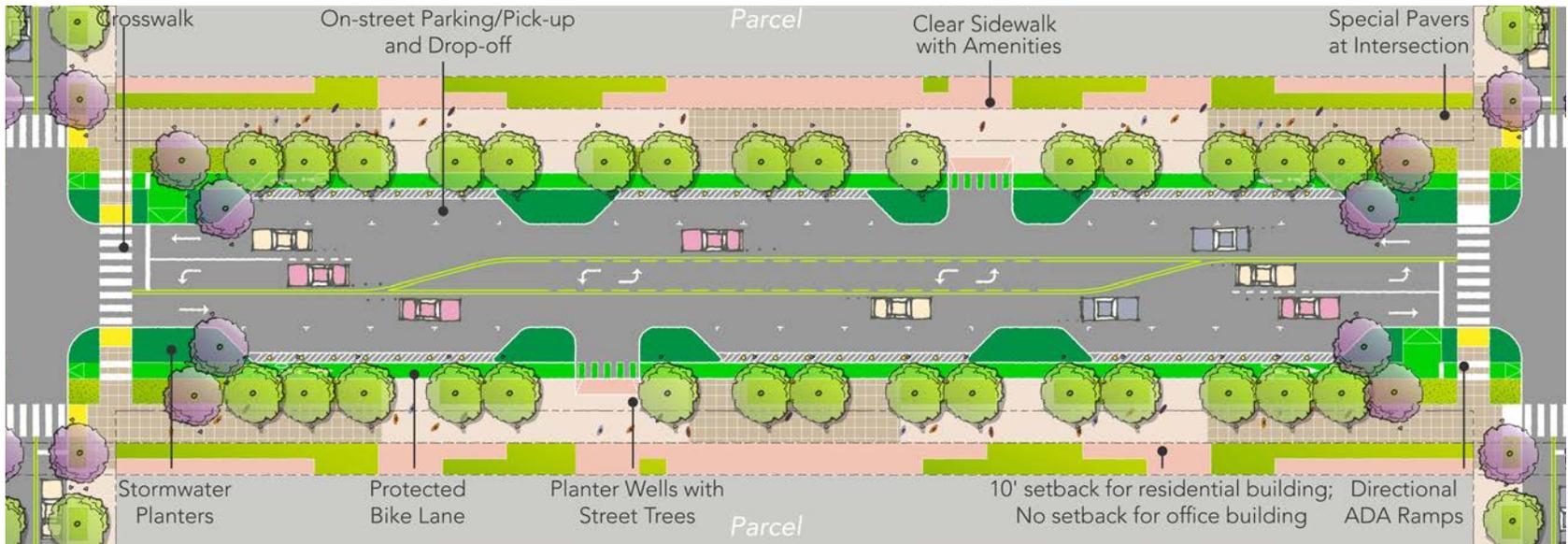
5.3.2B - Old Ironsides Drive Location 2 - Existing



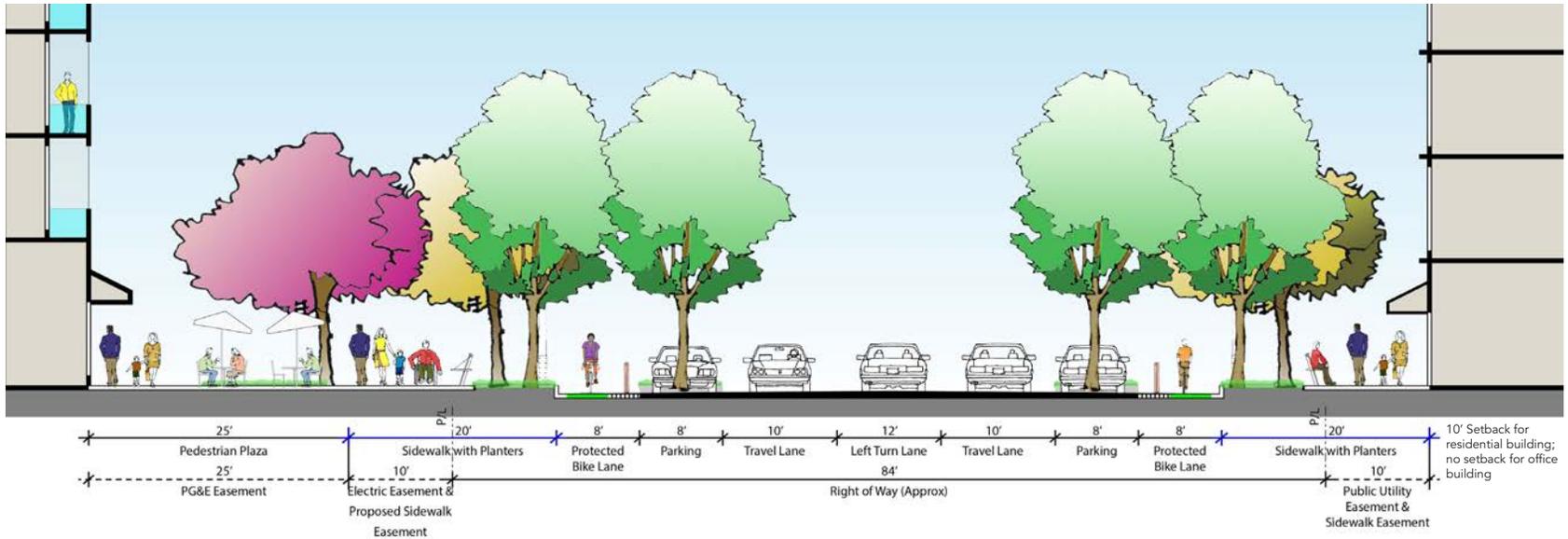
Key map



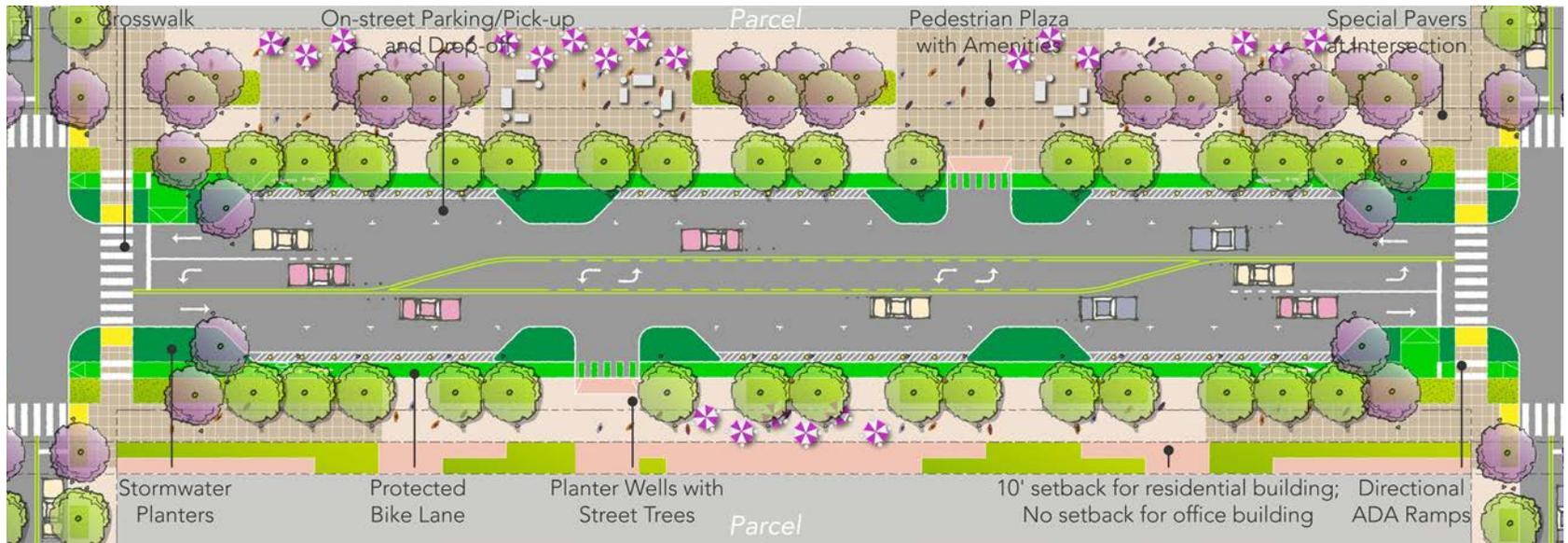
5.3.2C - Old Ironsides Drive Location 1 - Proposed Prototypical Option



5.3.2D - Old Ironsides Drive Location 1 - Proposed Prototypical Plan View Option



5.3.2E - Old Ironsides Drive Location 2 - Proposed Prototypical Option



5.3.2F - Old Ironsides Drive Location 2 - Proposed Prototypical Plan View Option

Standards

-
- 5.3.2.1 Maintain 10-foot-wide travel lanes on either side of the street, with a 12-foot-wide two-way left-turn lane.
-
- 5.3.2.2 Install an eight-foot-wide Class IV separated bikeway, including a three-foot-wide striped buffer zone with bollards to allow space between cyclists and vehicular traffic.
-
- 5.3.2.3 Install an eight-foot-wide on-street parking lane on both sides of the street.
-
- 5.3.2.4 Allow stormwater planters and trees in bulbouts.
-
- 5.3.2.5 Install 20-foot-wide continuous pedestrian zones and ensure seven-foot wide clear walkway at all time for ADA accessibility. Design amenity zone along curbside to include trees, planters and street furniture.

Guidelines

-
- 5.3.2.6 Allow planters inside the amenity zone as bio-retention areas
-
- 5.3.2.7 Allow parking spaces to be used as pick-up/drop-off locations.



5.3.2.2 - Class IV Separated Bikeway



5.3.2.3 - Parking with Planters

5.3.3 New Roadways

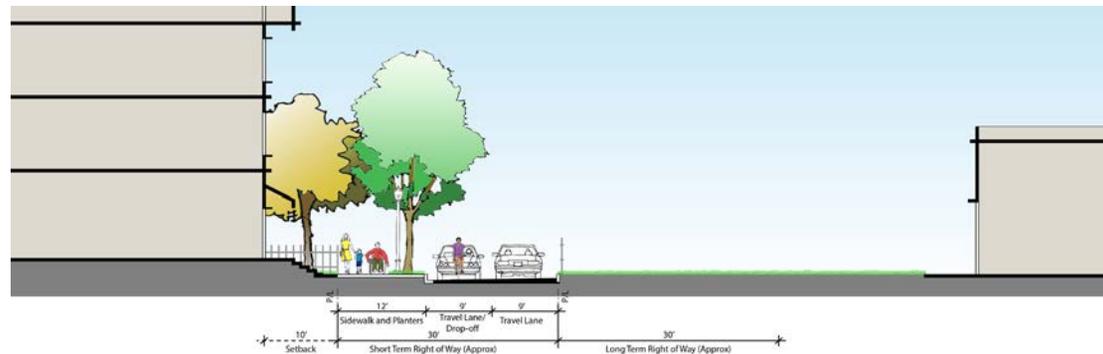
Intent: New Roadways will be private roadways that contribute significantly to the pedestrian- and bicycle-friendly character of the street environment by providing tree-shaded, traffic-calmed travel ways. The New Roadway design is flexible and will vary based on several factors, including the unique needs of uses fronting the street, smooth traffic regulation, and the amount of through and destination traffic.

Standards

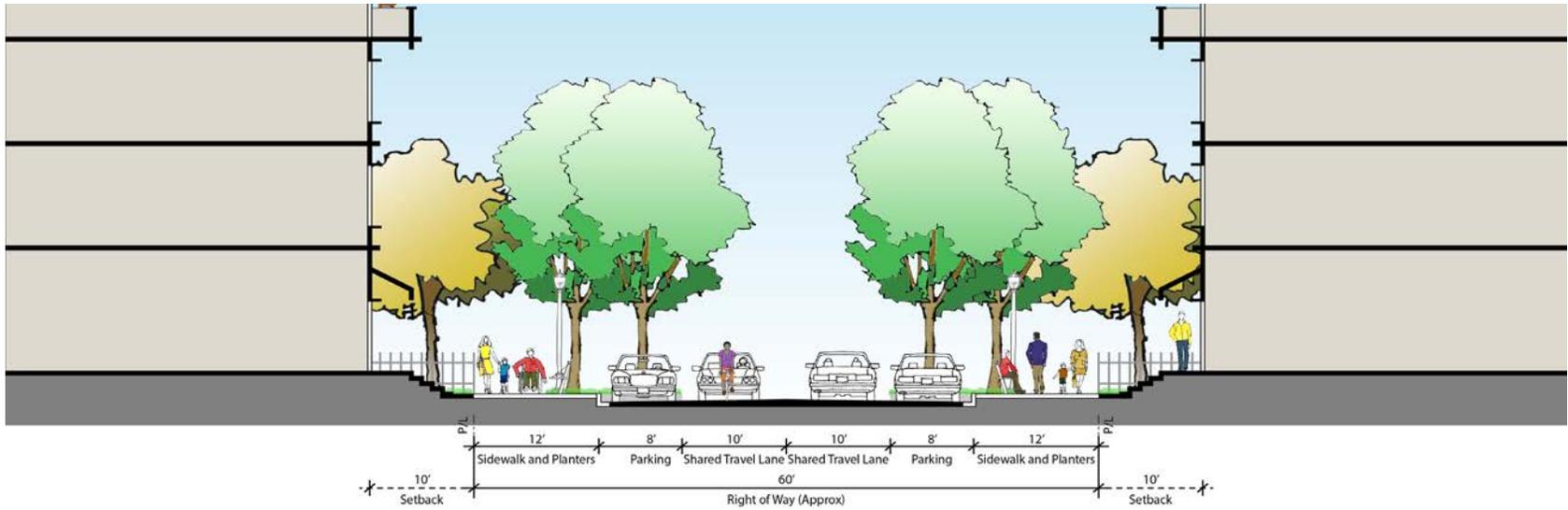
- 5.3.3.1 Allow for 10-foot-wide travel lanes on either side of the street.
- 5.3.3.2 Provide marked, shared Class III bicycle boulevards on new roadways with shared lane markings as per MUTCD standards
- 5.3.3.3 Require eight-foot-wide on-street parking lane on both sides of the street.
- 5.3.3.4 Allow stormwater planters and trees in bulbouts.
- 5.3.3.5 Install continuous 12-foot-wide pedestrian zone, including a seven-foot wide clear ADA accessible walkway. Design amenity zone along curbside to include trees, planters and street furniture.

Guidelines

- 5.3.3.7 Allow planters inside the amenity zone as bio-retention areas.
- 5.3.3.8 Encourage use of permeable interlocking concrete pavers in on-street parking surfaces to enhance traffic calming measures.



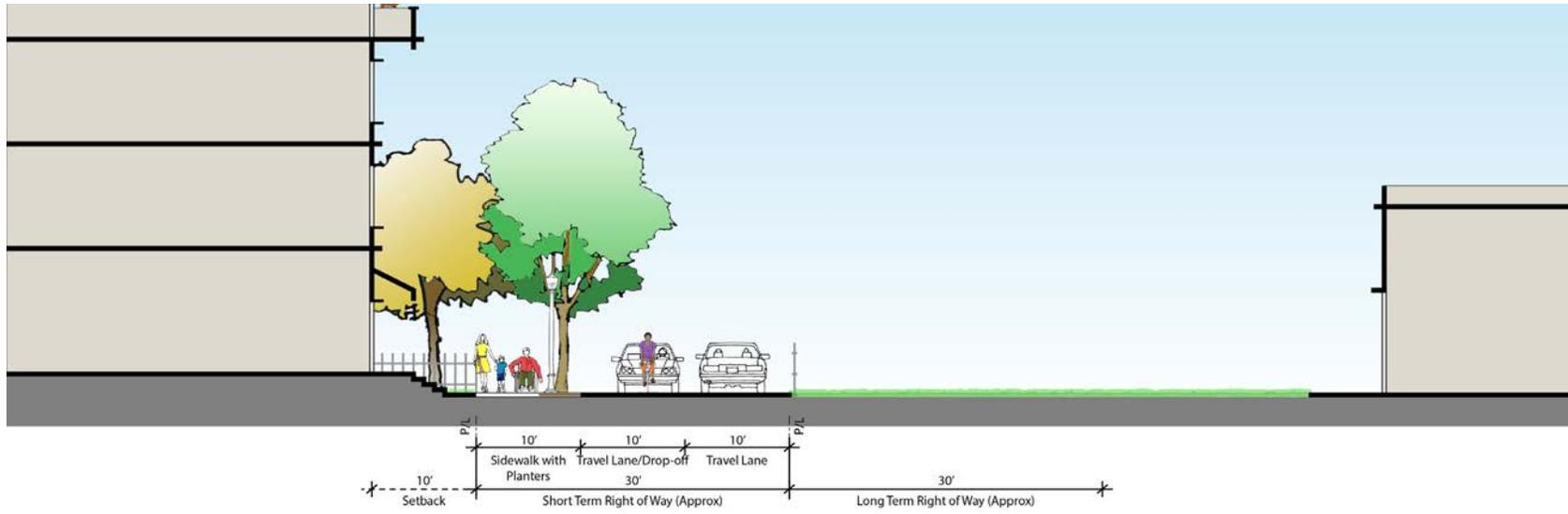
5.3.3A - New Roadways - Option 1 - Potential Short term



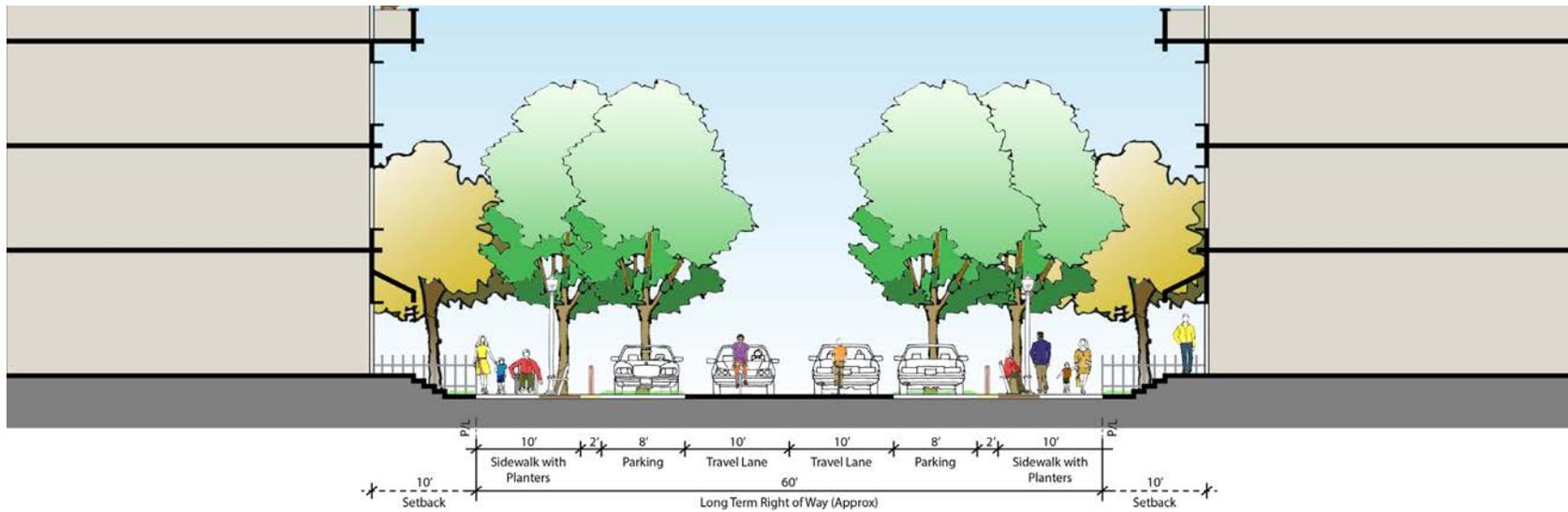
5.3.3B - New Roadways - Option 1 - Potential Prototypical Long term



5.3.3C - New Roadways - Option 1 - Potential Prototypical Long Term Plan View



5.3.3D - New Roadways - Option 2 - Proposed Prototypical Short term



5.3.3E - New Roadways - Option 2 - Proposed Prototypical Long term

5.3.4 Slow Streets

Intent: Private Slow Streets are low-traffic-volume roadways intended specifically to promote pedestrian- and bicycle-friendly conditions and contribute to neighborhood character by providing tree-shaded, traffic-calmed streets. The street design allows a variety of uses and flexible spaces that can be used as spaces for temporary kiosks, gathering, and public art.

Standards

-
- 5.3.4.1 Allow one 10-foot-wide travel lane on either side of the street.
-
- 5.3.4.2 Design streets to be curbless to encourage pedestrians and cyclists to use the entire right-of-way
-
- 5.3.4.3 Use seating with seat walls, planters, pedestrian lighting, bicycle parking, bollards or other amenities to provide separation and protection for pedestrians from moving traffic.
-
- 5.3.4.4 Design Slow Streets with Class III bicycle boulevards, with shared lane markings as per MUTCD standards.
-
- 5.3.4.5 Devote space to generous landscaped and widened sidewalks.
-
- 5.3.4.6 Provide 15-foot wide continuous pedestrian zone, including a seven-foot wide ADA accessible walkway all along the street. Design amenity zone along the edge of the travel lane to provide buffer. Include trees and planters inside the amenity zone.



5.3.4.1 - Shared Travel Lane



5.3.4.2 - Curbless Street



5.3.4.6 - Amenity Zone

5.3.4.7 Install mid-block crosswalks with directional ADA ramps where the distance between the crosswalk is more than 300 feet long to facilitate crossings for visually impaired people.

5.3.4.8 Include a variety of programmed spaces in or adjacent to Slow Streets wherever space allows. Spaces may accommodate children's play areas, basketball hoops and, landscaping. Design Slow Streets with flexibility such that they can be used differently at different times.

Guidelines

5.3.4.9 Encourage use of permeable interlocking concrete pavers in the roadway and parking surfaces to enhance traffic calming measures.

5.3.4.10 Install eight-foot-wide on-street pick-up/drop-off locations inside the amenity zone on both sides of the street. Limit the drop off spaces to one or maximum two spaces.



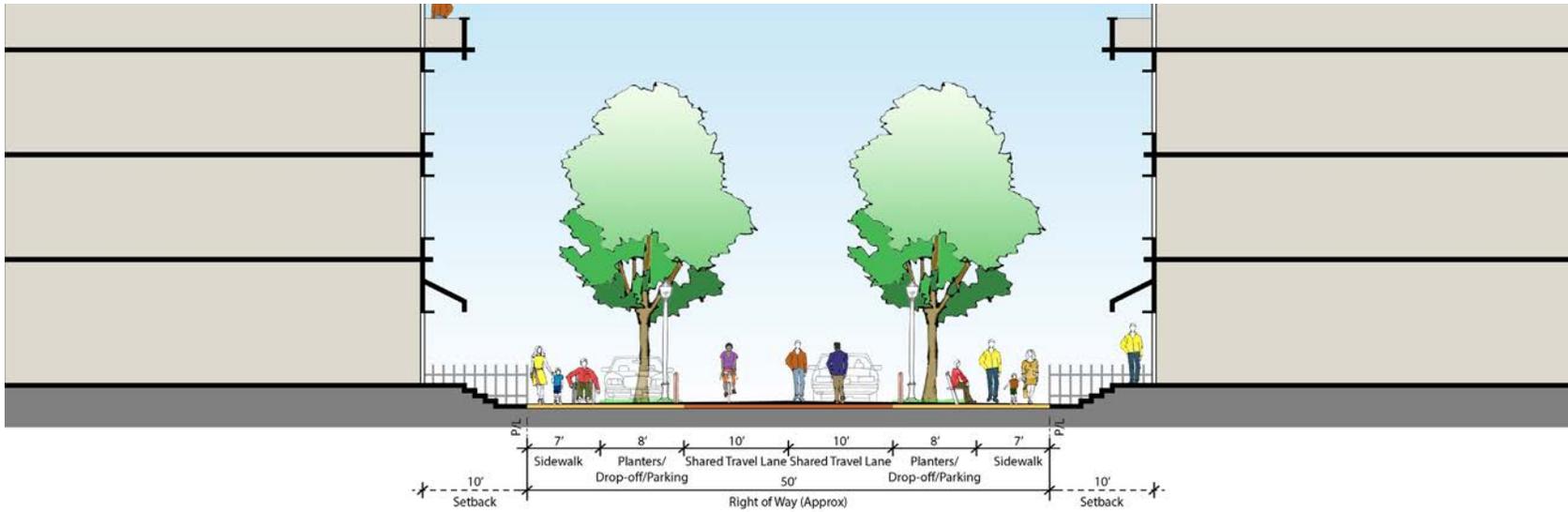
5.3.4.7 - Mid-block Crosswalk



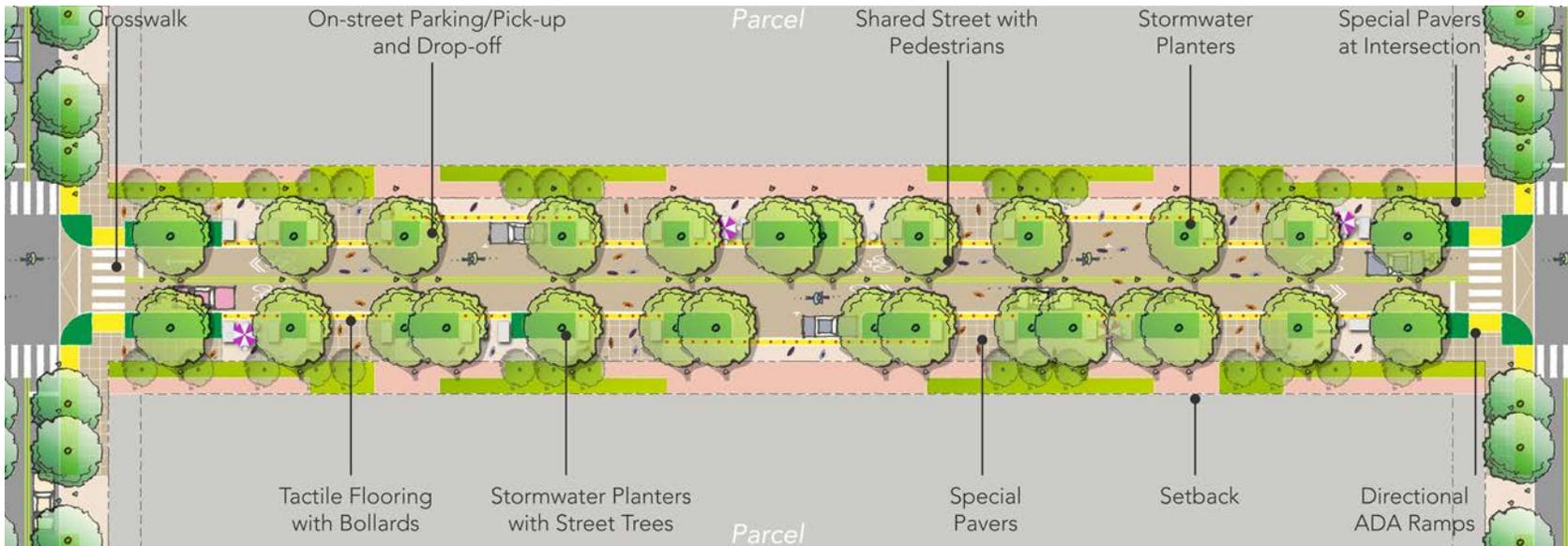
5.3.4.10 - Permeable Pavers



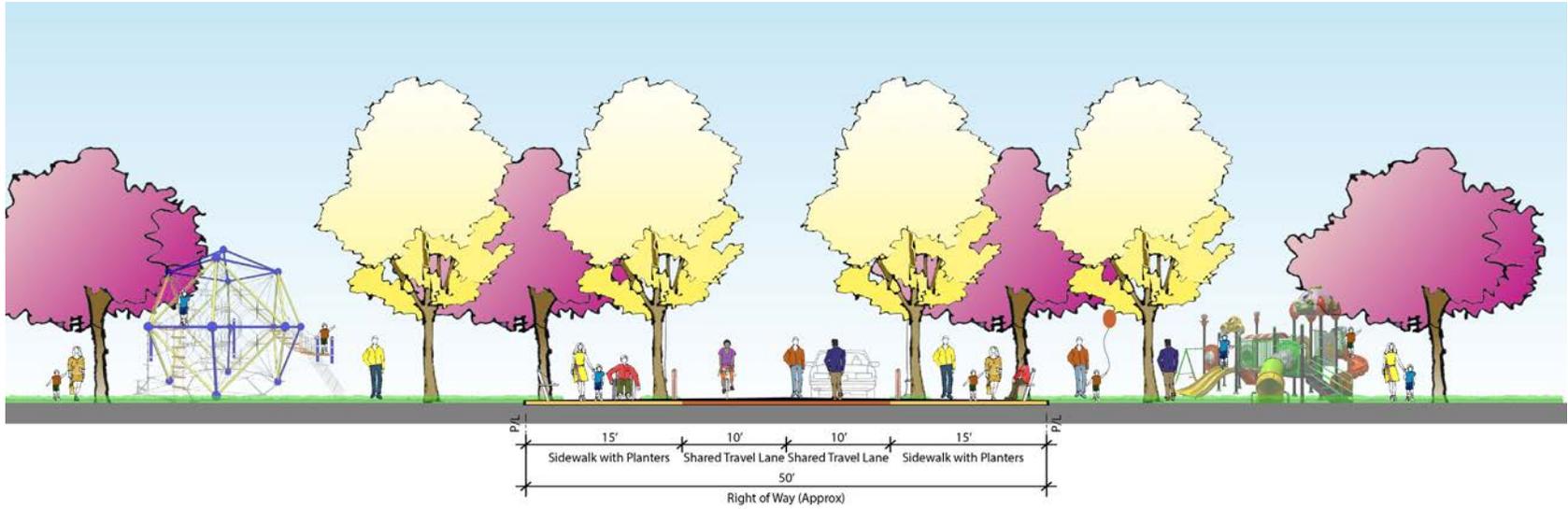
5.3.4.11 - Parking for pick-up/drop-off



5.3.4A - Slow Streets - Proposed Prototypical Option



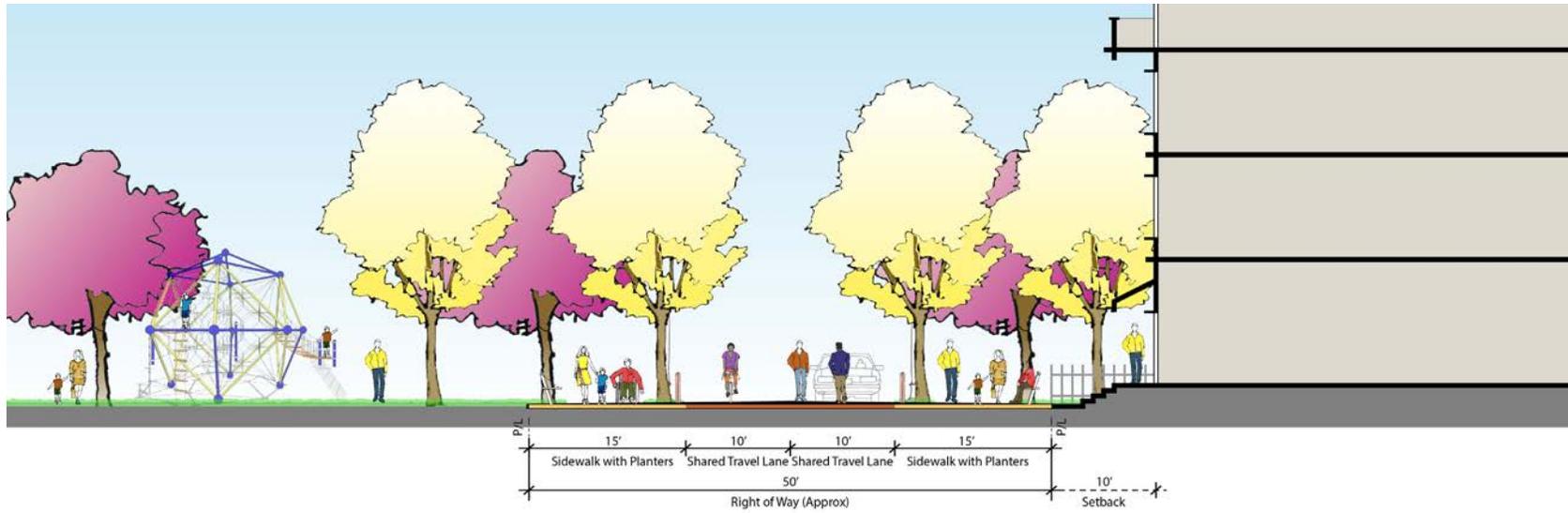
5.3.4B - Slow Streets - Proposed Prototypical Plan View Option



5.3.4C - Slow Streets along Central Neighborhood Park - Proposed Prototypical Option



5.3.4D - Slow Streets along Central Neighborhood Park - Proposed Prototypical Plan View Option



5.3.4E - Slow Streets along Central Neighborhood Park - Proposed Prototypical Option - Alternative



5.4 PARKS, RECREATION AND OPEN SPACES

A robust network of parks and open spaces connected by pedestrian and bicycle pathways will support the PHD Specific Plan Area as it transforms into a high-density residential mixed-use neighborhood (see Figure 4.5: Parks and Greenways). The standards and guidelines in this section support the City's overarching parks, recreation and open space goals and serve future residents by providing diverse outdoor environments and experiences. The open space system includes the following types of facilities.

- **Publicly Dedicated Parkland**
- **Privately-owned public open spaces (POPOS)**
- **Community Gardens**
- **Plazas**
- **Greenways, and Trail Connections**



Active Open Space with Games



Neighborhood Park



Activated Urban Plaza

5.4.1 Parkland Dedication

Intent: Public parks support the quality of life for all City residents and serve the day-to-day needs of those who work and live in the PHD Specific Plan Area.

Parks will be designed and programmed in consultation with the City Parks and Recreation Department and Parks and Recreation Commission with public input. Developers will enter into a park design and construction agreement with the City. Developers will also enter into a park maintenance agreement with the City or participate in a CFD or other mechanism to pay for ongoing maintenance and capital renewal of the parks.

Standards

5.4.1.1 Ensure all public parks are at least one acre in size to provide adequate space for seating and gathering areas, programming, and flexible use turf areas. Property owners may dedicate less than one acre in an instance where parkland straddles parcel lines and dedications are adjacent. The combined parkland dedication in these instances must be at least one acre.

- Programming for public parks may include courts, fields, seating, picnic tables, exercise equipment, off-leash dog areas and, other features appropriate to high-density residential neighborhoods and subject to Section 17.35.070
- Property owners can design and develop parkland for specialized uses (e.g., art park) with approval from, and in collaboration with, the City Parks and Recreation Department.

5.4.1.2 Ensure opportunities for public art in park and plaza design.



5.4.1.1A - Flexible Use Turf Area



5.4.1.1B - Open Spaces and Landscaped Plazas



5.4.1.2 - Public Art in Open Space

Guidelines

5.4.1.3 Design parks to be seamlessly connected to the PHD Specific Plan Area’s network of greenways, streets, and trails, including the Calabazas Creek Trail and the planned trail along the Hetch Hetchy right-of-way.

5.4.1.4 Plan, design, and program the public parks to be complementary and feature unique elements not found in other PHD Specific Plan Area open spaces and consistent with 17.35.070. Generally, the parks should be designed and programmed as follows:

- The neighborhood park near the middle of the PHD Specific Plan Area shall have pathways connecting east-west and north-south, include amenities that support the community uses along the park, and provide plentiful seating and play areas for all ages;
- The southwest park shall connect to the Calabazas Creek trail and provide facilities for active recreation, such as sports courts or fields; and

- The northeast park (in Scenario A only) shall connect to the Hetch Hetchy right-of-way and Great America Parkway and provide a hardscaped area with flexible seating and gathering areas.
-

5.4.1.5 Include amenities in parks that support the comfort of users, including shaded seating areas, movable furniture, and water fountains/bottle filling stations.

5.4.1.6 Ensure parks provide space and amenities for both passive and active recreation and encourage flexible spaces that can be used for multiple activities at different times.

5.4.1.7 Use climate-appropriate and native tree and plant species for landscaped areas to minimize maintenance and water requirements.



5.4.1.3 - Open Spaces with Amenities



5.4.1.6 - Play Areas for all Age Groups

5.4.2 Privately Owned Public Open Spaces (POPOS)

Intent: Property owners and residential developers are required to provide publicly accessible spaces on private parcels, as outlined in Chapter 4. These open spaces shall be privately owned and maintained and open for the general public access.

Standards

-
- 5.4.2.1 Ensure all POPOS are at least 30 feet wide and 1,000 square feet in size.
-
- 5.4.2.2 Require that any pedestrian path through the site be at least five feet wide.
-
- 5.4.2.3 Use climate-appropriate and native tree and plant species for landscaped areas to minimize maintenance and water requirements, consistent with the City's Water Efficient Landscape Ordinance.

Guidelines

-
- 5.4.2.4 Site or connect POPOS to the street level to provide easy public access.
-
- 5.4.2.5 Site and design POPOS to ensure direct sunlight at least four hours per day and to minimize shadows from adjacent buildings.
-
- 5.4.2.6 Design spaces to provide space for outdoor social activities and amenities suited to high-density residential development, such as play spaces and off-leash dog areas.



5.4.2.4 - Open Space with Access to Direct Sunlight



5.4.2.6A - Open Space with Seating



5.4.2.6B - Off-leash Dog Area

5.4.3 Community Gardens

Intent: As an added amenity for high-density residential neighborhoods and developments, the City and/or property owners may provide community gardens for residents' use. These guidelines outline recommended community garden siting, design, and maintenance.

Guidelines

-
- 5.4.3.1 Incorporate community gardens or planters in public parks and POPOS throughout the neighborhood.
-
- 5.4.3.2 Design planter beds to be at least three feet by six feet. Consider the use of raised beds for ideal draining.
-
- 5.4.3.3 As space allows, include a mix of planter bed sizes to accommodate different user needs and preferences.
-
- 5.4.3.4 Site garden beds and plots to have sun exposure six to eight hours per day.
-
- 5.4.3.5 Set back any planter beds along amenity zone or in bulbouts at least two feet from the curb face to allow safe gardening and room for car doors.
-
- 5.4.3.6 Provide easy access to water to irrigate planting beds.



5.4.3.1 - Planter Beds Along Sidewalk

5.4.4 Plazas

Intent: Plazas are hardscape urban open spaces that serve as neighborhood activity nodes and provide spaces for social gatherings, small events, and commerce. These spaces complement parks and other landscaped and turf areas and can activate the ground-floor urban environment.

Standards

-
- 5.4.4.1 Site plazas along pedestrian zones, and active corridors; at activity nodes; gateways; adjacent to ground-floor retail, flex, or community uses; and within setbacks and/or over existing utility easements.
-
- 5.4.4.2 Provide for plazas to connect to adjacent streets, paths, and greenways.
-
- 5.4.4.3 Provide amenities that encourage informal, flexible, and creative use of plazas and that support user safety. Amenities may include pedestrian-scaled lighting, benches or flexible seating, shade structures, trees and landscaping, water features, and public art.



5.4.4.1 - Plaza Adjacent to Ground-floor Retail



5.4.4.2 - Landscaped Plaza with Seating



5.4.4.3 - Plaza Amenities

Guidelines

-
- 5.4.4.4 Use special pavement design or treatment to increase plaza visibility and identity.
-
- 5.4.4.5 Encourage use of permeable interlocking concrete pavers as part of stormwater management.
-
- 5.4.4.6 Design plazas to be places for community gathering, programming, performances, and commerce.
-
- 5.4.4.7 Ensure that adjacent ground-floor uses open onto the plazas and allow their uses to spill out into the space, including outdoor dining and retail.



5.4.4.4 - Plaza with Flexible Seating



5.4.4.6 - Community Gathering in Plaza



5.4.4.7 - Active Ground Floor Uses

5.4.5 Greenways

Intent: Greenways will be created throughout the PHD Specific Plan Area to improve connectivity and access and to create a human-scaled setting. These pathways facilitate pedestrian and bicycle access to parks, trails, and activity nodes. Located along alleys and new development, these greenways also create opportunities for on-site stormwater filtration.

Standards

-
- 5.4.5.1 Site greenways as shown in Figure 4.5A of the Open Space Framework to provide pedestrian and bicycle connections through large blocks, to link destinations, and to enhance required spaces between buildings.
-
- 5.4.5.2 Use greenways to connect parks and open space and improve access to trails, transit stops, activity nodes, and other community amenities.
-
- 5.4.5.3 Create greenways that are at least 40 feet wide, with a preferred width of 40 to 60 feet to allow for paths of travel, buffers, and emergency access.
-
- 5.4.5.4 Ensure clear pathways within greenways are at least five feet wide.
-
- 5.4.5.5 Provide pedestrian-scaled lighting along greenways for user safety and comfort.
-
- 5.4.5.6 Provide seating, refuse/recycling receptacles, and other basic amenities along greenways.
-
- 5.4.5.7 Provide 10-foot setbacks for all buildings fronting on to the greenways.



5.4.5.1 - Pedestrian Connection Between Buildings



5.4.5.2 - Greenway Connecting Community Amenities



5.4.5.5 - Pedestrian-scaled Lighting Along Greenway

Guidelines

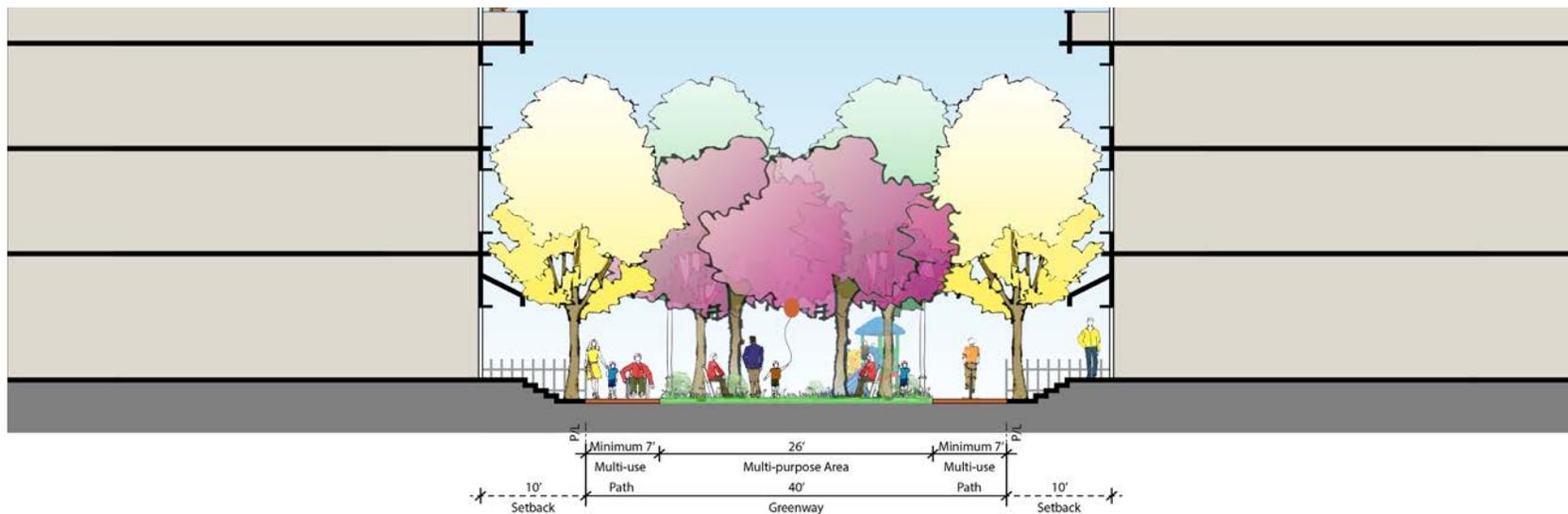
5.4.5.8 Encourage the use of bioswales along the greenways to attenuate surface run-off.

5.4.5.9 Incorporate landscaping, trees, and community gardens along greenways.

5.4.5.10 Require that design of buildings and setbacks along greenways contribute “eyes on the street” for safety to activate these spaces.



5.4.5.9 - Well Landscaped Pedestrian Path



5.4.5A - Greenways - Proposed Prototypical Option



5.5 SITE LAYOUT AND DESIGN

These standards and guidelines shape site layout and design to achieve the following overarching goals:

- **Break up large parcels and blocks and to create an improved pedestrian experience;**
- **Create active and attractive ground-floor relationships to the pedestrian zone; and**
- **Take advantage of natural heating and cooling.**

The following design standards and guidelines are broken into individual segments for residential, mixed-use, and office buildings.



Landscaped Residential Setback



Landscaping Within Active Alleyway



Shared Pathway

5.5.1 Building and Block Organization

Intent: Organize buildings and design sites to create interesting and pleasant pedestrian environments with convenient access and connections through blocks to destinations throughout the district.

Standards

For Residential, Mixed-use and Office

5.5.1.1 Encourage mid-block connectivity through the block and across adjoining streets such that the distance between two pedestrian crossings is no more than 330 feet or 1/16th of a mile to break up the massing.

5.5.1.2 Locate public open spaces and plazas facing major streets to create social gathering spaces that are welcoming, visible and provide visual access into the buildings or site.

For Residential and Mixed-use

5.5.1.3 Use alleys and greenways to break up long blocks, enhance connectivity, and create open spaces and stormwater management features.

5.5.1.4 Provide connectivity and emergency vehicle access next to cul-de-sacs by connecting the “dead end” section of the street with multi-modal paths for pedestrians, cyclists, and emergency vehicles.

5.5.1.5 Align and connect all new streets created as part of large private developments with existing adjoining public streets.



5.5.1.1 - Mid-block Connection with Human-scaled Spaces



5.5.1.3 - Mid-block Alley

Guidelines

For Residential and Mixed-use and Office

5.5.1.6 Locate parking lots and access to parking to minimize passive pedestrian edges along the streets.

5.5.2 Building Orientation

Intent: Orient buildings to maximize internal access, create visual interest, and avoid blank walls.

Standards

For Residential and Mixed-use

5.5.2.1 Ensure that corner buildings actively address both streets with well-marked and attractively designed pedestrian entrances.

5.5.2.2 Locate entries to retail flex spaces on major mixed-use corridors (Patrick Henry Drive and Old Ironsides Drive) to activate the streets.

5.5.2.3 Orient end and corner units to both the front and side façades to provide for new building exteriors to relate physically and visually to adjacent existing and planned development.

For Office

5.5.2.4 Locate pedestrian entries to office buildings on Old Ironsides Drive and Great America Parkway to activate the streets.

Guidelines

For Residential and Mixed-use

5.5.2.5 For buildings with ground-floor residential uses, locate kitchens and living rooms— rather than bedrooms and other more private areas—to face streets to maximize privacy and security.



5.5.2.1 - Corner Orientation Addresses Both Streets



5.5.2.2 - Entries on Major Streets



5.5.2.5- Ground Floor Residential Uses

5.5.3 Building Frontages and Setbacks

Intent: Use setbacks to activate the pedestrian environment by providing and designing for outdoor cafe seating, landscaping, and public art to create an extended and activated pedestrian zone environment.

Standards

For Residential and Mixed-use

- 5.5.3.1 No setback is required for mixed-use buildings with ground-floor retail, flex or community spaces on Patrick Henry Drive and Old Ironsides Drive, except where needed for flood control and utility requirements.
- 5.5.3.2 Provide 10-foot setbacks for all buildings with ground-floor residences fronting on to Patrick Henry Drive and Old Ironsides Drive.
- 5.5.3.3 Provide minimum 10-foot building setbacks on New Roadways and Slow Streets to ensure wide clear pedestrian zone and room for street-level activity.
- 5.5.3.4 Ensure buildings with residential ground-floor uses are set back 10 feet from greenways and creek trails.
- 5.5.3.5 No building setback is required for residential-only buildings where the width of the existing utility easement is 10 feet or more between the right-of-way and building edge.
- 5.5.3.6 Design and program utility easements along Patrick Henry Drive and Old Ironsides Drive as setbacks. Consider activating these spaces with amenities, including public seating areas, small plazas, and outdoor dining areas.



5.5.3.1 - No setback for Mixed-use Buildings



5.5.3.3 - Residential Stoop

For Office

5.5.3.7 No setback is required for office buildings.

Guidelines

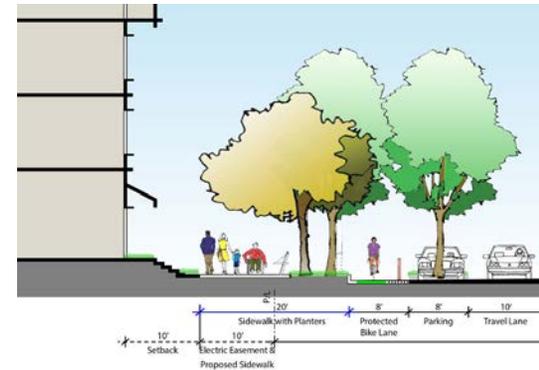
For Residential and Mixed-use

5.5.3.8 The following building elements are allowed to project horizontally into the setback zone at the following dimensions and at certain heights above sidewalk grade:

- Enclosed or unenclosed building area may project up to 3 feet, at a height of at least 12 feet above sidewalk grade;
- Architectural elements such as cornices and shading devices may project up to 2 feet and must be at least 8 feet above sidewalk grade;
- Canopies and awning may project up to 8 feet and must be at least 10 feet above sidewalk grade;
- Steps, stoops, terraces, and patios may project up to the full depth of the setback and may be up to 48 inches in height; and
- Planting beds may project up to the full depth of the setback and may be raised up to 48 inches above sidewalk grade.



5.5.3.7 - No Setback for Office Buildings



5.5.3.8 Building Elements in Residential Setback



5.5.3.8 - Balconies Projected in the Setback

5.5.4 Alleys and Service Access

Intent: Design alleys and service access points to be functional, safe and comfortable.

Standards

For Residential, Mixed-use and Office

- 5.5.4.1 Locate alleys and service areas that serve development on rear or side streets, as most practicable.
-
- 5.5.4.2 Provide adequate lighting in alleyways for safety.
-
- 5.5.4.3 Where rear or side service access through-traffic is infeasible due to parcel configuration, allow access from Patrick Henry Drive and Old Ironsides Drive only in a manner that preserves safe pedestrian movement and does not impede through traffic flow on these streets.
-
- 5.5.4.4 Limit curb cuts for service areas accessed from Patrick Henry Drive and Old Ironsides Drive, to 24 feet for two-way vehicular access and 16 feet for one-way vehicular access.
-
- 5.5.4.5 Require that alleys required for emergency vehicle access have a minimum width of 25 feet to allow for access and landscaping.
-
- 5.5.4.6 Include a five- to 10-foot planting buffer for trees and landscaping along alleys to enhance the pedestrian environment.



5.5.4.1 - Alleys to Serve Ground Floor Uses



5.5.4.2 - Alley Lighting for Safety and Decoration

Guidelines

For Residential, Mixed-use and Office

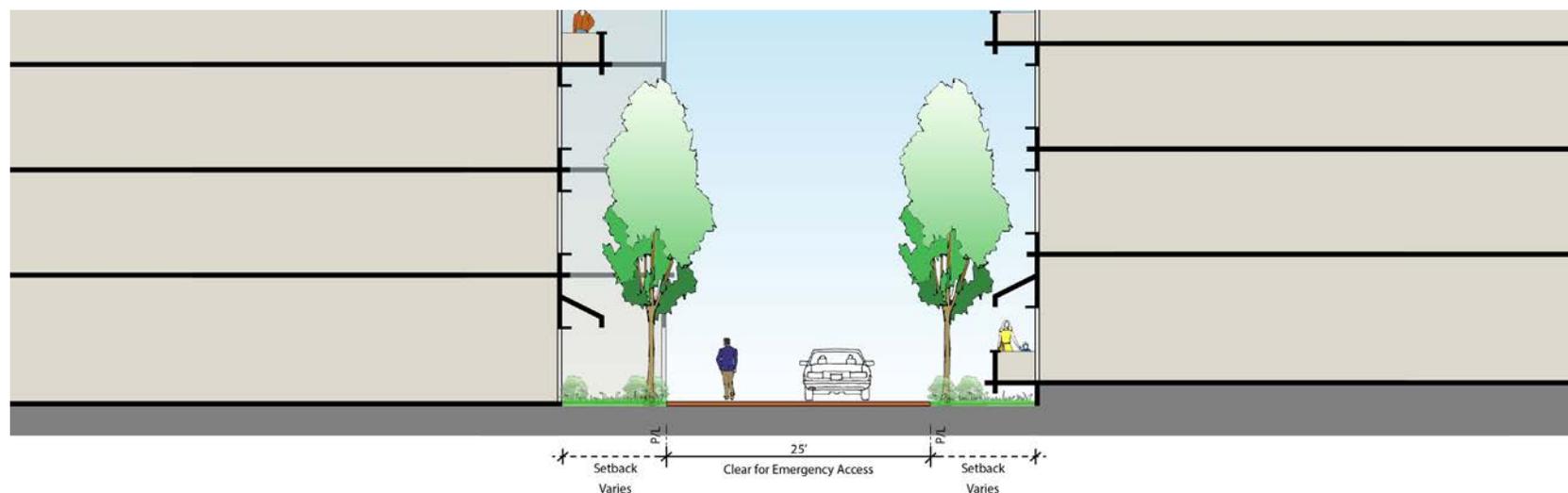
- 5.5.4.7 Use special paving materials or patterns for alleys to visually signal to drivers that they are entering a shared-use zone which allows both auto access and pedestrian connections.
- 5.5.4.8 Connect mid-block pedestrian pathways and greenways through and across alleys with special paving materials or patterns different than the alley paving.

5.5.4.9 Use speed humps, signage, and other traffic-calming devices in alleys and service accessways to reduce vehicle speed.

5.5.4.10 Provide windows and balconies overlooking alleys and service accessways to provide “eyes on the street” for safety and comfort.

5.5.4.11 Screen loading and refuse/recycling collection areas located in alleys from adjacent uses with vegetation, landscaping, walls, and structural design.

5.5.4.12 Incorporate loading areas (such as garage entrances) within the building to the maximum extent possible to minimize impacts on surrounding areas.



5.5.4A - Alleys - Proposed Prototypical Option



PANERA BREAD

PANERA BREAD

DO NOT ENTER

Hotel

5.6 BUILDING DESIGN

Building scale, massing, and design define the character and comfort of an area. The following overarching building design goals will help create a dynamic urban experience:

- **Requiring welcoming and attractive ground-floor environments;**
- **Distinguishing the district with high-quality design of lasting quality and style;**
- **Encouraging cohesive but not monolithic architecture; and**
- **Balancing density with a pedestrian-oriented street environment.**
- **Aligning with state-of-the-art building design.**

The following design standards and guidelines are broken into individual segments for residential, mixed-use, and office buildings.



Transparent Ground Floor and Entrance



Corner Orientation



Building Articulation and Landscaping

5.6.1 Building Massing, Height and Scale

Intent: Design building form, mass, and scale to enhance the pedestrian realm and experience, and to provide transitions to adjacent lower-density development and public spaces.

Standards

For Residential, Mixed-use and Office

5.6.1.1 Limit building height, including all vertical building elements, to the Federal Aviation Administration (FAA) requirement.

For Residential and Mixed-use

5.6.1.2 Limit the uninterrupted length of a building or complex to no more than 330 feet. For any building over 330 feet in length, break up the massing with a ground-floor inset or notch of at least 40 feet wide and 15 feet deep except for the edges fronting onto Mission College Boulevard.

5.6.1.3 Require a minimum 15 foot floor-to-floor height for mixed use buildings with ground floor commercial, flex or community uses except where utility rooms (i.e., fire, electric) must be located and accessible from the public street. In such cases, a reduced height is acceptable if enables transparency on the building façade within the first 15 feet.

5.6.1.4 Break up roof lines at intervals no greater than 80 linear feet by changes in direction, pitch, or similar approaches.



5.6.1.3 - Ground Floor Commercial Use



5.6.1.4 - Variation in Roof Lines

5.6.1.5 Mixed-use buildings shall provide a minimum of 40-foot and maximum of 70-foot depth of ground-floor commercial, and/or and community uses.

-
- 5.6.1.6 Mixed-use buildings shall provide a minimum of 30-foot and maximum of 70-foot depth for flex use.
-
- 5.6.1.7 Elevate ground-floor residential uses at least 24-36 inches above grade and locate windowsills two to three feet above floor level to provide for privacy.
-
- 5.6.1.8 Starting at 70 feet for residential and mixed-used buildings, buildings shall be articulated with a 5-foot average step back from the street wall, including building recesses and protrusions, for a minimum of 50% of each building's public frontage. Balconies and other architectural elements such as louvers are permitted in the recesses. For sites located within FEMA Special Flood Hazard Area Zone AH, building height may be measured from first finished floor.
-
- 5.6.1.9 Buildings that border Calabazas Creek, starting at 70 feet, shall be articulated with a 5-foot average step back from the street wall, including building recesses and protrusions, for a minimum of 50% of each creek frontage, provided it meets the 1:1 daylight plane shown in the General Plan. Balconies and other architectural elements such as louvers are permitted in the recesses.

For Office

- 5.6.1.10 For any building over 330 feet in length, break up the massing by articulating the buildings. Where appropriate, articulate the facades of the base and/or middle to vertically break up the overall mass.
-
- 5.6.1.11 Open up the sky view at the top portion of the building and avoid a canyon effect by:
- Stepping back from the middle portion of the building; and
 - Breaking up into sections with varied heights and articulation.

Guidelines

For Residential and Mixed-use

- 5.6.1.12 Use balconies, roof gardens, and other shared private open space for residents to soften apparent building height.
-
- 5.6.1.13 Provide balconies with a depth of 72 inches where feasible and compatible with building design.
-
- 5.6.1.14 Locate the highest parts of buildings to the north to minimize shadows cast on rooftop open spaces.

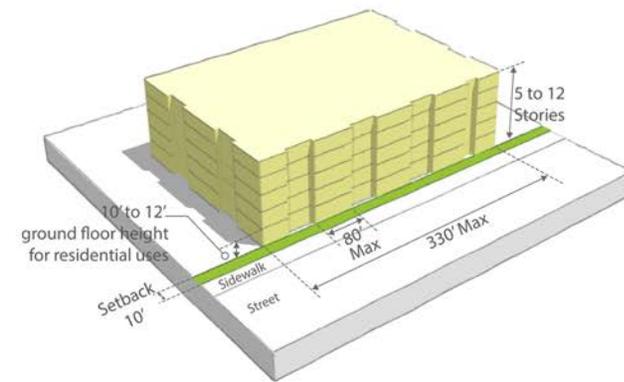


5.6.1.10 – Building articulation at ground floor level



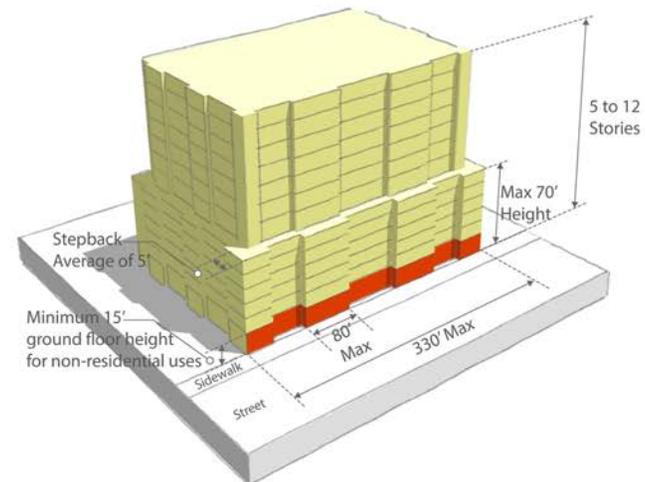
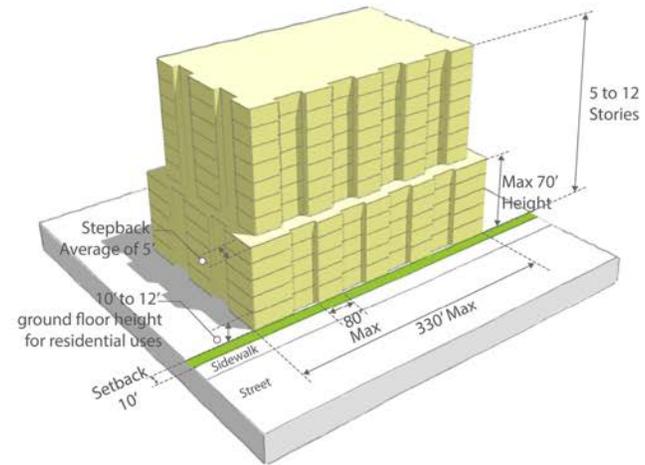
5.6.1.11 – Breaking the building mass in different sections

TYPE	VERY HIGH DENSITY RESIDENTIAL
	RESIDENTIAL
Density	51-99
Heights	5-12 Stories
Ground-floor Use	Residential
Setbacks	10' facing street; 10' facing greenways
Stepbacks - General	No stepbacks required up to 70' height facing streets and greenways
Stepbacks - Size	Average of 5' from streetwall for a minimum of 50% frontage
Streetwall Modulation	80' Maximum
Building Size	330' Maximum or 1/16th of a Mile
Ground Floor Height	10'-12'



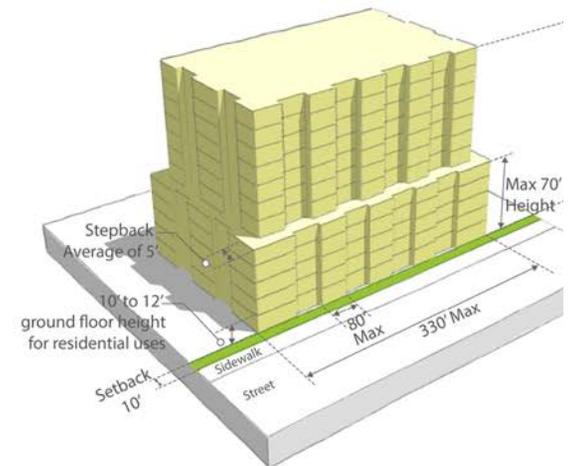
Conceptual diagram for illustrative purposes only.

TYPE	URBAN VILLAGE	
	RESIDENTIAL	MIXED-USE
Density	100-149	100-149
Heights	5-12 Stories	5-12 Stories
Ground-floor Use	Residential	Non-residential
Setbacks	10' facing street; 10' facing greenways	No setbacks facing street
Stepbacks - General	Stepbacks after 70' Height facing streets and greenways	
Stepbacks - Size	Average of 5' from streetwall for a minimum of 50% frontage	
Streetwall Modulation	80' Maximum	
Building Size	330' Maximum or 1/16th of a Mile	
Ground Floor Height	10'-12'	Minimum 15'



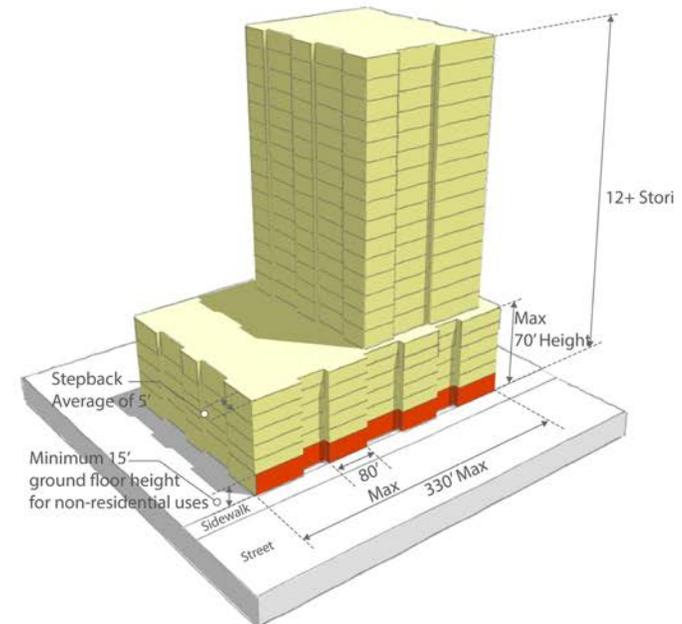
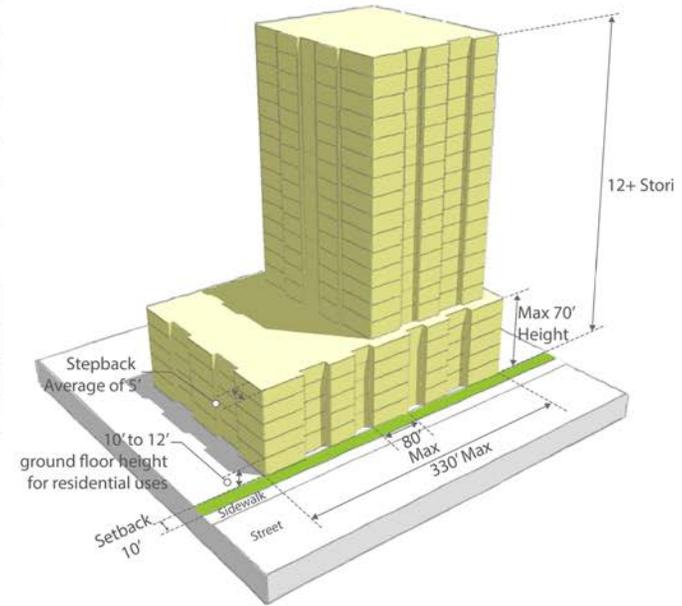
Conceptual diagram for illustrative purposes only.

TYPE	VILLAGE RESIDENTIAL
	RESIDENTIAL
Density	60-149
Heights	5-12 Stories
Ground-floor Use	Residential
Setbacks	10' facing street; 10' facing greenways
Stepbacks - General	Stepbacks after 70' Height facing streets and greenways
Stepbacks - Size	Average of 5' from streetwall for a minimum of 50% frontage
Streetwall Modulation	80' Maximum
Building Size	330' Maximum or 1/16th of a Mile
Ground Floor Height	10'-12'



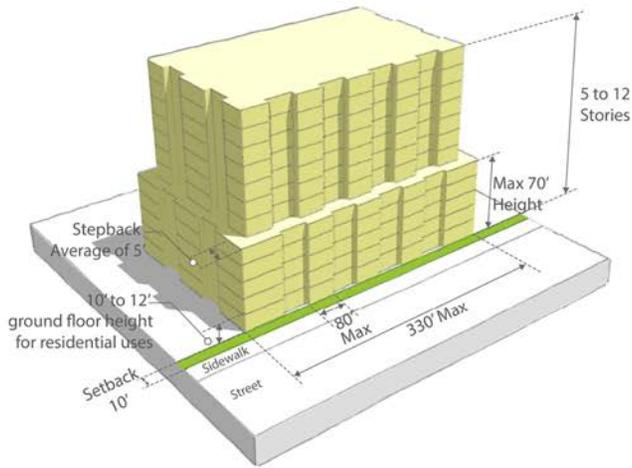
Conceptual diagram for illustrative purposes only.

TYPE	URBAN CENTER	
	RESIDENTIAL	MIXED-USE
Density	120-250	120-250
Heights	12+ Stories	12+ Stories
Ground-floor Use	Residential	Non-residential
Setbacks	10' facing street; 10' facing greenways	No setbacks facing street
Stepbacks - General	Stepbacks after 70' Height facing streets and greenways	
Stepbacks - Size	Average of 5' from streetwall for a minimum of 50% frontage	
Streetwall Modulation	80' Maximum	
Building Size	330' Maximum or 1/16th of a Mile	
Ground Floor Height	10'-12'	Minimum 15'

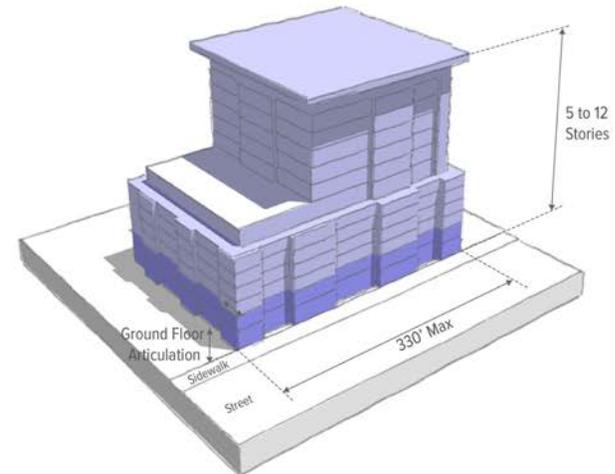


Conceptual diagram for illustrative purposes only.

TYPE	HIGH DENSITY FLEX	
	RESIDENTIAL	OFFICE
Density	60-149	2.0 FAR
Heights	5-12 Stories	5-12 Stories
Ground-floor Use	Residential	Non-residential
Setbacks	10' facing street; 10' facing greenways	No setbacks facing street
Stepbacks - General	Stepbacks after 70' Height facing streets and greenways	Stepback buildings to break the massing
Stepbacks - Size	Average of 5' from streetwall for a minimum of 50% frontage	
Streetwall Modulation	80' Maximum	Use architectural elements, color for modulation
Building Size	330' Maximum or 1/16th of a Mile	For those office buildings that are longer than 330 feet in length, a building articulation should be provided to break the massing.
Ground Floor Height	10'-12'	Minimum 10'-15'



RESIDENTIAL



OFFICE

Conceptual diagram for illustrative purposes only.

5.6.2 Character, Facades, and Articulation

Intent: Promote PHD Specific Plan Area character and allow for investments in all properties to be enduring. The following standards and guidelines require ground-floor building transparency for nonresidential uses and, for all development, insist upon use of high-quality, durable, and distinctive building design through architectural elements and treatments. The design of entries, doorways, and windows shall be focused on strengthening the public realm, supporting retail and office activity, and creating pedestrian comfort and safety.

Standards

For Residential, Mixed-use and Office

- 5.6.2.1 Require perpetual easements for any building element that projects into the right-of-way.
- 5.6.2.2 Locate windows at a pedestrian scale at the street level to maximize daylight and views from the street.

For Residential and Mixed-use

- 5.6.2.3 Buildings shall incorporate one or more of the following in the primary entrance design:
- Placement of art or decorative detailing at the entry;
 - A projecting element above the entrance;
 - A change in material or façade detailing relative to the rest of the building design
 - Implementation of architectural elements, such as flanked columns or decorative fixtures consistent with the building's overall architectural style
 - Recessed doors, archways, or cased openings
 - Changes in the roofline, a tower, or a break in the surface to the subject wall



5.6.2.1 - Ground Floor Windows at Pedestrian Scale



5.6.2.3 - Ground Floor Entrances

5.6.2.4 Ground-floor nonresidential spaces shall provide at least 65 percent visual transparency via clear glass windows and doors between two feet and 12 feet above sidewalk grade. This standard shall apply to flex uses as well as commercial or community spaces (for example, leasing space for associated residential uses, common areas for residential tenants, private gym areas).

For Office

5.6.2.5 Office buildings shall provide 50 percent visual transparency to maximize building engagement and public frontages.

5.6.2.6 Include façade elements and materials that make larger buildings more visually interesting and less bulky, particularly along streets and pedestrian pathways.

5.6.2.7 Office buildings shall incorporate a primary entrance design that strengthens the public realm, supports office activity, and creates pedestrian comfort and safety.



5.6.2.5 - Office Buildings with Visual Transparency



5.6.2.6 – Office Buildings shall be Visually Interesting



5.6.2.7 – Entrances of the building should strengthen the pedestrian realm.

Guidelines

For Residential and Mixed-use

-
- 5.6.2.8 Provide variation in fenestration, color, and architectural elements among multiple adjoining buildings and units.
-
- 5.6.2.9 Incorporate vertical and horizontal architectural elements to mitigate long, unbroken building façades. Use building elements, such as cornices, lintels, sills, balconies, awnings, porches and stoops to enhance building façades.
-
- 5.6.2.10 Articulate lower floors of buildings with pedestrian-scale design elements, such as bay windows, inset doorways, terraces, vertical piers, landscape walls, art, and other design elements.
-
- 5.6.2.11 Mitigate building mass and bulk by using insets, notches, and building features that create shadows.

5.6.2.12 Design windows and doors within a single façade to have a style, height, and scale consistent with the building elevation.

5.6.2.13 When windows face southwest and west, frame them with protruding vertical and horizontal shading elements, such as lintels, sills, and awnings to provide adequate glare protection.

5.6.2.14 To modulate the streetwall, every 80 feet horizontal or less, use either: a change in the plane of at least 3 feet in the horizontal dimension combined with a change in material or fenestration; or a vertical notch of at least 3 feet depth and 5 feet width, combined with a change in material or fenestration.



5.6.2.8 - Variation in Fenestration



5.6.2.9 - Vertical and Horizontal Architectural Elements



5.6.2.10 - Articulation of Building Mass

For Office

5.6.2.15 Respect the character and vertical rhythm of the adjacent properties and create a comfortable pedestrian scale by:

- Breaking up a long façade vertically through massing and architectural articulation to fit into the existing grain built form.
- Determining appropriateness of larger-scale façades in certain areas.

5.6.2.16 Use high-quality, durable, and environmentally sustainable materials, an appropriate variety in texture, and carefully crafted details to achieve visual interest and longevity for the facade.

5.6.2.17 The ground floor of the base should be animated and highly transparent. Avoid blank walls, but if necessary, articulate them with the same materials, rhythm, and high-quality design as more active and animated frontages.



5.6.2.15A - Building Articulation to Break Up Façade



5.6.2.15B - Variation in massing



5.6.2.17 - Ground Floor Transparency and Animation

5.6.3 Materials and Finishes

Guidelines

For Residential, Mixed use and Office

- 5.6.3.1 Use materials and finishes consistently and in a manner appropriate to the intended architectural style of the building.
-
- 5.6.3.2 Encourage architectural styles that use sustainable building practices and materials and ecologically sensitive design solutions, including solar panels, light shelves, and cool roofs.

For Residential and Mixed-use

- 5.6.3.3 Use contrasting colors for trims, windows, doors, and other key architectural elements.
-
- 5.6.3.4 Utilize high-quality, long-lasting materials for exterior windowsills and trims which are consistent with the overall architectural style of the building.
-
- 5.6.3.5 Choose roof materials that complement the materials and colors of the façades and provide texture or relief.
-
- 5.6.3.6 Integrate rain gutters and downspouts into the façade. At a minimum, their color should blend with adjacent surfaces.
-
- 5.6.3.7 Derive materials and colors for trellises, architectural canopies, balconies, and other such design elements from the building architecture.



5.6.3.5 - Complementary Roof and Building Materials

6

Infrastructure



This chapter describes existing conditions, proposed design strategies, and improvements related to the infrastructure needed to support the proposed land use within the PHD Specific Plan Area. The City of Santa Clara and regional utility providers directly control infrastructure systems within the PHD Specific Plan Area, including: sanitary sewer, potable water, storm drainage, dry utilities (such as electricity, natural gas, and telecommunications), and solid waste management.

Implementation of the PHD Specific Plan presents an opportunity to model the latest sustainable development practices. Compliance with the latest green building standards and design principles will enhance environmental, economic, and ecological health. Integrating improved water conservation and low-impact stormwater treatment measures will enable the area to be developed in a sustainable manner, while minimizing environmental and ecological impacts.

6.1 WET UTILITIES

6.1.1 Domestic Water

6.1.1.1 EXISTING DOMESTIC WATER SERVICE

The City of Santa Clara Water & Sewer Utilities Department owns and operates water supply and distribution infrastructure within the PHD Specific Plan Area. The water system provided by the Water Department consists of more than 335 miles of water mains, 26 wells, and 7 storage tanks with more than 28.8 million gallons of water capacity.

The existing water system's source within the PHD Specific Plan Area is served by San Francisco Public Utility Commission's (SFPUC) Hetch Hetchy water supply and is located in pressure Zone I, which is one of four interconnected pressure zones in place in Santa Clara to provide optimum pressures throughout the city. There is a domestic water main running along the eastern boundary line of the PHD Specific Plan Area project site and mains running through the proposed project site. A 12-inch asbestos cement (AC) City main (installed in 1966) runs along Great America Parkway at the project's eastern boundary line from Old Glory Lane to Patrick Henry Drive. This 12-inch main creates a loop with the 12-inch AC mains (1976) on Old Glory Lane, Old Ironsides

Drive, and Patrick Henry Drive. The 12-inch AC main continues west and then north on Patrick Henry Drive beyond the Hetch Hetchy right-of-way.

Lastly, there is an 8-inch AC loop (1981) located in an on-site easement at the Great America Technology Park plaza at 4701 Patrick Henry Drive. The City of Santa Clara Water and Sewer Utilities Department has adequate supply commitments to reliably meet the projected water needs of its residents and businesses for the foreseeable future, through its local wells and contracts with the Santa Clara Valley Water District and the San Francisco Public Utilities Commission.

It is not anticipated that increased densities in the PHD Specific Plan Area should cause overall projected demands to exceed supply in the City of Santa Clara. On October 9, 2020 to comply with the provisions of Senate Bills 610 and 221, which both passed the California State Senate in 2001, the City of Santa Clara has prepared a Water Supply Assessment (WSA) that defines the PHD Specific Plan Area as a single project. The WSA verifies that adequate water can be supplied to the area, consistent with their planning assumptions. The increased demands within the PHD Specific Plan Area will be incorporated into

the baseline assumptions for any subsequent water supply analysis within the city.

6.1.1.2 DOMESTIC WATER SUPPLY AND CAPACITY

New projects within the PHD Specific Plan Area will be required to install distribution mains in new public streets to serve fire and domestic water needs. Additionally, the existing AC water mains within the PHD Specific Plan Area will need to be upgraded and replaced with the City's standard ductile iron pipe (DIP).

Overall, the densities of development will represent an increase over existing conditions, and will, in turn, increase domestic water demand in the area. A hydraulic study for the PHD Specific Plan was performed and no upsizing was required. Individual projects will need to perform a fire flow analysis for each building or site.

6.1.1.3 INFRASTRUCTURE UPGRADES

Given the age and material of the water infrastructure in the PHD Specific Plan Area (asbestos cement pipes installed between 1966-1981), water mains will need to be upgraded to DIP to comply with the current City of Santa Clara Water Utility standards. All on-site mains and services connected to these mains shall be removed or abandoned. New developments shall connect to the new public water mains within public streets.

A hydraulic study for the potable water system was performed and it was determined that no additional upsizing of the lines is needed for the demands shown within the PHD Specific Plan Area. Individual developments will need to perform fire flow analysis for each building or site.

6.1.2 Recycled Water

6.1.2.1 EXISTING RECYCLED WATER SERVICE

Recycled water is used for certain approved non-potable uses. Pursuant to City Municipal Code Chapter 13.15, projects are required to use recycled water for all non-potable uses where recycled water is made available and where provided for by Recycled Water regulations. The City purchases recycled water from South Bay Water Recycling (SBWR). This is highly treated water delivered through separate pipelines. This source makes up about 16 percent of the water sales in the City of Santa Clara. Recycled water offsets the use of potable sources in drought-prone California and is a reliable source for conservation of potable sources.

There are two recycled water mains running through the PHD Specific Plan Area. There is an 8-inch plastic pipe (1997) running south on Patrick Henry Drive that transitions to a 12-inch Yelowmine main (1994), flowing eastward past the street curve towards Great America Parkway. This main splits in two at the intersection with Old Ironsides Drive. It remains a 12-inch Yelowmine main as it continues north on Old Ironsides Drive but transitions back to an 8-inch plastic main as it continues to Great America Parkway.



Below-ground infrastructure



Street-level Stormwater Drain

6.1.2.2 RECYCLED WATER SUPPLY AND CAPACITY

New projects within the PHD Specific Plan Area will be required to install new distribution mains in the public streets to serve irrigation, dual plumbing and industrial recycled water needs.

6.1.2.3 INFRASTRUCTURE UPGRADES

The existing recycled water infrastructure in the PHD Specific Plan Area will be replaced with 12-inch DIP in all public streets. The new DIP pipe material is the current City of Santa Clara Water Utility Standard and provides more strength and durability than the existing pipe materials which have been associated with higher occurrences of failure within the City. These improvements are included in the PHD Impact Fee (discussed in Chapter 7).



Recycled Water is Available to the PHD Area

6.1.3 Sanitary Sewer

6.1.3.1 EXISTING SEWER INFRASTRUCTURE

The City of Santa Clara Water & Sewer Utility Department is the sanitary sewer infrastructure's owner and is responsible for its maintenance. The Department of Public Works is responsible for infrastructure planning, including master plan, conveyance capacity review, and design and construction of necessary sewer capacity improvements. Sanitary sewer flows in the city are collected and transported to the San Jose/Santa Clara Regional Wastewater Facility (RWF) through more than 270 miles of sewer main by way of six pumping stations.

The existing sanitary sewer system serving the project site consists of 6-inch, 10-inch, and 12-inch vitrified clay pipe (VCP) mains. The main segment within the project site is the 12-inch VCP main which begins in front of the Great America Technology Park plaza at 4701 Patrick Henry Drive, traverses the site eastward, then north along Old Ironsides Drive and continues eastward on Tasman Drive into the Tasman lift station. The 6-inch VCP main's upstream end is on Mission College Boulevard south of the project site and runs along a 10-foot easement between the properties at 3118 and 3200 Patrick Henry Drive. This 6-inch main connects to the 12-inch main on Patrick Henry Drive.

The 10-inch VCP main's upstream end is at the southwestern corner of the property at 4701 Patrick Henry Drive and runs south between the properties at 3055 and 2929 Patrick Henry Drive.

6.1.3.2 COLLECTION SYSTEM CAPACITY

The City of Santa Clara hired Woodard & Curran (W&C) to evaluate the potential sanitary sewer capacity impact of the proposed PHD Specific Plan. The Technical Memorandum (May 7, 2020) analyzed the sanitary sewer system in the area under three scenarios. The first scenario analyzed was the PHD Specific Plan Area's current state without any new development. The other two scenarios were analyzed for future conditions with two proposed Specific Plan development scenarios (Scenarios A and Scenario B). Scenario A consists of 12,000 residential units, 200,000 square feet (SF) of commercial retail area, and 110,000 SF of an educational facility. Scenario B consists of 10,300 residential units, 785,000 SF of new office (R&D) space (replacing 200,000 SF of existing office space), 200,000 SF of commercial retail area, and 110,000 SF of an educational facility.

The technical memorandum states that “both development scenarios result in capacity deficiencies along the 12-inch Old Ironsides Drive and 15-inch Tasman Drive sewer (as proposed by CIP P4, Tasman Drive Sewer Improvement). In addition, the Tasman Drive Lift Station will have to be upsized to increase its capacity.” The CIP P4 was recommended per the Master plan study in 2016. However, the proposed development causes additional impact to Tasman Drive, thus requiring additional upsizing (further discussed in PHD Specific Plan Area Improvements section). The existing Tasman Lift Station has a current rated capacity of 1.5 million gallons per day (mgd). The new peak wet weather flow (PWWF) from proposed development reaching the Tasman Lift Station would increase to 4.23 mgd. The City analyzed the potential to upsize the existing Tasman Lift Station to address the capacity deficiency for the increased flows and found this solution to be infeasible.

6.1.3.3 PHD SPECIFIC AREA IMPROVEMENTS

The City continued to work with W&C to further identify and develop capacity improvement project alternatives for addressing the capacity deficiencies resulting from the proposed PHD Specific Plan. A total of eleven alternatives were identified as part of the development process including:

- One capacity improvement alternative at the existing Tasman Lift Station
- Eight gravity sewer alternatives
- Two sewer lift station alternatives

The alternatives were evaluated and weighted based on set criteria including availability of land (easements or right-of-way), hydraulic performance, utilities crossings, constructibility, operations and maintenance, permitting, and construction cost.

Based on the alternatives and evaluation, it was determined that the recommended solution was a gravity scenario in which most of the PHD Specific Plan Area development flows to the Great America Parkway (GAP) West Trunk at Patrick Henry Drive. The scenario also proposes to upsize and lower a portion of the GAP West Trunk (from Patrick Henry Drive to manhole S93-53 (manhole acting as bridge between the West and East GAP trunks). An existing leg of sanitary sewer running north from Patrick Henry Drive in the location of the central parkland will be abandoned as part of development. The Rabello and Northside Pump Stations will also need improvements in order to handle the new increase in flow. The new combined rated capacity for these pump stations will need to increase from 41 mgd to at least 45.3 mgd.

6.1.3.4 INFRASTRUCTURE UPGRADES

Given the size and flow direction of the existing sewer mains in the PHD Specific Plan Area, sewer lines will need to be upsized and/or resloped to allow for a gravity alternative to eliminate the deficiency noted at the Tasman Lift station. These improvements are included in the PHD Impact Fee (discussed in Chapter 7).

6.1.4 Storm Drain

6.1.4.1 EXISTING STORM DRAIN INFRASTRUCTURE

The City of Santa Clara Public Works Department is responsible for the construction and maintenance of the City's storm drain system. Santa Clara's storm drain system consists of curb inlets that collect and channel surface water into a series of pipelines beneath City roadways. Stormwater is delivered through these underground pipelines to creeks within the city, which then directly flows into the San Francisco Bay.

The current network of storm drain pipes in the PHD Specific Area project site all drain to San Tomas Aquino Creek through the Westside Storm Drain Pump Station on Old Mountain View-Alviso Road. The network's upstream end begins with a 33-inch main in front of the property at 4701 Patrick Henry Drive and transitions to 36-inch, 39-inch, 48-inch, and 54-inch mains progressively as it makes its way east to Great America Parkway. A 27-inch main collecting runoff along Old Ironsides Drive transitions to a 33-inch main and connects to the 48-inch main

on Patrick Henry Drive. All flows continue north on Great America Parkway towards the Westside Storm Drain Pump Station. There are currently no on-site stormwater treatment facilities in place.

6.1.4.2 PLAN AREA IMPROVEMENTS

The City of Santa Clara's 2015 Storm Drain Master Plan does not recommend any work (high, moderate, nor low priority improvement projects) be done within the Patrick Henry Drive Specific Area project site. However, flooding does occur in some areas during 2-year, 10-year, and 100-year storm events.

It is anticipated that storm drain flows generated by development under the Patrick Henry Drive Specific Plan will be adequately received by existing off-site storm drain systems, although the Plan Area will require construction of a new stormwater treatment system on-site to accommodate proposed land uses.

6.1.4.3 PROJECT FLOOD CONDITIONS

The PHD Specific Plan Area contained by San Francisco Public Utility Commission's Hetch Hetchy pipeline easement to the North, Patrick Henry Drive to the West, Great America Parkway to the East, and Mission College Boulevard to the South is currently identified by the Federal

Emergency Management Area (FEMA) Flood Insurance Rate Maps (FIRM) to be within three Flood Zones; mostly Zone X, some portions of the southern side of Patrick Henry Drive in Zone AH (EL 17), and the intersection of Old Ironsides Drive and Old Glory Lane in Zone AO (one-foot Depth).

Zone X is defined as an area having a 0.2 percent annual chance flood; areas of 1 percent annual chance flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from 1 percent annual chance flood. Zone AH is defined as an area with flood depths of one to three feet (usually areas of ponding); base flood elevations are determined (base flood elevation of 17 for the Plan Area). Zone AO is defined as an area with flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depth determined (average depth of 1 foot for this area).

Any development projects within Zones AH and AO needs to be carefully considered, whether proposing to install improvements within the flood plain, or whether seeking to raise elevations locally to remove areas from the flood plain. The placement of fill materials to remove particular areas from FEMA's mapped flood plain need to thoroughly evaluate potential downstream and upstream effects.

6.1.4.4 STORMWATER QUALITY

Any project within the PHD Specific Plan Area must meet the requirements of Section C.3 of the Santa Clara Valley Urban Runoff Pollution Prevention Program's (SCVURPPP) National Pollutant Discharge Elimination System (NPDES) permit with the California State Water Board, the City of Santa Clara requirements, and other applicable local, state, and federal requirements to ensure that stormwater is adequately treated prior to being discharged into the San Francisco Bay. Various stormwater treatment options for post-development treatment measures could be appropriate for specific applications. These could include infiltration trenches, media filtration devices, pervious surface treatments, and bio-retention areas.

While it is typical for individual, private projects to incorporate applicable treatment systems within their individual sites on a project-by-project basis, provisions for treatment of run-off from either new or newly widened public facilities (such as streets, sidewalks, and bicycle trails/paths) will also be required. As site planning within the PHD Specific Plan Area progresses, a comprehensive, regional approach to stormwater treatment should be considered. A regional approach could include developing standards for public streets that allow stormwater to be treated "at the source" before being captured in drainage inlets, and/or large, regional facilities that treat run-off from multiple parcels and/or public rights-of-way. In either case, adequate space for these facilities must be programmed into any land planning effort.

6.1.4.5 INFRASTRUCTURE UPGRADES

Given the requirements to treat new or newly widened public facilities, the City has programmed storm water treatment planning into the Specific Plan. These improvements are included in the PHD Impact Fee (discussed in Chapter 7).

6.2 DRY UTILITIES

6.2.1 Gas System Infrastructure

Pacific Gas and Electric Company (PG&E) owns and operates the gas service within the City of Santa Clara, including the PHD Specific Plan Area. PG&E has stated that there are no known capacity limitations within the gas system in the PHD Specific Plan Area. It is likely that gas mains that would otherwise remain due to their location within a proposed street, will need to be upgraded to comply with the current PG&E standards. PG&E will be actively involved throughout the design, construction, and operation of natural gas utilities required for the project to guarantee efficient and reliable utilization of natural gas resources.

6.2.2 Electrical System Infrastructure

Silicon Valley Power (SVP) owns and operates the electric service within the City of Santa Clara, including the PHD Specific Plan Area. SVP will be actively involved throughout the design, construction, and operation of electric utilities required for the project to guarantee efficient and reliable utilization of electric resources. At the time of PHD Specific Plan Adoption, SVP is seeking approval for infrastructure upgrades and load capacity fees that include improvements to the PHD Specific Plan Area.



7

Implementation Plan

PHD

The Patrick Henry Drive (PHD) Specific Plan provides a comprehensive framework and set of policies to guide its transformation to a high-density, mixed-use residential community. Following Plan adoption, development will require a range of efforts and actions on the part of the City, property owners, developers and others. These include carrying out the necessary regulatory measures, providing infrastructure improvements, and securing needed financing. In order to meet the City of Santa Clara’s climate action goals, property owners and developers must also implement Transportation Demand Management (TDM) strategies. This chapter details the major policies and actions that will ensure effective implementation of the Specific Plan.

The chapter is divided into the following sections:

- Regulatory Implementation
- Funding
- Transportation Demand Management

7.1 REGULATORY IMPLEMENTATION

The Specific Plan is the City policy document governing future land use within the PHD Specific Plan Area. Following Plan adoption, regulatory actions will be taken by City Council, Planning Commission, City staff and others, as described below.

7.1.1 General Plan Amendment

Approval of the Specific Plan includes concurrent approval of a General Plan amendment that reflects the Specific Plan’s vision, goals and policies and incorporates the Plan Area’s development (buildout) potential in the overall City buildout projections. A General Plan amendment brought forward with the Specific Plan will include the land use designations included in this plan (Chapter 4).

7.1.2 Zoning Ordinance

While the General Plan establishes a policy framework, the Zoning Ordinance prescribes standards, rules, and procedures for development. The Zoning Ordinance translates Specific Plan policies into specific use regulations, development standards, and performance criteria that govern development on individual properties. At the time of the Specific Plan approval, City Council shall also adopt Zone Change and Zoning Text Amendments by ordinance.

7.1.3 Project Planning Review And Approval

All development projects within the PHD Specific Plan Area shall be subject to review in accordance with the procedures described in Chapter 18.76 of the Santa Clara Zoning Ordinance. These procedures will ensure development is consistent with the PHD Specific Plan as well as other applicable City ordinances and standards. Specifically, proposals must meet the development standards and substantially conform to the design guidelines in Chapter 5 of the PHD Specific Plan. Individual projects must also provide a bird-safe evaluation project as part of the development review process.

7.1.4 Legal Non-Conforming Uses

The lawful use of structure existing prior to the adoption of this Specific Plan may continue, and none of the other sections of this Chapter shall apply. Such buildings shall operate as though prior zoning of the parcel remained in place, until such time as the existing use (including any expansions) has been discontinued in its entirety, at which time the prior zoning shall become inapplicable and the other sections of this Chapter shall apply from that point forward.

For parcels with legal uses of buildings existing prior to the adoption of this Specific Plan, allowed uses of the prior zone (ML: Light Manufacturing) shall apply, and none of the other sections of this Chapter shall apply to the structure and use, until the existing use (including any expansions) has been discontinued in its entirety.

7.1.5 Public Art Fee

Planning staff shall prepare a post-adoption Specific Plan amendment for a public art fee.

7.2 FUNDING FOR INFRASTRUCTURE AND SERVICES

This section describes the funding approaches and policies for both the one-time and on-going costs of providing the public infrastructure, improvements and services needed to implement the Specific Plan. It is designed to ensure that new development within the Plan Area “pays its own way” and does not put a strain on the City’s limited financial resources.

7.2.1 Funding Requirements and Phasing

While the need to improve and expand public infrastructure and services to and within the Plan area will evolve over time, it is essential to secure adequate funding prior to development. The funding resources will need to be generated by the property owners, developers, and/or tenants within the Plan Area.

The Specific Plan and other City sources provide baseline information on the applicable standards and related infrastructure requirements.

Chapter 6: Infrastructure and Public Services describes the type and level of improvements and services required to support planned development.

The Environmental Impact Report identifies a number of mitigation measures necessary to address various Plan impacts.

Chapter 4, Section 4.5 and the City Park and Recreation’s Land Ordinance (City Code Section 17.35) describe the service standards and facilities applicable to development in the Specific Plan Area.

Each landowner/developer will be responsible for construction and dedication of any public parkland contribution at no cost to the City and subject to a park design and construction agreement and a park maintenance agreement with the City. Credit will be allocated for dedication and improvements per City Code Section 17.35. Maintenance of public parkland may be funded through a Community Facilities District (see section 7.2.2.) or other maintenance agreement.

Chapter 4 Section 4.4, describes on the affordable housing goals and policies applicable to the PHD Specific Plan.

7.2.1.1 PROJECT PHASING

Although it is not possible to accurately predict if and when each of the individual properties within the PHD Specific Plan Area will redevelop, the following assumptions have been made with input from property owners and developer representatives for the purposes of infrastructure planning and funding. See Table 7.1 and 7.2.

7.2.2 Funding Tools and Resources

The public improvement costs will be funded utilizing a variety of funding mechanisms and resources. The appropriate and most effective funding mechanism is based on the nature of the improvement or service being delivered as well as the timing (e.g., when the funds are needed), level and frequency of costs (e.g., on-going versus one-time costs), the primary beneficiaries and responsible parties, and funding availability.

During the buildout of the Specific Plan, other funding sources may be identified and used as appropriate.

While the revenue generated from existing City sources (i.e., taxes and fees) may defray some of the costs associated with Specific Plan area infrastructure improvements and/or service or maintenance requirements, additional funding will be required. Accordingly, the financing tools and resources described below are presented as options for addressing this shortfall.

The estimated buildout figures in Tables 7.1 and 7.2 were provided by property owners in 2022, or estimated based on maximum density. As a result, the projected units are lower than the maximum allowable.

Table 7.1: PHD Buildout by Address

Address(es)		Phase	Maximum Units
2901	PHD	1	968
2950	PHD	2	375
3000	PHD	1	375
3055	PHD	1	955
3105	PHD	1	376
3118	PHD	1	375
3200	PHD	2	889
4590	PHD	1	416
4600	PHD	3	--
4701	PHD	1	674
4701	PHD	2	674
2900	PHD	2	296
4633, 4655, 4677, 4699	OID	1	1,700
4700	OID	3	--
Total			8,073

Table 7.2: PHD Buildout by Phase

Phase	Occupancy	Estimated Units
1	2025-2029	5,839
2	2030-2034	2,234
3	2035 and later	--
Total		8,073

7.2.2.1 PHD SPECIFIC PLAN INFRASTRUCTURE IMPACT FEE

With input from the prospective developers and property owners of the Specific Plan, the City initiated the process of creating a PHD Specific Plan Infrastructure Impact Fee to facilitate development. The purpose of the Impact Fee is to create an equitable distribution of area-wide and common infrastructure costs for all developers within the Specific Plan. Infrastructure that provides common benefits to development within the Specific Plan was analyzed and calculated for probable construction costs. These fees cannot be used for public services or maintenance. The fee program would be enacted by the City Council through adoption of an ordinance in a public hearing (without a public vote or landowner approval). The fee levels must be based on a “rational nexus”, or a demonstrated relationship between the amount and impact or demand attributable to the development paying the fee.

In the case of the PHD Specific Plan, an Area Impact Fee would supplement the existing Citywide development impact fees but focus more narrowly on infrastructure improvements that serve Patrick Henry Drive. The PHD Impact Fee will be used to cover area-wide infrastructure items including on-site roadway facilities (i.e. traffic signals, traffic safety devices, pavement rehabilitation), sanitary sewer facilities and structures, storm drainage facilities, potable and recycled water facilities, emergency response vehicle and tiller aerial ladder apparatus, entry monuments and signs, and the formation of a Transportation Management Association (TMA).

Proceeds may be used to reimburse property owners who pay up-front costs for facilities or infrastructure needed to facilitate development on their property.

7.2.2.2 MAINTENANCE AGREEMENTS

A Mello-Roos Community Facilities District (CFD) can be authorized to levy a special tax for public facilities and services. A CFD may be initiated by the legislative body or by property owner petition.

CFD funds can be used to cover the cost of certain public services as well as infrastructure. At the time of Specific Plan Adoption, the City and property owners are evaluating whether the development of a CFD would be appropriate to cover park maintenance and maintenance of new publicly accessible streets within the plan area.

7.2.3 Funding Policies and Implementation Actions

The policies and actions outlined below assume a PHD Specific Plan impact fee and CFD maintenance funding agreements. The policies guide the subsequent actions including requisite studies or findings, formation and adoption of financing entities and mechanisms, and other approaches, approvals and programs.

The policies and actions outlined below assume a PHD Specific Plan impact fee and CFD or other maintenance agreement.

FUNDING POLICY #1

The land uses within the Specific Plan shall pay the full costs of capital facilities, infrastructure improvements, maintenance and public services, and other requirements needed to support and serve the Plan Area and mitigate the impact of development on other parts of the City.

Action 1.1: Establish initial cost and phasing assumptions. Prior to the approval of planning entitlements for individual development projects on privately owned properties, the City will prepare, at the applicants' expense, a cost analysis that identifies all public infrastructure and service requirements needed to serve their project and their respective costs. The infrastructure and service cost estimates included in this report will be based on the best information available and will be updated periodically during various phases of the Specific Plan development process. This cost analysis should account for project-specific circumstances, changing market conditions, and be updated as more refined facility and cost data become available.

FUNDING POLICY #2

A Specific Plan Area Impact Fee shall be established to fund necessary infrastructure and public facilities needed to serve the area. The Impact Fee will be used for costs not typically included in City fees or charges, such as land and construction costs for new publicly accessible roadways, and area-wide sewer improvements. The fee cannot be used for ongoing operations or maintenance costs.

FUNDING POLICY #3

The Specific Plan shall expand infrastructure improvements and services in a phased manner such that adequate capacity is provided as development occurs.

Action 3.1: Establish Phasing Requirements. The City shall prepare a detailed infrastructure and public service phasing schedule that links the timing of additional infrastructure and service provision to the service level demands created by new development, to the extent possible.

Action 3.2: Identify Required Land and Facility Dedications, Easements, and Use Restrictions. Specific Plan implementation will require land for public infrastructure (e.g., transportation, utilities, and park and open space) and to meet other policy goals (e.g., pedestrian and bicycle connections). The City and property owners shall establish a process, and in some cases designate the approximate amount and preferred location, for necessary land contributions. Some developers may need to “oversize” or provide land and public facilities beyond what is required by a particular project to ensure various phases of development stand-alone functionally and aesthetically. The timing and precise terms of land conveyance, whether through dedication, easement, deed restrictions, or other means, may vary depending on the circumstance. However, a clear and enforceable process should be established prior to major redevelopment in order to achieve equitable cost allocation, implement various financing tools, and advance other planning prerogatives.

FUNDING POLICY #4

The cost of public infrastructure, and amenities envisioned for the Specific Plan (including land as well as maintenance) shall be allocated among land uses (i.e., property owners, developers, and tenants) in a manner that is fair and equitable, to the extent possible.

Action 4.1: Advance equitable cost sharing measures. Implementation of the Specific Plan should be guided by the principle of an equitable allocation of costs to ensure that no property owner / developer is disproportionately disadvantaged by the proposed land use and phasing program. For example, if it is necessary for certain property owners to dedicate property towards the creation of public infrastructure/ facilities, they should be fairly compensated by property owners / developers who do not make such dedications.

Accordingly, the City should engage and coordinate with property owners, developers, and other entities to in the establishment and execution of the preferred Specific Plan financing mechanism(s).

To the extent feasible, the value of any land that is dedicated for the purposes of infrastructure and public facilities should be based on its fair market value given allowable uses. For example, a third-party appraisal would allow for a realistic determination of the value asset based on the highest and best use of the land. Of course, land that is currently not developable, due to permanent easements or environmental considerations, for example, would be assessed accordingly.

Action 4.2: Consider creative and flexible financing solutions. In addition to the Impact Fee and other tools described above, additional funding solutions can be used for project and plan area infrastructure as needed. These creative solutions can address buildout complexities, including phasing. For example, the City can facilitate mechanisms for future development to reimburse developers who “oversize” infrastructure or dedicate excess land, possibly as part of an area development impact fee ordinance or related credit and reimbursement agreements. Measures could include cost sharing agreements, construction and reimbursement agreements with developers, and “pre-payment” or “buy-down” options that increase certainty and avoid interest costs.

7.3 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) consists of a combination of programs, policies, and infrastructure projects designed to reduce overall vehicle trips and associated parking demand. TDM seeks to provide incentives and options for PHD residents and employees to choose alternative modes such as walking, bicycling, transit, or ridesharing.

The City of Santa Clara's 2010-2035 General Plan Update includes goals and policies related to transportation demand management (TDM) for Specific Plans. These include land use and site design strategies to reduce reliance on automobile trips and reduce VMT. Implementing TDM measures in the PHD Specific Plan Area must be consistent with these General Plan policies and the requirements of the City's Climate Action Plan (CAP). This Specific Plan requires a vehicle miles traveled (VMT) reduction of twenty percent over the baseline established in the project traffic analysis, including ten percent through TDM measures.

The PHD Specific Plan includes land use, mobility and site design measures that support walking, biking, transit, and other alternative transportation choices. In addition to the location and mix of uses in the PHD Specific Plan Area, TDM measures for each specific development proposal pursued under the PHD Specific Plan must be incorporated into a TDM Plan (see Section 7.3.3 below) to be used to minimize single-occupancy vehicle trips and to reduce VMT by at least 10%.

The PHD TDM program outlined below includes measures that are applicable to the entire PHD Specific Plan Area; parcel-specific requirements; and a menu of optional measures that can be employed to help property owners and developers pursuing specific development proposals under the PHD Specific Plan to help achieve TDM goals.

7.3.1 Transportation Management Association

Establish a privately funded and administered Transportation Management Association (TMA) for the PHD Specific Plan Area or join in a TMA for the North Santa Clara area (comprising neighborhoods north of Highway 101) led by property owners that are pursuing specific development proposals within the PHD Specific Plan area, employers or other entities. The main purpose of the TMA is to fund and operate the local shuttle service or micro-transit solution (see 7.3.2 below), and may help to implement, coordinate and manage VMT-reduction programs as determined appropriate by the TMA members, between multiple properties and lead information and marketing campaigns to support behavior change.

Property owners pursuing specific development proposals under the PHD Specific Plan must prepare formation documents for a new TMA. The formation documents necessary to establish the TMA under applicable laws and regulations must be completed and approved by the City Council prior to the first Building Permit issuance for new construction implementing the PHD Specific Plan.

Property owners pursuing specific development proposals under the PHD Specific Plan shall be required to join the TMA.

Prior to the commencement of operation of the TMA, the property owners pursuing specific development proposals under the PHD Specific Plan must propose and fulfill other temporary substantial TDM programs or incentives, such as a three-year VTA Smart Pass for all residents, to serve as a stopgap until the TMA commences operation pursuant to 7.3.1. This temporary proposal must be prepared to the satisfaction of the City Manager prior to issuance of the first Building Permit issuance for new construction implementing the PHD Specific Plan.

In connection with the completion of the formation documents for the TMA, the property owners pursuing specific development proposals under the PHD Specific Plan shall obtain an analysis prepared by a qualified professional and submit the analysis to the City Council for approval (TMA Analysis). The purpose of this analysis is to confirm the potential market within the PHD Specific Plan area for a local shuttle program or micro-transit solution (as described in section 7.3.2) and provide recommendations for efficient, cost effective service delivery.

The City Manager shall determine whether the local shuttle or micro-transit solution will be implemented by the TMA.

Notwithstanding any other provision of this section, the TMA must be formed prior to the issuance of a Building Permit for the 3,300th unit in the PHD Specific Plan Area or prior to the issuance of a Building Permit for the 1,500th unit in the PHD Specific Plan Area when a minimum of 5,000 units (inclusive of units in the PHD Specific Plan issued Building Permits) contributing to the TMA funding and/or administration have been issued Building Permits.

The individual property owner(s) that actually fund the preparation and completion of the formation documents pursuant to this Section 7.3.1 shall receive a credit/reimbursement for all costs associated therewith via the PHD Specific Plan Impact Fee.

7.3.2 Local Shuttle

The TMA shall fund and operate a local shuttle program or micro-transit solution, consistent with the approved TMA Analysis, that connects residents with commercial, transit, and employment centers. This service shall be funded by all property owners pursuing specific development proposals under the PHD Specific Plan, with said costs being proportionately shared. The operation can be incrementally expanded with other developments in North Santa Clara through expanded participation by property owners and developers outside of the PHD Specific Plan, including voluntary participation of other key North Santa Clara destinations and employers.

The TMA must commence operations and shuttle or micro-transit solution service prior to the issuance of a Certificate of Occupancy for the 3,300th unit of the PHD Specific Plan Area or prior to the issuance of the Certificate of Occupancy for the 1,500th unit in PHD Specific Plan Area when a minimum of 5,000 units (inclusive of units in PHD Specific Plan issued Certificates of Occupancy) contributing to the TMA funding and/or administration that have been issued Certificates of Occupancy. Prior to the completion of the first four years of shuttle or micro transit operation, the TMA will be evaluated by the City and alternative methods of single vehicle trip reduction could be considered with the objective of continuing to ensure the shuttle or micro-transit solution provides efficient, cost effective service delivery.

7.3.3 Required Parcel-Specific TDM Elements

Each property owner or developer must adhere to this Section 7.3.3 in connection with its specific development proposal being pursued under the PHD Specific Plan. These programs and measures can be adopted and implemented on an individual basis, or through collaboration and coordination at the Specific Plan Area level.

TDM PLANS

Each property owner pursuing a specific development proposal under the PHD Specific Plan must submit a TDM Plan that includes, for example, mode-share goals, planned TDM programs, tools and processes for monitoring and reporting on travel behavior as described further below, which, when implemented, will satisfy the 10% reduction requirement noted above. The TDM Plan must be approved by the Community Development Director prior to the issuance of building permits.



Ride Sharing Option

INFORMATION AND MARKETING

Each TDM Plan must provide information and marketing to residents and/or employees to build awareness of TDM programs, amenities (e.g., bike lockers and showers) and incentives. Information on transportation options and/or links to appropriate websites, apps and other resources (e.g., 511) must be:

- Provided to all prospective residents and employees
- Included in resident and employee welcome or orientation materials
- Posted in prominent locations within buildings (e.g., elevators, shared common spaces) and online (e.g., on tenant portals)

BICYCLE PARKING

Each TDM Plan must provide both short- and long-term bicycle parking in all buildings as described in Section 5.2.4.5 of this plan. Bicycle parking locations must be located in convenient, secure and prominent locations in each building.

TRANSPORTATION COORDINATOR

Each TDM Plan must identify an individual or job classification that will serve as the property's transportation coordinator and if this will be a full or part-time position. The TDM Plan must describe the duties and responsibilities of the transportation coordinator. Typical roles of transportation coordinators include:

- Providing information about transit options and passes
- Marketing TDM programs, including distribution of orientation materials for new residents/employees
- Distributing transportation news and commuter alerts
- Assisting with rideshare matching
- Managing travel surveys to track trends and develop new commute programs
- Coordinating services with vendors, partners and transit providers

7.3.4 Optional TDM Elements

The following is a partial list of optional TDM elements that can be adopted on a parcel-specific or area-wide basis to supplement the required elements listed above and/or to augment efforts if a project is unable to meet its mode-shift goals. Property owners can include these and other preferred options as part of their TDM Plan.

CAR SHARING

Car sharing programs allow people to have on-demand access to a shared fleet of vehicles as an alternative to car ownership. Property owners can provide parking spaces for car-share operators and/or memberships for residents or employees.

TRANSIT PASS SUBSIDIES

Property owners can share or cover the cost of transit passes with their employees and residents.

BIKE BUDDY PROGRAMS

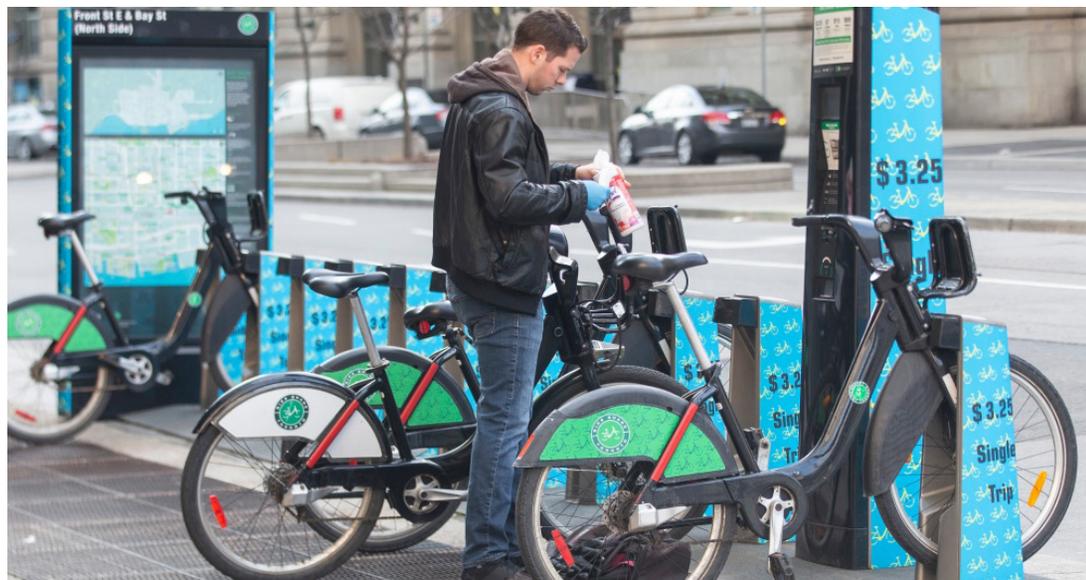
A “Bike Buddy” program pairs a beginning or novice bicyclist with an experienced rider who already knows safe routes and riding techniques.

ON-SITE AMENITIES AND SERVICES

Mixed-use buildings can offer on-site amenities such as a café, ATM machine, post office, dry cleaning, pharmacy, as well as other types of retail services to reduce the need for vehicle trips for meeting day-to-day needs. Reducing the need for these types of trips makes using alternative modes of transportation for commuter purposes more feasible.

RIDESHARE MATCHING PROGRAMS

Employers or property owners can offer carpool / vanpool matching services, subsidies, and priority accommodation to all employees or residents.



Bike Share Program