



# TASMAN EAST

## FOCUS AREA SPECIFIC PLAN



**City of  
Santa Clara**  
The Center of What's Possible

PERKINS+WILL

02/22/19

# ACKNOWLEDGEMENTS

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# 01 INTRODUCTION

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# 01.1 PLAN CONTEXT & STRUCTURE

## PLAN CONTEXT

In 2010, the City of Santa Clara adopted its comprehensive 2010-2035 General Plan, which included the identification of nine Focus Areas throughout the city. These areas were chosen for their potential to significantly define the City's identity as a place in transition from a suburb to a regional economic center. The opportunity to develop at a higher density near transit is central to this new identity.

In 2014, the City initiated its Housing and General Plan Land Use Planning Elements that identified which Focus Areas would prioritize housing development in order to reach housing goals set by the State required Regional Housing Needs Allocation (RHNA). These areas were selected based on their proximity to transit, jobs and potential for redevelopment. The City required the approval of a comprehensive and specific Focus Area Specific Plan prior to development of each of these areas.

The 46.1-acre Tasman East Focus Area has been identified by the City of Santa Clara's General Plan as a Focus Area with potential to contribute to the City's RHNA goals to increase residential density near transit and to balance the commercial uses along the Tasman corridor.

## Plan Objectives

The role of a Specific Plan is to build on City-specified goals and policies to provide a framework for implementation and ensure that future development will make the most of key site opportunities. The Specific Plan is a tool for the City to bring clarity and consistency in the regulation of individual development proposals within the plan boundary.

The Specific Plan aims to achieve the following objectives:

- Engage and collaborate with the stakeholders, a technical advisory committee (TAC) and the community to develop a transit-oriented design framework.
- Establish a land use plan and policy framework that will guide development at the site as a transit-oriented and livable neighborhood with housing close to jobs.
- Improve vehicular, pedestrian, bicycle and transit connectivity between stations and adjacent commercial and residential areas.
- Evaluate existing infrastructure and provide recommendations to meet future needs for the neighborhood, including a financial analysis to allocate fair share cost burdens for public facilities and benefits.
- Develop and implement urban design standards for streets, streetscapes, buildings and open space, which promote walkable and livable environments within the project area.

## PLAN STRUCTURE

This plan document is organized into four parts:

**Chapters 1+2: Introduction, Vision and Principles** describe the overall vision, planning principles and planning process, setting the context for the development of the Focus Area Plan.

**Chapter 3: Regulatory Framework** sets out the multiple frameworks and accompanying policies that guide development of the streets, open spaces and buildings within the Tasman East Focus Area.

**Chapters 4-6: Design Guidelines** identify the standards and guidelines required to enhance and improve the aesthetic and functional quality of streets, open spaces and buildings. These chapters use “shall” or “must” statements to define standards that are required and will be regulated. Statements that use “should” are intended to articulate a vision and aspiration for the site's development. All standards and guidelines are subject to staff interpretation to determine if the project proposals meet the intent of the Specific Plan.

**Chapters 7+8: Implementation and Appendix** outline the necessary steps to fulfill the vision of the plan and contain background information. Chapter 7: Implementation covers economic studies, infrastructure improvements, capital investments and ongoing monitoring. Chapter 8: Appendix contains information for reference used to generate the Tasman East Focus Area Plan including existing site conditions, market studies, infrastructure and sustainability analysis.



Figure 01-1-1 Existing and Future Regional Transit Connections

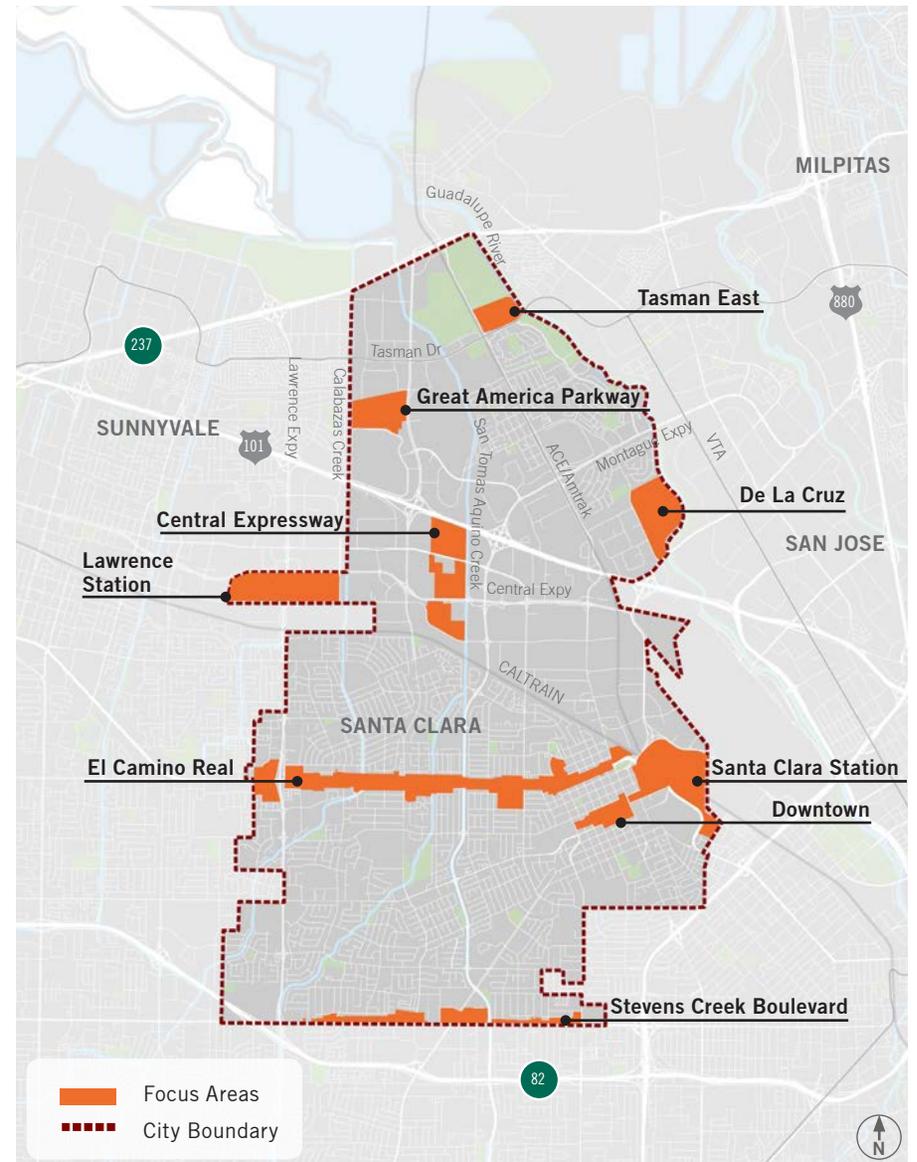


Figure 01-1-2 Santa Clara Focus Areas

## 01.2 PLANNING PROCESS

Community involvement was integral to the framing and development of this plan. The City and consultant team organized three meetings with a stakeholder group, three meetings with a Technical Advisory Committee (TAC), and four public workshops. Meetings were scheduled around key project milestones to ensure engagement at critical decision points.

The TAC was selected to represent local and regional capabilities in technical areas of importance to the plan for data compilation, shared analysis and liaison to other decision making groups.

Meetings with the Stakeholder group created opportunities for stakeholders to share ideas on business and development perspectives and give feedback on the plan as it developed. The group consisted of current property owners as well as representatives from the real estate development and broker community.

The community workshops were open to the public and promoted on the City's website. Community review was based on the stated Focus Area Specific Plan goals of high density housing and supportive retail. The format and findings from each of the four community workshops were framed around the following topics: 1) establishing a vision; 2) developing and testing alternatives; 3)



*Participants in the first community workshop*

*Credit: Perkins + Will*

presenting the preferred alternative; and 4) summary of the Specific Plan.

### **STAKEHOLDER ENGAGEMENT + TECHNICAL ADVISORY COMMITTEE (TAC)**

In the first session with the Stakeholders and TAC, the team presented an overview of the project vision and goals. Both groups gave the team insight about upcoming plans within and around the Focus Area. The TAC informed the team of VTA's upcoming bus and light rail upgrades to Tasman Corridor. The Santa Clara Unified School District expressed their interest in finding space for an elementary school in this location. The Stakeholders shared their early thoughts on plans for development within the Focus Area.

In the second session, the team presented five frameworks developed for the plan – Connectivity, Sustainability, Open Space + Amenities, Density + Height, and Phasing. The TAC offered suggestions to adjust the

retail and open space to better serve the entities they represented. The Stakeholders stressed the importance of a flexible framework.

In the third session, the team presented a strategy for flexible frameworks rather than one fixed, preferred plan. The TAC members supported the idea of breaking down the blocks with smaller paseos or greenways and recommended that the team find a creative, non-traditional solutions to accommodate an elementary school in this proposed urban context. The Stakeholder group also suggested the team consider varying minimum densities based on parcel size so as not to prohibit development of smaller parcels.

### **COMMUNITY WORKSHOP 1 : VISION**

The focus for the first workshop was to summarize the existing conditions of Tasman East and its relationship to its context as well as to encourage community members to express their hopes, concerns and ideas as a vehicle for helping to inform the vision for the project. The workshop

included a walking tour of the site, a presentation and break-out sessions to more fully engage participants in understanding and reacting to preliminary concept plans and programs.

- In the break-out sessions, the participants gave the team input on a variety of topics including:
- Types of open space and recreation facilities;
- Types of amenities that constitute a livable neighborhood;
- Location of taller residential buildings;
- Interest in sustainable strategies; and
- Key context conditions to consider

### **COMMUNITY WORKSHOP 2: ALTERNATIVES DEVELOPMENT**

At the second meeting, the team presented three preliminary alternative concept plans for discussion. The community workshop included both a presentation and a “planning game” with a hands-on urban design charrette.

For the planning game, participants were organized into five groups of five to eight people with a facilitator from City staff or the consultant team. The groups were given game pieces for roads, pedestrian paseos, several categories of open space, a grocery store, ground floor retail, and an optional school to be placed on a map of the site as they saw fit. The participants were also given enough blocks to represent 4,500 residential units and were asked to place all the blocks on the site, suggesting locations for taller buildings. The five group’s plans were photographed and analyzed for trends, which were used to generate the site plan.

### **COMMUNITY WORKSHOP 3: PREFERRED FRAMEWORK**

The community and the working groups suggested a desire for a flexible framework in which some elements are fixed while others are flexible. So, rather than presenting a preferred plan at the final sessions of workshops, the team presented a preferred framework for discussion. The material presented included some of the concepts that would be developed into the preferred framework – focusing particularly on streets, paseos, open space, amenities, building form and parking.

The community’s participation brought to light key concepts such as the desire for a connected public realm and the need to provide safe and comfortable bicycle infrastructure.

### **COMMUNITY WORKSHOP 4: DRAFT PLAN OVERVIEW**

The Consultant team presented the key ideas from the regulatory frameworks and gathered feedback from community members and stakeholders. This feedback was used to further refine the plan before final publication.



*Credit: Perkins + Will*



*Credit: Perkins + Will*

*Community members play the planning game at workshop 2*

# 02 VISION & PRINCIPLES

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## 02.1 VISION

Northern Santa Clara is at a moment of transformation from a patchwork of industrial parks and single-family communities into a walkable, transit and trail-oriented, high density area offering an urban lifestyle alongside regional destinations. The Tasman East Focus Area will be at the heart of this transformation.

In five to ten years we will likely see approximately half of the Tasman East Focus Area redeveloped with open space and high density residential buildings, including some that offer a mix of ground floor uses to support a vibrant public life. These developments will largely occur at the site's perimeter, fashioning a new identity for the urban neighborhood along Tasman Drive and Guadalupe River Trail. Such development will also bookend gateway developments along Lafayette Street.

At the center of the site, the pace of development may be slower as it will align with property owners' decision to redevelop or continue to operate light industrial businesses. This will lend diverse uses to the neighborhood and new development may choose to enhance this character by adding its own mix of urban industrial uses at the ground level of buildings such as beer gardens, furniture-makers, small press publishers, florists, arts and design activities and performance spaces.

Full buildout of the site will likely occur over the next 20 years, as the development of the center of the site responds to market ebbs and flows.

### **WALKABLE AND TRANSIT AND TRAIL-ORIENTED**

Development will build on the site's rich transit connections to both regional heavy-rail and local light-rail. Light-rail will be within a five-minute walk of every front door.

Connections to the Guadalupe River Trail, a recreational and commuter path for bikers and pedestrians, will carry residents through Santa Clara's unique geography of rivers and creeks south to Downtown San Jose and beyond.

### **COMPLETE COMMUNITY**

The Specific Plan targets the development of up to 4,500 residential units to contribute much needed housing supply in response to City Place's increased local employment opportunities. This will include a variety of housing types, retail and active uses within a vibrant urban neighborhood.

A minimum of 10 percent of all units that receive a discretionary approval before 2021 will be affordable by deed restriction to households making an average of 100% of area median income with this number increasing to 15% thereafter. This affordable requirement shall override any other City requirements, including General Plan and Affordable Housing Ordinance. Other units will be made affordable 'by design,' with smaller units targeted for young professionals looking for their first

apartment, empty-nesters looking to downsize and others who desire a walkable, urban lifestyle.

### **SUSTAINABLE COMMUNITY**

The site will target reductions in carbon emissions by creating a public realm that is well-connected, safe and walkable, decreasing the demands for private vehicles. Residents will take pleasure in choosing active modes of transit and shared mobility options.

### **AUTHENTIC CHARACTER**

The existing legacy of light industrial uses will be maintained and woven into the character of the Focus Area Plan. As some industrial users sell or redevelop their properties into housing, others will have the option to continue to operate their businesses, or sell to future industrial users that are compatible with an urban, mixed use neighborhood.



## 02.2 PLANNING PRINCIPLES

The following principles were developed based on feedback from community and stakeholder engagement and the goals of the General Plan to promote urban design and planning criteria that respond directly to the needs of the site and its specific context.

1 MULTIMODAL CONNECTIVITY	2 DIVERSITY OF HOUSING OPTIONS	3 RICH NETWORK OF OPEN SPACES
<p>Foster strong transit connections to the VTA light rail, ACE and Amtrak Capitol Corridor stations. Improve roadways to benefit cyclists and pedestrians within and around the plan area to minimize unwanted cut-through traffic and intrusion onto residential-only streets.</p> <ul style="list-style-type: none"><li>• Circulation network emphasizes resident access to transit connections by providing multiple pedestrian and bike short cuts through the site;</li><li>• Street hierarchy supports both quiet residential streets and busy thoroughfares;</li><li>• Multi-modal streets prioritize pedestrians with generous tree-lined sidewalks.</li></ul>	<p>Create a vibrant residential community with a diversity of unit types and sizes for sale and for rent. Promote high density housing to address needed housing for surrounding employment centers.</p> <ul style="list-style-type: none"><li>• A range of high density housing typologies to achieve desired unit target;</li><li>• Creative design solutions reduce development costs to achieve desired densities and provide affordable housing;</li><li>• Diverse unit sizes and community amenities enable mixed-income and mixed-use community.</li></ul>	<p>Offer an attractive and diverse network of public or publicly accessible parks and open spaces to meet both passive and recreational needs of residents. Share open spaces with retail uses where appropriate to enhance visibility and success.</p> <ul style="list-style-type: none"><li>• Adequate park and open space acreage serves projected resident population;</li><li>• Park and open space areas are visible and accessible to all residents and include diverse amenities, including larger community open spaces;</li><li>• Internal neighborhood park areas are sited and designed to prioritize use by residents;</li><li>• Park and open space areas are well linked via a pedestrian and bike network.</li></ul>

#### 4 VARIETY OF NEIGHBORHOOD-SERVING AMENITIES

Provide an appropriate amount of active ground-floor retail and neighborhood commercial services within walking distance of residents, nearby employees and visitors. These services should be strategically located to best support transit access, minimize the need to drive and provide needed street exposure for commercial success.

- Neighborhood-serving commercial services are complementary to those provided at City Place;
- Retail opportunities are sited for convenience to commuters arriving at or passing through the site;
- Clustered ground floor retail promotes a “park-once and stroll” strategy;
- Commercial services are sited on streets with suitable vehicle access and speed controls, minimizing vehicular traffic into quieter residential locations.

#### 5 SUSTAINABLE DESIGN

Promote a healthy, resilient community that sets a new benchmark in the planning and design of high quality development. Explore utility systems that reduce demand for energy and water and other resources.

- Reduces on-site resource usage and promotes reuse measures;
- Uses drought tolerant planting, promotes rainwater retention and reuse, and minimizes impervious areas;
- Maximizes shade protection along streets and in open spaces;
- Provides on-site electric vehicle locations and charging stations;
- Utilizes Green Building measures and completes appropriate checklist for Green Building construction practices;
- Installs photovoltaic panels on individual projects; participates in Silicon Valley Power Neighborhood Solar Program.

#### 6 VARIED URBAN FORM

Establish land use and architectural guidelines that will create a landmark neighborhood. Promote elegant building design and create key points of interest with iconic architecture and placemaking.

- Creates opportunities for key gateways and establishes a strong neighborhood identity;
- Provides key views and vistas to and from the plan area;
- Encourages the design of human scale, high quality buildings and inviting streetscapes;
- Works with existing topography to enhance the physical connections to and through the plan area;
- Sites and orients building heights to complement and mark open space amenities.

#### 7 RIGHT-SIZING PARKING

Develop parking reduction strategies that incentivize transit, walking and cycling. Minimize vehicle-per-household ratios.

- Encourages convenient, non-vehicular pathways from home to commercial to transit;
- Minimizes surface parking, limits convenience parking and minimizes exposed parking garages;
- Allows reduced on-site parking ratios in return for transit passes and other Transportation Demand Management (TDM) vehicle reduction incentives;
- Implements unbundled parking and promotes shared parking between different uses;
- Provides secure and convenient bike storage and services.

# 03

## REGULATORY FRAMEWORK

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## 03.1 SITE SETTING

### SITE SURROUNDINGS

The area surrounding the site is a diverse patchwork of uses, including the approved City Place development which will replace the current golf course to the west and north of the site. Directly south of the site are the Kathryn Hughes Elementary School and several residential neighborhoods, including a mix of single family houses, attached town homes and medium density mid-rise apartments.

Diagonally south-west of the site is Levi's Stadium, built in 2014 which hosts the 49ers football team as well as many other large-scale events throughout the year.

The Guadalupe River runs along the eastern edge of the site and also marks the boundary between Santa Clara and San Jose. This area of San Jose is home to a mix of high-density housing and office parks, most notably the Cisco and Samsung campuses with frontages along Tasman Drive.

### LOCAL LAND USE

The current zoning for the site is ML: Light Industrial which allows for uses such as manufacturing, processing, repairing and storing products. Consistent with the zoning, the existing buildings on site are warehouses with associated surface parking and rear-yard storage areas. There is also an existing data center at the south-west corner of the site and a cluster of office buildings at the south-east corner of the site.

Through implementation of this Focus Area Specific Plan, the area will be re-zoned from ML: Light Industrial to Transit Neighborhood, which allows for a high density residential neighborhood with a mix of uses at the ground floor. Figure 03-5-2 lists the permitted uses and conditional uses in the Transit Neighborhood Zoning District. Chapter 6 of the Tasman East Specific Plan also provides building design guidelines for the Specific Plan Area. The policy for this

transition takes into consideration the potential that existing owners of the light industrial parcels will remain or transfer their land to future light industrial users.

### SURROUNDING OPEN SPACE NETWORK

Tasman East sits within a 5-minute walk of many large-scale regional and community parks, including the adjacent Ulistac Natural Preserve and the Guadalupe River Trail which connects the site to downtown San Jose and beyond. Diagonally across Tasman Drive from the site is a regional soccer park which is well-used by families and youth from across the city.

To the north of the site, several major recreation spaces are planned as part of the City Place development, including a series of public plazas and paths and a network of bike trails lining both sides of Lafayette Street. Perhaps most significant, is a 35-acre community-wide open space that will be developed as a part of the second phase of the City Place project.

### LOCAL AND REGIONAL TRANSPORTATION

VTA's Lick Mill Station provides light rail service that operates at 15-, 20-, and 60-minute frequencies, depending on the time of day. Great America Station (with service for Amtrak and ACE trains) is within a 5-minute walk from the site and has some of the highest ridership on the Capitol Corridor transit route, which links San Jose to the south and Sacramento to the north.

Bus, light rail, passenger rail and public and private shuttles are all accessible from Tasman East via Great America Station and Lick Mill Station.

### EXISTING CONNECTIONS AND BARRIERS

The perimeter of the site has a number of grade changes that present challenges for connecting to adjacent streets

and open spaces. To the north and east of the site there are steep hillsides ranging from 15 to 26 feet in height. Where Tasman Drive bridges over the Guadalupe River and Lafayette Streets, there are also embankments with challenging grade changes. Slopes are abutting the project area but are on external parcels or City/SCVWD rights-of-way, and are not within the development parcels; therefore, in order to ease these transitions for greater connectivity, cooperative arrangements will need to be pursued.

### CUT-THROUGH TRAFFIC

Tasman Drive and Lafayette Street are major arterials with traffic connecting between them. However, because Tasman Drive bridges over Lafayette Street and the railroad tracks, there is no physical intersection between these two streets. Currently, vehicles pass through the site using Calle del Sol and Calle de Luna as a de-facto cloverleaf. Addressing this cut-through traffic is an important factor in creating a safe, pedestrian-friendly, residential neighborhood.

### PEDESTRIAN CONNECTIONS

The single-family neighborhood to the south of the site is oriented facing away from Tasman Drive and separated with a perimeter wall. There is one point of pedestrian access at the connection between the single-family neighborhood and the Riverwood Grove multi-family complex.

Currently, pedestrians walking from the Tasman East Focus Area to Great America Station may cross at the signalized, at-grade intersection at Calle de Luna and Lafayette Street and cross the tracks to access the platform. Alternatively, they may cross to the south side of Tasman Drive and use a pedestrian stair that connects to the southern end of the platform.

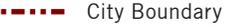
1. City Place North Park
  2. City Place Campus
  3. Great America Station (ACE/Amtrak)
  4. Katherine Hughes Elementary
  5. Santa Clara Youth Soccer Park
  6. Fairway Glen Park
  7. Riverwood Grove
  8. Lick Mill Station (VTA)
  9. Vista Montana Park
  10. Ulistac Natural Area
  11. Lick Mill Park
  12. Levi's Stadium
  13. Great America Theme Park
-  VTA - Light Rail
  -  ACE
  -  Amtrak
  -  Open Space
  -  Guadalupe River Trail
  -  Site
  -  City Boundary



Figure 03-1-1 Surrounding Site Context

## 03.2 INFRASTRUCTURE CONDITIONS

Because of the major investment in the surrounding area, the Tasman East Focus Area already has access to much of the infrastructure necessary to support redevelopment of this scale, including recycled water supply, sewer capacity and electrical capacity. Improvements will be needed to modernize and bring the site up to new development standards for stormwater treatment and the undergrounding of electric and communications utilities.

### **STORM DRAINAGE AND SEA LEVEL RISE**

Federal Emergency Management Agency (FEMA) current Flood Insurance Rate Map (FIRM) number 060885C0062J, dated February 19, 2014 identifies major portions of the plan area as potential Flood Hazard Zones subject to localized flooding. The Base Flood Elevation (BFE) of 8 feet at the plan area is significantly lower than the BFE of 15 feet in the Guadalupe River, as adjacent levees provide flood protection. Runoff from the plan area flows to the Eastside Detention Basin and Lift Station to the north of the Project.

The inundation water level within the plan area represented in the FEMA FIRM could be lowered by elevating building pads or increasing the 33 inch diameter line that connects the site to the ditch adjacent to the Guadalupe River.

Because all project flows are pumped, the plan area is isolated from the direct effects of sea level rise. The primary impact associated with sea level rise would be hydraulically to the Lift Station's performance. As sea level rise increases, there would be a minor decrease in the pumping rate associated with the higher discharge water level. An increase in sea level would have only a minor impact on water levels in the Project area provided the levee separating the Guadalupe River flows is maintained.

The plan area has high percentages of impervious areas that direct storm water runoff into the public storm drain infrastructure with little to no retention or treatment. As projects are implemented that comply with the Municipal Regional Stormwater Permit (MRP) requirements, it is anticipated that the overall percentage of impervious surface within the plan area will likely decrease, and so additional facilities for stormwater peak flow conveyance will not be required.

### **WASTEWATER TREATMENT AND CONVEYANCE**

Wastewater from the 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), which is approximately two miles to the northeast in the Alviso area of San Jose. 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.

Existing sewer public infrastructure within the plan area is predominantly 12 inch vitrified clay pipe (VCP). It is anticipated that the existing piping is adequately sized and will not need to be upsized to increase capacity.

The Rabello and Northside Pump Stations are estimated to operate at capacity in 2035. Because the plan area will be contributing new flows to those pumps, new

developments may need to provide upgrades to existing pump stations.

The Primavera Pump Station within the plan area is operating far below its capacity and will not need capacity upgrades. The Primavera Pump Station would need to be relocated when Calle del Sol is extended northward to Calle del Mundo.

### **WATER SUPPLY AND INFRASTRUCTURE**

Water demand within the plan area, assuming a full build-out, exceeds estimates for the area in City's Urban Water Master Plan (UWMP) assuming the UWMP used the 2035 General Plan directly for its forecasting. In the event the conditions in the City's contract with the San Francisco Public Utilities Commission are met that require the City to eliminate its take from the SFPUC, the City may need to identify alternate sources of water.

It is anticipated that the system of 12 inch water mains within the plan area is adequate to serve the potable water and fire suppression needs of higher densities. However the 12" AC water lines will need to be replaced with 12" PVC water lines. The 12 inch main in Lafayette from the west is likely undersized for the estimated future fire flow requirement of 4,000 gallons per minute (gpm) for 4 hours (To be determined and approved by the Fire Department). Developer shall

determine the fire suppression needs based on the current city water distribution system and make revisions/upgrades accordingly. To meet these flow requirements, it is assumed that an on-site new storage tank and/or booster pump may be required at the development site (Fire Department to Verify) and/or approximately 3,000 lineal feet or more of 12 inch water main along Lafayette Street may need to be up sized to 16 inch as per BKF recommendation. Developer is required to perform the hydraulic fire flow analysis to determine the fire and water demands to the project site.

#### **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.

AT&T typically provides service to a “Minimum Point of Entry” (MPOE) for a single building on each parcel. For underground services, the applicant is typically responsible for trenching and installation of AT&T's conduits.

Comcast conduits are typically installed by Comcast's contractors in a trench provided by the applicant.

*1. Assumes a 200,000 SF Type V Construction with sprinklers and a 50% Fire Flow requirement reduction from Fire Code Table B105.1*

## 03.3 MARKET ANALYSIS FINDINGS

The Tasman East Focus Area is well positioned to attract market interest and demand for multifamily housing due to its transportation options, employment access, recreational opportunities and proximity to the planned City Place retail, office and housing development.

### **MULTIFAMILY HOUSING DEVELOPMENT POTENTIAL**

Based on projected employment and population growth, demand for additional housing in Santa Clara will remain robust over the long term. Forecasts from ABAG's 2013 'Plan Bay Area' shows that Santa Clara will grow jobs by 29 percent between 2010 and 2040, and households by 33 percent.

The Tasman East Focus Area is well positioned to attract market interest and demand for multifamily housing due to its transportation options, employment access, recreational opportunities and proximity to the planned City Place retail, office and housing development.

In the immediate term, developers could deliver high-density midrise projects in the Tasman East Focus Area at 100 dwelling units per acre, though achieving this relatively high density with midrise buildings will require inclusion of smaller unit sizes.

Economic conditions in the area need to be significantly better to incentivize construction of high rise towers, which are more expensive to construct on a per square foot basis. Recently completed high rise towers are typically built in locations where a rent or sales premium associated with local amenities justifies the higher costs of construction.

As the neighboring City Place project is built out and local-serving retail and service activities are added to the Tasman East Focus Area, rents and sales prices are among the factors that define the point at which high rise tower development may become feasible.

Additional value for housing could be created by incorporating local-serving retail and services (such as eating and drinking establishments, dry cleaners, convenience stores, etc.), parks, and strong pedestrian and bicycle connections to surrounding areas.

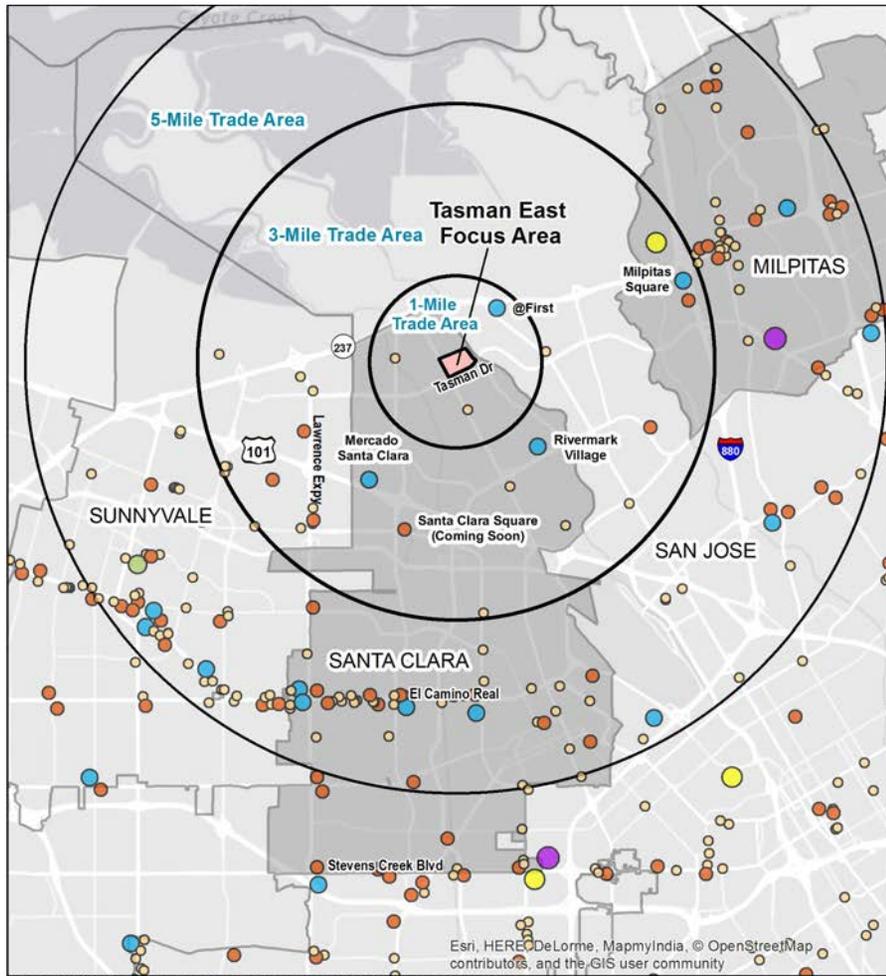
### **NEIGHBORHOOD-SERVING RETAIL POTENTIAL**

Residential and employment growth at the Tasman East Focus Area and City Place may generate significant new demand for a grocery store and other neighborhood-serving amenities in and near the Tasman East Focus Area. Neighborhood serving amenities are defined in section 3.5 Land Use Framework.

The early phases of retail at City Place are unlikely to include neighborhood-serving retailers, creating an opportunity for the Tasman East Focus Area to capture neighborhood-serving retail opportunities such as groceries, local-serving restaurants, cafes, and day-to-day retail and services.

Two grocery stores currently operate and two are being planned within the three-mile radius of the Tasman East Focus Area, but no grocery store is located within one mile. See Figure 03-3-1. Given the magnitude of planned development activity at City Place, potential residential growth in the Tasman East Focus Area, and ongoing growth in nearby North San Jose, strong potential exists for grocery stores to eventually add new locations in or near the Tasman East Focus Area.

However, once City Place is built out, it will feature a high concentration of eating and drinking, lifestyle, and entertainment uses. The Tasman East Focus Area will need to include complementary offerings positioned to provide a more relaxed, neighborhood-centric, and/or independent or boutique feel. To encourage patronage of retail in the TEFA and City Place, circulation within the Specific Plan Area and to nearby areas must be well designed.



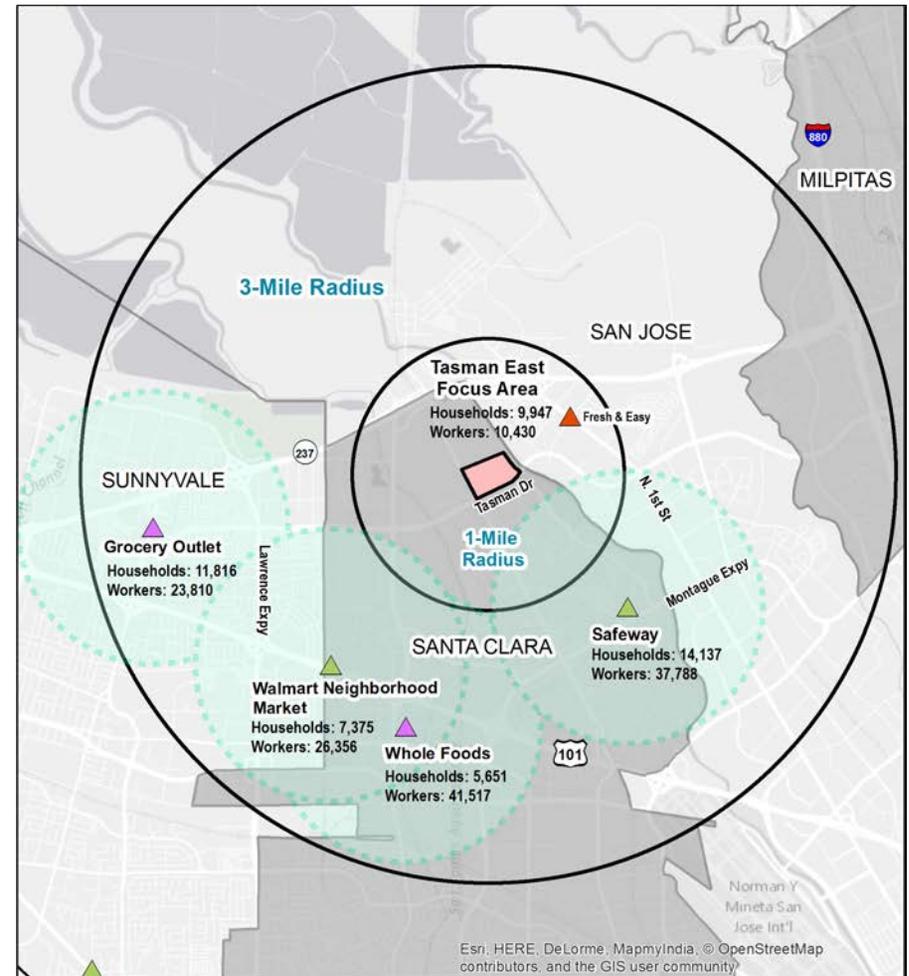
Sources: CoStar Group, 2016; U.S. Census Tiger Line Data, 2014; Strategic Economics, 2016.

**Existing Retail Centers:  
One, Three, and Five-Mile Trade Areas of Tasman East Focus Area**

- Strip Center
- Neighborhood Center
- Community Center
- Lifestyle Center
- Power Center
- Regional Mall



Figure 03-3-1 Existing Retail Centers and Grocery Stores



Sources: CoStar Group, 2016; LEHD "On the Map", 2014; U.S. Census American Community Survey 5-Year Estimates, 2010-2014; Strategic Economics, 2016.

**Grocery Stores:  
One and Three-Mile Radius of Tasman East Focus Area**

- ▲ Existing Grocery Store
- ▲ Coming Soon
- ▲ Recently Closed
- 1 Mile Trade Area



## 03.4 SUSTAINABILITY FRAMEWORK

### SUSTAINABILITY TARGETS

Environmental sustainability is one of the five Major Strategies highlighted as underlying the General Plan (GP) adopted for 2010-35. The City will continue to grow through redevelopment of existing properties, which will result in higher land use intensities and densities where opportunities for sustainable practices can be more economically achieved.

The Tasman East Focus Area is intended to attain a high level of sustainability guidelines and to address the greenhouse gas (GHG) reduction goals identified in the City's Climate Action Plan (CAP). Given its location, the Plan Area will provide housing close to job centers and transit facilities, creating a more sustainable development pattern with substantial reductions in Vehicle Miles Traveled (VMT). Later development, as compared to the initial projects within the Specific Plan Area, may achieve even greater levels of sustainability as new technologies are implemented over time.

#### Targeted areas of sustainable development should include measures such as:

- Optimized land uses and densities that take advantage of job locations, transit and transportation facilities, lifestyle amenities, and utility services;
- Energy reductions for building construction and use consistent with or better than applicable State Title 24 standards
- Carbon emission reductions through best choice equipment selection, use of renewable energies and purchases of Renewable Energy Credits;
- Transportation measures that reduce carbon emissions compared to typical practices, such as promoting TDM and electric vehicle preferences for tenants;
- Water use reduction and efficiency practices that reduce demand for potable water resources and maximize use of reclaimed water;
- Treatment of stormwater and reduction of runoff through on-site landscape design that can reduce pollutant deposition in streams and rivers;
- Maximized solid waste diversion in construction and ongoing property management through recycling and composting measures; and
- Enhancement of urban forestry features and support for biodiversity to provide beneficial local microclimate conditions

These targets can be achieved to a progressively greater degree over time by incorporating the regulatory measures provided in bullet points below each category into each project.

All projects within the Tasman East Specific Plan shall design and construct buildings to a sustainability standard of LEED Silver or equivalent level from another green building rating system (such as Build it Green). A completed green building checklist (as provided by the US Green Building Council, Build it Green, or other Green Building/Sustainability Certification system) would be provided by the applicant to the Planning Division at the Architecture Review submittal to describe the intent of sustainable design and materials. The checklist must be verified by a third party, whom is acceptable to the Director of Community Development, prior to issuance of a Building Occupancy Permit.

## **LAND USE**

The Focus Plan Area presents a unique opportunity within the City to create high density housing with supporting services and amenities where public infrastructure is already in place. Reuse of older industrial sites as high density residential properties could yield as many as 4,500 new homes in close proximity to the nearby job centers in Santa Clara, San Jose, Milpitas, Sunnyvale and Mountain View. The adjacency of the VTA Light Rail station and proximity of various bus lines, the nearby ACE and Capitol Corridor rail service at the Great America Station and the bike and pedestrian facilities along the roadways, Guadalupe River and San Tomas Aquino Creek all promote non-drive-alone access to work locations and non-work destinations from the Plan Area. The incorporation of convenience retail services within the Focus Area for the neighborhood also promotes a walkable lifestyle, further reducing the need for car trips in many daily outings.

### **Land use related measures that promote sustainability can include:**

- Meet or exceed minimum project densities;
- Provide pedestrian-oriented features, including direct access from units/lobbies to the public sidewalk; and
- Provide TDM measures that promote alternatives to drive-alone vehicle trips.

## **ENERGY EFFICIENCY**

The City's CAP calls for reductions in GHG to 15 percent below the 2008 levels by 2020, across all sectors of the community, including buildings, transportation, industry and waste. New development in Santa Clara, including Tasman East, will be subject to SB-32 targets to reduce 2030 GHG emissions to 40 percent below 1990 levels.

### **Energy efficiency related measures that promote sustainability on a project-by-project basis include:**

- Install energy efficient appliances and lighting through the selection of Energy Star products;
- Utilize smart controls and switches to reduce energy use in non-occupied spaces;
- Maximize efficient building envelopes using best R-values insulation, glazing, air-tight features and solar shading;
- Install energy efficient building mechanical systems, including best technology furnaces, heat pumps, ventilation systems and water heaters; and
- Integrate renewable energy systems, including photovoltaic and heat recovery systems.

## **CARBON REDUCTIONS**

Seeking zero carbon emissions over time will come with advancement of newer technologies and transition away from use of fossil fuels, such as reducing or eliminating the use of natural gas-fired appliances and mechanical systems. There are also options for immediate offsetting of carbon content fixtures via the purchase of Renewable Energy Credits from off-site sources.

### **Carbon reduction related measures that promote sustainability on a project-by-project basis include:**

- Install best technology and non-combustion appliances, such as water heaters and furnace systems; and
- Purchase renewable energy credits through Silicon Valley Power or other off-site sources.

## **TRANSPORTATION**

Transportation, according to the CAP, is the second highest contributor to GHG emissions behind Nonresidential Energy activities, estimated at 25 percent of all GHG emissions in 2015. Measures that will reduce drive-alone vehicle trips and/or travel distances can deliver a substantial contribution to reductions in emissions. The proximity and density of housing near employment facilities presents an opportunity to reduce automobile emissions, enhanced by promotional measures to use alternative modes of travel. Building features and operational obligations, such as Transportation Demand Management (TDM) measures, will reduce carbon emissions related to the project area.

### **Transportation related measures that promote sustainability on a project-by-project basis include:**

- Reduce parking ratios offset by TDM measures;
- Provide resident transit passes;
- Install Electric Vehicle charging points;
- Dedicate car-share parking spaces;
- Provide bike kitchen and storage facilities;
- Participate in bike share programs and support related facilities;
- Contribute to improvements to transit facilities and to ped/bike access to transit stations; and
- Support and participate in curbside ride-share programs and/or facilities.

## **WATER USE**

The General Plan supports and promotes reduction in water demand and use through conservation, design and the use of recycled water. The Focus Plan Area is well served by the City's recycled water infrastructure and new development will be expected to maximize the use of the recycled water. The State Water Resources Agency currently has limitations on reclaimed water use in residential projects, but more uses may be allowed over time as legal constraints change and building codes are requiring pre-plumbing dual piping in multi-family residential projects.

### **Water-use measures that promote sustainability on a project-by-project basis include:**

- Maximize all exterior landscape areas that use drought tolerant planting schemes;
- Utilize recycled water for all landscape areas, utilizing water conservation best practices; and
- Install internal dual plumbing (purple pipe) for uses permitted.

## **STORMWATER**

Stormwater runoff requirements are governed by the City's participation in the regional urban stormwater runoff program, which seeks to maximize the purification of urban runoff into lakes, rivers, streams, and the Bay. The combination of well-designed and integrated surface runoff and landscape designs can reduce the solids, fertilizers and other runoff pollutants from the Plan Area.

On an area-wide basis, "Green Streets" concepts should be integrated into street designs to minimize the impacts of polluted runoff. For the purpose of this Specific Plan, green streets may include biotreatment areas in the form of stormwater curb extensions, stormwater planters and stormwater tree systems, to drain and treat runoff from curb flowlines, or equivalent technology. Other systems, such as pervious pavement may also achieve this objective.

### **Stormwater related measures that promote sustainability on a project-by-project basis include:**

- Connect rooftop drain and hardscape surface drainage systems to landscape swale areas;
- Design landscape features that capture and infiltrate initial runoff flows into grounds/soil; and
- Design landscape swales to capture and treat runoff waters that flow to river outfalls.

### **SOLID WASTE DIVERSION**

The General Plan notes that the City is working toward an 80 percent solid waste reduction by 2025 by expanding the residential curbside recycling and composting programs to divert recyclable and compostable materials from the solid waste stream. Achievement of this goal will rely upon aggressive commercial and residential recycling of waste.

#### **Solid waste diversion related measures that promote sustainability on a project-by-project basis include:**

- Design adequate and convenient recycled waste, greenwaste and composting facilities in all projects;
- Include public awareness campaigns that would further encourage diversions from landfills; and
- Provide interior and exterior recycle waste containers for customers within commercial areas.

### **URBAN FORESTRY AND BIODIVERSITY**

Redevelopment of this older industrial area presents an opportunity to improve the local ecosystem and enhance the biodiversity of the general area, particularly given the proximity of the riparian corridor and the natural open space of the Ulistac preserve. A well-designed and integrated arrangement of street trees, landscaped front yards, landscaped patio amenity areas and paseo landscaping will enhance habitat within the neighborhood, provide a cooler microclimate and present a comfortable urban forest environment.

#### **Urban forest related measures that promote sustainability on a project-by-project basis include:**

- Require a vibrant urban forest and a healthy ecology for human health and wellness for a high density residential area;
- Encourage the planting of native trees, especially native oaks, to improve the ecological integrity of the urban forest;
- Preserve and protect existing native trees through tree protection and education programs;
- Prioritize the preservation of trees along riparian corridors and in open space areas;

- Protect and maintain mature, healthy, native trees that do not adversely affect the Plan objectives;
- Participate in and contribute to the master street tree plan;
- Maximize native plant landscaping that supports local bird and wildlife populations; and
- Proposed landscaping shall consider the principles outlined in the Santa Clara Valley Water District's (SCVWD) Guidelines and Standards for Land Use Near Streams, specifically Design Guides 2 through 5.

## 03.5 LAND USE FRAMEWORK

### Focus Area Targets

The Tasman East Focus Area Specific Plan aims to achieve the following targets for different uses within the overall plan area:

- Up to 4,500 dwelling units;
- Affordable housing in conformance with prevailing city ordinance;
- 10 acres of open space distributed between public, private and semi-private spaces;
- Up to 106,000 square feet of retail uses, including a grocery store of approximately 25,000 square feet; and
- Potential for a small, urban school.

### TRANSIT NEIGHBORHOOD USES

#### Principal Use

This zoning district is intended to provide regulatory standards for height, setbacks, densities, parking standards, and allowed uses.

The Tasman East Focus Area will be principally high density, transit-oriented, residential use for sale and for rent. This includes multi-family dwellings, supportive housing and transitional housing. Private parking and home occupation are permitted as accessory uses. Single-family and two-family dwellings are not permitted in this district.

To achieve a vibrant public realm and support a walkable neighborhood, other active uses are encouraged at the ground floor of residential buildings. See Figure 03-5-2 for a full list of permitted, conditional and excluded uses.

### Density

There is a target of 4,500 units in the Tasman East Focus Area. Each parcel of one acre or more in size is required to accommodate a minimum density of 100 dwelling units per acre. Each parcel of less than one acre in size is required to achieve a minimum density of 60 dwelling units per acre. There are no density maximums for individual parcels. Density shall be calculated as net density, which excludes all of the following, whether public or private, from the calculation of minimum density: parks, streets, and greenways.

See Figure 03-5-1 for two scenarios of minimum residential development; one assumes no further consolidation of individual parcels and one assumes consolidation of parcels into an area of at least one acre.

### Retail uses

The Tasman East Focus Area will provide neighborhood-serving retail, which is defined as businesses that provide goods and services that people would frequently use to take care of their personal and household needs. Examples include grocery stores, drug stores, eating and drinking establishments, dry cleaners, hair salons etc.

Retail uses are required for ground floor frontages facing onto Calle del Sol, as indicated in the Land Use Framework diagram. This use is also allowed and encouraged along all ground floor frontages.

### Neighborhood Light Industrial uses

This use is intended to protect existing industrial businesses and provide an opportunity for the inclusion of uses with an industrial character which have public-facing operations such as breweries, wineries, catering

companies, garment manufacturers and crafts or artists studios (or similar).

Light industry is intended to accommodate businesses operating substantially within an enclosed building and without provision of storage or side yards. Such permitted uses shall not be objectionable or detrimental to adjacent properties because of signage, noise, smoke, odor, dust, noxious gases, vibrations, glare, heat, fire hazards or industrial wastes emanating from the property.

Neighborhood light industrial uses are also allowed along the ground floor of any building in the Urban Neighborhood district, except where retail uses are required.

### Active uses

To create a pedestrian friendly environment and visual activity at the ground floors of buildings, all buildings shall provide active uses on every frontage facing a public right-of-way, greenway or park to the degree feasible. Building frontage for mechanical equipment, transformer doors, parking garage entrances, exit stairs, and other facilities necessary to the operation of the building are excluded from this requirement.

The following uses qualify as active:

- Retail, Entertainment, Arts and Recreation Use;
- Neighborhood Light Industrial Uses;
- Public Uses including a community room, an urban school, a bookmobile dock and/or a book vending machine stocked by the library;
- Residential or live/work units that are individually entered from the street;

- Building lobbies; and
- Spaces accessory to residential uses, such as fitness rooms, work spaces, leasing offices, shared kitchens, mail rooms and Class I bicycle parking facilities with direct access to the sidewalk or street.

**Public uses**

The Tasman East Focus Area will have a distributed, publicly accessible open space system where a series of neighborhood parks are connected throughout the district by a network of streets and greenways. These neighborhood parks and greenways count towards the 10-acre site-wide open space target.

Where parks and greenways are privately owned but publicly accessible, they shall be considered public uses. The Tasman East Focus Area also allows for other public or quasi-public facilities such as schools, municipal facilities, non-profit facilities and neighborhood recreational enterprises.

**School Facility**

The Specific Plan allows an urban school. The location would be identified during Specific Plan implementation. It is assumed that this “urban school” can be located at the ground floor of a mixed-use building and must be accessible to a public open space of a minimum of one acre. This urban school may be private or public.

DEVELOPMENT AREAS		AREA (ACRES)	MINIMUM DEVELOPMENT
	Total Site Boundary Area	46.1	
<b>Sitewide Areas</b>	Developable Area <i>(Total site boundary area, minus: 7.9 acres of existing and proposed ROWs, 0.75 acre SCVWD easement, 5 acres of fixed open space and approximately 1.1 acres of greenways)</i>	31.3	
	<b>Scenario 1</b> Assuming no consolidation of smaller parcels and achieving minimum required density		<b>2,830 units</b>
<b>Residential Scenarios</b>	Parcels larger than 1 acre (minimum 100 du/ac)	23.8	2,380 units
	Parcels smaller than 1 acre (minimum 60 du/ac)	7.5	450 units
	<b>Scenario 2</b> Assuming consolidation of smaller parcels into parcels of at least one acre in size and achieving minimum required density		<b>3,140 units</b>
	Parcels larger than 1 acre (minimum 100 du/ac)	31.3	3,140 units

Figure 03-5-1 Theoretical Residential Yield

**LEGAL NON-CONFORMING USES**

The lawful use of buildings existing prior to the adoption of this Plan may continue and none of the other sections of this Chapter shall apply. Such buildings will 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.

**Allowed Uses**

For parcels with legal uses of buildings existing prior to the adoption of this Chapter, permitted uses of the ML: Light Manufacturing district are allowed, and none of the other sections of this Chapter shall apply to such building and use, until such time as the existing use (including any expansions) has been discontinued in its entirety.

**Conditional Uses**

For parcels with legal uses of buildings existing prior to the adoption of this Chapter, conditional uses of the ML: Light Manufacturing district are conditionally permitted, and none of the other sections of this Chapter shall apply, until such time as the existing use (including any expansions) has been discontinued in its entirety.

**Development Standards**

For parcels with legal uses of buildings existing prior to the adoption of this Chapter, development standards of the ML: Light Manufacturing district shall apply, and none of the other sections of this Chapter shall apply, until such time as the existing use (including any expansions) has been discontinued in its entirety.

LAND USE	SANTA CLARA ZONING CODE USES	PERMITTED/CONDITIONAL/PROHIBITED
Residential	Multiple-family dwelling units	Permitted
	Supportive Housing	Permitted
	Transitional Housing	Permitted
	Home for the Ambulatory Aged	Permitted
	Stand-Alone Parking	Prohibited
Commercial	Neighborhood Commercial	Permitted and Conditional per Zoning Code Chapter 18.34
	Alcohol Sales (on-premises)	Conditional
	Co-working	Permitted (only as a ground floor use to a residential building)
Neighborhood Light Industrial	Light Industrial	Conditional (only as a ground floor use to a residential building, or as a legal non-conforming use)
Public/Quasi-Public	Parks and Recreational Facilities	Public parks are permitted, as well as privately-owned and -maintained parks that are publicly accessible.
	General Education Facilities (including Elementary School)	Conditional
	Municipal and Public Utility Facilities	Conditional
	Places of Worship and other Assembly uses	Conditional
	Neighborhood Recreational Enterprises	Conditional

Figure 03-5-2 Permitted Land Uses



Figure 03-5-3 Land Use Framework

## 03.6 CIRCULATION FRAMEWORK

### COMPLETE STREETS

The streets within the Tasman East Focus Area are designed as “complete streets” designed with people and place in mind, centered around providing a variety of mobility options within an inviting public realm. Complete Streets ensure accessibility for people of all ages and abilities, while balancing multiple mobility needs and supporting local land uses.

The circulation plan includes not only the improvement of existing rights-of-way, but also the addition of new streets to create additional connections in the area.

Streets and other transportation facilities are organized according to typologies that relate to the function and adjacent land uses. All roadways will be designed to accommodate multiple users and anticipated levels of vehicular traffic.

Special attention should be given to ensure safe and convenient pedestrian and bicycle connections to existing transit facilities and neighboring trails.

### PEDESTRIAN NETWORK

The City’s General Plan encourages pedestrian connections from neighborhoods to public amenities and destinations that are accessible to all segments of the population. High quality pedestrian facilities improve the convenience and safety for pedestrians and reduce vehicle trips made for everyday activities. These facilities include sidewalks, paths, pedestrian bridges and crosswalks. In pedestrian-friendly environments, frequent crossing locations are essential to provide direct paths between origins and destinations. Special attention should be given to ensure safe and convenient pedestrian

and bicycle connections to existing transit facilities and neighboring trails.

### BICYCLE NETWORK

Bicycles provide a convenient, active and enjoyable method of travel, particularly for trips less than 4 miles. Bicycle facilities improve safety for cyclists and can also promote reductions in vehicle trips and vehicle miles traveled. A good bicycle network includes bike paths, bike lanes and design treatments such as pavement markings, bicycle signals and bicycle wayfinding.

Lick Mill Boulevard and Calle del Mundo will be the main bicycle streets with dedicated lanes that connect through the neighborhood to the bike lanes on Tasman Drive and Lafayette Street, as well as to the Guadalupe River Trail. All other streets will contribute to the bike network with sharrows to indicate that vehicles should share the road with bicycles.

### VEHICULAR NETWORK

While some roadways are designed to move higher volumes of vehicles quickly and efficiently, other streets prioritize space for pedestrians, bicyclists, on-street parking, loading zones and passenger drop-off locations. There are 3 street typologies derived from the General Plan within the site boundary: Minor Arterial, Collector Street and Local Street; Tasman Drive is a Major Arterial, but lies beyond the Focus Area site boundary. Goals and policies for roadway classifications as described in Santa Clara’s General Plan within the Focus Area are below:

#### Minor Arterials

Minor arterials serve through-traffic and typically include transit vehicles. Minor arterials are generally designed

with two to four travel lanes with dedicated left-turn lanes, traffic signals at major intersections, and parallel street parking. Lafayette Street is a minor arterial that will move traffic to and around the site.

#### Collector Streets

Collector streets typically provide traffic circulation for residential and commercial uses. These streets penetrate residential neighborhoods and typically feature two to four lanes of vehicular traffic. Lick Mill Boulevard will be designed as a collector street that moves traffic at lower volumes through the Focus Area and connects to the broader network of minor arterials. The Lick Mill Boulevard extension is a responsibility of the adjacent City Place development; its timing is independent of the Tasman East Specific Plan.

#### Local Streets

Local streets are designed to calm traffic and give pedestrians priority in terms of scale and facility. These streets typically serve as neighborhood streets, generally providing two travel lanes, on-street parallel parking, bike lanes and sidewalks. Calle del Sol, Calle de Luna and Calle del Mundo will all be designed as local streets.

- Major Arterial
- Minor Arterial
- Collector Street
- Local Street
- Bike Lane
- Existing Bike Lane
- To Be Implemented as Development Occurs
- City Easement
- Site Boundary

Note: Configuration of bike lanes on Calle Del Sol south of Calle De Luna will be consistent with which ever street configuration adopted .



Figure 03-6-1 Circulation Framework

## 03.7 OPEN SPACE FRAMEWORK

### DETERMINED NEED

For residential developments, Open Space requirements are regulated by Chapter 17.35 of the City's Municipal Code. Per City Council direction, the Tasman East Focus Area (TEFA) is required to provide at least 10 acres of open space made up of both dedicated park and privately-owned open spaces.

### DEDICATED PARKLAND

A minimum of 5 acres of dedicated parkland is required throughout the Tasman East Focus Area districts, see Figure 03-7-1 for location of districts.

Each district is required to provide dedicated parkland of a given acreage and adjacency. The exact dimensions and programming are flexible to allow for the design to evolve along with the needs of the community, see Figure 03-7-3.

The five dedicated parkland districts are: Hill District (0.85 acres), River District (2.5 acres), Station District (0.15-acre urban plaza), Bridge District (0.5 acre), and Center District (1 acre). For an overview of the character, connections, and programming for each district, see Chapter 5: Open Space Design Guidelines.

Dedicated parkland and greenways as required by the TEFA shall receive park land dedication credits for the Santa Clara Parks Ordinance 17.35 SCCC if consistent with the size and general location of parks identified in Figure 3.7.3 and Chapter 5 of the TEFA.

All development will be responsible for satisfying the parkland amount specified in Chapter 17.35 of SCCC by land dedication and/or in-lieu fees. Properties that do not

have parkland identified on their sites on Figure 3.7.3 of the TEFA shall make their contribution through in-lieu fees or can choose to propose parkland dedication that has not yet been identified. The City will retain discretion to provide Parks Ordinance credit for proposed parkland not identified in the TEFA. The "Parkland Dedication Ordinance and TEFA Additions" section of Chapter 5 specifies the criteria for private recreation credit.

### PRIVATELY-OWNED OPEN SPACE

Beyond the minimum 5 acres of dedicated parkland, the balance of the 10 acres of required open space may be achieved with any of the three following types of space: greenways, privately-owned publicly-accessible parks, and Privately-owned Open Space, see Figure 03-7-2.

### GREENWAYS

Greenways are privately owned publicly-accessible open space connectors that will link dedicated parkland and streets into a continuous green network throughout the site. Greenways will be car-free, providing safe and pleasant paths for people on foot, bikes and scooters. If landscaped appropriately, greenways will create open space opportunities for lingering and gathering as an addition to the dedicated parkland and privately-owned open spaces. They also provide an opportunity to improve the local environment by reducing air pollution, the heat-island effect, noise, and improving pedestrian safety.

Greenways will be created through minimum 15-foot easements on either side of property lines for a total minimum right-of-way width of 30 feet. The general alignment of greenways are shown in Figure 03-5-3 (equivalent to roughly 1 acre of open space). This alignment may be refined, but generally greenways should

be toward the middle of a block and create meaningful connections between open spaces. The greenway network should align across streets so that they can be connected via mid-block crosswalks. Greenways are to be maintained at a standard equal to or higher than City parks.

Greenways count towards the total 10-acre open space requirement. Also see Section 05.6 for design guidelines.

### PRIVATELY-OWNED PUBLICLY ACCESSIBLE OPEN SPACE

In the case of privately-owned, publicly accessible open space, each portion of at-grade publicly-accessible land may count toward the TEFA open space requirement, as long as it meets the following criteria:

- To the maximum extent feasible, privately owned publicly-accessible land shall be contiguous with the fixed open space network;
- For parcels one acre or greater in size, the minimum area of a single open space is 2,000 square feet with a minimum dimension of 40 feet. For parcels less than an acre in area, the minimum size for open space is 5% of the net parcel size, after any other required dedications, with a minimum dimension of 30 feet;
- A minimum 25% of the perimeter of the open space must abut a sidewalk, greenway, open space or publicly-accessible pathway;
- The open space shall include signage that is located in a publicly conspicuous place stating that the open space is available for public use and the hours of use;
- Fences or other barriers that create the appearance of privatization of open space are discouraged. If fencing is used, it shall be designed to maximize visibility.

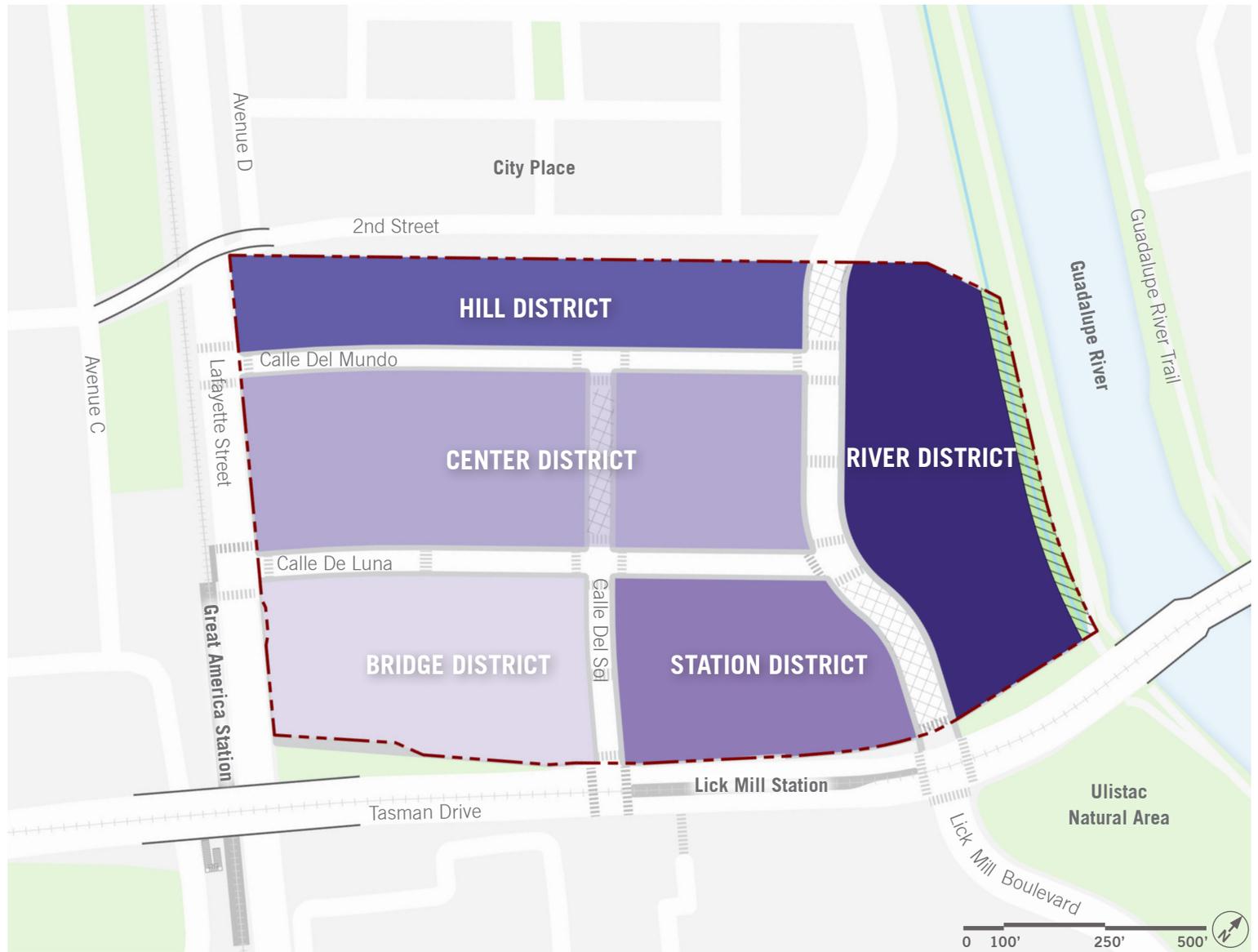


Figure 03-7-1 Districts

-  To Be Implemented as Development Occurs
-  City Easement
-  Site Boundary

- To ensure visibility and safety, all points along the perimeter of an open space must maintain an unobstructed line of sight to at least one street or greenway frontage;
- The open space shall be generally flat; sloped areas programmed with active uses can be considered for credit.

Privately-owned publicly accessible open space located on a podium must meet all of the above criteria as well as:

- Provide adequate soil volume to support planting; and
- Ensure privacy for podium level units; and.
- Clear and visible signage indicating that the space is open for public use.

**PRIVATE OPEN SPACE**

In the case of PRIVATE OPEN SPACE, up to 50 percent of the area of each open space is eligible for credit toward the TEFA open space requirement. In addition, balconies or stoops that are a minimum of 36 square feet in area

	ACRES
<b>Total Open Space Requirement</b>	<b>10.0</b>
Dedicated Parkland	5.0
Greenways	1.1
Remaining Privately-Owned Open Space	3.9
<b>Need from Each Development (as a percent of 31.35 acres of developable area)</b>	<b>12.5% (or 3.9 acres)</b>

**Figure 03-7-2** Privately-Owned Open Space Requirement as a Percentage of Development Area.

and have a minimum dimension of 5 feet in any direction shall be allowed 25% of area credit toward the TEFA open space requirement.

**Parkland Dedication Ordinance and TEFA Additions**

Privately-Owned Publicly Accessible Open Space and PRIVATE OPEN SPACE as defined in the Specific Plan shall receive Park and Recreational Land PRIVATE OPEN SPACE credits when the combined area of over 0.75 acres meets 4 of the 8 required elements of the Park Ordinance defined in Municipal Code Section 17.35.070 plus two new as noted below.

The eight required elements of the Park Ordinance defined in Municipal Code Section 17.35.070 are listed below for reference:

- Turfed play field, comprised of a single unit of land which is generally level and free of physical barriers which would inhibit group play activities with a minimum contiguous area of one-half acre;
- Children’s play apparatus area that conforms to the then current Federal Consumer Product Safety Commission guidelines;
- Landscaped and furnished, park-like quiet area;
- Recreational community gardens;
- Family picnic area;
- Game, fitness or sport court area;
- Accessible swimming pool (minimum size forty-two (42) feet by seventy-five (75) feet) with adjacent deck or lawn areas;
- Recreation center buildings and grounds;

Two additional recreational elements are noted in the Tasman East Focus Area Plan:

- Dog park with a minimum size of 3,000 square feet, and a minimum dimension of 30 feet; and

- Game area, a minimum of 2,000 square feet in area with a minimum dimension of 30 feet. This minimum area can be reduced to 1,000 square feet if next to another open space.

The City has the discretion to also allow Park Ordinance credit for costs associated with off-site improvements in areas which are functionally contiguous to dedicated parkland (or an easement with public access).

**DEDICATED PARKLAND  
(MINIMUM 5 ACRES)**



- Hill District 0.85 acre
- Center District 1.0 acre
- River District 2.5 acres (Including 0.75 acre easement)
- Bridge District 0.5 acre
- Station District 0.15 acre

+

**PRIVATELY-OWNED OPEN SPACE**

- Greenways
- At Grade & Publicly Accessible (100% Credit)
- PRIVATE OPEN SPACE (50% Credit)



=

**TOTAL 10 ACRES**

Public improvements beyond the site not included in 10.0 acres

\* Greenway and Park locations depicted are conceptual.

- Public Improvement Beyond the Site
- To Be Implemented as Development Occurs
- City Easement
- Site Boundary



Figure 03-7-3 Open Space Framework

## 03.8 URBAN DESIGN FRAMEWORK

The urban design framework builds on the land use, circulation and open space frameworks to create a sense of place for the Tasman East Focus Area. An identity for the neighborhood will take shape through the urban design devices of gateways, edges, connections, and landmark buildings. These elements are illustrated in Figure 03-8-1.

### GATEWAYS

The Focus Area will feature two gateway locations at the edge of the site that offer first impressions upon approach. Gateways mark important destinations, such as transit stations and points of connection within the site and to adjacent development. Gateways will feature high quality architecture, public realm enhancements (such as plazas and parks), or a combination of both.

The gateway locations include: 1) a connection to the Lick Mill Station at Calle Del Sol; and 2) a connection to the Great America Station at Calle de Luna and a potential third gateway connection to City Place at 2nd Street.

### EDGES

The site is surrounded on the north and east sides by challenging grade changes ranging from roughly 15 feet to 30 feet in height. Additionally, at the two southern corners of the site, Tasman Drive bridges over the rail tracks and the Guadalupe River (from west to east), causing steep slope differences on the site.

Periphery developments along the eastern edge of the site should gracefully mitigate grade changes to offer pedestrians continuous access to the Guadalupe River

Trail. The northern edge of the site should be designed to facilitate a pedestrian connection to 2nd Street, as this will be an important pedestrian route to City Place. Strategies for mitigating grade changes include fill and/or publicly accessible, activated vertical connections such as stairs, ramps or landscaped slopes.

Any action to mitigate the grade changes will happen beyond the site boundaries and will require landscape design and civil engineering coordination with adjacent property owners.

### CONNECTIONS

A complete and connected network of streets will provide a safe and enjoyable pedestrian experience that encourages walking and biking. A finer grained network of greenways will provide secondary, pedestrian and bicycle-only connections that link people easily to the parks in the neighborhood as well as regional open spaces, including the Guadalupe River Trail.

In order to truly connect this network, vertical connections are required to be made between specific parks in Tasman East to roads or trails outside of the plan boundary.

Ramps and stairs for pedestrian and bicycle connectivity are required at open spaces in the River District, located along grade changes. See Section 5.2 and 5.3 for Open Space Design Guidelines.

### LANDMARK BUILDINGS

Towers should mark the location of key site features such as sites nearby the VTA and Amtrak/ACE stations and neighborhood parks. By locating towers near transit

stations and neighborhood parks, these places are identifiable from a distance and also give the towers a sense of prominence, proximity and space appropriate to their larger scale.

Towers should also be located to take advantage of the site's sweeping views. Santa Clara is characterized by flat lands with meandering rivers and creeks – allowing for distant views of the hills to the East and West, of the Bay to the north, and of landmark buildings such as Levi's Stadium, the towers of Downtown San Jose and views up and down the Guadalupe River.

-  Gateway
-  Grade Change Beyond Site
-  Filled and Landscaped Grade Change
-  Required Ground Floor Retail
-  Dedicated Open Space\*
-  Greenway
-  Vertical Circulation
-  To Be Implemented as Development Occurs
-  City Easement
-  Site Boundary

\* Greenway and Park locations depicted are conceptual.

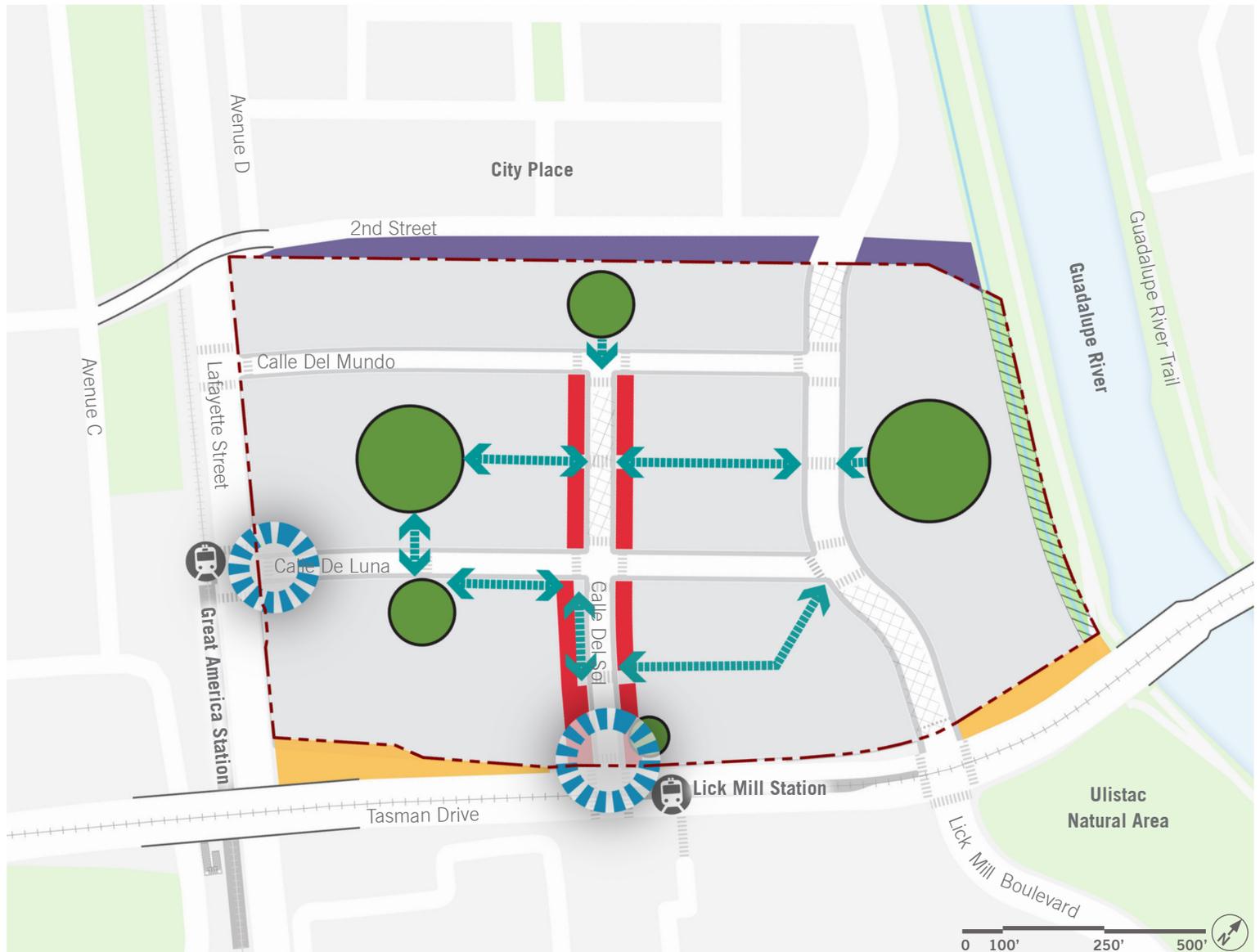


Figure 03-8-1 Urban Design Framework

# 03.9 PARKING FRAMEWORK

## PARKING RATIOS AND RESTRICTIONS

Parking ratios must be provided as per the minimums listed in Figure 03-9-1. Note that residential visitor parking may be shared with retail parking.

Parking is not allowed as a stand-alone use, but as a use accessory to residential, retail or industrial use. Surface parking is only allowed as a temporary or interim use.

## CAR SHARING

Car sharing programs provide on-demand access to a shared

fleet of vehicles on an as-needed basis. Car sharing has been shown to significantly reduce vehicle ownership and vehicle miles travelled (VMT). Access to these vehicles increases the vehicle availability for non-car owners and reduces cars per household.

Developers/property owners shall provide car share spaces at a rate of at least 1 per 400 units, up to 2 spaces per development, at no cost to car share companies. Parking spaces reserved for car share vehicles

should be conveniently placed next to building entrances to promote the use of these vehicles. These vehicles should be reserved for residents/employees and the general public.

## BICYCLE PARKING AMENITIES

Adequate bicycle parking encourages bicycle ridership by offering riders the same level of access and security as motorists. On-site bicycle parking should include bike lockers, bike cages or indoor long-term

bicycle parking for residents and on-site employees and convenient short-term racks for visitors.

Short-term and long-term bicycle parking spaces should be provided in prominent and convenient locations in all buildings. For residential buildings, long-term bicycle parking shall be provided at a minimum ratio of one space per two units. For retail portions of buildings, provide one public bicycle parking space per 1,000 square feet of gross floor area.

## EV ENABLED PARKING

EV parking should be provided to meet the significant increase in statewide EV use. Consider the following:

- For any lower parking floors, a large empty conduit could be run to dead corner locations where future electrical breaker panels could be located and embedded; 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.

*\* Residential visitor parking spaces can be shared with retail customer spaces*

*\*\* On-street spaces can qualify toward this requirement*

Figure 03-9-1 Parking Ratios

USE	FOR RESIDENTS/ EMPLOYEES	FOR VISITORS/ CUSTOMERS
Residential Uses	Minimum 1 space per unit for units greater than 550 square feet  Minimum 0.5 spaces per unit for units less than 550 square feet	Minimum 0.05 spaces per unit*
Retail Uses	None required	Minimum 1 space per 1,000 square feet**  Minimum 1 space per 500 square feet for a grocery store
Home for the Ambulatory Aged	Minimum 1 space per employee and 0.1 per unit	Minimum number of spaces shall be 10% of units
Neighborhood Light Industrial Uses	None required	None required
Public Uses	None required	None required

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# 04 STREET DESIGN GUIDELINES

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## 04.1 RIGHTS OF WAY & SIDEWALK EASEMENTS

### Intent

The street network at Tasman East will be improved to create a safe, comfortable, and complete system. A well designed network will promote walking, encourage cycling and slow vehicles as they drive through this residential neighborhood.

Existing rights of way will remain, but the street network will be expanded to improve connections and increase widths as indicated in Figure 04-1-1.

Calle del Sol will be extended north of Calle de Luna and Lick Mill Road will be extended through the site northward to create a more robust, connected network. The Calle del Sol and Lick Mill Boulevard extensions will be implemented as development occurs.

Substandard sidewalks will be expanded within the right of way, or through easements within adjacent properties. See Figure 08-1-5 in the appendix for existing pedestrian sidewalks.

All street cross sections and figures shown in this Section of the 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.

### Standards

(A) Comfortable sidewalks shall line both sides of every street. A sidewalk easement may be required within a property line adjacent to a right of way to

expand the clear walkway of a sidewalk. Dimensions and locations vary, see Figure 04-1-1 and street sections for requirements. Sidewalk easements are to be measured as a perpendicular dimension from the edge of the right of way, horizontally into the adjacent property.

- (B) Striped pedestrian crosswalks shall be marked at intersections and mid-block crossings as illustrated in Figure 04-1-1.
- (C) Sidewalk extensions or bulb-outs shall be implemented at crosswalks on streets with parking for traffic calming.
- (D) The plan proposes an optional 15-foot diameter traffic circle at the intersection of Calle Del Sol and Calle De Luna as a traffic-calming measure. As an alternative, this intersection may be designed as a 4-way stop. The City of Santa Clara Department of Transportation will determine the daily traffic thresholds, below which the alternative may be implemented.
- (E) The existing sidewalk on Tasman Drive is sub-standard; the sidewalk shall be expanded within the Tasman Drive right of way and in accordance with plans for Tasman Drive (beyond the scope of this Specific Plan).

### Guidelines

(F) Sidewalks should be designed with considerations for universal accessibility to accommodate people with disabilities, children, seniors and adults.

(G) Sidewalks should be designed with adequate space for street furniture that will provide an enhanced pedestrian environment with opportunities for people to linger, socialize and rest.

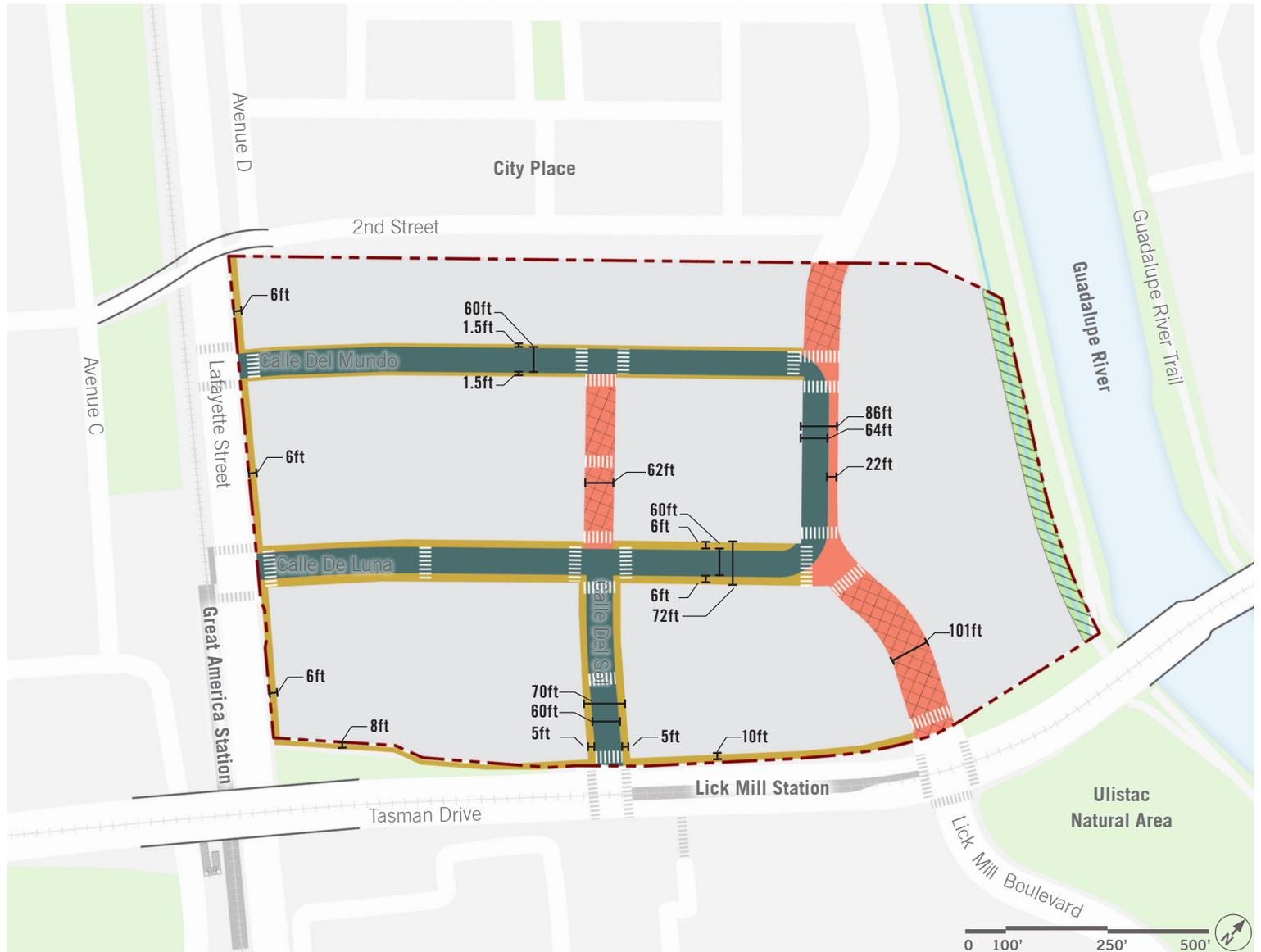


Figure 04-1-1 Rights of Way and Sidewalk Easements

-  Existing Sidewalk
-  Proposed Sidewalk within Site Boundary
-  Proposed Sidewalk beyond Site Boundary
-  Proposed Dedicated Bike Lanes
-  Greenway
-  Guadalupe River Trail
-  To Be Implemented as Development Occurs
-  City Easement
-  Site Boundary

\* Greenway locations depicted are conceptual.

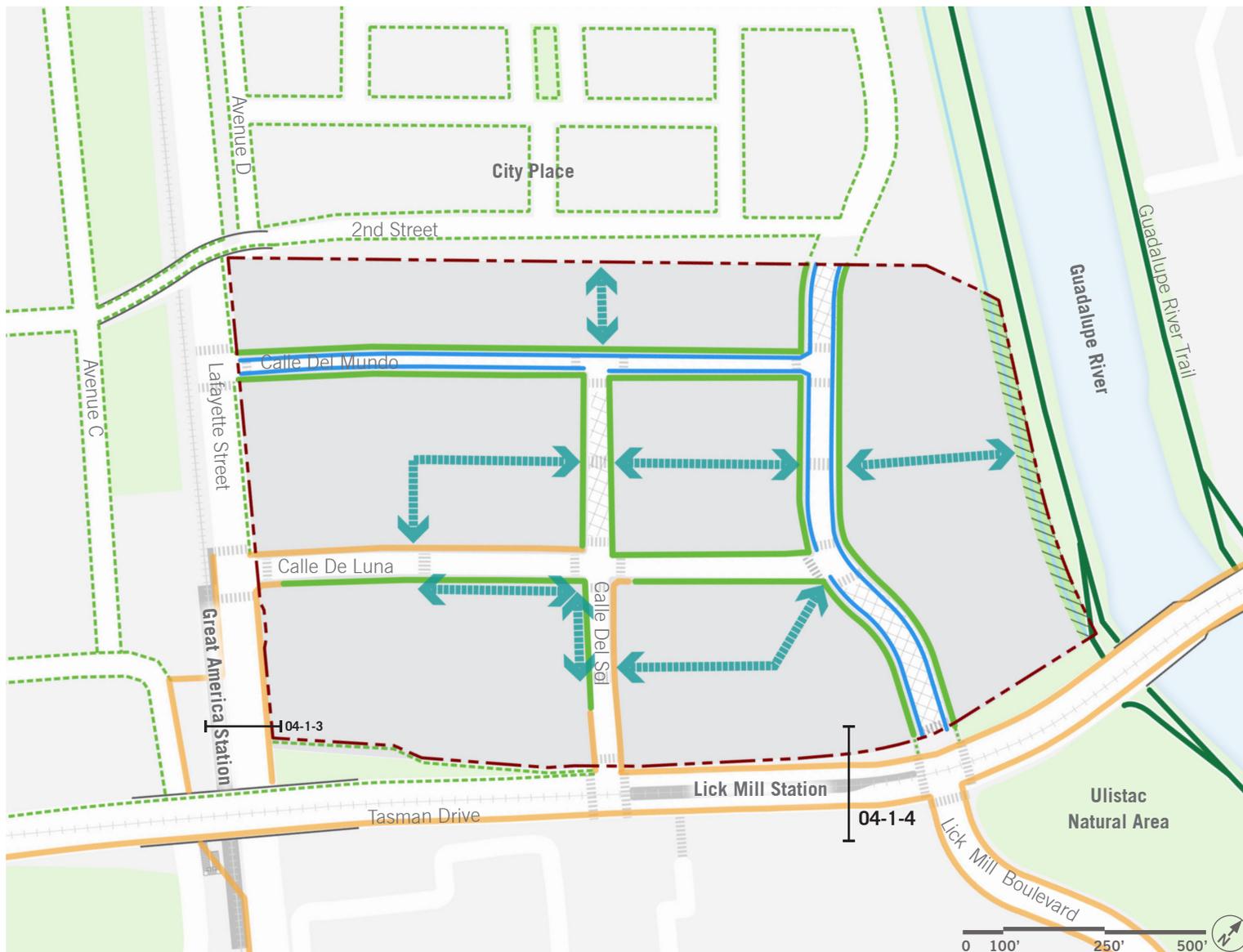


Figure 04-1-2 Pedestrian and Bike Network Connectivity

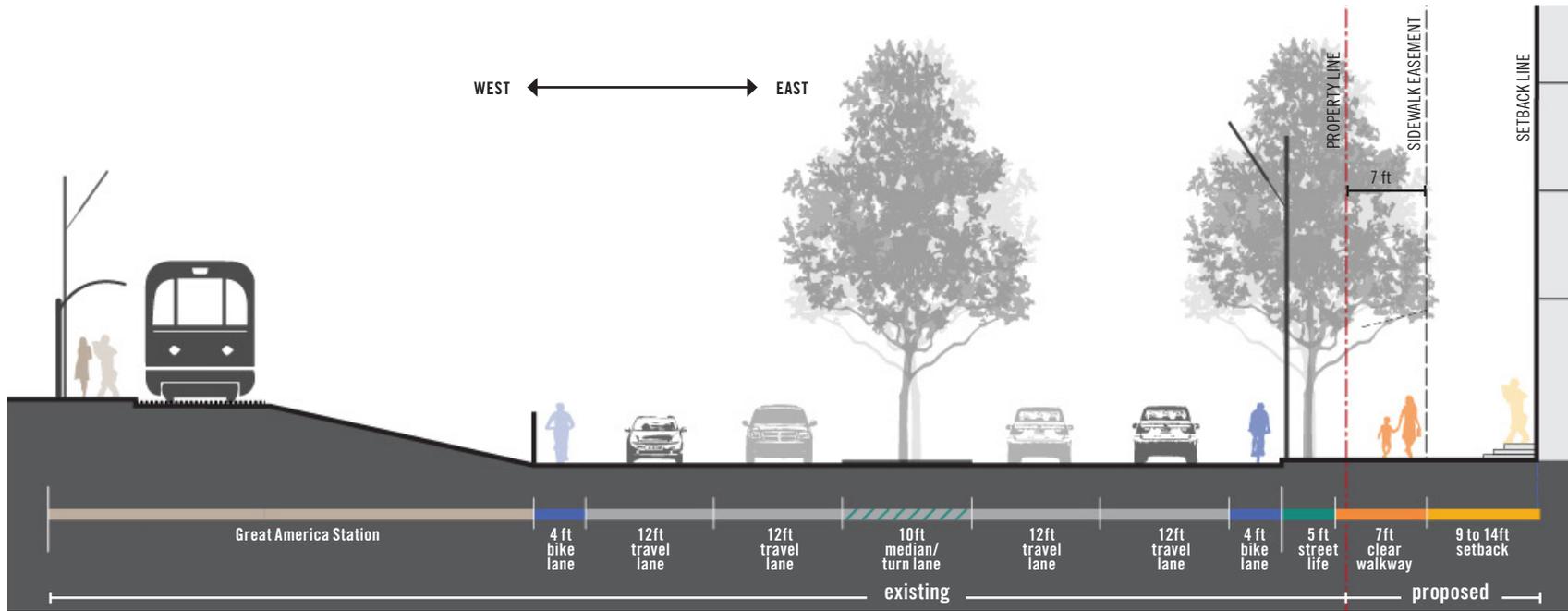


Figure 04-1-3 Lafayette Street Section

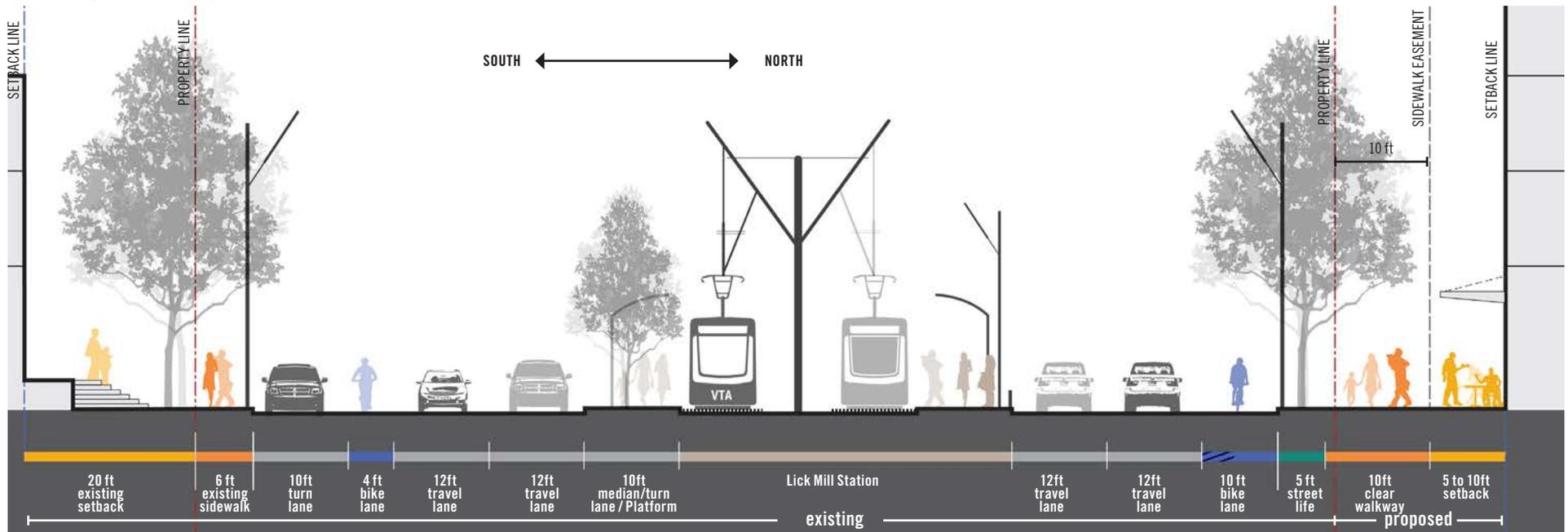


Figure 04-1-4 Tasman Drive Section

Note: Dimensions are approximate.

## 04.2 STREET ZONES

### Intent

Streets in the Tasman East Focus Area are comprised of sidewalks and roadways that clearly identify safe, convenient and attractive paths of travel for pedestrians, cyclists and vehicles. Within the roadway there is separation for bicycles, parked cars and moving vehicles. Sidewalks are delineated into zones that allow for spill-out uses from buildings, as well as areas for trees, stormwater planting and street furniture.

Along some rights-of-way there are additional edge conditions that fall within private property lines. These are located and sized to enhance the pedestrian realm either by a contribution of right-of-way or an access and maintenance easement, or frontage elements within a setback that will enliven the sidewalk and contribute to a walkable pedestrian experience.

### Standards

(A) Sidewalks are made up of the following two zones:

- Clear Walkway: a continuous, unobstructed and accessible path of travel for pedestrians that must remain clear of obstacles at all times. This zone shall be a minimum of 6 feet in width, or wider as indicated in each street section. An exception is Calle Del Mundo, which has a clear walkway of 5 feet.
- Street Life Zone: This zone organizes the fixed sidewalk elements along the curb into an area that delineates the clear walkway from the roadway. This is the location for street trees, stormwater planting areas and street furniture such as benches, trash cans, bicycle racks,

street lighting and street signage. This zone shall be a minimum of 4 feet in width, with an ideal width of at least 5 feet, as indicated in the sections for each street. In some locations the street life zone may alternate with parking spaces.

- (B) There is one type of bicycle lane throughout the street network:
  - Bicycle Lane: A striped, designated zone for the exclusive use of bicyclists, usually adjacent to a vehicle lane. Bicycle lanes shall be a minimum of 5 feet wide.
- (C) Vehicle lanes are divided between travel lanes and parking or loading lanes:
  - Travel Lane: Vehicle travel lanes include provisions for dedicated turn lanes or center turn lanes to support queueing at intersections, where appropriate. Vehicle travel lanes shall be a minimum of 10 feet per City of Santa Clara Standards.
  - Parking or Loading Lane: Demarcated parallel street parking is provided on certain streets. This lane is also shared by zones for passenger loading and deliveries. Parking lanes shall be between 7 and 8 feet in width.
- (D) Building setbacks are required along all frontages. There are two types of setback, based on the uses that they front:
  - For retail frontages along Calle del Sol, setbacks will be treated as spill-out zones where uses can

spill out of the building in the form of furniture, signage, and merchandizing. For more details on dimensions and location, see Section 4.4 Calle del Sol.

- Along residential frontages the setback zone is an intermediate, semi-public space that creates a comfortable social distance from the public sidewalk. This area can be used for stoops, terraces, and planting that will offer a buffer between residential activities and the street. For more details on stoop design and location, see Section 6.4.

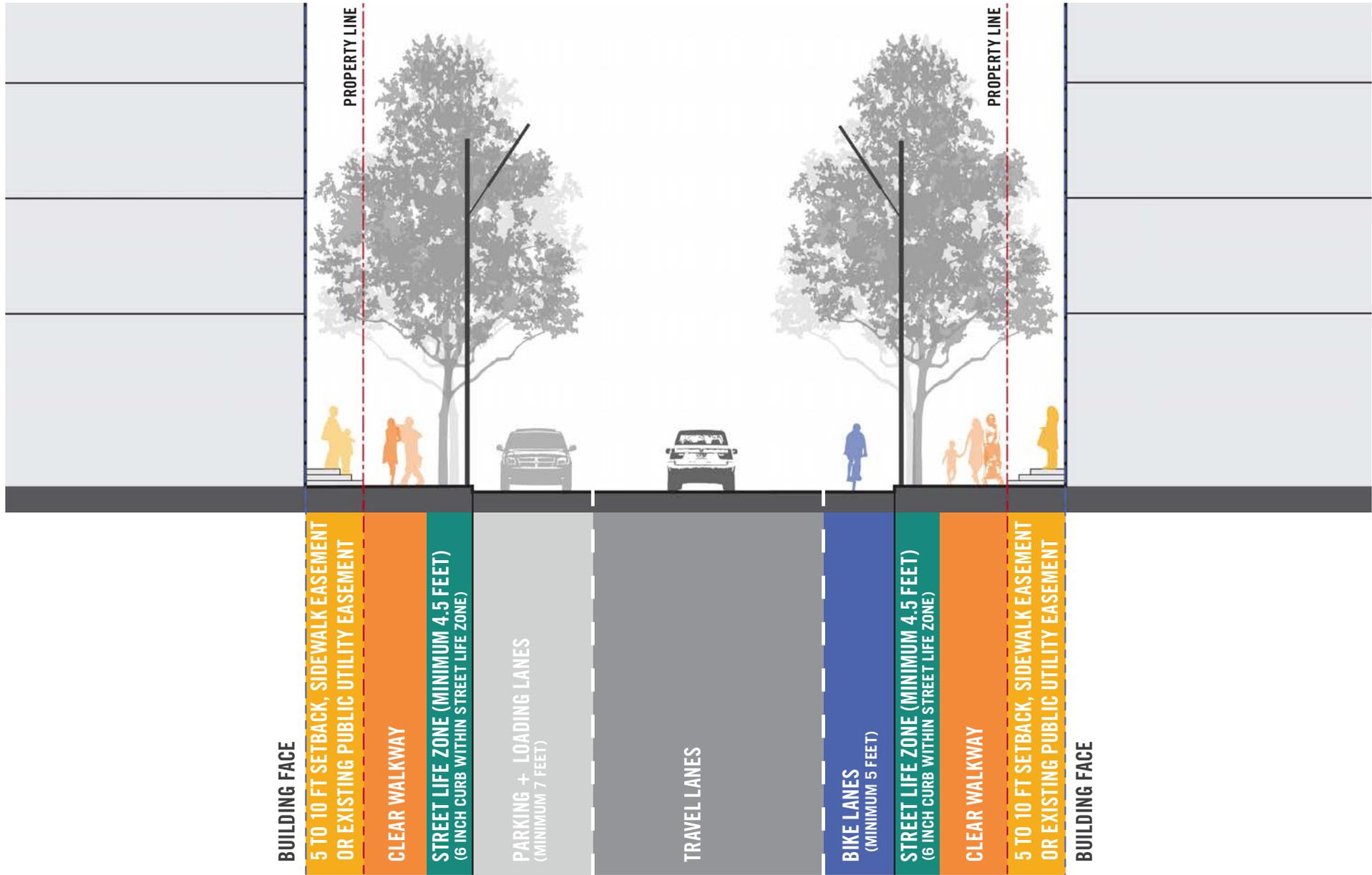


Figure 04-2-1 Street Zones

# 04.3 LICK MILL BOULEVARD

## Intent

Lick Mill Boulevard is a minor arterial boulevard that connects from the Montague Expressway to the south, currently terminating at Tasman Drive. The extension of this boulevard by the City Place project, will add a significant additional connection to Lafayette Street to the North of Tasman East.

As it passes through the Tasman East Area, Lick Mill Boulevard will continue to be flanked by multifamily housing and parks that link passersby to the river. With the addition of a protected bicycle lane in this new segment, it will be a critical link in the development of a high-quality environment for cyclists.

## Standards

- (A) To the south of Calle De Luna, Lick Mill Boulevard will be 101 feet in width; narrowing to 86 feet in width north of Calle de Luna.
- (B) Lick Mill Boulevard will be designed with street zones and lane configurations according to Figure 04-3-1 and Figure 04-3-2 for the street segment north of Calle de Luna.

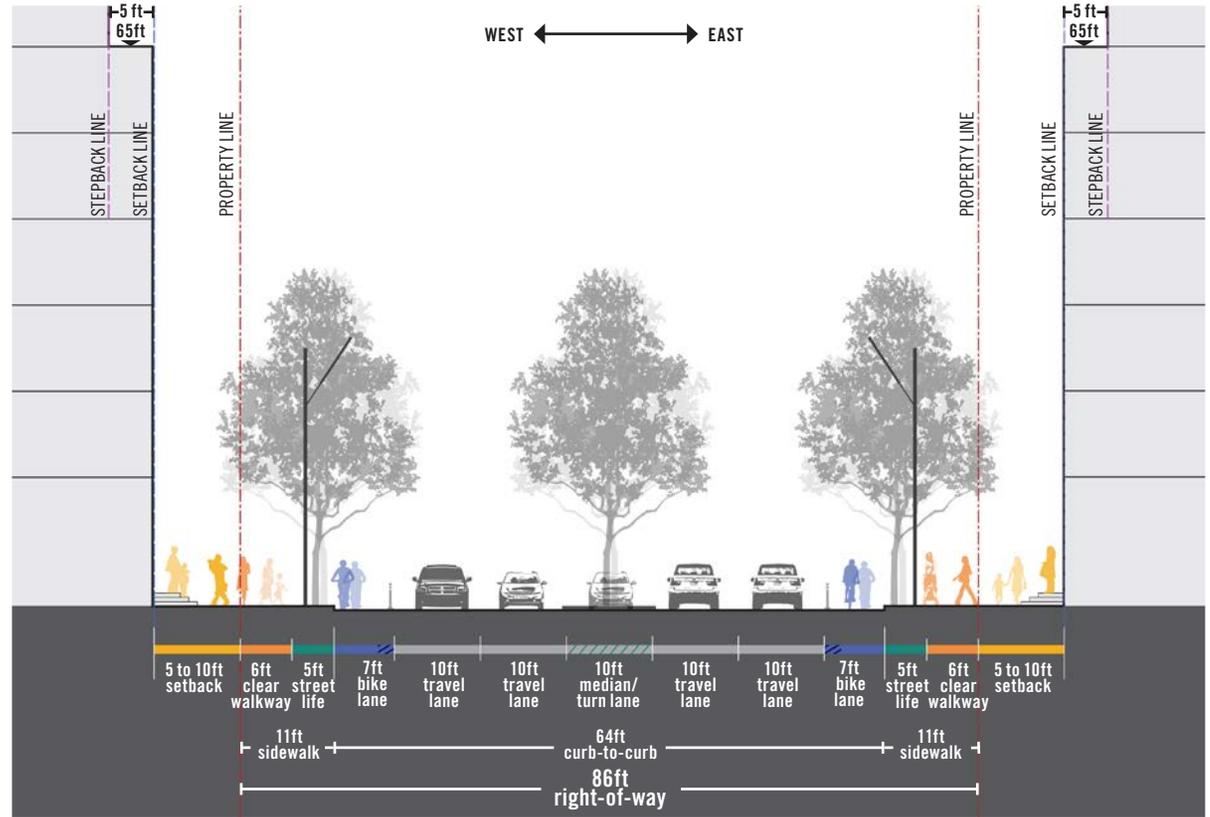


Figure 04-3-1 Lick Mill Boulevard Street Section: North of Calle De Luna



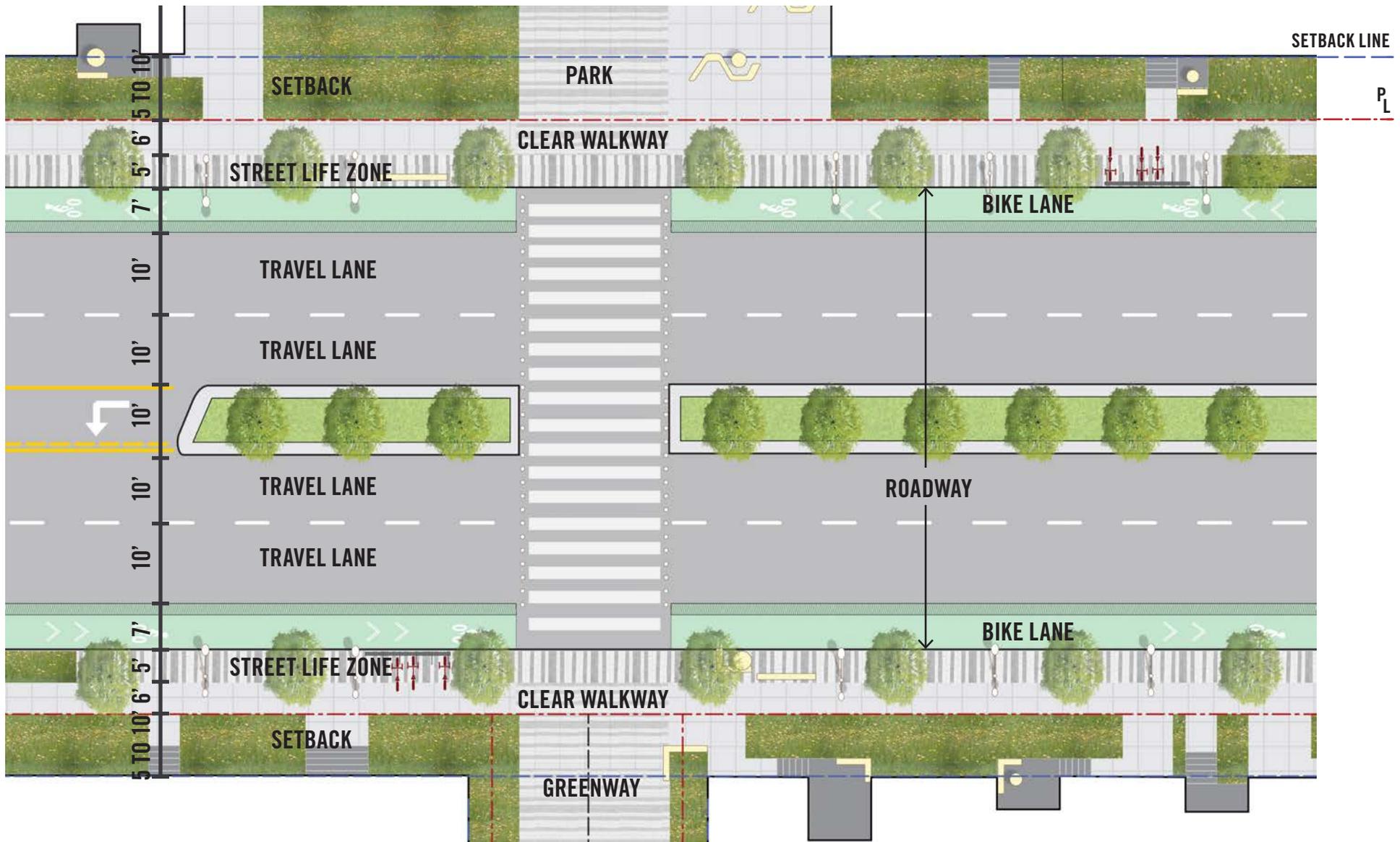


Figure 04-3-2 Lick Mill Boulevard Street Plan: Between Tasman and Calle de Luna

# 04.4 CALLE DEL SOL

## Intent

Calle del Sol will be the main retail street of the Tasman East neighborhood, home to restaurants, cafes and neighborhood serving amenities that will support a vibrant public life. It will be enhanced and made more pedestrian-oriented, allowing the street to serve as a critical pedestrian link to the VTA Lick Mill Station. In addition to the existing street segment, Calle del Sol will be extended north of Calle de Luna, to connect to Calle del Mundo, creating a more complete street network.

## Standards

- (A) The alignment and phasing of the northern segment of Calle del Sol will be determined based on the availability of land.
- (B) North of Calle de Luna, Calle del Sol will be designed with street zones and lane configurations according to Figure 04-4-1 and Figure 04-4-2.
- (C) There are several options proposed for the segment of Calle del Sol between Tasman Drive and Calle de Luna that accommodate different levels of vehicular capacity, see Figure 04-4-3 through Figure 04-4-8. The most appropriate option will be selected before adoption of this plan based on input from the Transportation Impact Analysis (TIA).

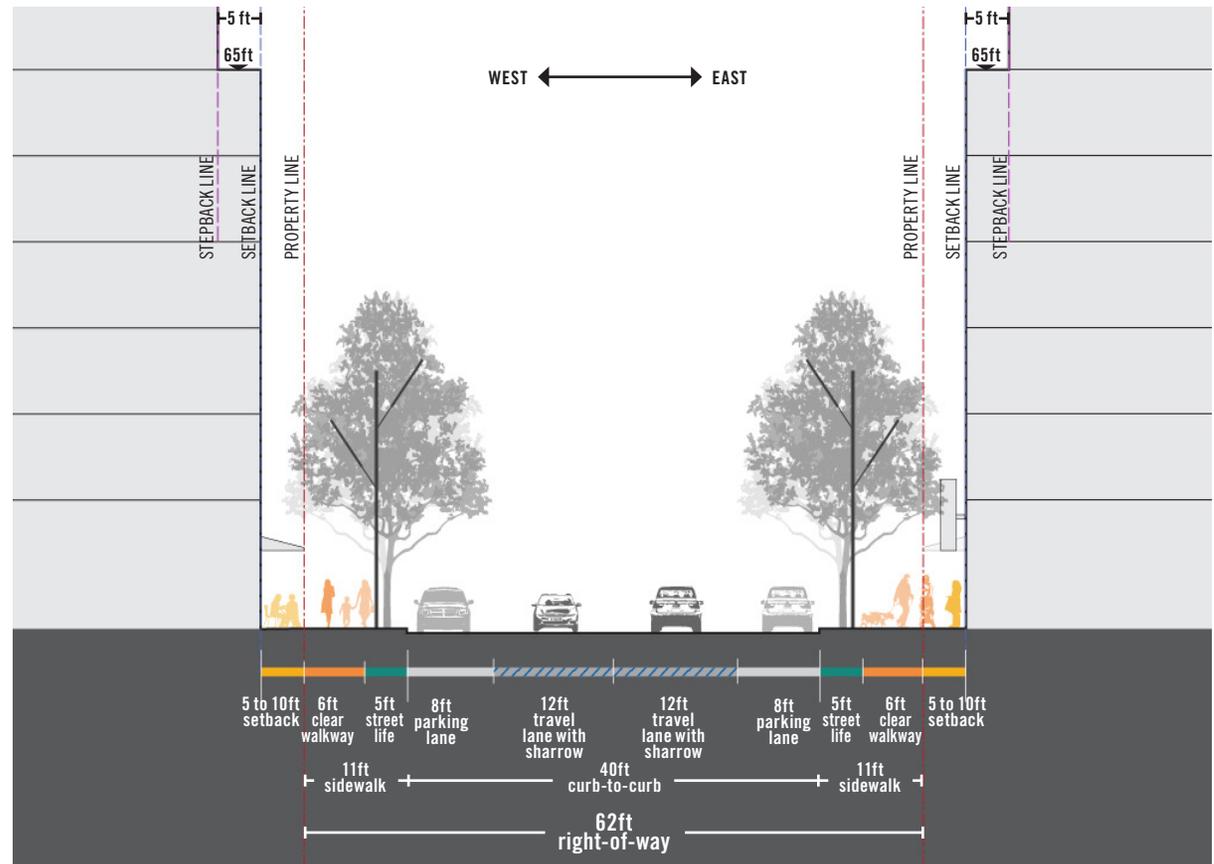


Figure 04-4-1 Calle Del Sol Street Section: North of Calle de Luna



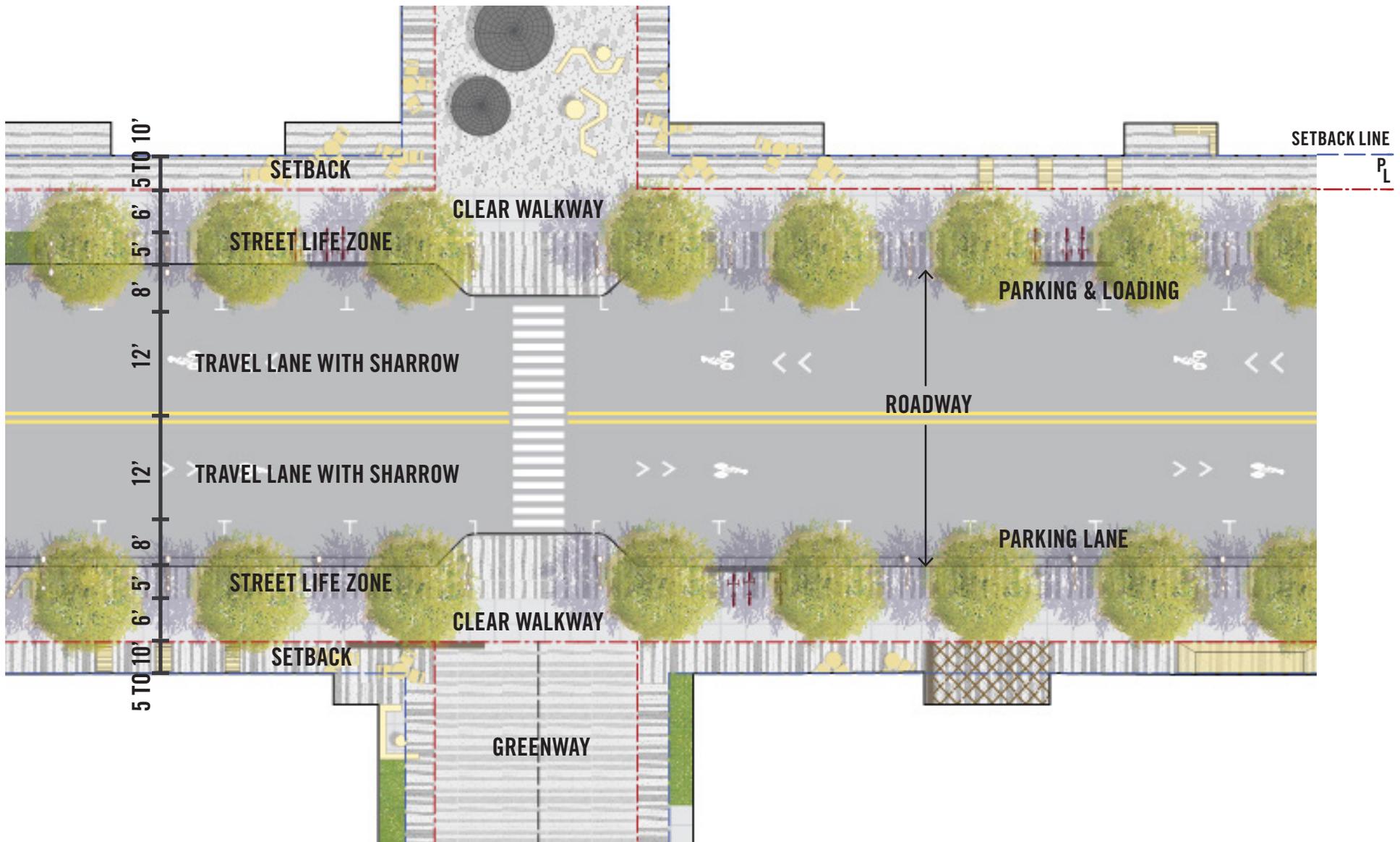


Figure 04-4-2 Calle Del Sol Street Plan: North of Calle de Luna

# CALLE DEL SOL

SOUTH OF CALLE DE LUNA (OPTION 1)

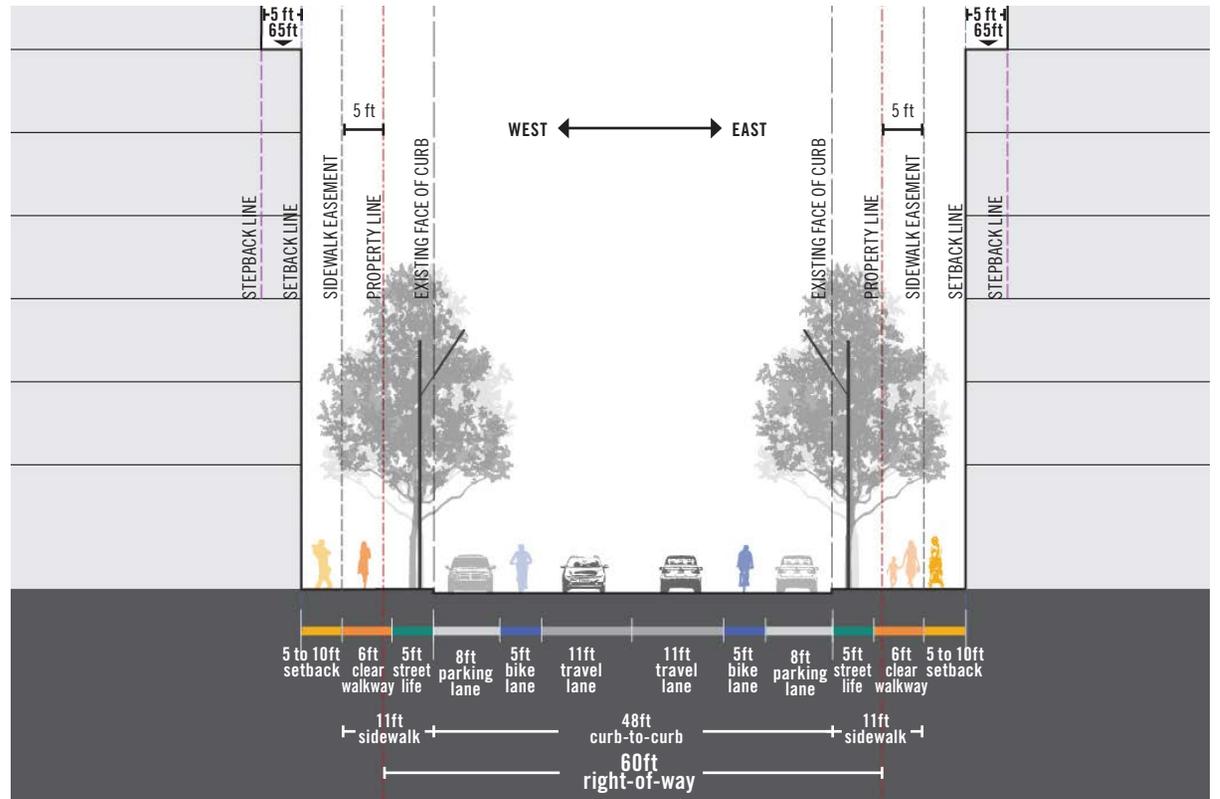


Figure 04-4-3 Calle del Sol Section Option 1: Low Traffic Volumes, 2 Drive Lanes

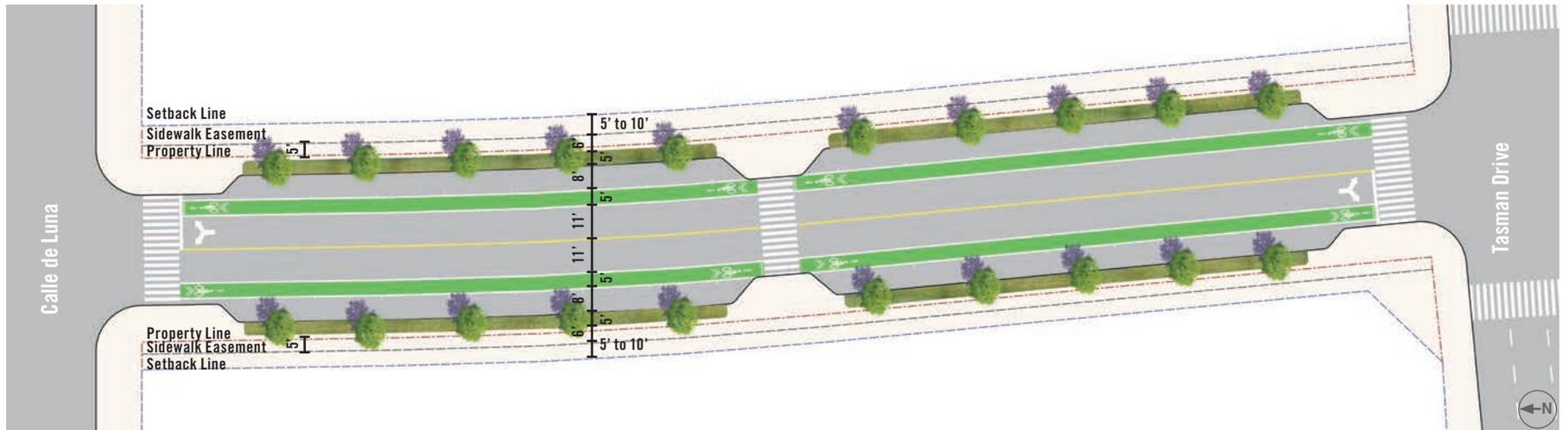


Figure 04-4-4 Calle del Sol Plan Option 1: Low Traffic Volumes, 2 Drive Lanes

Note: Exact location of crosswalk to be aligned with ultimate location of greenways for enhanced pedestrian connectivity.

# CALLE DEL SOL

SOUTH OF CALLE DE LUNA (OPTION 2)

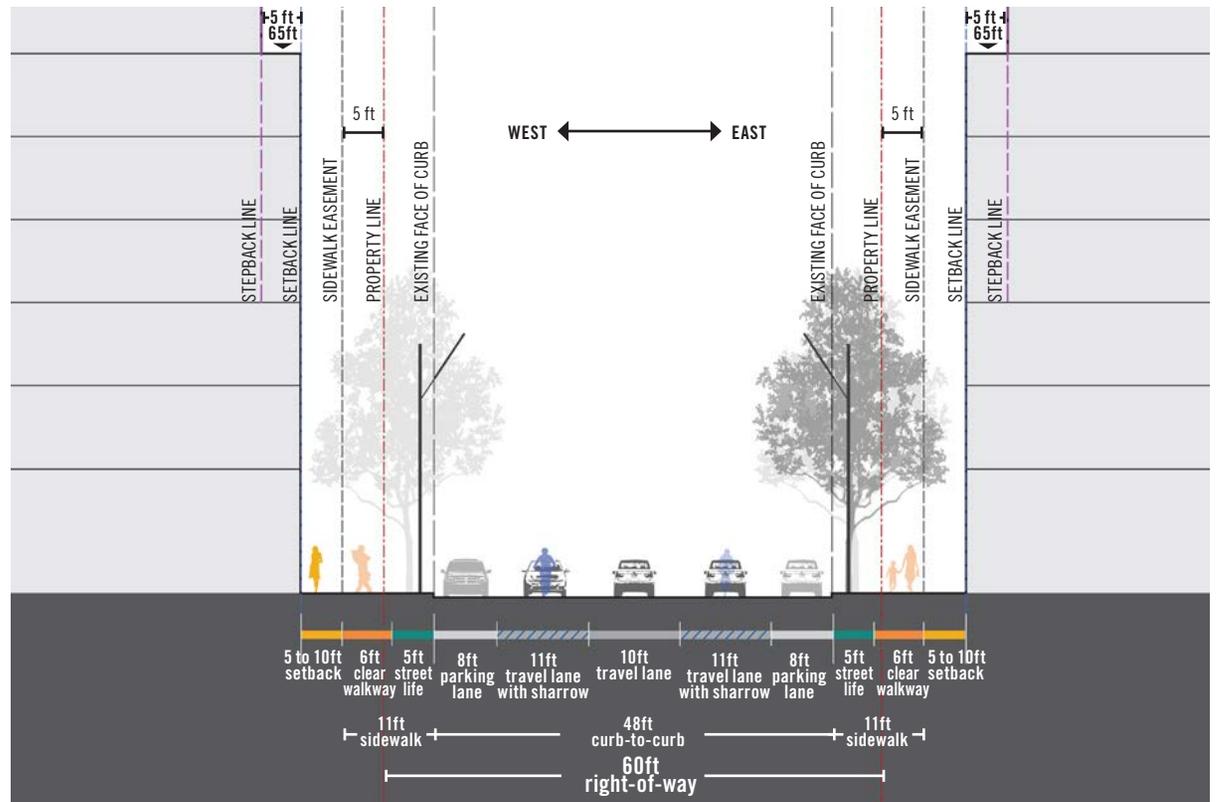


Figure 04-4-5 Calle del Sol Section Option 2: Medium Traffic Volumes, 3 Drive Lanes

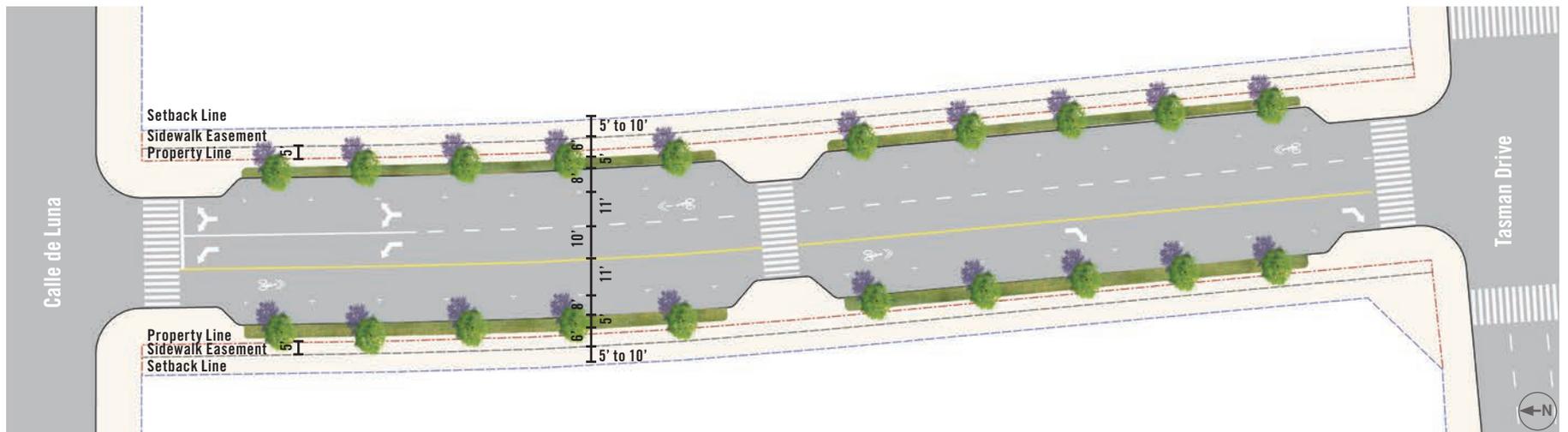


Figure 04-4-6 Calle del Sol Plan Option 2: Medium Traffic Volumes, 3 Drive Lanes

Note: Exact location of crosswalk to be aligned with ultimate location of greenways for enhanced pedestrian connectivity.

# CALLE DEL SOL

SOUTH OF CALLE DE LUNA (OPTION 3)

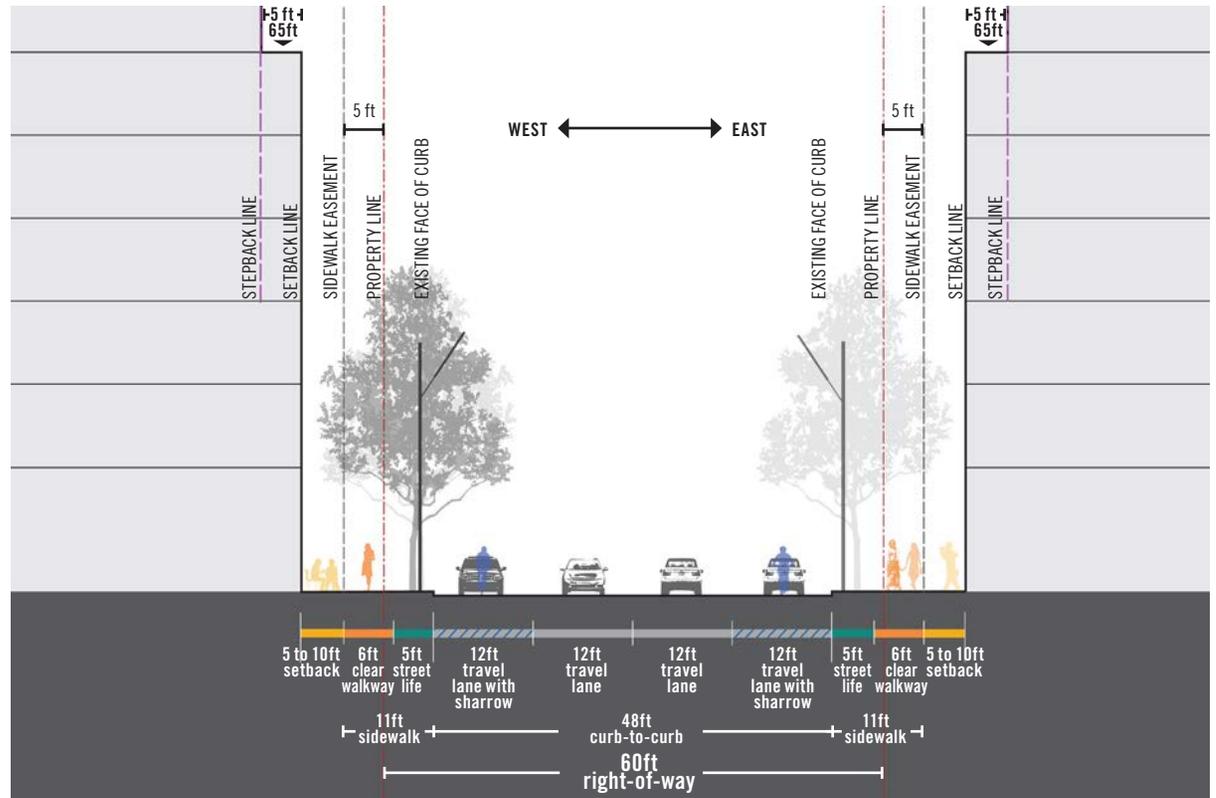


Figure 04-4-7 Calle del Sol Section Option 3: High Traffic Volumes, 4 Drive Lanes

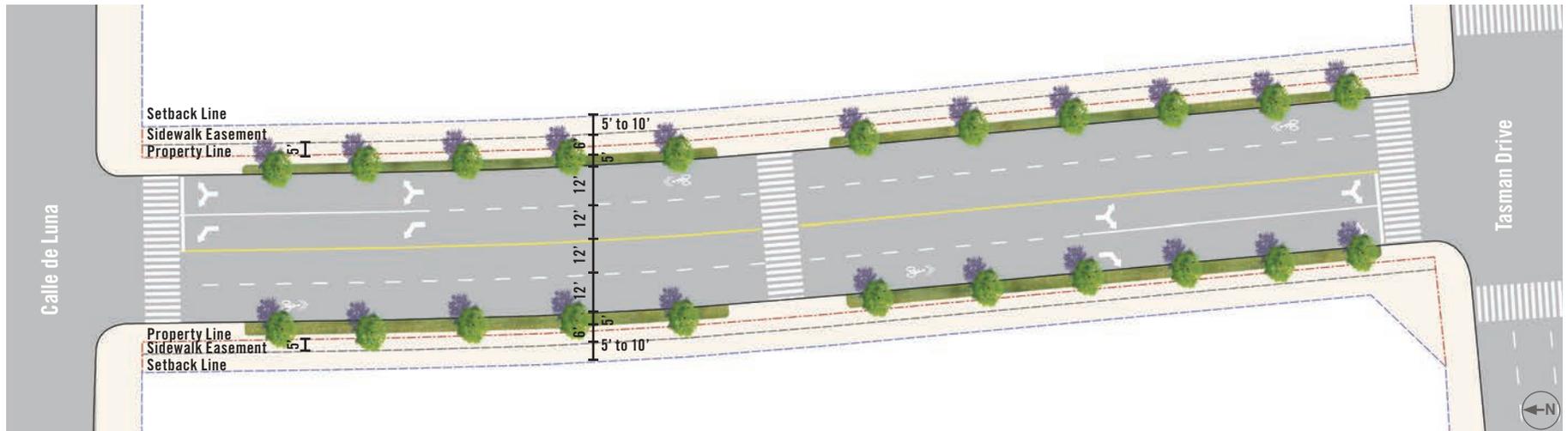


Figure 04-4-8 Calle del Sol Plan Option 3: High Traffic Volumes, 4 Drive Lanes

Note: Exact location of crosswalk to be aligned with ultimate location of greenways for enhanced pedestrian connectivity.

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# 04.5 CALLE DE LUNA

## Intent

Calle de Luna will serve as a critical pedestrian link between Great America Station and the Lick Mill VTA stop. Generous sidewalks will improve the street experience for pedestrians.

## Standards

- (A) A 6 foot sidewalk easement is required on both sides of the 60 foot right of way to widen the sidewalk and enhance the pedestrian experience.
- (B) Calle de Luna will be designed with street zones and lane configurations according to Figure 04-5-1 and Figure 04-5-2.

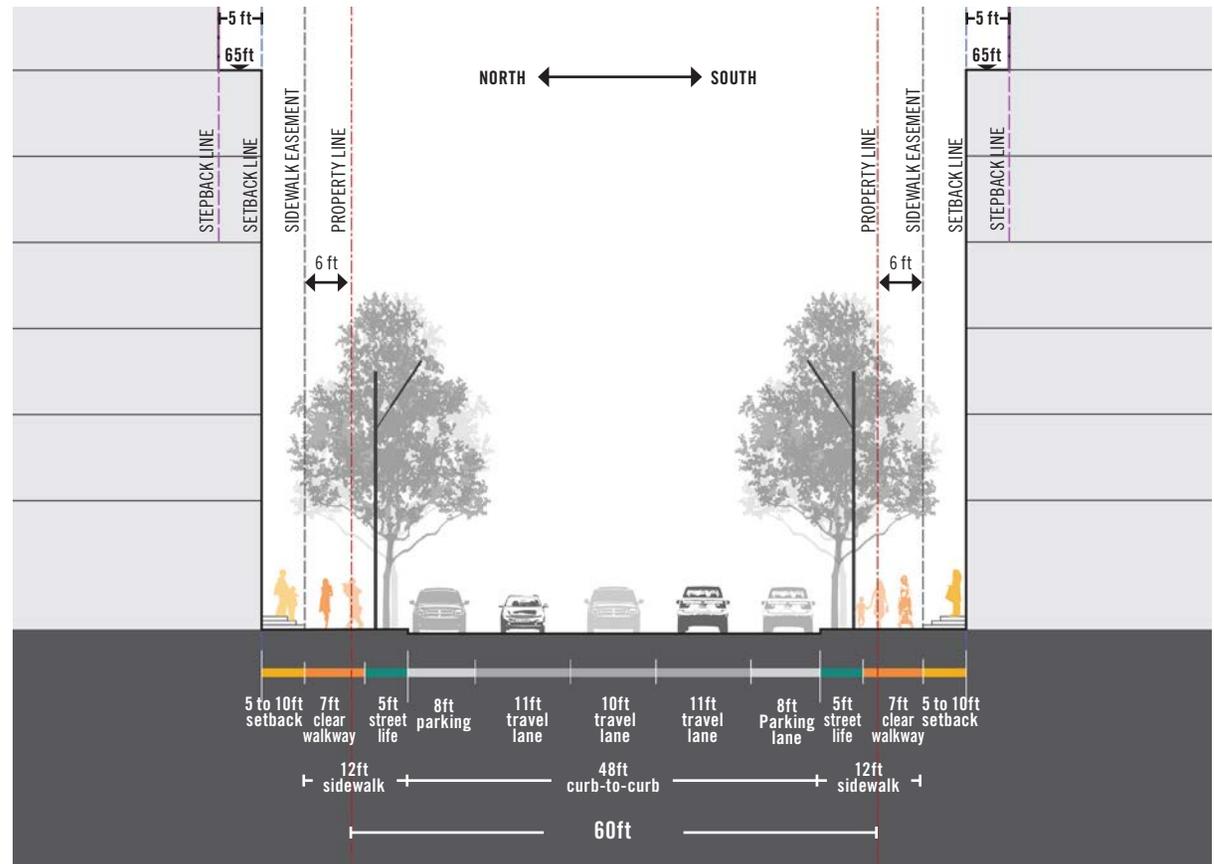


Figure 04-5-1 Calle De Luna Street Section, looking east.



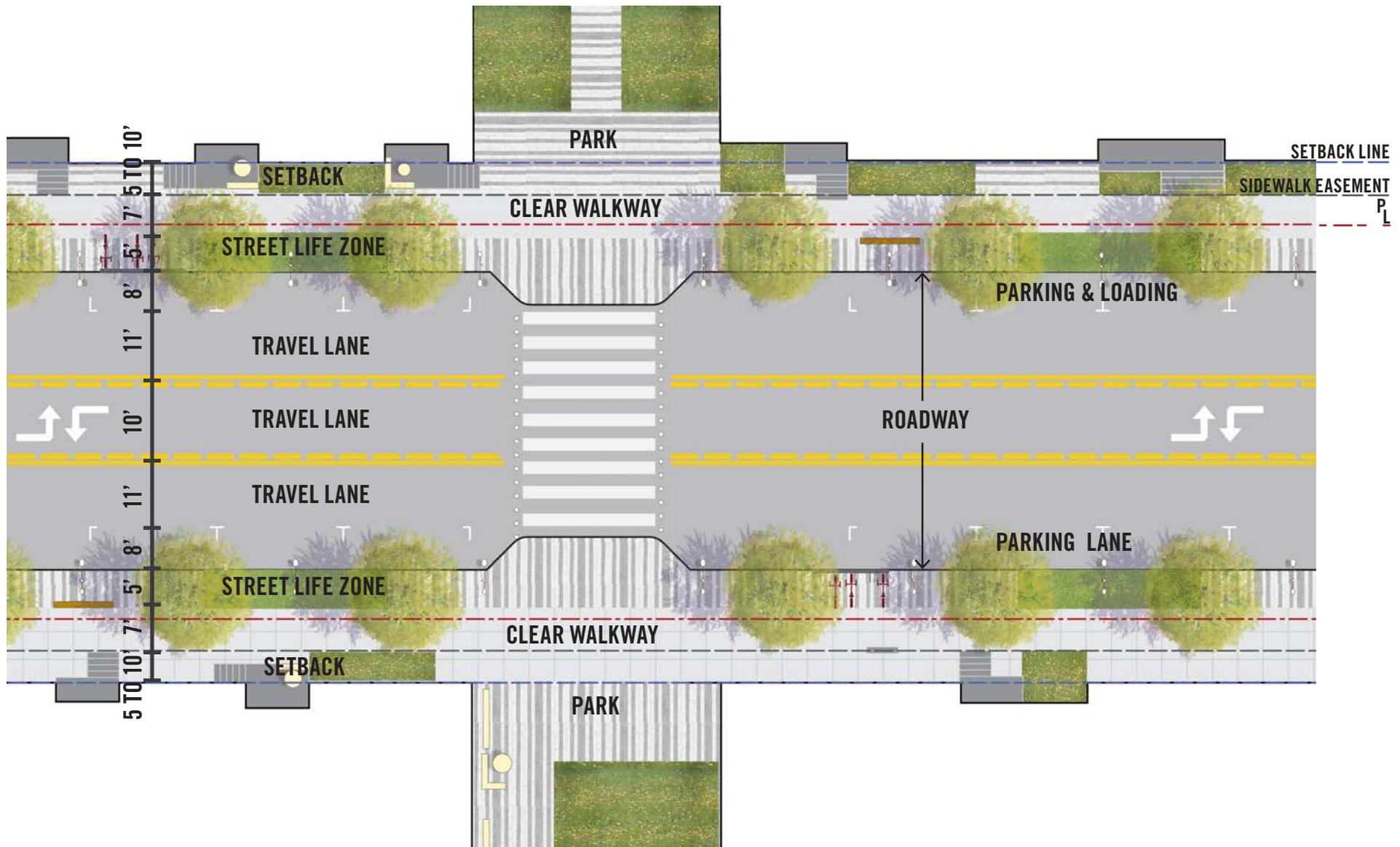


Figure 04-5-2 Calle De Luna Street Plan

\* West end of Calle de Luna parking only on the southside of the street to accommodate one eastbound and three westbound lanes.

# 04.6 CALLE DEL MUNDO

## Intent

Calle del Mundo will be a quieter, residential street that is lined on both sides by residential stoops and building entries. The setback will create a softer edge to the sidewalk with terraces, steps, and planted areas that will allow for a comfortable social distance between the street and residential units.

Dedicated bike lanes will provide a safe and convenient connection for cyclists through the site, connecting to Lick Mill Boulevard and Lafayette Street.

## Standards

- (A) Calle del Mundo will be designed with street zones and lane configurations according to Figure 04-6-1 and Figure 04-6-2.
- (B) Where turn lanes need to be added they shall replace parking lanes.

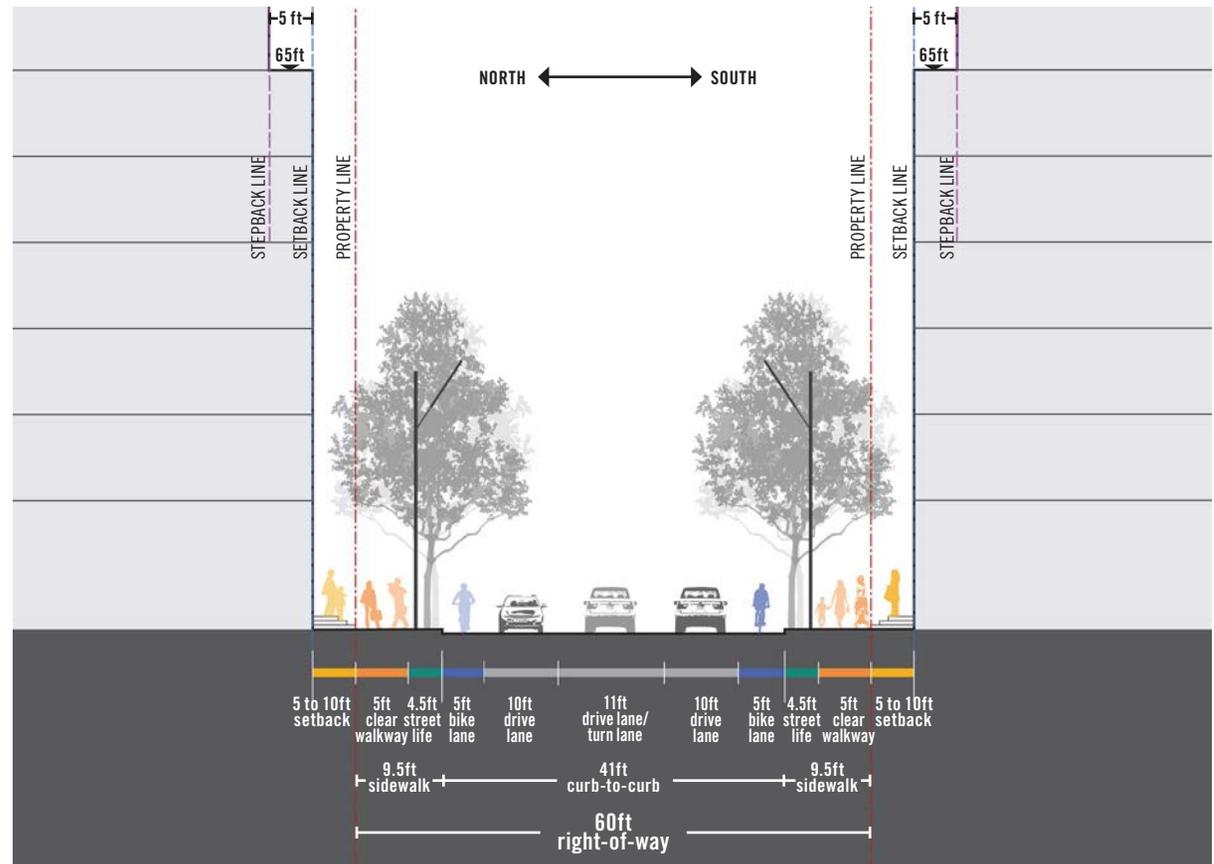


Figure 04-6-1 Calle Del Mundo Street Section



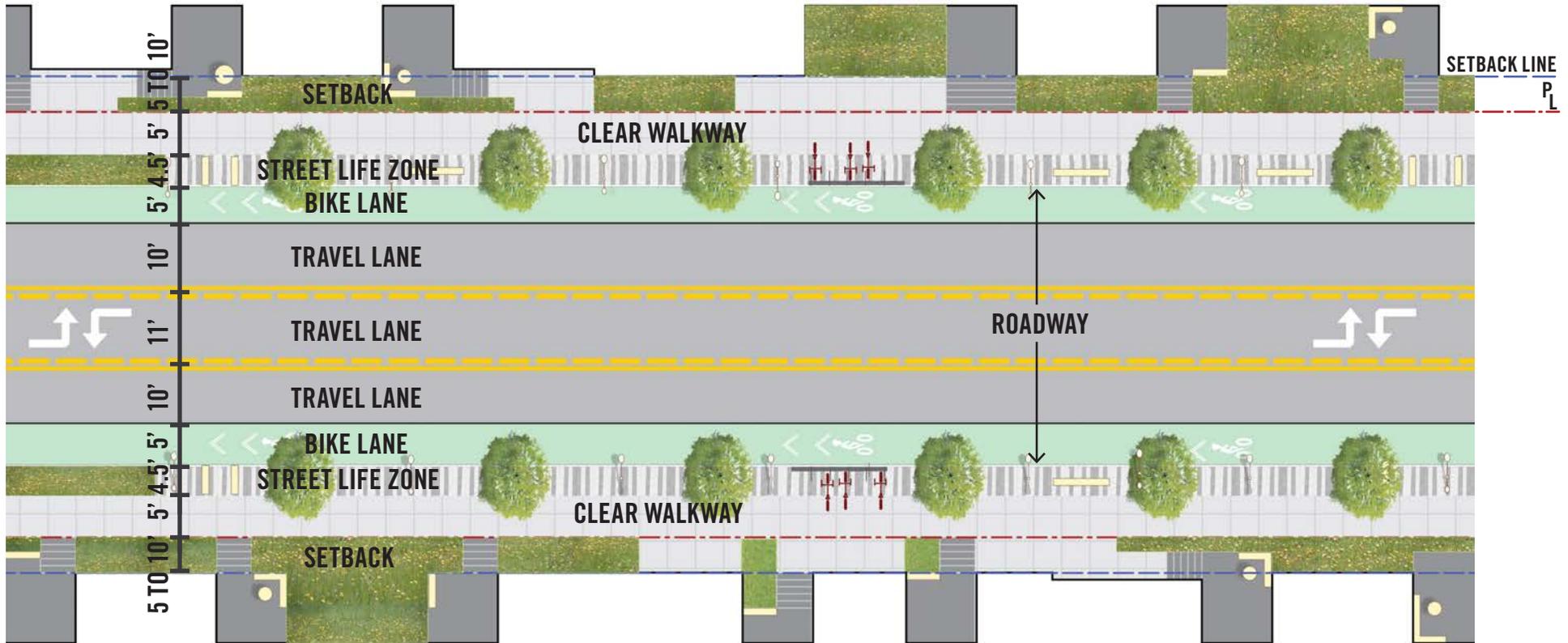


Figure 04-6-2 Calle Del Mundo Street Plan

# 04.7 STORMWATER MANAGEMENT

### Intent

The integration of stormwater management in public open spaces lowers infrastructure costs, increases space efficiency, provides ecological benefits, and creates opportunities for public interaction.

Stormwater areas should be designed amenities that function effectively and contribute aesthetically to the site as a whole, integrating with the architecture and streetscape design of the surrounding context. For example, raised planters can function as seating or stormwater treatment can be a feature within the pavement.

### Standards

- (A) Select drought-tolerant plant species in the design of stormwater treatment systems.

### Guidelines

- (B) Creation of subdistrict stormwater management areas is preferred over an approach that treats each space individually.
- (C) Designed treatment systems such as bioswales, flow-through planters, permeable paving, and greenroofs should be utilized as part of a comprehensive approach to stormwater management.
- (D) Developments with more than one building that include greenways and/or parks are encouraged to treat their stormwater management areas in adjacent open spaces. Smaller parcels, if developed concurrently with neighboring parcels,

are encouraged to coordinate stormwater design in shared open spaces.

- (E) Select a planting palette that will provide seasonal interest.
- (F) Consider access to sunlight and drainage requirements of selected trees and shrubs when locating and designing treatment areas; provide dry season irrigation to ensure long-term plant health.
- (G) Refer to the Santa Clara Valley Urban Runoff Pollution Prevention Program's reports and work products for materials, precedents, and methods.
- (H) Consider educational or interpretive signage near stormwater treatment areas, to educate the public about the benefits and processes of stormwater treatment areas.



*Raised planters can function as seating*



*Stormwater treatment can be an educational opportunity*



*Stormwater treatment can be a feature within the sidewalk.*

## 04.8 PAVING & LIGHTING

### PAVING

#### Intent

A hierarchy of paving materials helps to create clear wayfinding and contributes aesthetically to the site as a whole.

#### Standards

- (A) All street paving shall meet City of Santa Clara Sidewalk Standards.
- (B) All control joints are required to be saw cut.
- (C) For greenways, use concrete Pavers with Type 1 steel edging.

#### Guidelines

- (D) The design of greenways should consider the following:
  - Use special paving or accent materials to visually connect with entry points, linear increments, or adjacent design or program.
  - For visual continuity, continue paving patterns across differing conditions, such as pervious or vehicular paving and permeable paving sections.
- (E) Park paving should consider the following:
  - Use a combination of pavers and concrete that are unique to each park design.
  - Meet greenways in a consistent way, using lane paving to clearly show circulation.

### LIGHTING

#### Intent

Adequate lighting should be provided in all dedicated open space and along all streets and greenways to ensure clear wayfinding and safe pedestrian passage.

#### Standards

- (A) Parks that connect to the Guadalupe River or City Place shall include a lit pathway at all times.
- (B) A lit pathway that utilizes Dark Sky compliant and efficient lamping would be provided at all times within the bounds of the Plan Area and would not include any part of the trail or trail access on Santa Clara Valley Water District (SCVWD) property.

#### Guidelines

- (C) In addition to existing cobra head street lighting, pedestrian scale fixtures should be added as needed to increase safety and activate retail areas for evening use.
- (D) Streetscapes should utilize shorter pedestrian scale pole light fixtures to improve pedestrian experience, wayfinding, and safety.
- (E) Bollard lighting should be used to create a consistent and safe passage through greenways at all times.



*Bollard lighting allows for safe pedestrian passage without intruding light into residential units*



*Consider how lane paving meets open space to mark circulation*

## 04.9 URBAN CANOPY

### Intent

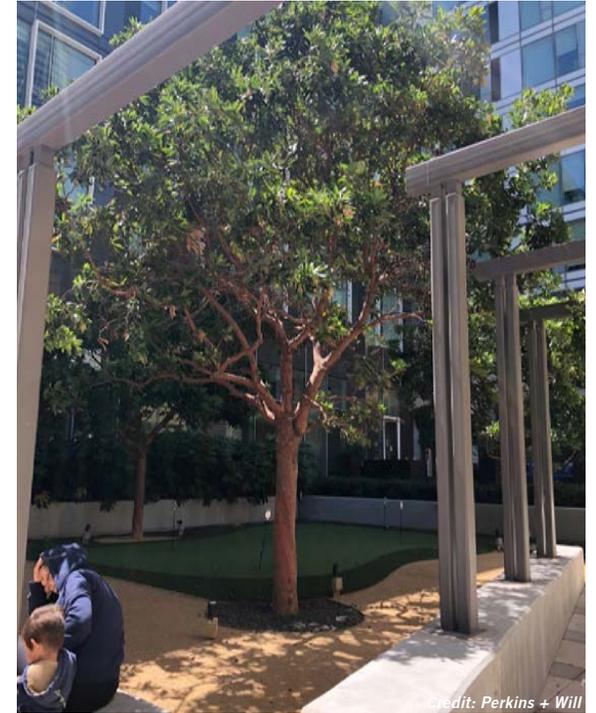
Integration of new tree planting and landscape will enhance the urban forest at Tasman East and surrounding area. The urban forest plays important environmental and social roles: it cleans the air, absorbs rainwater, provides habitat and improves health and well-being. Tree planting also reduces the urban heat island effect by increasing shading. Irrigation will be provided by the City's recycled water supply.

### Standards

- (A) All trees shall be planted in consideration of utility offsets.
- (B) All selected trees shall conform to CalGreen water efficiency requirements.
- (C) Tree pits shall be a minimum of 4 feet in width, and a maximum of 3 feet in depth. Along the segment of Calle del Sol from mid-block to Tasman, tree pits may be a minimum of 3.5 feet in width and a maximum of 3 feet in depth. Tree pits shall use planting or granite sets outside of critical root ball zone or may use tree grates to create additional travel width for pedestrians. Refer to tree box size in Figure 04-9-1 when sizing to ensure sufficient growing space around root ball at installation.
- (D) Trees shall be planted in contiguous open planting areas. Where continuous planting is interrupted by curb cuts, use of a modular suspended pavement system (such as Silva Cells) is required.

### Guidelines

- (E) Reference Figure 04-9-1 for recommended options for tree selection and planting.
- (F) Tree planting areas should target soil volumes listed in Figure 04-9-1, and be assigned as per their mature size. Soil volume may be shared between trees co-planted in trench or large planter and below sidewalks.



*Credit: Perkins + Will*  
Provide proper soil volume to allow trees to mature



*Credit: Perkins + Will*  
Maximize shading to mitigate the heat island effect

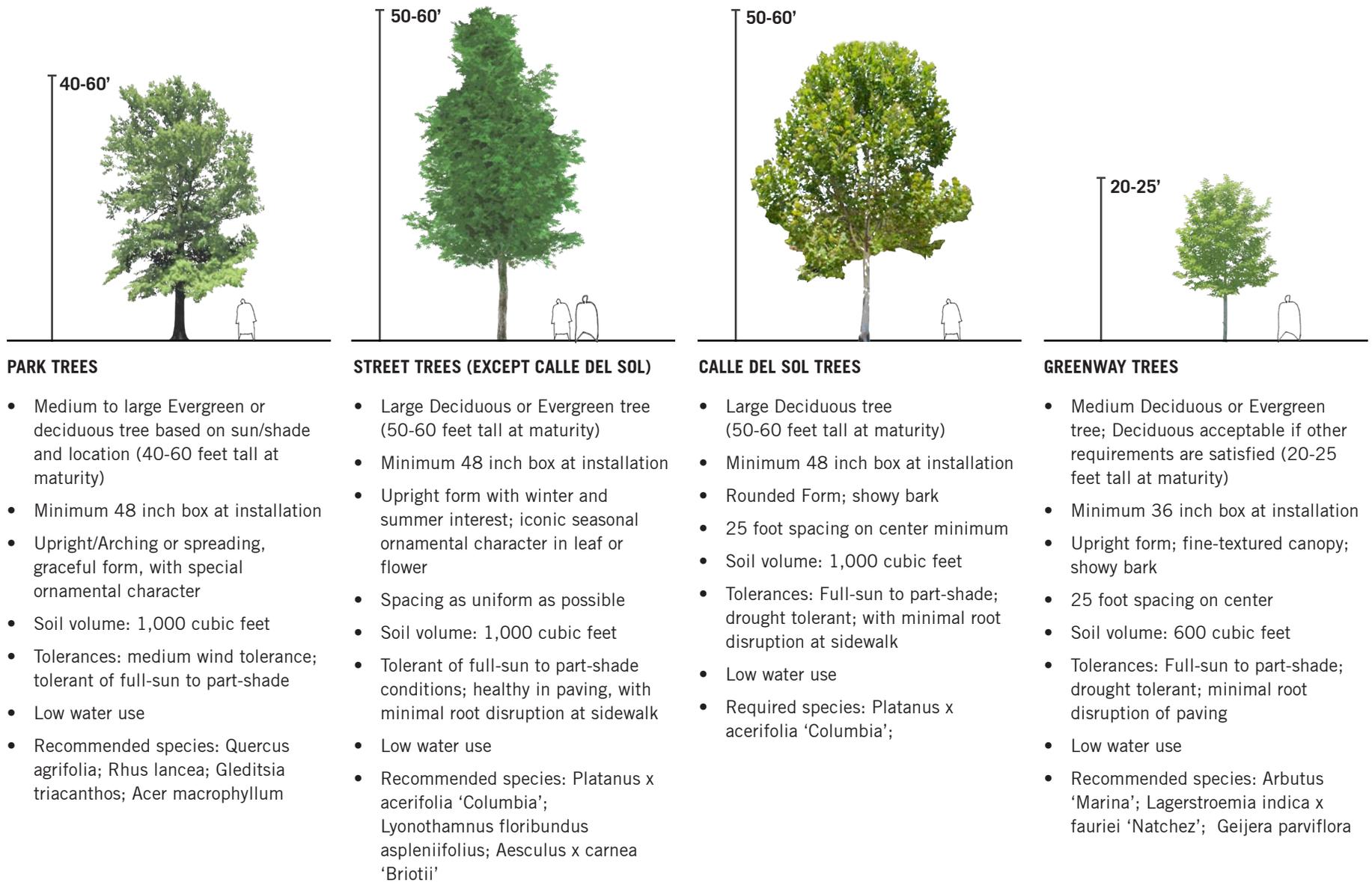


Figure 04-9-1 Urban Canopy Tree Selection

# 05

## OPEN SPACE DESIGN GUIDELINES

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# 05.1 DEDICATED PARKLAND LOCATIONS & PROGRAM

## Intent

The Tasman East open space system will be a network of diverse neighborhood parks that offer a unique destination and enhance the overall site environment. Open Spaces will be connected by greenways and pedestrian priority streets that complement and connect with the larger North Santa Clara open space network, including the Guadalupe River Trail and the parks and paths provided at City Place.

## Standards

- (A) Open spaces shall be sized and located in districts according to Section 3.7 Open Space Framework. Parkland shall be dedicated and constructed in a proportional amount to a given project's district requirement prior to issuance of a certificate of occupancy, or temporary certificate of occupancy. Developer shall have the option of posting a bond or providing other security to the satisfaction of the Director of Community Development if the construction of the new open space is not completed prior to temporary certificate of occupancy.
- (B) Parks and open spaces shall be designed to connect with the network of greenways and streets that carry pedestrians through the neighborhood. See also Section 05.06 for guidance on greenway design.
- (C) Grey arrow on Figure 05-1-1 indicates location where open space is encouraged to be designed to create vertical connection that navigates grade changes between River District and the adjacent Guadalupe River Trail. The character of this

connection is further outlined in the following section 05.2.

- (D) Open spaces shall be generally flat; sloped areas programmed with active uses can be considered for credit.
- (E) Pioneer trails; Native plantings proposed for development in the Plan Area shall consider the SCVWD's Guidelines and Standards for Land Use Near Streams. Local native plantings, to the extent they are available, shall be used. Development and landscaping of the area along the levee should also consider opportunities such as site layout, fencing, landscaping, and education to discourage the public from creating pioneer trails up the levee slope to access the existing trail. A 15-foot zone free of tree plantings shall be provided from the levee toe to allow for emergency access.

## Guidelines

- (F) The open space network should provide a comprehensive array of passive and active recreational opportunities. Each open space should have a unique identity that reinforces a diversity of activities within the overall open space system.
- (G) Potential program elements which may be used to create a unique park identity may include, but are not limited to: dog park, exercise area, sport courts, games (i.e. bocce, etc), large natural area, playground, community garden or amphitheater.
- (H) Sports courts, where they occur, should be designed

to official sizes with required setbacks and safety fencing. Elements that require fencing should be sited in a way that does not negatively impact park connectivity or visibility.

- (I) In addition to a signature program element, all open spaces should accommodate passive uses such as reading, picnicking and gathering.
- (J) When siting park elements, consider types of activity, periods of use or vacancy, availability of sun or shade and the differing needs of a diverse range of visitors such as small children, adult athletes, skateboarders, dog owners, etc. Design program components to accommodate flexible uses.
- (K) Park program should relate to adjacent land use, interior building program and building siting. Considerations for sun/shade, indoor/outdoor, public/private should all be incorporated into the design of open space and siting of buildings.



\* Greenway and Park locations depicted are conceptual.

**Figure 05-1-1** Open Space Locations

## 05.2 RIVER DISTRICT

### Intent

The park in the River District will be the most expansive and natural neighborhood park in the Tasman East neighborhood.

### Standards

- (A) The park shall maintain public access along the riverfront and be designed to embrace the Guadalupe River as a central feature.
- (B) Sloped walks, terraces, stairs and/or ramps for bicycle and pedestrian circulation shall be a key feature to connect across the grade change between the eastern edge of the site and the Guadalupe River Trail. This will ensure that pedestrians and bicyclists from the Guadalupe River Trail can access the Great America Station at the western end of Calle De Luna.
- (C) The park may also provide a public outdoor amphitheater that can be used to host concerts, movies, and other public events.

### Guidelines

- (D) The River district park should be designed to complement the adjacent Guadalupe River and Ulistac Natural Area.
- (E) The park should have larger contiguous soil volumes to support long-lived canopy trees and diverse habitat.
- (F) Plant selections should reinforce the native and surrounding ecology and promote habitat development.
- (G) Ramps and stairs should be aesthetically pleasing as well as functional. In bridging the grade change, the elevated open space should open views back across the Tasman East neighborhood, up and down the river, and toward Levi's stadium. More distant views to Downtown San Jose and the Diablo Mountain Range should be considered.



*Terraces direct views and provide an informal gathering space*



*Passive trails along the riverfront*



*Slides are one way to use grade changes to provide signature play opportunities*

## 05.3 HILL DISTRICT

### Intent

The Hill District park could potentially connect the site and City Place's proposed Second Street. Second Street connects northward and serves as an important bridge connection across Lafayette Street.

### Guidelines

- (A) Ramps and stairs should be aesthetically pleasing as well as functional.
- (B) Terraces along the grade change should be designed to serve as meeting points and visual landmarks. In bridging the grade change, the elevated open space should open views to Levi's Stadium, the Guadalupe River and beyond.
- (C) This park should include amenities to support the retail environment on Calle Del Sol such as flexible seating areas, social gathering spaces, play spaces and public art.
- (D) Surrounded by development on two sides, this park should be designed to be protected from wind and down-drafts from buildings with strategic tree planting and thoughtful siting of passive programming.



*Seating and landscape enhances and diversifies the functionality vertical circulation*



*Permanent game tables create a social gathering space*



*A variety of soft and hard scape creates a varied and interesting experience*

## 05.4 BRIDGE & CENTER DISTRICTS

### Intent

At the heart of the site, the parks in the Bridge and Center Districts will be a signature social element of the open space network. These parks are the ideal location for intimate neighborhood-serving amenities, because they are remote from busy Lafayette Street and Tasman Drive, but are still a short walk from the retail at Calle Del Sol.

### Guidelines

- (A) These parks can include a variety of landscaping treatments, and should feature urban plazas, tree-lined promenades, tot-lots, pocket gardens with seating areas and lawns.
- (B) Hardscape plazas and lawns should provide flexible spaces to accommodate a range of activities for the community, such as movies, picnics and community events.
- (C) The crossing at Calle de Luna should be designed to prioritize pedestrian safety and visibility using a raised tabletop intersection and warning lights.
- (D) Surrounded by development on two or three sides, these parks should be designed to be protected from wind and down-drafts from buildings with strategic tree planting and thoughtful siting of passive programming.



*The flexibility of a large lawn can allow for informal recreation like group exercise classes*



*Play areas are one of many program uses in this park.*



*The lawn can host community events like movie screening*



*Flexible seating areas create a signature amenity*

## 05.5 STATION DISTRICT

### Intent

The location and configuration of the open space in the Station District should be designed as an urban plaza to complement the gateway experience from the Lick Mill VTA Station and highlight this area as a center of activity for neighborhood residents, workers and visitors, see Figure 03-8-1.

### Guidelines

(A) Station District Park should be one large plaza or form a network of plazas that offer an urban social space for the neighborhood and enhance connections between transit, greenways, open space and the retail experience of Calle del Sol.

- (B) Outdoor dining areas - either associated with restaurants or open seating - should support the connection to retail at Calle del Sol.
- (C) Plazas in this area should feature public art and other elements that enhance social interaction.
- (D) Plazas should be designed to maximize sunlight during the active hours of the day as well as visibility and public access.



*Credit: Rehwaldt Landschaftsarchitekten*

*Inviting play areas will attract families from the neighboring communities*



*Credit: Perkins + Will*

*Plazas should be nodes of activity within the block*



*Credit: Jim Campbell, Scattered Light, Northern Spark 2011  
Presented by Northern Lights.mn & Minnesota Museum of American Art*

*Public art can be experiential*



*Credit: Perkins + Will*

*Urban plazas can host community events*

## 05.6 GREENWAYS

### INTENT

Greenways are public thoroughways that provide a fine grain of connections to subdivide large blocks. They will take advantage of code-required fire separation between buildings to create a variety of walking connections that provide a human-scaled pedestrian experience. Public access easements will be required for greenways to ensure that they remain public at all times.

There is potential for sections of the same greenway to be constructed by separate entities, therefore the standards and guidelines below ensure that greenways will be designed cohesively.

### GUIDELINES

- (A) Greenways should provide two distinct paths: a minimum 12 foot wide, paved or raised boardwalk, shared use path for pedestrians, cyclists, strollers, etc and a 6 foot wide dirt/decomposed granite path for walking and jogging. These paths can either be side by side or separated by planted areas to count towards the 10-acre open space requirement.
- (B) Greenways may provide a minimum 20 foot wide access for emergency vehicles. This area can be partially planted as long as the planting can be driven over in case of emergency (i.e. grasses but not trees).
- (C) Up to 50% of the surface area of a greenway may be used for stormwater management. The remainder of the surface area shall be used to create urban, public spaces that provide opportunities for social gathering.

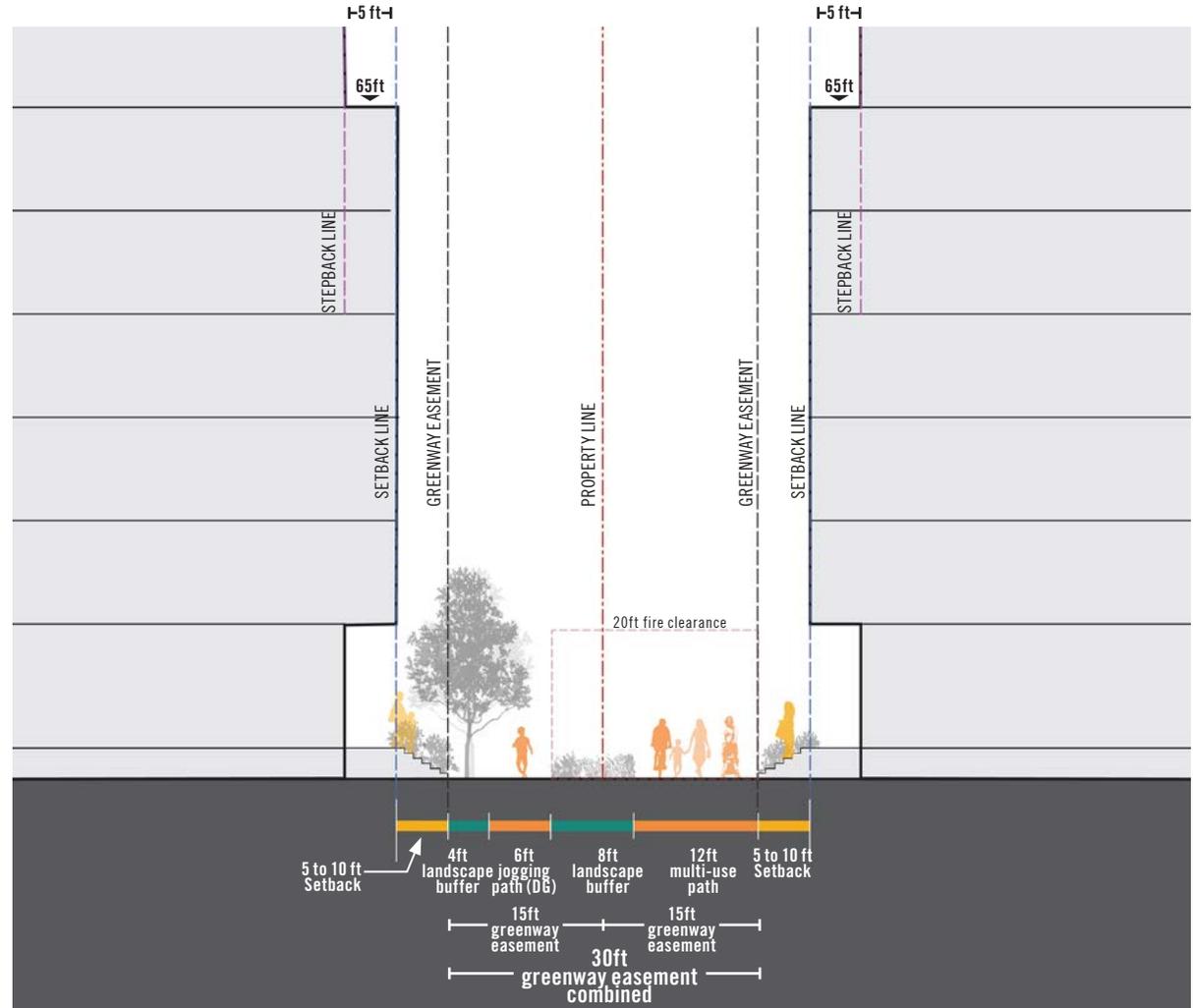


Figure 05-6-1 Greenway Section

- (D) Greenways should provide durable, low-maintenance seating at intervals of 100 feet or less to create rest areas for pedestrians. Consider more frequent seating for the comfort of people with limited mobility. Consider incorporating seating into other uses such as planters or stairs.
- (E) In the interim condition where only one half of a greenway is constructed at given phase, there should be a minimum 5 foot clear walkway provided. The interim design should be created to anticipate a complete, cohesive design when finished.

- (F) Greenways should apply a consistent palette of materials, paving, trees, lighting and street furnishings to ensure clarity and legibility of the greenway network. See Section 4.9 for paving and lighting standards, and Section 4.10 for tree selection guidance.
- (G) Greenways should be well-lit at night to ensure safety.
- (H) Greenways should have a diversity of plantings and stormwater treatment areas should be thoughtfully integrated into the overall design.
- (I) Greenway connections to open space should be aesthetically consistent.
- (J) Seating areas should have a variety of scales and be located at intervals along the greenways, branching off from the continuous pedestrian path. These spaces should be socially-oriented and connected to the main thoroughway with benches, planting and shade structures (where appropriate).
- (K) At important intersections or gathering places, consider the use of catenary lighting and overhead tree canopies to create a sense of enclosure and scale while maintaining pedestrian through-traffic.
- (L) Specify low-maintenance, durable street furnishings appropriate to adjacent uses and program.
- (M) Greenways should use a consistent family of

lighting fixtures. Lighting should be designed to limit light intrusion into residential units. Consider feature lighting at important non-residential entrances. Also see Section 4.9 Paving and Lighting for site-wide lighting guidelines.

- (N) Create a rhythmic tree spacing based on mature size of species selected and the spacing of lighting. See also section 4.10 Urban Canopy for tree selection criteria.



*Greenways will create an interesting and intimate experience for pedestrians and cyclists*



*Landscape-enhanced pedestrian environment*



*Social seating areas*

# 06

## BUILDING DESIGN GUIDELINES

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## 06.1 BUILDING DESIGN

### BUILDING SCALE AND ORGANIZATION

#### Intent

The following guidelines are general guidance for architecture that is not monolithic, but appropriately scaled to create an interesting pedestrian experience, as well as architecture where the building program is legible and well-organized.

#### Guidelines

- (A) Building design should use contrast and depth to reinforce massing or programmatic changes. For example, where the tower meets the podium, building entries and building common areas are all logical locations for notches, reveals, and changes in materiality. Buildings should generally be articulated with smaller scaled elements toward the base of the building, and larger, more volumetric elements toward the middle and top of the building.
- (B) Residential buildings should express the scale and proportion of individual residential units through the use of balconies, expression of floorplates, and recesses and projections.
- (C) The streetwalls of buildings should be modulated with insets, notches, and larger scale projections that create shadow lines, conveying a sense of volumetric depth and modulation, and to reduce the apparent building mass;
- (D) The lower floors of buildings should be more highly articulated with elements such as bay windows, inset doorways, terraces, vertical piers, landscape walls, art, and other design elements that reinforce a human scale.

### BUILDING FENESTRATION AND MATERIALS

#### Intent

Well-designed fenestration and high-quality materials are essential in establishing buildings that convey the qualities of durability and permanence.

#### Guidelines

- (E) Uninterrupted expanses of full-height glazing should be avoided, including on towers. For example, vertical piers, horizontal balconies, or spandrel panels can be used to break up expanses of glazing.
- (F) Design the façade and cladding to be sustainable, provide thermal comfort, give access to daylight, minimize glaring reflections, and protect interior spaces from glare.
- (G) High quality materials should be used at the pedestrian zone, with a preference for materials that are tactile and durable and reflect the natural quality of the material such as brick, stone, wood, and tile.
- (H) Avoid superficially applied finish materials. Where surface materials are used, ensure they turn the corner and express an appropriate depth. For example, if brick tile is used, corners should be clad in corner pieces with an appropriate thickness, as opposed to miter joints.
- (I) The use of locally sourced and sustainable building materials is encouraged.
- (J) Particular attention should be paid to the quality of window detailing.

### ROOFTOPS AND OUTDOOR AMENITY AREAS

#### Intent

Podiums of buildings should provide generous common spaces including usable rooftops or podium courtyards. Rooftops of buildings should be considered a “fifth façade” that is designed to be viewed from taller buildings.

#### Standards

- (K) In order to encourage the creation of usable outdoor space, balconies or stoops that are a minimum of 36 square feet in area and have a minimum dimension of 5 feet in any direction shall be allowed 25% of area credit toward the TEFA open space requirement.

#### Guidelines

- (L) Courtyards should be designed as welcoming common spaces, incorporating the individual patios of adjacent podium level units, or common indoor amenities where appropriate.
- (M) Courtyards should feature both paved and planted areas. Planted areas must have adequate soil volume to support mature plant growth, see section 03.7.
- (N) Courtyards should be designed to integrate any functional elements such as skylights, photovoltaic panels and shading devices elegantly into the design of the space.

## MECHANICAL EQUIPMENT

### Intent

Screening for mechanical equipment should be incorporated into overall architectural character of the building.

### Standards

- (O) To avoid noise and air quality impacts on open space areas, mechanical ducts or vents, with the exception of residential kitchen and bathroom vents, shall not be located adjacent to areas designated for courtyards or common activity areas.
- (P) Rooftop mechanical equipment greater than 4 feet in height shall be screened in an enclosure that also considers views from above. All screening should be at least of equal height to the mechanical equipment that it screens.
- (Q) Where possible, vents for grease and garbage shall be exhausted at the roof level or to a greenway.

### Guidelines

- (R) The location of ducts, vents, and other appurtenances should be integrated into the building design. Where used, fresh air intake grills or exhaust ducts shall be incorporated into wall cladding or fenestration design and should not be conspicuous.
- (S) Carefully consider the wind direction when composing the roofscape, and organize all mechanical equipment to minimize visibility.
- (T) All other mechanical equipment or outdoor storage areas should be screened with architectural detailing equivalent to that of the rest of the building.



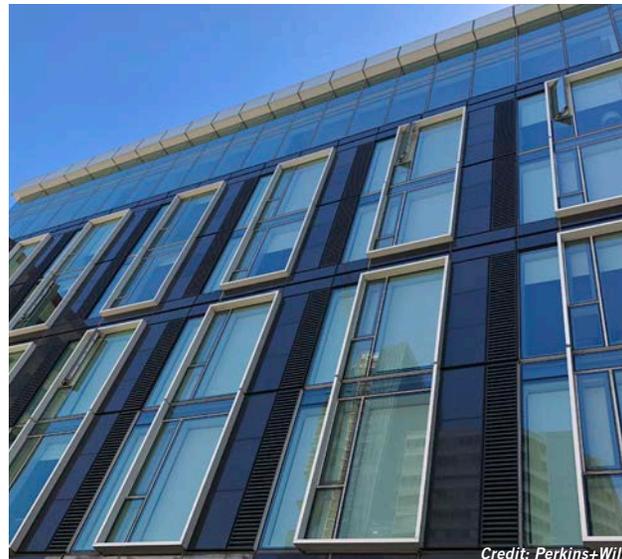
*Credit: DSDHA, Luca Miserocchi*

*Materials should express their natural qualities.*



*Credit: Perkins + Will*

*Express the scale and proportion of individual residential units through the use of balconies, vertical notches or projections and contrasting materials or changes in fenestration.*



*Credit: Perkins+Will*

*Where used, fresh air intake grills or exhaust ducts shall be incorporated into wall cladding or fenestration design and shall not be recognizable.*



*Credit: Perkins+Will*

*The tower should be designed to come to ground in a way that reinforces the human scale at the sidewalk.*

## 06.2 BULK AND MASSING

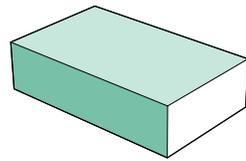
### Intent

The experience of a place is shaped by the aesthetic and scale of its buildings, the character and scale of the street and the relationship between the two. A sense of enclosure of the street makes the street feel like a series of urban rooms with a consistent 'streetwall', see Section 03.8.

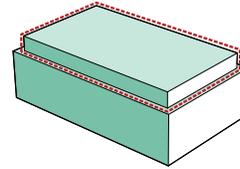
Tall buildings are an opportunity to mark the location of key site features and, when treated with appropriate detail and groundfloor use, can also enhance the public realm.

### Standards

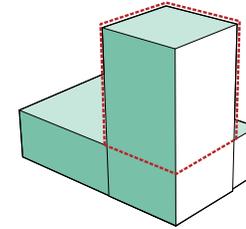
- (A) Long, undifferentiated buildings that span an entire block can create a monotonous urban environment. In order to create a more interesting and walkable public realm, individual buildings should ideally be no longer than 300 feet in length. For those buildings that are longer than 300 feet in length a building notch shall be provided on the podium starting at the street level, for the entire height of the façade, to break up the massing. The building notch shall have a minimum dimension of 40 feet in width and 15 feet in depth
- (B) The maximum height on the site shall comply with the Federal Aviation Administration (FAA) 220 feet above grade height limit. The height limit for the site is inclusive of all vertical building elements including tower tops. Where reasonable exemptions from FAA height limits are sought, unoccupied vertical projections may extend beyond the height limit up to 40 feet.
- (C) The maximum height of the base of a tower building shall not exceed 85 feet. Any portion of a building greater than 85 feet in height shall be considered a tower and subject to tower bulk controls.
- (D) Starting at 65 feet, buildings shall be articulated with a 5-foot average setback from the streetwall, including building recesses and protrusions, for a minimum of 50% of each building frontage. Balconies and other architectural elements such as louvers are permitted in the recesses.
- (E) The streetwall shall be varied and articulated to create interest and diversity of experiences, forms and materials along public ways. Variety is purposely sought in order to avoid repetitive or over-sized buildings and provide visual interest.
- (F) In order to create visually appealing towers, ensure that they do not appear monolithic or bulky, and to minimize shadow and wind impacts of towers on the public realm, the following bulk controls apply:
  - The maximum building envelope footprint shall not exceed 12,000 square feet (with Director of Community Development discretion to approve projects that provide greater articulation for mass reduction including reduced floor plates for the upper stories, and higher quality of building materials to have a maximum building envelope footprint of up to 15,000 square feet).
  - The maximum tower plan length is defined as the greatest dimension parallel to the longest side of the building at any level of the tower above the base of the building. The maximum tower plan dimension shall not exceed 230 feet for buildings between 86 and 140 feet in height; the maximum tower plan dimension shall not exceed 160 feet for buildings above 141 feet in height, unless a shift in plane of at least 15 feet in depth or at least 15 degrees from the original plane is provided at a maximum of 140' in length, in which case the maximum tower plan dimension shall not exceed 200 feet.



Low-Rise



Mid-Rise



High-Rise

Building Element	Up to 65 feet facing streets and greenways	66 - 85 feet facing streets and greenways	86 - 220 feet
Stepback	Average of 5 feet from streetwall for a minimum of 50% of frontage	Average of 5 feet from streetwall for a minimum of 50% of frontage	N/A
Maximum Floor Plate Area *	N/A	N/A	12,000 square feet
Maximum Plan Length	N/A	N/A	230 feet for buildings between 86 and 140 feet in height The maximum tower plan dimension shall not exceed 160 feet for buildings above 141 feet in height, unless a shift in plane of at least 15 feet in depth or at least 15 degrees from the original plane is provided at a maximum of 140' in length, in which case the maximum tower plan dimension shall not exceed 200 feet.
Maximum Apparent Face Length	80 feet	80 feet	140 feet
Change in Plane or Notch	3 feet change in plane for at least 15 feet in the horizontal dimension, or 3 feet wide by 5 feet deep notch	3 feet change in plane for at least 15 feet in the horizontal dimension, or 3 feet wide by 5 feet deep notch	4 feet change in plane for at least 12 feet in the horizontal dimension
Tower Separation	N/A	N/A	Minimum distance between the closest building points of two towers is 60 feet, measured from the nearest tower faces, see Figure 06-2-2

**Figure 06-2-1** Bulk and Massing Guidelines

\* See Standard F.

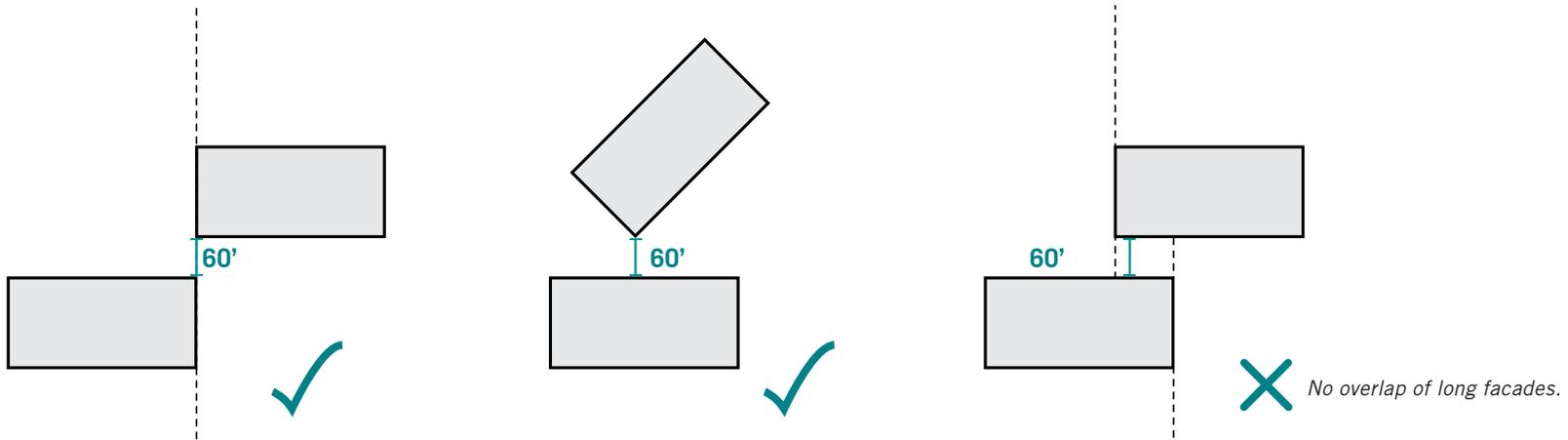


Figure 06-2-2 Distance Between Towers

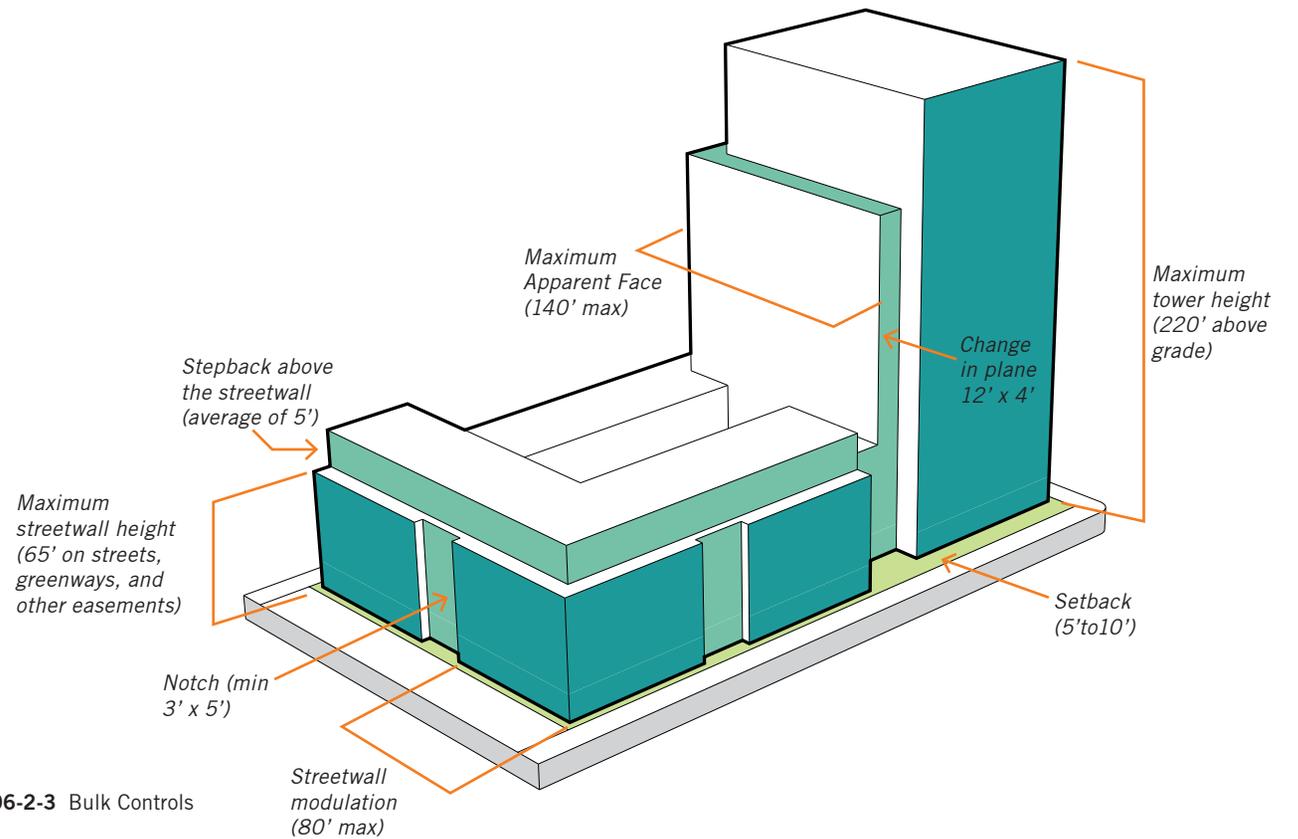


Figure 06-2-3 Bulk Controls

- (G) Broad or long tower facades shall be broken into narrower apparent faces, adding visual relief in the bulk of the façade and creating shadow lines which add articulation, depth, and scale. Tower floorplates shall comply with the following maximum apparent face standards:
- All towers with floorplates over 10,000 square feet are limited to a maximum apparent face of 140 feet, after which there is a required change in plane of at least 12 feet in the horizontal dimension by a minimum of 4 feet in depth. A notch is not considered a change in plane.
  - Buildings that have rounded facades or faceted planes that can show that the maximum apparent face and change in plane meet the intent of this bulk reduction will satisfy this requirement.
  - Changes in plane shall be accompanied by a change in material and/or fenestration.
- (H) To preserve views and privacy for tower occupants, planar faces of towers shall be separated one from another. The minimum distance between the closest building points of two towers is 60 feet, measured from the nearest tower faces, see Figure 06-2-2 for examples of how this may be achieved.

**Guidelines**

- (I) To modulate the streetwall, every 80 feet horizontal or less, use either: a change in 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. See Figure 06-2-3.

- (J) These massing changes shall relate to the overall building design, design of the tower, and to other prominent building elements such as fenestration patterns and building entries.
- (K) The tops of towers are highly visible elements which are identifiable from a distance and contribute to a larger site identity and project skyline. Tower tops should use the following approaches;
- Tower tops should be shaped with wall plane extensions and other non-habitable elements, and should be designed to allow for building differentiation and architectural expression.
  - There should be a relationship between the design of the base of the building and tower which gives a sense of the tower touching the ground.
  - A similar palette of materials, colors and fenestration should continue from upper building to base building, so as to create a unified composition.
- (L) The massing of buildings can impact street level microclimates, making for a comfortable or uncomfortable pedestrian experience. Consideration should be given to how the building's massing might impact the public realm, private and semiprivate outdoor spaces, particularly in terms of shadow and wind.

## 06.3 BUILDING PERFORMANCE

### Intent

In addition to the performance targets listed in Section 3.9, buildings are encouraged to seek high levels of performance relative to energy, water use, carbon reductions and waste diversion for buildings regarding more sustainable choices.

### Standards

(A) Buildings shall provide “solar ready” infrastructure such as solar panel standoffs, conduit and roof water spigots that minimize the cost and effort of adding solar capacity at a later date, as per the California Green Building Standards Code.

### Guidelines

- (B) Buildings should be designed with operable windows and vents that allow for natural ventilation of the building in case of power outages in extreme weather events.
- (C) Buildings that allow for natural ventilation reduce energy consumption for heating and cooling and provide a higher-quality indoor environment. Consideration should be given to optimizing floorplates and unit layouts to allow for cross-ventilation.
- (D) Buildings should be designed to maximize the use of daylighting for all inhabited interior spaces in order to provide a high quality indoor environment, reduce overall energy consumption and reduce exposure to artificial lighting which can negatively impact human health.

- (E) West- and south-facing facades should be designed to balance solar access with the need to control heat gain.
- (F) Where building roofs are free of solar panels or other sustainability infrastructure, they should be designed to include systems such as vegetated roof covers, plants and roofing materials with high albedo surfaces in order to reduce heat island effect and slow rainwater runoff.
- (G) Whenever possible, incorporate visible elements of sustainability – such as green roofs, shading devices or photovoltaic panels – into the fabric of the building, so as to make visible the building’s energy saving features.
- (H) Provide interpretive signage to explain the features of the building which promote sustainability, and to educate visitors and occupants how their behavior can make an impact on overall building performance.



*Credit: Perkins+Will.*  
*A residential roovescape should be considered a “fifth facade”.*



*Credit: Linazasoro&Sanchez.*  
*Sustainable timber used as a visible green design element.*

## 06.4 BUILDING FRONTAGES

	BUILDING ELEMENT	PROJECTION DEPTH	MINIMUM HEIGHT
ABOVE SIDEWALK LEVEL	(A) Enclosed Building Area	3'	at least 12'
	Unenclosed Building Area	3'	at least 12'
	Architectural Elements	2'	at least 8'
	(B) Signage	3'	at least 10'
SIDEWALK LEVEL	(B) Lighting	3'	at least 10'
	(B) Canopies & Awnings	8'	at least 10'
SIDEWALK LEVEL	(C) Stairs, Stoops, Patios, Terraces, and Planted Areas	Full depth of setback 5 to 10ft	24 to 48 inches
BELOW GRADE	(D) Garages, Basements	Full depth of setback 5 to 10ft	NA

### SETBACKS

#### Intent

Building setbacks create a transitional zone between the building face and the sidewalk, where retail uses can spill out or residential users can experience public life at a comfortable social distance.

#### Standards

(A) All building frontages shall be set back between 5 and 10 feet horizontally from the property line or sidewalk easement or existing 5-foot public utility easement as illustrated in Figure 06-4-1, subject to Public Works Triangle of Safety considerations, and except where a building notch is provided to comply with Standard 6.2A. Should a notch be provided, then that portion of building frontage setback may exceed 10 feet.

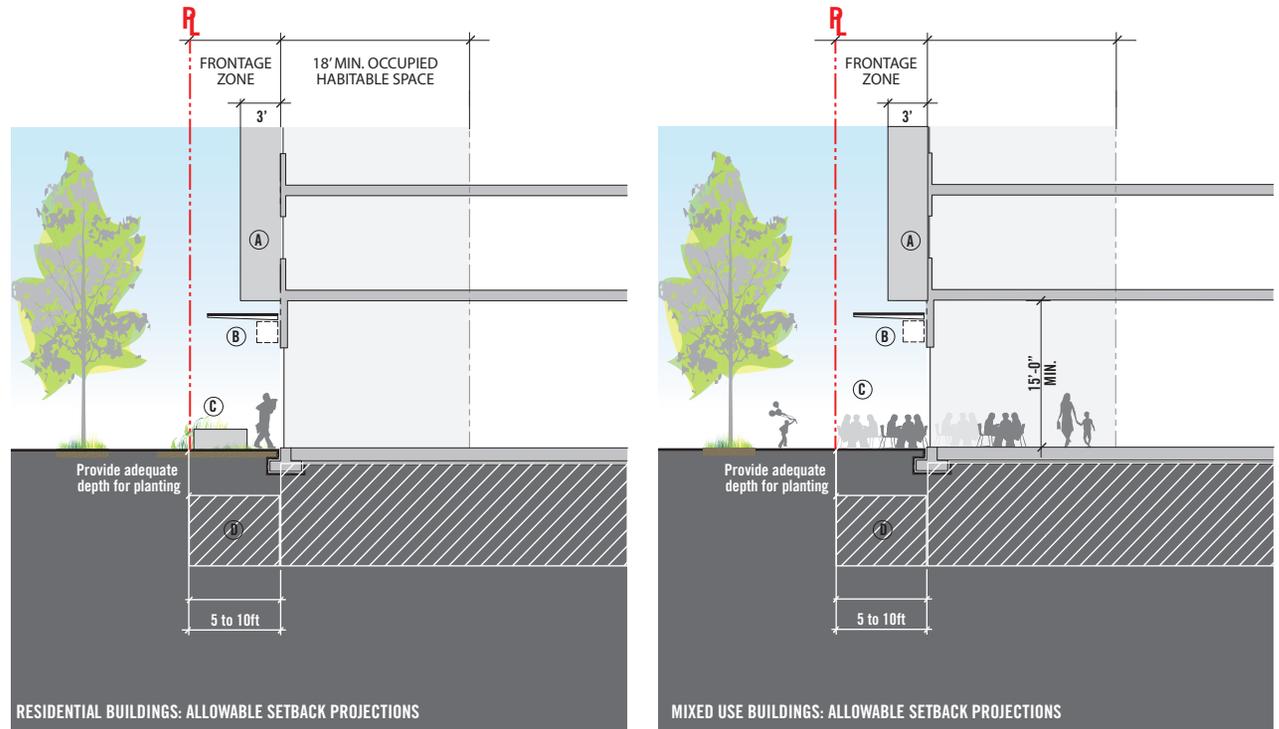


Figure 06-4-1 Allowed projections in setbacks for mixed-use and residential buildings

(B) The following building elements are allowed to project horizontally into the setback zone at the following dimensions and at certain heights above sidewalk grade, as listed below and illustrated in Figure 06-4-1.

- 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;
- Building signage and lighting may project up to 3 feet and must be at least 10 feet above sidewalk grade;
- Canopies and awnings may project up 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.

## **GROUND FLOOR RETAIL AND ACTIVE USES**

### **Intent**

Ground floor retail and other active uses enliven and activate streets, enhancing the public interface between the buildings and the sidewalk. See section 03.5 for more on active use.

### **Standards**

- (A) Ground floor retail is required along the Calle Del Sol frontages indicated in Figure 03-5-3.
- (B) Retail facades must be at least 75 percent transparent between 2 feet and 12 feet above sidewalk grade; all other non-residential active use facades must be at least 50 percent transparent between 2 feet and 12 feet above sidewalk grade.
- (C) To ensure ground floor retail spaces that will create a fine-grain scale at dimensions that will feasibly support retail tenants, retail frontages shall comply with the following dimensions and requirements:
  - Minimum ground floor height shall be 15 feet from floor to floor;
  - Retail spaces must be at least 30 feet deep; however, depths of up to 60 feet are preferable;
  - On Calle del Sol, individual retail frontages are preferred to be 15 to 30 feet to create a finer grain of activity along the street. Exceptions in maximum width can be made to accommodate local serving tenants, such as grocery stores.

### **Guidelines**

- (D) Retail frontages should maintain clear lines of sight into the retail spaces; for example shelves or signs should not be placed in front of windows such that a pedestrian walking by cannot see into the space.
- (E) Retail is encouraged along Tasman Drive and Calle de Luna Street frontages, as well as at Riverside Park corners at Lick Mill Boulevard, at a 30 foot minimum depth.

## **GROUND FLOOR RESIDENTIAL**

### **Intent**

Residential stoops create a social edge to a neighborhood street. When set back by a small distance and vertically above the sidewalk grade, they can also ensure privacy at a comfortable social distance for a residential unit.

### **Standards**

- (A) Where units are located at the ground floor, at least 50% of units on each frontage must be individually accessed from the sidewalk via stoops, side yards or other means.
- (B) Stoops that face public rights of way shall be set at least 24 inches above sidewalk grade.
- (C) Stoops shall have a minimum 5 foot landing depth with room for a table and chairs to provide an opportunity for residents to engage in the social life of the street.

### **Guidelines**

- (D) Doorways that are moderately inset provide visual relief and articulation on the façade and focus attention on the active areas of the building. Each residential doorway or entry should be recessed from the building façade or provide a projecting overhead covering of at least 2 feet in depth.
- (E) Areas between stoops should be planted and can be an opportunity to provide stormwater management elements.

## **GROUND FLOOR LIVE/WORK**

### **Intent**

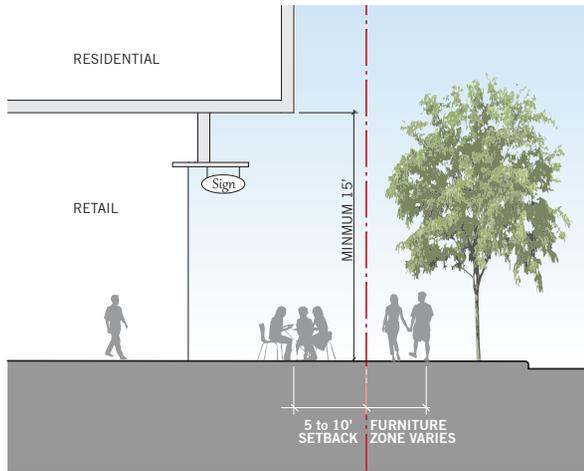
Live/work spaces are often preferred by artists, therapists, architects and other types of creative or service-related industries. Because they are often designed as a loft-style or townhome unit with the ground floor space as the public-facing part of the unit, they are a good option for a sidewalk-level use that actively engages the public realm and allows for more visibility while also adding to the range of available housing types.

### **Standards**

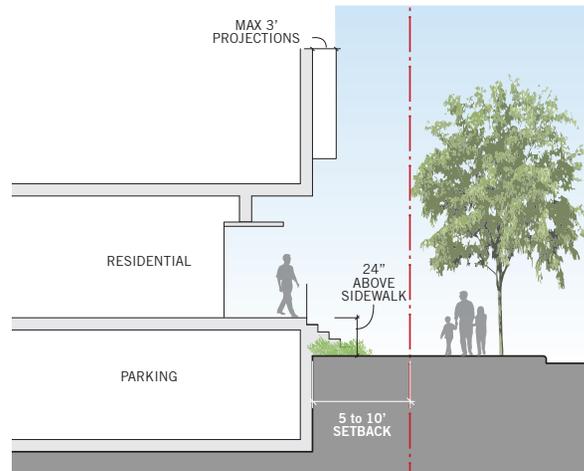
- (A) All live/work units shall be individually accessed from a street or greenway.
- (B) Because live/work units are meant to be public-facing, they should be entered at-grade and are not required to be elevated above sidewalk level.
- (C) Live/work units must be at least 50 percent transparent between 2 feet and 10 feet above sidewalk grade.
- (D) Each live/work doorway or entry shall be recessed from the building façade by at least 2 feet in depth.

### **Guidelines**

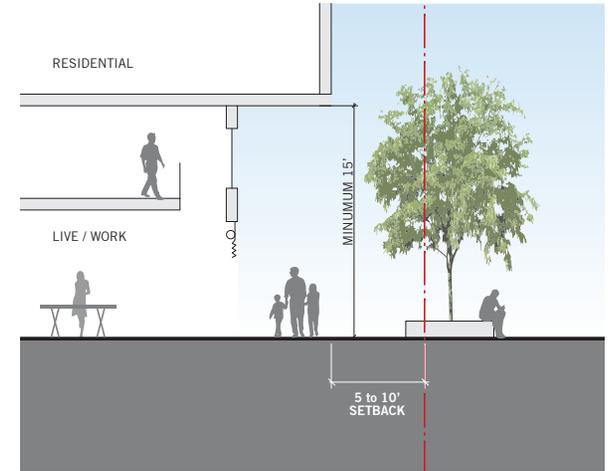
- (E) Live/work residences should be designed to orient the nonresidential portions of the unit toward the street or greenway.
- (F) In setbacks, use planting to create a sense of separation of the frontage from the public realm and lend a visual identity to individual doorways.



Ground Floor Retail



Ground Floor Residential



Ground Floor Live/Work and Neighborhood Light Industrial

Figure 06-4-2 Ground Floor Sections



Credit: San Francisco Giants

Active edges allow for indoor uses to spill out and activate the public realm.



Credit: Perkins + Will

A stoop with a small setback and planting creates a comfortable social distance from the street.



Credit: Perkins + Will

High ground-floors allow for live-work units.



Credit: SF Made

Production uses should incorporate a retail aspect to invite customers in to activate the space.

## GROUND FLOOR NEIGHBORHOOD LIGHT INDUSTRIAL

### Intent

Maker spaces at the ground floor of a building contribute a unique identity to an urban neighborhood, allowing people to see and experience where goods are made firsthand. Much like farmer's markets connect consumers to the people who grow their food, urban manufacturing connects consumers to the people who make the products they use in their everyday lives. Examples of urban manufacturing are urban wineries and breweries, chocolate-makers, coffee roasteries, furniture-makers, print-makers and jewelry-makers.

Most urban "makers" require spaces that have similar venting, electricity, and gas needs to a typical retail space. There are a few exceptions to this: coffee roasteries require extra venting and urban wineries require additional drainage.

### Standards

- (A) The minimum ground floor height shall be 15 feet clear from floor to ceiling for ease of stacking goods, or to allow for a mezzanine office.
- (B) Light industrial ground floor spaces shall be a minimum of 20 feet in depth and at least 35 feet in one dimension; however, depths of 60 feet are preferable.
- (C) Light industrial ground floor facades shall be at least 65 percent transparent between two feet and twelve feet above sidewalk grade.

### Guidelines

- (D) Light industrial frontages should feature large doors such as roll-up or sliding doors which will allow for stacked goods and large equipment to be more easily moved in and out of the spaces.

## PARKING AND LOADING FRONTAGES

### Intent

Parking and loading are necessary uses for a building, but where they dominate a frontage, they need to create a pleasant and inviting pedestrian experience.

### Standards

- (A) Driveway access shall be designed to clearly prioritize pedestrians, according to the following requirements:
- Driveway crossings shall maintain the elevation of the sidewalk;
  - Driveway aprons shall not extend into the pedestrian clear walkway where cross slopes are limited to a maximum of 2 percent; steeper driveway slopes are permitted in the furnishing and edge zones of the streets;
  - The dimensions and design of parking entry and exit points shall be coordinated with the requirements for stormwater treatment areas and street trees; and
  - Curb cuts shall be minimized on greenways or open spaces, with at most only one maximum allowable curb cut intersecting greenway or open space per project.
- (B) Parking entries and loading docks may be located on any frontage except those facing Calle del Sol, where maximum one curb cut per side of street per block shall be allowed.
- (C) Off-street parking entries and loading docks shall be designed according to the following criteria:
- Parking garage entries shall be no wider than 25 linear feet;

- Loading docks shall be no wider than 25 linear feet;
  - Transformer doors shall be limited to 12 feet of frontage; and
  - Where possible, access for parking and loading shall be grouped together to limit the number of curb cuts.
- (D) Parking entries and loading docks may be located on any frontage except those facing Calle del Sol, where maximum one curb cut per side of street per block shall be allowed unless deemed infeasible by the Director of Community Development and sufficient distance and setbacks are provided.
- (E) Exposed structured parking at the street level shall not be permitted on any façade facing a public right-of-way or greenway.
- (F) In order to ensure surveillance and safety for parking garage frontages, a minimum of 75 percent of the cumulative length of the total ground floor frontage on the same grade as and facing a street, greenway, or open space frontage of an above-grade parking structure shall be lined with active ground floor spaces such as residential unit stoops, lobbies, community rooms or other equivalent use. In no instance shall any individual parking garage, ground floor frontage be less than 25% active uses. The remaining facade length (any amount of ground floor facade length without active uses) shall be mitigated with landscaping, artwork or high-quality, durable materials that create visual interest.
- (G) The maximum distance for a blank wall of an above-ground garage is 150'. A blank wall is one that does not have architectural screening or is not screened

with lush landscaping treatment.

### Guidelines

- (H) Gates for parking garages should be visually transparent if adjacent to the street for an increased sense of safety brought by higher visibility between the street level and the interior parking garage.
- (I) Parking entries and stairways linking parking structures to public ways should be attractive, well-lit and secure.
- (J) Half-level openings or ventilation grill work should be designed to the same level of architectural detail as the rest of the building.

# 07 IMPLEMENTATION

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# 07.1 FUNDING, FINANCING, AND IMPLEMENTATION

## INTRODUCTION AND APPROACH

The Tasman East Specific Plan specifies new public infrastructure and amenities required to support the emergence of a walkable, transit-oriented district with residential and retail uses. This section outlines a strategic approach to selecting and implementing funding sources for constructing these public improvements. The first part of the strategy identifies major projects and their costs, followed by an overview of funding and financing sources/mechanisms applicable to the projects. This section concludes with a description of the next steps for determining final public and private funding responsibilities and mechanisms.

## MAJOR PROJECTS AND COSTS

The public infrastructure and amenity improvements identified in this Specific Plan fall into three primary categories of streets, utilities, and parks and open space. The street and utility improvements are estimated to cost a total of approximately \$25-30 million (in 2018 nominal dollars) for related land acquisition, demolition, and construction costs. Implementation of the Plan relies on the creation of an Infrastructure Fee, which will assign the individual developments a prorated share of the \$25-35 million infrastructure costs. The City Council will review and adopt the Infrastructure Fee, which is anticipated to include funding the costs of the following items:

- Relocation of Primavera Sanitary Sewer Pump Station
- Rabello & Northside Pump Stations Resizing
- Water line replacement on Calle Del Sol, Calle De Luna, & Calle De Mundo
- Water line upsize (12-inch to 16-inch on Lafayette Drive

## FUNDING SOURCE CATEGORIES AND EXAMPLES

CATEGORY	EXAMPLES
Developer Contributions	Infrastructure Fee Development Standards
	CEQA Mitigations
	Impact / In-Lieu Fees
	Negotiated Agreements
City Resources	General Fund
	Capital Improvement Program
	User Fees
Outside Grants	Regional, State, and Federal Grants
District-Based Tools	Assessment District
	Community Facilities District
	Enhanced Infrastructure Finance District

- New Recycled Water Line
- Storm Drain Extension for Calle Del Mundo/Lafayette
- Calle Del Sol Extension
- Pavement Repair, Overlay, Reconstruction, Striping, and Pavement Markings
- Traffic Mitigations identified in EIR

The Tasman East Specific Plan will also require ongoing funding for operation and maintenance costs associated with new infrastructure, amenities, and general population growth. Examples include street maintenance, park maintenance, police and fire services, general government

services, and administrative costs for implementation of the Specific Plan and any Transportation Demand Management programs.

## **FUNDING AND FINANCING SOURCES AND MECHANISMS**

A spectrum of potential funding sources and mechanisms exist for implementing the improvements identified in the Tasman East Specific Plan. This section describes these sources and mechanisms and their potential uses in Tasman East. In many cases, multiple funding sources will need to be combined to pay for specific projects.

Although the terms “funding” and “financing” are often used interchangeably, there is an important distinction between the two terms. “Funding” typically refers to a revenue source such as a tax, fee, or grant that is used to pay for an improvement. Some funding sources, such as impact fees, are one-time payments, while others, such as assessments, are ongoing payments. “Financing” involves borrowing from future revenues by issuing bonds or other debt instruments that are paid back over time through taxes or fee payments, enabling agencies to pay for infrastructure before the revenue to cover the full cost of the infrastructure is available.

Funding for improvements in Tasman East will come from a mix of developer contributions (both required and negotiated), city resources, outside grants, and district-based “value capture” mechanisms. The funding responsibilities for private developers and the City are clear in some instances – for example, developers must meet minimum development standards requirements and pay citywide impact fees for infrastructure. However, funding many of the infrastructure improvements in Tasman East – improvements that are necessary to support the higher-density growth mutually desired by the City and developers – will require negotiations with developers and property owners to clarify funding responsibilities and to establish new mechanisms.

Implementation of the Tasman East plan will also require more detailed studies and an ongoing management process involving the City, developers/property owners, and local utility providers. This process is described in more detail following this description of funding sources.

### **Developer Contributions:**

- **Development Standards:** Each new development project will contribute to the Specific Plan’s implementation by meeting requirements regulating each project’s land uses, height, density, bulk, parking requirements, on-site circulation, on-site open space, street frontage improvements, and other requirements specified in the Specific Plan. These standards are adopted in the City’s zoning ordinance and must be satisfied in order for a project to be granted approval.
- **Infrastructure Fee:** As stated above, there are \$25-35 million of anticipated infrastructure improvements, which will be paid for by the individual developers through a prorated Infrastructure Fee. The Infrastructure Fee is subject to City Council review and approval.
- **Reimbursement Agreements:** If a developer is required to provide additional infrastructure capacity or amenities to serve the entire district, a reimbursement agreement can be established to receive payments from later developers who benefit from these early improvements.
- **CEQA Mitigations:** As a requirement of approval under the Specific Plan Environmental Impact Report, developers may be required to contribute to mitigation measures. Traffic mitigations are anticipated to be paid for through the Infrastructure Fee.

- **Impact / In-Lieu Fees:** Impact fees are one-time fees imposed on new developments to pay for improvements and facilities that either serve the new development or reduce the impacts of the project on the existing community. Fee revenues cannot be used to fund existing deficiencies in infrastructure. The City of Santa Clara already has citywide impact fees for traffic mitigation, sanitary sewer, storm drain, and parks, but may also choose to establish fees unique to the Specific Plan Area through a nexus study. Any Specific Plan fee and corresponding study will be brought forward for City Council review and approval.
- **Negotiated Agreements:** Community benefits are developer contributions that exceed the baseline features required under development standards, environmental mitigation measures, and impact fees. Community benefits agreements can be negotiated with developers individually, but the existence of multiple major developers in Tasman East creates an opportunity to craft a negotiated agreement with these developers simultaneously.

**City Resources:**

- **General Fund:** General Fund revenues include property tax, sales tax, transient occupancy tax, and other revenues that are primarily used to pay for ongoing municipal services and operations. Both the General Fund and the Capital Improvement Program are likely to be needed to fund the Specific Plan's highest-priority infrastructure improvements.
- **Capital Improvement Program (CIP):** Infrastructure projects identified in the Specific Plan are candidates for inclusion in the City's Capital Improvement Program.
- **User Fees:** User fees and rates include the fees charged for the use of public infrastructure or goods. It may be possible to use a portion of user fee or rate revenue toward financing the costs of new infrastructure, but user fees are unlikely to be a major source of funding for implementation of the Specific Plan.

**Outside Grants:**

Various federal, state, and regional grant programs distribute funding for public improvements. Because grant programs are typically competitive, grant funds are an unpredictable funding source, and the City of Santa Clara must remain vigilant in applying for grants to implement the Specific Plan. Unique grant funding opportunities may become available due to Tasman East's designation as a priority development area and its inclusion of high-capacity transit service.

**District-Based "Value Capture" Tools:**

Land-based financing tools are typically associated with new real estate development to generate benefit-based special assessment revenues or property tax revenues to finance improvements through bond repayment or paying for improvements over time. District-based tools provide a stable revenue stream while ensuring that properties benefitting from improvements also contribute to those public investments. The following table describes the three primary types of district-based funding and financing tools. Note that assessment districts and community facilities districts primarily capture additional funding from private entities, while the enhanced infrastructure financing district reinvests growth in public property tax revenues within the district.

**SUMMARY OF MAJOR DISTRICT-BASED VALUE CAPTURE TOOLS**

FUNDING TOOL	DESCRIPTION	USES	CONSIDERATIONS
Special Assessment Districts	Additional assessment against a range of participants, depending on the type of district and relative benefit received. Examples include: Landscaping and Lighting District, Community Benefit District, Business Improvement District.	Most useful for funding ongoing operations and maintenance.	Requires majority vote of paying stakeholders. Increases costs and risk for paying stakeholders. Stakeholders need to perceive a clear benefit for themselves. Impacts paying stakeholders' overall ability to support other taxes, fees, and community benefits. Little financial risk to the City or public agencies; could lead to increased tax revenue based on private reinvestment. Additional City staff time to administer districts could offset some gains.
Community Facilities District	Additional assessment on property, levied and varied based on a selected property characteristic (excluding property value).	Infrastructure improvements, development of public facilities, ongoing operations and maintenance.	Requires approval of 2/3 of property owners (by land area) if there are fewer than 12 registered voters residing in the district. Boundaries can include non-contiguous parcels. Fees can be proportionally subdivided and passed on to future property / home owners. Increases costs and risk for landowners and homeowners if fees dissuade buyers or reduce achievable sales prices. Impacts paying stakeholders' overall ability to support other taxes, fees, and community benefits.
Enhanced Infrastructure Financing District	Diverts a portion of future General Fund property tax revenues generated within the district to help fund infrastructure projects.	Infrastructure improvements, development of public facilities, affordable housing development.	Formation does not require a local vote, but bond issuance requires a vote of 55 percent of landowners by area if there are fewer than 12 registered voters residing in the district. Does not cost individual property owners additional fees and taxes. Does not divert revenues from schools. Reduces future General Fund revenues by restricting use of the district's future property tax revenue growth.

## IMPLEMENTING THE INFRASTRUCTURE IMPROVEMENTS

The envisioned growth in Tasman East represents a long-term, ongoing generator of operating revenues for Santa Clara. Tasman East is likely to generate significant net revenue due to increases in assessed values. Growth will also help the City of Santa Clara accommodate desired housing increases in a format and setting that encourages fewer automobile trips on the City's roadways.

Achieving these fiscal, housing, and transportation benefits will require new infrastructure and amenities identified in this Specific Plan. Some infrastructure items need to be constructed or initiated in the early stages of transformation to support future population densities and avoid missed opportunities for land acquisition. Thus, the City must play an active role in these early investments, while ensuring that each development project contributes its fair share toward capital and operating costs.

The following implementation strategy outlines the process for delivering the infrastructure and programs necessary to support Tasman East's growth. The actions are incorporated in the larger Implementation section of this plan.

### Short-Term Actions: Immediate Steps

"Short-term actions" should be undertaken immediately upon adoption of the Tasman East Specific Plan. These actions include determining more detailed costs of area improvements, establishing the specific legal mechanisms to fund development and implementation of the Specific Plan itself, and engaging with developers active in Tasman East to determine funding/financing responsibilities. The goal of the short-term actions is to ensure that the City and private property owners/developers share

a clear understanding of who is paying for different improvements, and to lay the groundwork for establishing new funding/financing tools.

1. Establish an ongoing City management structure and staffing resources for Specific Plan implementation: The City should ensure adequate staff resources and decision-making authority are in place to proactively undertake implementation of the Specific Plan and achieve the General Fund revenue increases resulting from growth in Tasman East.
2. Establish a reimbursement fee for Specific Plan and EIR creation, adoption, and ongoing implementation costs. A reimbursement fee will ensure developers contribute toward the City's costs of implementing the Specific Plan. These fees are enabled under Section 65456 of the California Government Code.
3. Engage with developers and property owners to evaluate the potential creation of district-based funding mechanisms for infrastructure construction and operations. As shown in the following section, a variety of district-based funding mechanisms can be applied to the infrastructure and/or operations and maintenance costs of public facilities in Tasman East, each with unique considerations for use and approval. Many of these tools require a vote of local property owners, and may take time to study and approve.
4. Identify any infrastructure projects that will require funding sources beyond those required as a development standard or CEQA mitigation. These infrastructure projects will require use of a public or district-based funding tool.

5. Identify projects requiring partnerships with other implementing agencies/organizations. Several infrastructure projects – particularly utilities projects – are likely to require partnerships with other agencies, such as Santa Clara Valley Water District and Silicon Valley Power. The City must identify required partnerships to lay the groundwork for later construction and to explore funding and financing options.
6. Complete a detailed public facilities financing plan. The plan would identify precise cost estimates for improvements, phasing of improvements, allocation of costs between public and private entities, and a detailed funding and financing plan.

### Mid-Term Actions: Tying to Development Activity

"Mid-term actions" should occur as development activity commences. These actions focus on establishing new funding/financing tools, commencing the first phases of construction of public improvements, and ensuring that developers build agreed-upon development-related and site-specific improvements. High priority should be given to acquiring any land needed for later infrastructure and parks projects. Major actions include:

1. Establish district-based funding mechanisms, as determined in prior actions. The City, property owners, and developers should establish agreed-upon district-based funding mechanisms, including any impact fees, voter approvals, and enabling legislation.
2. Pursue partnerships for implementation with other agencies/organizations, as determined in the short-term actions.

**INFRASTRUCTURE IMPROVEMENTS AND APPLICABLE FUNDING SOURCES IN THE TASMAN EAST SPECIFIC PLAN AREA**

IMPROVEMENT CATEGORIES	DEVELOPER CONTRIBUTIONS				DISTRICT-BASED MECHANISMS			CITY RESOURCES			OUTSIDE SOURCES
	Development Standards	CEQA Mitigations of Project Impacts	Impact / In-Lieu Fees	Negotiated Agreements	Assessment District (LLD, PBID, CBD)	CFD	EIFD	General Fund	Capital Improvement Program Funds	User Fees	Other Regional, State, and Federal Grants
<b>Streets and Sidewalks</b>											
Major intersection and street construction		X	X	X	X	X	X		X		X
Additions of new streets	X	X	X	X		X	X		X		X
New intersections at new streets	X	X	X	X		X	X	X	X		X
Streetscape enhancements: widened sidewalks, landscaping, lighting, street furniture	X		X	X	X	X	X	X	X		X
<b>Parks and Open Space</b>											
Acquisition of land for parks and plazas	X		X	X	X	X	X				X
Construction of new parks and plazas	X		X	X		X	X		X		X
<b>Land Use</b>											
Desired ground floor uses	X			X							
<b>Utilities</b>											
District-wide utilities improvements		X	X	X		X	X		X	X	
On-site utilities improvements	X	X	X	X		X				X	
School		X	X	X	X						X

**Long-Term and Ongoing Actions**

“Long-term and ongoing actions” should occur over time as development proposals are submitted, outside grant funding opportunities arise and growth generates new needs.

1. Pursue grant funding opportunities, as available and applicable. The City should continuously monitor and pursue state, regional and local grant funding opportunities as they emerge.
2. Developments in the Tasman East Specific Plan may be required to participate in a Transportation Management Association, which may include a shuttle and/or other alternative mode measures.

## 07.2 PHASING & THRESHOLDS

Although it is not possible to accurately predict if and when each of the individual properties within Tasman East will redevelop, it is reasonable to assume, given the shared intentions of various property owners and stakeholders/developers, that the first phase of transformation is likely to include most of the perimeter properties (except the data center near Tasman Drive and Lafayette Street and the strip mall facing Tasman Drive), including the “loop” roads of Calle De Luna and Calle Del Mundo. See “Figure 07-2-1 Phase One Diagram”.

Phase two will include redevelopment of the “island properties”, should that occur, extension of Calle Del Sol, and relocation of the Primavera Pump Station and cell towers which are affected by the Calle Del Sol extension “Figure 07-2-2 Phase Two Diagram.”

The Lick Mill Boulevard extension between Tasman Drive and City Place 2nd Street will be contingent on the City Place development schedule.

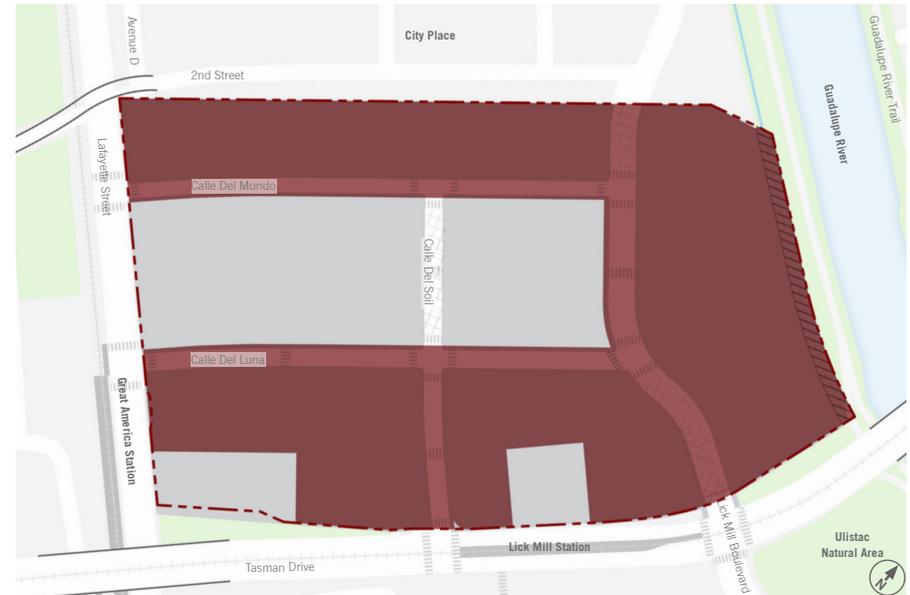


Figure 07-2-1 Phase One Diagram



Figure 07-2-2 Phase Two Diagram.

- Phase One
- Phase Two
- Site Boundary

**OPEN SPACE**

Each landowner/developer will be responsible for construction, dedication and maintenance of their parkland contribution.

**CALLE DEL SOL EXTENSION**

The extension of Calle Del Sol between Calle De Luna and Calle Del Mundo is not anticipated until triggered by development on the central block. The extension will require partial dedication of two properties, the relocation and/or undergrounding of the Primavera Pump Station, and the relocation of one cell tower, located towards the rear of the property facing Calle De Luna. The cost of these improvements will need to be shared among all owners intending to redevelop their properties. A mechanism for contributing to the necessary funds will be negotiated by City of Santa Clara staff.

**LICK MILL BOULEVARD EXTENSION**

The construction of Lick Mill Boulevard by the Related Companies is required as a mitigation measure for the development of City Place. If the implementation of Lick Mill Boulevard, or some temporary alternative, is required by Tasman East prior to the date of intended implementation by City Place, further negotiations with the Related Companies will be required.

## 07.3 PROJECT ADMINISTRATION

### **TASMAN EAST SPECIFIC PLAN ADOPTION**

The Planning Commission shall hold a public hearing with proper public notice, and issue a report on its findings and recommendations to the City Council on the following applications for approval: 1) the Tasman East Specific Plan, which shall legally function as a Specific Plan applicable to properties addressed herein; 2) a General Plan Amendment, involving revisions to both text and land use diagram in order to achieve consistency with the Tasman East Specific Plan; and 3) a Zone Change and Zoning Text Amendments that will maintain consistency and support implementation of the Tasman East Specific Plan. Subsequently, the City Council shall hold a public hearing to consider the Commission's report and approvals. The Tasman East Specific Plan and General Plan Amendment shall be adopted by Resolution, while the Zone Change and Zoning Text Amendments shall be adopted by ordinance.

### **TASMAN EAST SPECIFIC PLAN AMENDMENT**

Modification to the Tasman East Specific Plan shall be subject to the same procedures as described for Plan adoption, including a public hearing and recommended action by the Planning Commission, and a public hearing and approval by resolution by the City Council. Amendments to the Tasman East Specific Plan shall be analyzed for consistency with the General Plan and Zoning Ordinance, and may require corresponding amendments to those documents.

### **ARCHITECTURAL REVIEW**

All development projects within the Tasman East Specific Plan Area shall be subject to Architectural Review in accordance with the procedures described in Chapter 18.76 of the Santa Clara Zoning Ordinance. These

procedures are intended to promote development in accordance with the Tasman East Specific Plan concept, policies, and guidelines, as well as any other applicable City ordinances and standards. In particular, proposals shall meet the development standards and substantially conform to the design guidelines as set forth in the Tasman East Specific Plan.

### **ADDITIONAL APPLICANT APPROVALS**

Further approvals may be required for a development project to move forward. In particular, it is anticipated that subdivision approvals may accompany an applicant's proposal.

- Subdivision Approval: Approval of any proposed Subdivision Map shall be in accordance with procedures adopted by State Law and the Santa Clara City Code (Chapter 17.05). The subdivision of property shall be consistent with the intent and requirements of the Tasman East Specific Plan, and other applicable regulations and standards.
- Use Permits: Application for a Use Permit shall be processed in accordance with the City of Santa Clara Zoning Ordinance (Chapter 18.110). Additionally, approval of a Use Permit shall be consistent with the intent and requirements of the Tasman East Specific Plan, and other applicable regulations and standards.

### **ZONING ADMINISTRATOR MINOR MODIFICATIONS**

- Minor modifications to the Tasman East Specific Plan which are within 25% of the adopted Specific Plan standards may be reviewed and approved through the Zoning Administrator Modification process called out in Section 18.90.30 of the Municipal Code.

## 07.4 CAPITAL IMPROVEMENTS

### ESTIMATED PROPOSED CONDITIONS

#### Wastewater Facilities

In order to document the utility infrastructure anticipated for the preferred Land Use Plan, conceptual infrastructure demands for wastewater were developed based on the land uses presented in the general plan. This method correlates with the Sewer Master Plan Updated 2001 and calculated flow model as closely as possible. Additionally, actual existing sewer generation rates were estimated based on historic water usage. Wastewater generation rates were assigned to each existing land use based on rates published in the Sanitary Sewer Master Plan Update, Final Report, dated April 2016. No adjustment were made for future conservation measures which may reduce expected demands by customers.

Assigning the water consumption rates shown in Table 1 to the existing Land uses, the daily rates of generation are estimated as shown in Table 2. In total, existing sewer generation for the plan area is estimated to amount to be approximately 0.75 Million Gallons per Day (MGD) at full build-out, which is nearly 4-times higher than the estimates based on current land use, and double the estimate (0.336 MGD) included in the Sanitary Sewer Master Plan Update (SSMPU) (Table 3).

As mentioned in the Existing Conditions Section, the Rabello and Northside Pump Stations are estimated in the SSMPU to operate at capacity in 2035. Because Tasman East will be contributing new flows to those pumps, new developments within Tasman East may need to contribute to upgrades to those pump stations.

The Primavera Pump Station within Tasman East is operating far below its capacity and will not need capacity upgrades with the development in the Project Area.

Since Tasman East's location being close to the downstream terminus of the City's sewer system, the increased flows from the site will likely not trigger hydraulic capacity upgrades in the downstream system. As the SSMPU does not include hydraulic performance information on elements of the system where deficiencies were not discovered, the information provided by the SSMPU does not provide sufficient information as to whether any of the pipes downstream from the Tasman East are near their hydraulic capacity.

Existing sewer piping with the Tasman East is predominantly 12-inch vitrified clay pipe (VCP). We anticipate that the existing piping is adequately sized and will not need to be upsized in increase capacity.

#### Storm Drainage Facilities

The storm drainage infrastructure within the project plan area is owned, operated and maintained by the City of Santa Clara. The city is responsible for maintaining its drainage infrastructure within public rights-of-way. Specifically, the City is responsible for protecting citizens and businesses from flooding and responding to mandates imposed at the Federal, State and Regional levels. The Clean Water Act is at the Federal level, while the State Water Resources Control Board and Regional Water Quality Control Boards act via the Porter-Cologne Act and support Federal and State regulations.

The city's development policies address storm drain pipe design for capacity and quality. Storm drains are

to be sized per the current Santa Clara County Drainage Manual approved in 2007. Storm drains are required to accommodate a 10-year design storm and post-development flow rates cannot exceed pre-development flow-rates, on a project by project basis.

Stormwater quality must be met on a project by project basis as the plan area redevelops. New developments that create or replace more than 10,000 square feet of impervious surface must comply with Provision C.3 of the Municipal Stormwater Permit (MRP) and with the California State Water Board. Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) has published a "C.3 Stormwater Handbook" that assists developers with ways in which they can meet local municipal and State regulations through the use of Low Impact Design (LID) strategies. Commonly accepted measures include such treatment methods as bio-retention basins and flow-through planters, as well as green roofs. Both individual project level as well as regional level storm water management programs should be implemented to achieve overall storm water quality compliance.

The Tasman East is developed land with high percentages of impervious areas that direct storm water runoff directly into the public storm drain infrastructure with little to no retention or treatment. As projects are implemented that comply with the MRP requirements, it is anticipated that the overall percentage of impervious surface within the Plan Area will likely decrease, so additional mitigations for storm water peak flow conveyance, either additional detention, or upsizing of existing conveyance facilities, other than what has already

**TABLE 1: EXISTING CONDITIONS: SEWER GENERATION/WATER DEMAND (BASED ON EXISTING ZONING)**

	LIGHT INDUSTRIAL AC	SEWER GENERATION* MGD	WATER DEMAND** gpd
Totals	48	0.157	164,657

\*Assumes 0.15 gpd/SF (per the City of Santa Clara Sanitary Sewer Master Plan Update, April 2016, Table 2-1), Assumes 0.5 FAR for Light Industrial Zoning Designation

\*\*Assumes water demand is 105% of wastewater generation

**TABLE 2: EXISTING CONDITIONS: SEWER GENERATION/WATER DEMAND (BASED ON HISTORICAL WATER USE)**

	JANUARY - APRIL 2013 WATER USE HCF*****	JANUARY - APRIL 2014 WATER USE HCF*****	AVERAGE WATER DEMAND gpd	AVERAGE SEWER DEMAND MGD
Totals	6,196	5,862	37,581	0.036

\*\*\*Assumes residential units are half townhouse or condominiums at 175 gpd/DU and half are apartments at 154 gpd/DU

\*\*\*\* From water usage file received from City of Santa Clara on 13 May 2016

\*\*\*\*\*Hundred Cubic Feet

\*\*\*\*\* 40 units per acre and 175 gpd/unit

**TABLE 3: CURRENTLY PROJECTED CONDITIONS: SEWER GENERATION/WATER DEMAND (BASED ON 2035 GENERAL PLAN)**

	HIGH DENSITY RESIDENTIAL AC	SEWER GENERATION ***** MGD	WATER DEMAND** gpd	WATER DEMAND Acre-Ft/Year
Totals	48	0.336	352,800	395

**TABLE 4: CURRENTLY PROJECTED CONDITIONS: SEWER GENERATION/WATER DEMAND (BASED ON 2035 GENERAL PLAN)**

	RESIDENTIAL Units	SEWER GENERATION *** MGD	WATER DEMAND ** gpd	RETAIL SF	SEWER GENERATION **** MGD	WATER DEMAND ** gpd	TOTAL (SEWER) MGD	TOTAL (WATER) gpd	TOTAL (WATER) Acre-Ft/Yr
Totals	4,500	0.740	777,263	120,000	0.012	12,600	0.752	789,863	885

been discussed, is not anticipated to be needed with new development.

#### **Potable Water Supply**

Study Area water demand, assuming a build-out of 4,500 residential units and 120,000 SF of retail space is estimated at 885 Acre-Ft / Year, which exceeds the 395 Acre-Ft / Year that would have been assumed had the UWMP used the 2035 General Plan directly for its forecasting. The forecasting methodology considers several different elements, such as future conservation programs and natural replacement of less water efficient processes with more efficient processes, among others.

#### **Potable Water Infrastructure**

Tasman East is approximately 1/2 –mile northeast of a turnout on the Bay Division Pipelines of the Hetch-Hetchy delivery system, adjacent to which, the City maintains 9 Million Gallons of storage. There is a 12-inch main in Lafayette Street along the western project frontage that extends from a system of 16-inch trunk mains near the water storage facility. Another 12-inch main enters Tasman East from Tasman Drive into Calle Del Sol that is extended from Lick Mill Boulevard to the southeast and, presumably, another Turnout to the Hetch-Hetchy delivery system near where Lick Mill crosses the Bay Division Pipeline right-of-way (approximately .5-miles south of the Lick Mill and Tasman intersection).

It is anticipated that the system of 12 inch water mains within the plan area is adequate to serve the potable water and fire suppression needs of higher densities. However the 12” AC water lines will need to be replaced with 12” PVC water lines. The 12 inch main in Lafayette from the west is likely undersized

for the estimated future fire flow requirement of 4,000 gallons per minute (gpm) for 4 hours (To be determined and approved by the Fire Department). Developer shall determine the fire suppression needs based on the current city water distribution system and make revisions/ upgrades accordingly. To meet these flow requirements, it is assumed that an on-site new storage tank and/or booster pump may be required at the development site (Fire Department to Verify) and/or approximately 3,000 lineal feet or more of 12 inch water main along Lafayette Street may need to be up sized to 16 inch as per BKF recommendation. Developer is required to perform the hydraulic fire flow analysis to determine the fire and water demands to the project site.

#### **Recycled Water**

Recycled water can be appropriate for developments with large non-potable water demands, including irrigation and toilet flushing. New 6-inch recycled water mains extending throughout Tasman East would be sufficient for this use provided the system is looped

#### **Gas Facilities**

As each development project within Tasman East applies to PG&E for new gas service, PG&E will evaluate the gas demands on a case by case basis in order to design and bill the gas facilities installations respectively. PG&E can provide cost estimates for each development based on the particular application for service they receive.

#### **Electrical Facilities**

Any off-site frontage underground structure improvement will be the responsibility of developer(s) including onsite electrical underground substructure required to provide power. The costs for residential units are assessed per

the City’s Municipal Fee Schedule, per unit. Commercial loads, house meter loads and garage are per 1,000 volt amps (KVA).

#### **Telecommunications**

AT&T typically provides service to a “Minimum Point of Entry” (MPOE) for a single building on each parcel. They will serve multiple buildings as desired by each applicant, but at the applicants’ cost, typically. For underground services, the applicant is typically responsible for trenching and installation of AT&T’s conduits.

Comcast conduits are typically installed by Comcast’s contractors in a trench provided by the applicant.

#### **Site Utility Infrastructure**

The Plan proposes new, narrower street sections whose curb alignments and trees will conflict with existing utility alignments within the Plan Area. The budget should accommodate relocating underground utilities in the Plan Area, to meet City, SVP and other utility providers’ standards for utility separations.

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# 08 APPENDIX

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# 08.1 EXISTING CONDITIONS

Tasman East is a 46.1-acre industrial neighborhood in northern Santa Clara that spans west-east from Lafayette Street to the Guadalupe River and north-south from 2nd Street to Tasman Drive along Calle Del Mundo and Calle De Luna. Immediately to the north of Tasman East, Santa Clara City Place is a approved 240 acre multi-phased, mixed-use development that includes 9.16 million square feet of office buildings, retail and entertainment facilities, residential units, and hotel rooms as well as surface and structured parking facilities.

### EXISTING LAND USE

The current zoning for the site is ML: Light Industrial which allows for uses such as manufacturing, processing, repairing, and storing products. Consistent with the zoning, the current buildings on site are generally warehouses with associated surface parking and rear-yard storage areas. There is also currently a data center at the south-west corner of the site, and a cluster of office buildings at the south-east corner of the site, and a few dining establishments facing Tasman Drive.

As described in the Introduction, the purpose of this Focus Area plan is to bring this area into conformance with the General Plan policy that this transit-oriented site become an opportunity to develop high-density housing with direct walking access to many community amenities and a robust transit network.

Through implementation of this Focus Area Plan, the zoning will be updated from ML: Light Industrial to transit residential, which allows for a high density residential neighborhood with a mix of uses at the ground floor.

The policy for this transition takes into consideration the likelihood that existing owners of light industrial

**Table 08-4-1 Modal Split for Commuting Trips**

MEANS OF TRANSPORTATION TO WORK	TASMAN EAST CENSUS TRACT (%)	US AVERAGE (%)
Car, truck or van	92.5	86.0
Public Transportation	2.8	5.1
Bike	1.4	N/A
Walking	0.0	2.8
Work from home	2.6	4.4
Other	0.6	1.8

land may want to remain light industrial for the foreseeable future, and even transfer their land to future light industrial users.

Other uses that are currently on the site are a City-owned sewer lift station and an easement along the toe of the Guadalupe River levee, which is owned and maintained by the Silicon Valley Water District, and operates as a public drainage channel.

The area surrounding the site is a diverse patchwork of uses, including the approved City Place development which will replace the current golf course to the east and north of the site. Directly south of the site are the Kathryn Hughes Elementary School and several residential neighborhoods, including a mix of single family houses, attached townhomes, and medium density mid-rise apartments.

Diagonally south-east of the site is Levi’s Stadium, a relatively recent addition to the neighborhood, built in 2014 which hosts the 49ers football team as well as many other large-scale events throughout the year.

Next to the stadium is a regional soccer park which is well-used by families across the city of Santa Clara.

The Guadalupe River runs along the eastern edge of the site and also marks the boundary between Santa Clara and San Jose. The area surrounding the TEFA is home to a mix of high-density housing and office parks, most notably the Cisco and Samsung campuses which front onto Tasman Drive.

Some smaller parcels have already been assembled into larger properties by land owners who are interested in developing high density residential, while other owners are interested in continuing to run industrial operations, or lease to industrial tenants. The fact that these smaller parcels in the center of the site may be more difficult for a developer to assemble presents some opportunities unique to the Tasman East neighborhood, which can be supported and protected by this plan.

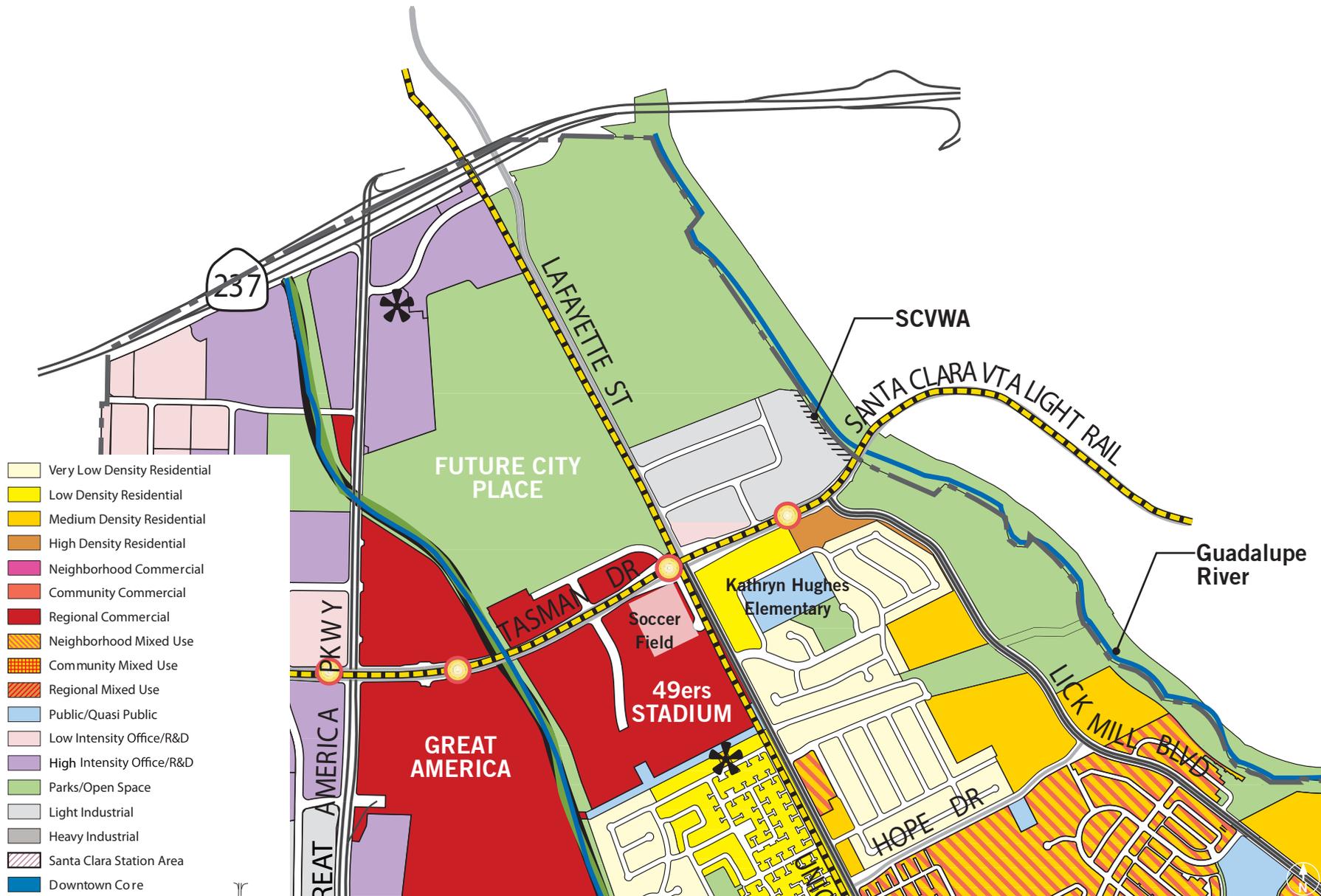


Figure 08-1-1 General Plan land use

### EXISTING TRANSIT NETWORK

Figure 08-4-1 summarizes the mode split of commuter trips for residents living in the Census Tract where Tasman East is located. Compared to the national average, people living in this area rely heavily on automobile as their major mode of transportation for commute trips. Public transportation and active travel modes (bike and walking) make up approximately 4.2% of all commuting trips.

The existing regional transit operations near Tasman East are shown in Figure 08-1-1. Bus, light rail, passenger rail, and public and private shuttles are all accessible from Tasman East via Great America Station and Lick Mill Station. Tasman East is less than 10-minutes walking distance to Great America Station and 5-minutes walking distance to Lick Mill Station. Figure 08-1-1 summarizes the existing transit service by route serving the Lick Mill and Santa Clara-Great American stations.

### Altamont Commuter Express (ACE) and Amtrak Capitol Corridor

Great America Station is located on Lafayette Street below the Tasman Drive overpass, and is served by ACE Rail and Capitol Corridor transit routes. Eight private shuttle services provide connections to specific final destinations. The Station is the busiest on the ACE Rail Route, which links Stockton and San Jose. Alighting data shown in Figure 08-1-1 indicates that the station is also popular on the Capitol Corridor transit route, which links San Jose and Sacramento.

### Santa Clara Valley Transit Authority (VTA)

Lick Mill Station is located on Tasman Drive directly east of the intersection with Calle Del Sol, and is

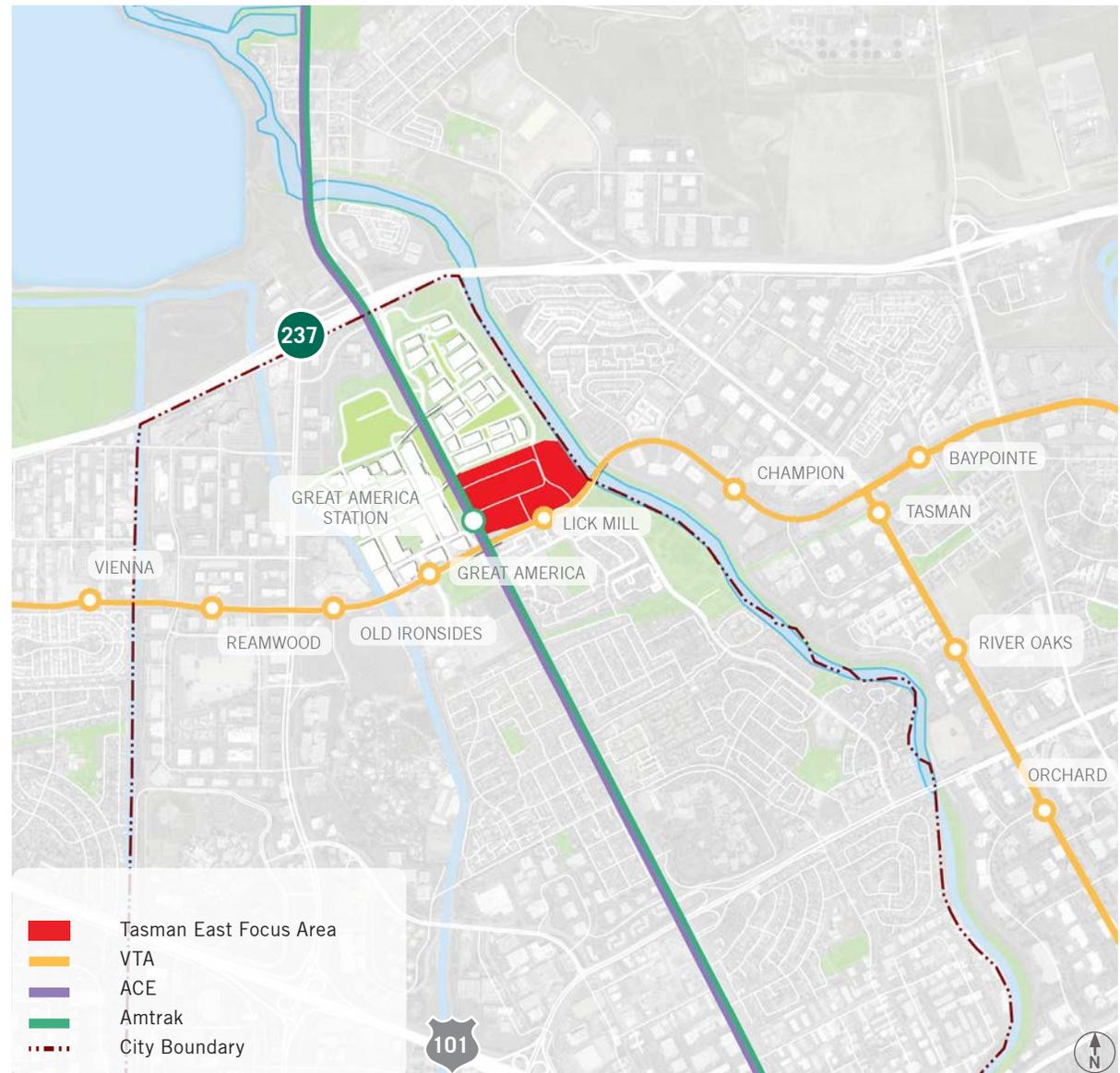


Figure 08-1-2 Existing Transit

served by Santa Clara Valley Transit Authority (VTA) Light Rail Mountain View-Winchester line. VTA provides light rail, bus, and paratransit service to Santa Clara County, including the City of Santa Clara. Light rail trains operate at 15-, 20-, and 60-minute frequencies, depending on the time of day. VTA bus routes generally operate between 5:00 a.m. and 1:00 a.m. on weekdays and 6:00 a.m. and 12:30 a.m. on weekends.

**Table 08-1-1 Existing Transit Service By Route**

<b>ROUTE</b>	<b>OPERATING HOURS</b>	<b>PEAK HEADWAY</b>	<b>AVERAGE ANNUAL WEEKDAY BOARDINGS FOR ENTIRE ROUTE</b>
<b>Santa Clara Valley Transportation Authority (VTA) – Light Rail</b>			
902	5:10 AM – 12:40 AM	15 mins	13,330
<b>Santa Clara Valley Transportation Authority (VTA) – Bus</b>			
140	7:10 – 9:50 AM 4:20 – 7:10 PM	60 mins	166
200	11:09 PM – 12:16 AM	45 mins	11
330	6:45 – 9:30 AM 4:17 – 7:22 PM	30 mins	175
<b>Amtrak</b>			
Amtrak Capitol Corridor	6:55 AM – 8:35 PM	90 mins	3,890 4,040
<b>Altamont Corridor Express (ACE)<sup>3</sup></b>			
ACE	6:15 – 9:00 AM 3:50 – 6:50 PM	60 mins	5,100 5,020
<b>Shuttles</b>			
Gray Shuttle: 822	6:15 – 9:20 AM 3:40 – 6:40 PM	60 mins	220 266
Green Shuttle: 823	6:15 – 9:05 AM 3:40 – 6:40 PM	60 mins	117 127
Orange Shuttle: 824	6:15 – 9:15 AM 3:40 – 6:40 PM	60 mins	101 114
Purple Shuttle: 825	6:15 – 9:20 AM 3:40 – 6:40 PM	60 mins	136 147
Red Shuttle: 826	6:15 – 9:10 AM 3:40 – 6:40 PM	60 mins	188 245
Yellow Shuttle: 827	6:15 – 9:15 AM 3:40 – 6:40 PM	60 mins	194 276
Brown Shuttle: 828	6:15 – 9:15 AM 3:40 – 6:40 PM	60 mins	155 175
Violet Shuttle: 831	6:15 – 9:20 AM 3:40 – 6:40 PM	60 mins	129 163

## EXISTING BICYCLE NETWORK

The California Department of Transportation (Caltrans) codifies four distinct classifications of bikeways with California Assembly Bill 1193 and the Highway Design Manual (Chapter 1000: Bikeway Planning and Design). Each bikeway class is intended to provide bicyclists with enhanced riding conditions. Bikeways offer various levels of separation from traffic based on traffic volume and speed, among other factors. The four bikeway types and appropriate contexts for each are detailed below.

**Class I Bikeway (Bike Path):** Bike paths provide a completely separate right-of-way and are designated for the exclusive use of people riding bicycles and walking with minimal cross-flow traffic. In general, bike paths are along corridors not served by streets or where sufficient right-of-way exists to allow them to be constructed away from the influence of vehicles. Class I Bikeways can also offer opportunities not provided by the road system by serving as both recreational areas and/or desirable commuter routes.

**Class II Bikeway (Bike Lane):** Bike lanes provide designated street space for bicyclists, typically adjacent to the outer vehicle travel lanes. Bike lanes include special lane markings, pavement legends, and signage. Bicycle lanes are generally five to six feet wide. Wider lanes are desirable on roadways with high traffic volumes and/or high vehicle travel speeds. Bike lanes may be enhanced with painted buffers between

vehicle lanes and/or parking, and green paint at conflict zones (such as driveways or intersections).

**Class III Bikeway (Bike Route):** Bike routes provide enhanced mixed-traffic conditions for bicyclists through signage, striping, and/or traffic calming treatments, and to provide continuity to a bikeway network. Bike routes are typically designated along gaps between bike trails or bike lanes, or along low-volume, low-speed streets. Bicycle boulevards provide further enhancements to bike routes to encourage slow speeds and discourage non-local vehicle traffic via traffic diverters, chicanes, traffic circles, and/or speed tables. Bicycle boulevards can also feature special wayfinding signage to nearby destinations or other bikeways.

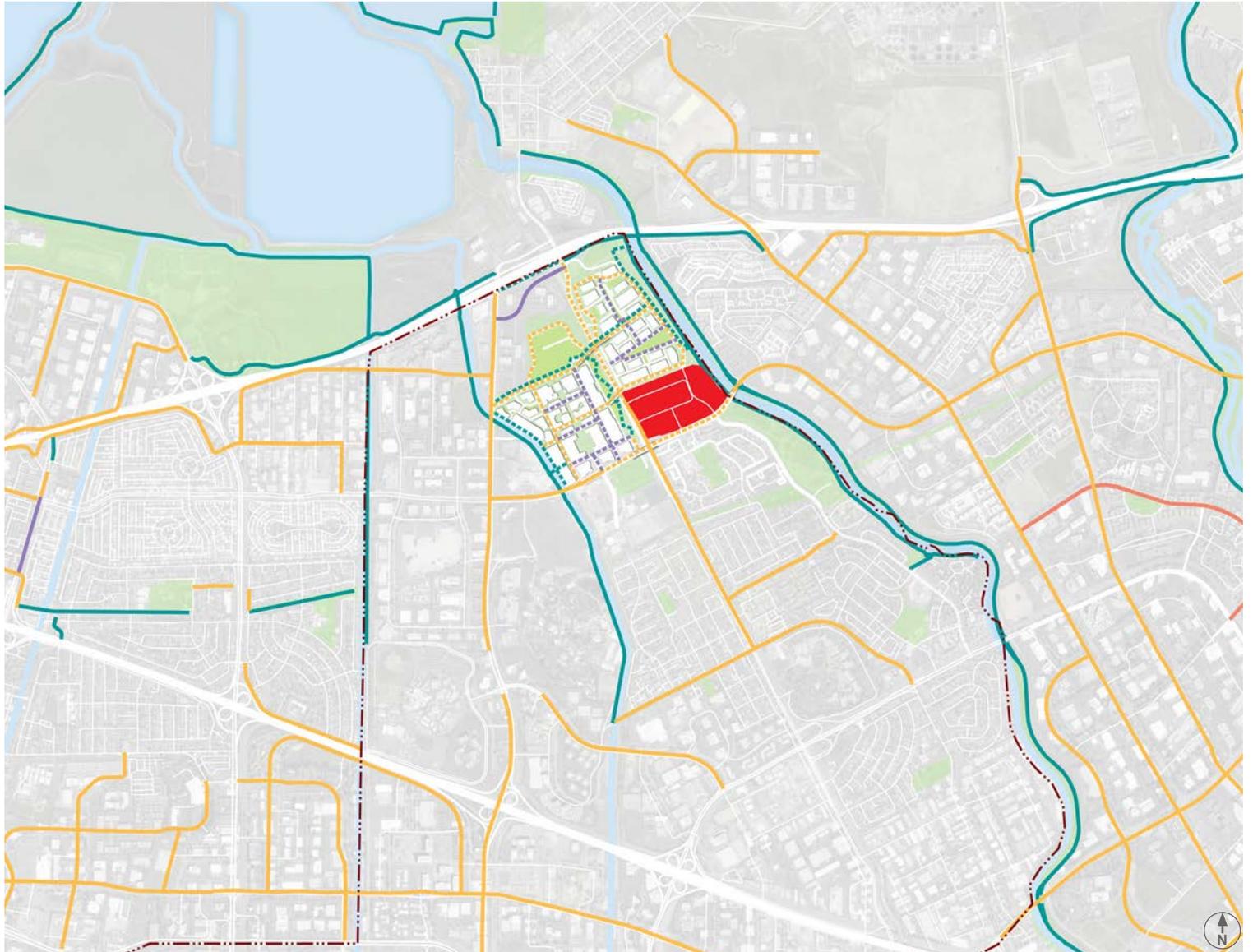
**Class IV Bikeway (Separated Bikeway):** Separated bikeways, also referred to as cycle tracks or protected bikeways, are bikeways for the exclusive use of bicycles which are physically separated from vehicle traffic. Separated bikeways were recently adopted by Caltrans in 2015. Types of separation may include, but are not limited to: grade separation, flexible posts, or physical barriers.

Existing bicycle facilities near Tasman East are shown in Figure 08-1-3. There are existing Class I bicycle paths along the Guadalupe River and San Tomas Aquino Creek. Proposed Class I bicycle paths will extend along Avenue C and City Place Parkway within

the planned City Place development. Class II bicycle paths currently serve the area along Old Mountain View-Alviso, Great America Parkway, and Lafayette Street (south of Calle De Luna). Class II bicycle paths are proposed for the following streets:

- Lick Mill Boulevard
- Avenue A
- City Place Parkway
- 2nd Street
- Tasman Drive
- Lafayette Street

- Tasman East Focus Area
- Existing Bike Route
- Existing Bike Path
- Existing Bike Lane
- Existing Cycle Track
- Planned Bike Route
- Planned Bike Path
- Planned Bike Lane
- City Boundary



**Figure 08-1-3** Existing and City Place planned bicycle network

### EXISTING PEDESTRIAN NETWORK

Existing pedestrian facilities in and near Tasman East are shown in Figure 08-1-3. The neighborhood is served by existing and proposed north-south routes along Lafayette Street, Lick Mill Boulevard and the Lick Mill Boulevard extension, and existing east-west routes along Tasman Drive and part of Calle De Luna. Additional north-south pedestrian access is provided by Class I bicycle trails along San Tomas Aquino Creek and the Guadalupe River. Pedestrian access to Great America Station is at the Calle De Luna/Lafayette Street intersection and to Lick Mill VTA Light Rail Station at Calle Del Sol/Tasman Drive.

Pedestrian facilities are planned along the entirety of the City Place development's roadway network, including along Lick Mill Boulevard as it extends through Tasman East. Notably, there are no sidewalk facilities on the following streets within Tasman East:

- Calle Del Mundo on both north and south sides
- Calle De Luna on the south side as well as the north side between Calle Del Sol and Lick Mill Boulevard
- Calle Del Sol on the west side for approximately half of the length of the street
- Lafayette Street on the west side, north of Calle De Luna



Figure 08-1-4 Pedestrian Access to Transit and Open Space



Figure 08-1-5 Existing and City Place planned pedestrian network

## EXISTING VEHICULAR NETWORK

Regional access is provided via State Route (SR) 237 and U.S. 101. Local access is provided by Lafayette Street, Tasman Drive, and Lick Mill Boulevard. Internal circulation within Tasman East is provided by Lick Mill Boulevard, Calle Del Mundo, Calle De Luna and Calle De Sol. These roadways are described in more detail below.

**SR 237** is a six-lane divided freeway that connects the east and west sides of Silicon Valley to Mountain View, Sunnyvale, Santa Clara, North San Jose, and Milpitas. It provides access to employers, including Cisco, Samsung, Yahoo!, and San Disk and region-serving retail in Milpitas. One lane in each direction operates as an HOV lane from 5:00 am to 9:00 am and from 3:00 pm to 7:00 pm Monday through Friday.

**US 101** is an eight-lane divided freeway that connects east San José to San Francisco along the west side of the San Francisco Bay, including communities along the peninsula. The freeway is a major commute corridor in Silicon Valley, providing access to businesses in downtown San José and technology employers, including Google, Facebook, Microsoft, Oracle, eBay/PayPal, and Intuit in the northern portion of Santa Clara County. One lane in each direction operates as an HOV lane from 5:00 a.m. to 9:00 a.m. and from 3:00 p.m. to 7:00 p.m. Monday through Friday from the northern Santa Clara County border to south of SR 85 in south San José. Access to Tasman East from US 101 is provided by the Great America Parkway and Montague Expressway interchanges.

**Lafayette Street** is a four-lane, north-south arterial roadway that provides convenient access to both US 101 via Montague Expressway and SR 237 via the Gold Street Connector. Lafayette Street, which has an undercrossing without a connection at Tasman Drive, connects directly to Great America Way (previously known as Yerba Buena Way). Union Pacific railroad tracks with Amtrak and ACE passenger service run along the west (southbound) side of the street, as do high-voltage power lines.

**Tasman Drive** is an east-west six lane divided arterial located to the south of Tasman East and includes a center-running VTA-owned and operated light rail line, which runs between I-880 on the east and Java Drive on the west. Tasman Drive narrows to two lanes in each direction west of Great America Parkway. The City of Santa Clara is currently adding bicycle lanes to Tasman Drive between the Guadalupe River and Calabazas Creek, which will result in removing or narrowing existing vehicle lanes.

**Lick Mill Boulevard** is a four-lane arterial roadway located between Tasman Drive and Montague Expressway that provides access to US 101 via Montague Expressway to the south.

Lick Mill Boulevard will be extended north through Tasman East with the construction of Santa Clara City Place, to connect to Lafayette Street at Great America Way. This will change the current loop configuration of Calle del Mundo and Calle de Luna into two “T” intersections with Lick Mill road, making a more complete network.

**Calle Del Mundo** is a two-lane local street within Tasman East that provides access to the businesses within the neighborhood. Calle Del Mundo runs east-west from Lafayette Street to Lick Mill Boulevard.

**Calle De Luna** is a three-lane local street within Tasman East that provides access to the businesses within the neighborhood. Calle De Luna is located immediately south of Calle Del Mundo, and connects Lafayette Street to Lick Mill Boulevard.

**Calle Del Sol** is a short, four-lane local street within Tasman East that provides access from Tasman Drive to the businesses within the neighborhood.

Calle del Sol and Calle de Luna operate together as a link through the site for vehicles needing to connect from Lafayette Street and Tasman Drive, and vice-versa, as there is no direct connection at their intersection due to the grade difference at the Tasman Drive overpass.

### **EXISTING OPEN SPACE NETWORK**

Tasman East sits within a 1/4 mile radius of many large-scale regional and community parks, including the adjacent Ulistac Natural Preserve and the Guadalupe River Trail which connects the site to downtown San Jose and beyond. Kitty-corner to the site is a regional soccer park, an important recreation facility for families throughout Santa Clara who participate in soccer leagues.

Several major recreation assets are planned as part of the City Place development north of the site including a network of bike trails, pedestrian paths, public plazas, and open spaces. Perhaps most significant, is the addition of two opens spaces: a 4.75 acre park and a 3 acre park. The City Place plan will replace the current golf course that lies to the north and west of the Tasman East site.

### **ECOLOGY**

The site is nestled between the Guadalupe River to the east and the Ulistac Natural Area to the south. As the only dedicated natural open space in the City of Santa Clara, Ulistac Natural Area is an important community resource. The site's proximity to these features in combination with the proposed parks and greenways will offer residents a daily experience of the natural world.

The Guadalupe River on the eastern edge of the site is a major corridor for migratory bird species. The plan proposes a waterfront park that would provide access to the river and increase tree cover, creating contiguous habitat for migratory birds, butterflies, and other pollinators.

## 08.2 MARKET ANALYSIS

### INTENT

The following analysis explores housing and retail market conditions in order to clarify the types of housing densities, building types, and neighborhood-serving retail and services which will drive redevelopment of the 48-acre Tasman East Focus Area's (TEFA) existing light industrial properties into a new mixed-use, transit-oriented neighborhood. This analysis specifically examines the following:

- Typical characteristics, general sources of demand, location preferences, and development feasibility for a range of higher-density multifamily housing products;
- Whether market conditions merit an increase in maximum allowable densities from 50 dwelling units per acre to a minimum of 100 dwelling units per acre;
- Potential to attract families to new multifamily housing in the TEFA;
- Potential to attract neighborhood-serving retail and services to the TEFA.

### POPULATION AND HOUSEHOLD TRENDS

This section describes demographic and household characteristics and trends in order to clarify the TEFA's positioning to capture multifamily housing demand and neighborhood-serving retail demand. Strategic Economics analyzed demographic data at the county, city, and subarea levels using data from the 1990 and 2000 U.S. Census and the Census' American Community Survey 5-Year Estimates for 2010-2014.

### GEOGRAPHIC CONTEXT

In order to characterize changing conditions in the area immediately surrounding the TEFA, Strategic Economics created two subareas entitled "North Santa Clara Context Area" and "North San Jose Context Area."<sup>1</sup> The TEFA itself has remained a largely industrial and flex/office district for decades. Therefore, change in the immediately surrounding areas – and its relative relationship to the City of Santa Clara and Santa Clara County – helps to illustrate future opportunities in the TEFA.

The context area boundaries represent the primary market area surrounding the TEFA, and were selected based on a combination of city boundaries, major geographic barriers – such as freeways and waterways – and similar existing and changing land use character. The context areas largely feature a mix of existing office, light industrial, and lower-density housing stock, with portions of the employment-focused land uses now being redeveloped into high-density multifamily housing. The market area data analysis was disaggregated between the Santa Clara and San

Jose segments to illustrate the differences between the two areas. North San Jose has undergone a similar transition to higher-density housing uses as that envisioned for the TEFA, although the nature of the transition to housing in the TEFA will ultimately differ based on the community's vision for the area.

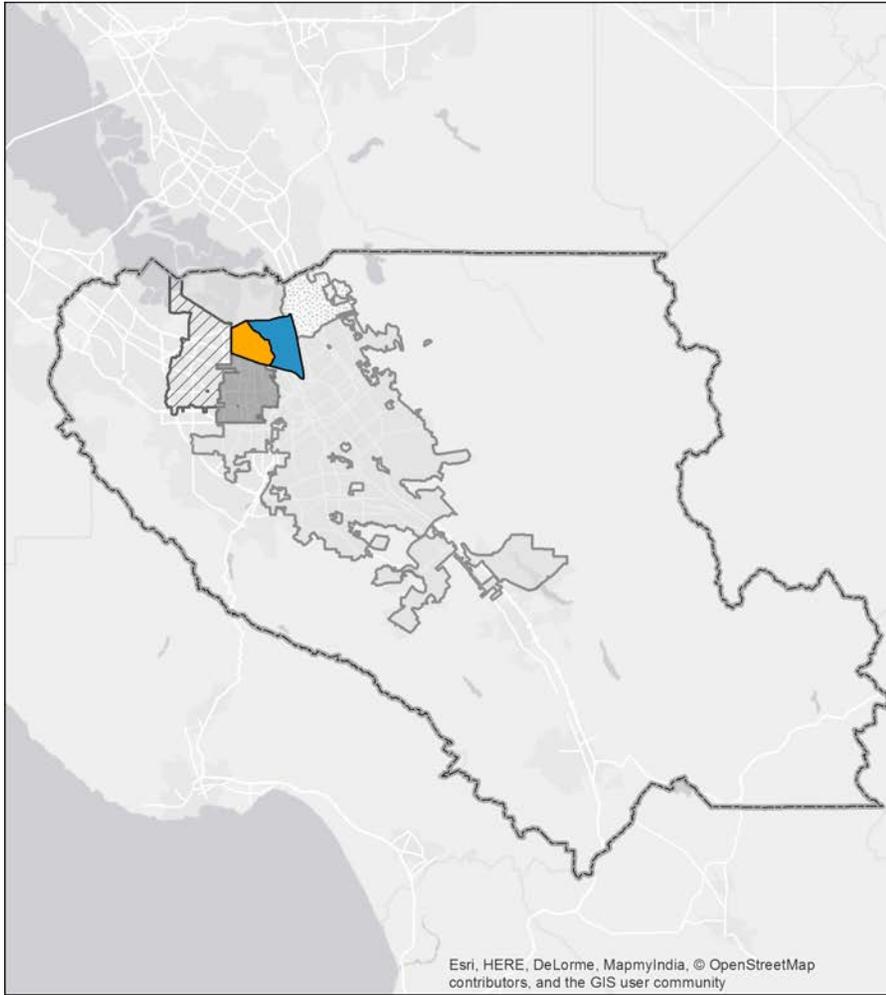
Figure 08-2-1 shows the location of the context areas in relation to the city and county. Figure 08-2-2 provides a closer look at the boundaries of the analyzed context areas. These boundaries are:

North Santa Clara Context Area: bounded by Highway 237 on the north, the Cabaza Creek Trail to the west, the Guadalupe River to the east, and Highway 101 to the south.

North San Jose Context Area: bounded by Highway 237 on the north, the Guadalupe River to the west, Highway 880 to the east, and Highway 101 to the south.

### POPULATION AND HOUSEHOLD FINDINGS

The North Santa Clara and North San Jose context areas are relatively fast-growing. While both the city and county's populations grew by an annual average of 1 percent between 1990 and the 2010-2014 period, the population of the North Santa Clara and North San Jose context areas grew by 5 and 12 percent, respectively. Household growth in these areas also exceeded the city and county (Figure 08-2-3).

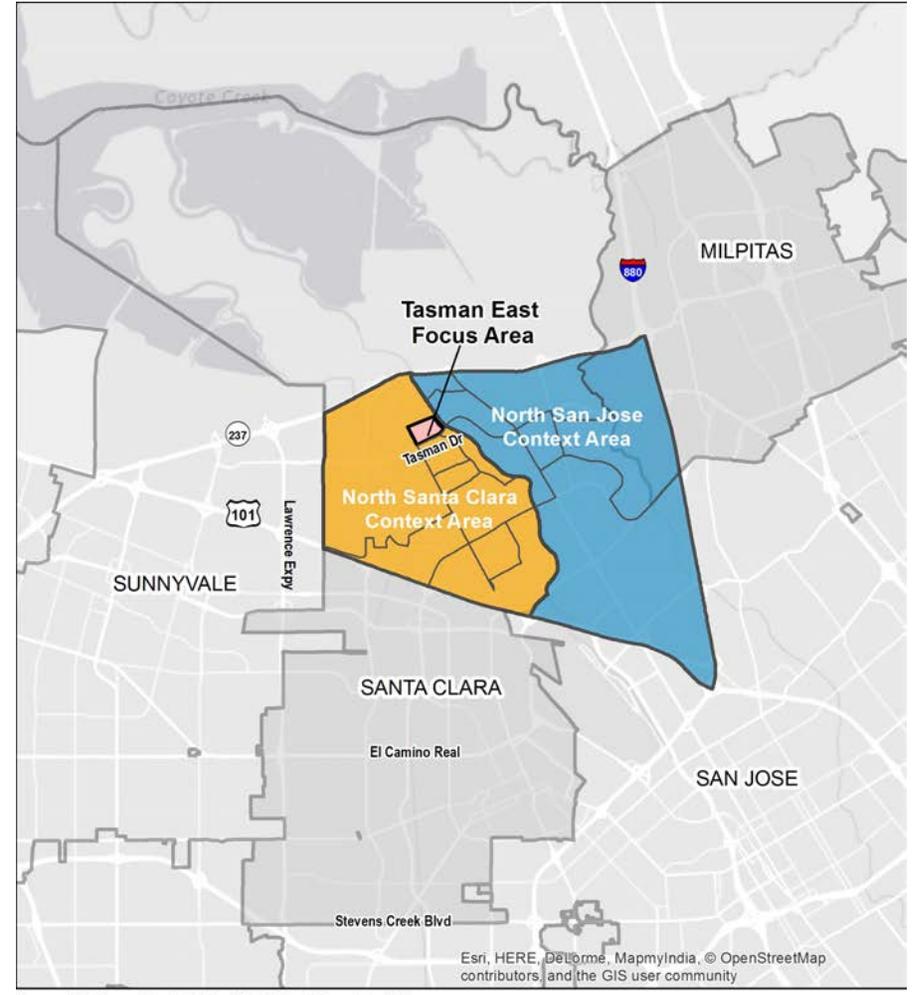


Sources: U.S. Census Tiger Line Data, 2014; Strategic Economics, 2016.

**Demographic Reference**

- North Santa Clara Context Area
- North San Jose Context Area
- Sunnyvale
- Santa Clara
- San Jose
- Milpitas
- Santa Clara County

Figure 08-2-1 Context Area



Sources: U.S. Census Tiger Line Data, 2014; Strategic Economics, 2016.

**North Santa Clara Context Area and North San Jose Context Area Census Block Groups, 2014**

Figure 08-2-2 Context Area



**The overwhelming majority of the City of Santa Clara's population and household growth since 2000 occurred in the North Santa Clara Context Area.** Between 2000 and the 2010-2014 period, the North Santa Clara Context Area drove 82 percent of the City of Santa Clara's total population growth. The rapid population growth in the Santa Clara Context Area is entirely attributable to housing growth, given that average household sizes fell from 3.1 persons per household in 1990 to 2.9 in the 2010-2014 period.

**Compared to the city and county, the North Santa Clara and North San Jose context areas have a much higher proportion of renter-occupied households and multifamily units (Figure 08-2-4).** In the 2010-2014 period, 58 percent of households in the North Santa Clara Context Area and 74 percent of households in the North San Jose Context Area were renters, compared to 55 percent of citywide and 43 percent of countywide households. In both the city and county, the housing tenure has remained relatively stable, although there was a slight uptick of renter-occupied households between 1990 and 2014. The share of renter households in the North San Jose Context Area rapidly increased over the past twenty years as new multifamily rental housing was built.

**The Asian or Pacific Islander population significantly increased in both numbers and share of total population in all geographies since 1990 (Figure 08-2-5).** In 1990, the Asian/Pacific Islander population accounted for 18 percent of the citywide population and 17 percent of the county's overall population. By

the 2010-2014 period, Asians or Pacific Islanders accounted for 39 percent of the citywide population and 33 percent countywide. In the North Santa Clara Context Area, the Asian/Pacific Islander population comprises almost 60 percent of area residents and nearly half in the North San Jose Context Area.

**Small households (one and two person households) make up the majority of households in both the North San Santa Clara and North San Jose context areas.** However, three- and four-person households grew faster than other household size categories in both the North Santa Clara context area and the city between 2000 and the 2010-2014 period (Figure 08-2-6).

**The share of households with children is growing in the North Santa Clara Context Area, but decreasing in the North San Jose Context Area (Figure 08-2-7).** The growth of three- and four-person households in the North Santa Clara Context Area – as cited above – appears linked to this growth of households with children. The North Santa Clara Context Area has experienced growth of a more diverse mix of housing types than the North San Jose Context Area, including types more typically associated with families with children – such as single-family homes and townhomes.

**The North Santa Clara and North San Jose context areas have a slightly higher proportion of young children compared to the city and county as a whole.** In the 2010-2014 period, 10 to 11 percent of the population in the North Santa Clara and North San

Jose context areas was under five years old. This compares to eight percent of residents in Santa Clara and seven percent countywide (Figure 08-2-8).

**Residents in the North Santa Clara and North San Jose context areas are slightly younger than in the city and county.** The median age in the North Santa Clara and North San Jose context areas is 32 and 31, respectively. The median age in the city is 34 and 37 in the county overall.

**Like the city and county, household incomes in the North Santa Clara and North San Jose context areas are relatively high overall, but have experienced a bifurcation of incomes into higher and lower brackets from 2000 to 2014 (as shown in Figure 08-2-9 and Figure 08-2-10).** Shares of households in the bottom income households (less than \$35,000) and highest income households (\$150,000 or more) have increased across all geographies (including adjustments for inflation). Overall, over one-third of households earn \$150,000 or more in both the North Santa Clara and North San Jose context areas.

**POPULATION AND HOUSEHOLD CONCLUSIONS**  
**Rapid population and household growth in the North Santa Clara and North San Jose context areas reflects their roles as desirable and regionally significant infill housing development opportunities.** Historically the North Santa Clara and North San Jose context areas were secondary market locations for housing development, partly due to their distance from the historic downtowns of San Jose and Santa Clara, and partly due to their proximity to the once-undesirable

and industrial San Francisco Bay. As a result, the context areas were largely zoned for and built out with low-density office and light industrial employment uses.

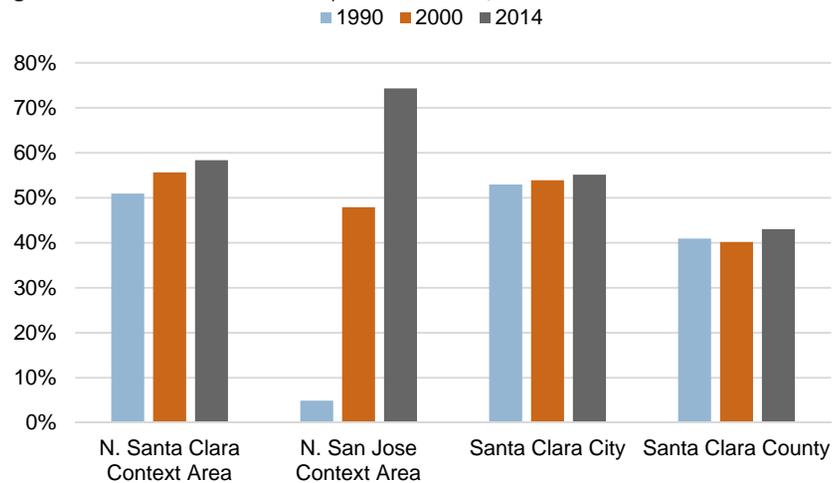
However, the combination of local zoning changes, local investments in transit and transportation, and regionally limited land availability for housing development has positioned the context areas for significant population and housing growth. The regional significance of this growth is demonstrated by the fact that 11.4 percent of all population growth in Santa Clara County occurred in the context areas between 2000 and the 2010-2014 period, and nearly 64 percent of the City of Santa Clara’s population growth over the same period occurred in the North Santa Clara Context Area.

**The types and sizes of households in the North Santa Clara and North San Jose context areas are highly correlated with each area’s mix of housing types and year of housing development.** Comparison of the census data against housing growth trends – described in the following section – reveals that the presence of larger/smaller and family/non-family households in the context areas is largely correlated with the mix of housing types and year of construction in each location. The North San Jose Context Area features a low share of households with children and high share of small households; nearly all housing in the area was constructed since 2000 and consists of large multifamily buildings. In contrast, the North Santa Clara Context Area’s housing includes a mix of single-

	1990	2000	2014	% Change			Average Annual Growth, 1990-2014
				1990-2000	2000-2014	1990-2014	
<b>Total Population</b>							
North Santa Clara Context Area	10,360	13,003	23,914	26%	84%	131%	5%
North San Jose Context Area	4,233	9,613	16,877	127%	76%	299%	12%
Santa Clara City	93,613	102,361	119,525	9%	17%	28%	1%
Santa Clara County	1,497,577	1,682,585	1,841,569	12%	9%	23%	1%
<b>Total Households</b>							
North Santa Clara Context Area	3,379	4,268	8,277	26%	94%	145%	6%
North San Jose Context Area	1,199	4,065	6,974	239%	72%	482%	20%
Santa Clara City	36,545	38,526	42,751	5%	11%	17%	1%
Santa Clara County	520,180	565,863	614,714	9%	9%	18%	1%

Sources: U.S. Census Bureau, 1990 and 2000 Decennial Censuses; U.S. American Community Survey 5-Year Estimates, 2010-2014; Strategic Economics, 2016.

**Figure 08-2-4** Tenure: Renter-Occupied Households, 1990 to the 2010-2014 Period



Sources: U.S. Census Bureau, 1990 and 2000 Decennial Censuses; U.S. American Community Survey 5-Year Estimates, 2010-2014; Strategic Economics, 2016.

**Figure 08-2-3** Population and Households, 1990 to the 2010-2014 Period

family homes, townhomes, and multifamily housing built from the 1980s onward; the context area today features a higher share of larger households and households with children compared to the North San Jose Context Area.

### MULTIFAMILY HOUSING MARKET ASSESSMENT

This section describes local multifamily housing market conditions in Santa Clara and nearby cities, and then examines the potential for higher-density housing development in the TEFA based on review of the types, locations, and market drivers of nearby comparable new multifamily housing developments. Strategic Economics based the analysis on a variety of data sources, including the U.S. Census and American Community Survey, housing unit permit data from the U.S. Department of Housing and Urban Development, city records of recently built, under construction, planned, and proposed residential development, and interviews with local housing developers.

### EXISTING HOUSING SUPPLY OVERVIEW

**The existing housing supply in the North Santa Clara Context Area is much more mixed compared to the North San Jose Context Area, where virtually all the supply is in multifamily apartment buildings.**

Figure 08-2-11 shows that single family homes and townhomes comprise 45 percent of housing units in the North Santa Clara Context Area, versus 11 percent in the North San Jose Context Area. However, the North Santa Clara Context Area's share of single family detached homes has decreased between 1990 and 2014, while townhomes and multifamily buildings have been added to the area's housing stock.

	1990	2000	2014	Share of Total		
				1990	2000	2014
<b>North Santa Clara Context Area</b>						
White, non-Hispanic	4,544	4,225	5,004	44%	32%	21%
Black or African-American, non-Hispanic	378	323	1,224	4%	2%	5%
Asian or Pacific Islander, non-Hispanic	3,761	6,086	13,924	36%	47%	58%
Hispanic or Latino	1,609	1,828	2,820	16%	14%	12%
All Other Races, non-Hispanic	68	541	942	1%	4%	4%
<b>Total</b>	<b>10,360</b>	<b>13,003</b>	<b>23,914</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>North San Jose Context Area</b>						
White, non-Hispanic	3,261	4,492	4,284	77%	47%	25%
Black or African-American, non-Hispanic	169	511	743	4%	5%	4%
Asian or Pacific Islander, non-Hispanic	167	2,746	8,225	4%	29%	49%
Hispanic or Latino	607	1,469	3,030	14%	15%	18%
All Other Races, non-Hispanic	29	395	595	1%	4%	4%
<b>Total</b>	<b>4,233</b>	<b>9,613</b>	<b>16,877</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>City of Santa Clara</b>						
White, non-Hispanic	59,754	49,392	41,252	64%	48%	35%
Black or African-American, non-Hispanic	2,281	2,237	4,039	2%	2%	3%
Asian or Pacific Islander, non-Hispanic	16,802	30,207	46,820	18%	30%	39%
Hispanic or Latino	14,260	16,364	22,802	15%	16%	19%
All Other Races, non-Hispanic	516	4,161	4,612	1%	4%	4%
<b>Total</b>	<b>93,613</b>	<b>102,361</b>	<b>119,525</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Santa Clara County</b>						
White, non-Hispanic	869,874	744,282	627,346	58%	44%	34%
Black or African-American, non-Hispanic	52,583	44,475	44,910	4%	3%	2%
Asian or Pacific Islander, non-Hispanic	251,496	431,811	612,359	17%	26%	33%
Hispanic or Latino	314,564	403,401	492,546	21%	24%	27%
All Other Races, non-Hispanic	9,060	58,616	64,408	1%	3%	3%
<b>Total</b>	<b>1,497,577</b>	<b>1,682,585</b>	<b>1,841,569</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Sources: U.S. Census Bureau, 1990 and 2000 Decennial Censuses; U.S. American Community Survey 5-Year Estimates, 2010-2014; Strategic Economics, 2016.

Figure 08-2-5 Race and Ethnicity, 1990 to the 2010-2014 Period

	1990	2000	2014	Share of Total		
				1990	2000	2014
<b>North Santa Clara Context Area</b>						
1 and 2 person	1,778	2,302	4,269	53%	54%	52%
3 and 4 person	1,004	1,226	3,110	30%	29%	38%
5 or more persons	598	740	898	18%	17%	11%
<b>Total</b>	<b>3,380</b>	<b>4,268</b>	<b>8,277</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>North San Jose Context Area</b>						
1 and 2 person	667	2,822	4,584	55%	69%	66%
3 and 4 person	418	991	1,967	35%	24%	28%
5 or more persons	117	252	423	10%	6%	6%
<b>Total</b>	<b>1,202</b>	<b>4,065</b>	<b>6,974</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>City of Santa Clara</b>						
1 and 2 person	22,397	22,959	23,967	61%	60%	56%
3 and 4 person	10,798	11,547	14,772	30%	30%	35%
5 or more persons	3,350	4,020	4,012	9%	10%	9%
<b>Total</b>	<b>36,545</b>	<b>38,526</b>	<b>42,751</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Santa Clara County</b>						
1 and 2 person	276,568	292,957	311,929	53%	52%	51%
3 and 4 person	172,400	185,160	223,076	33%	33%	36%
5 or more persons	71,212	87,746	79,709	14%	16%	13%
<b>Total</b>	<b>520,180</b>	<b>565,863</b>	<b>614,714</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Sources: U.S. Census Bureau, 1990 and 2000 Decennial Censuses; U.S. American Community Survey 5-Year Estimates, 2010-2014; Strategic Economics, 2016.

Figure 08-2-6 Household Size, 1990 to the 2010-2014 Period

	1990	2000	2014	Share of Total		
				1990	2000	2014
<b>N. Santa Clara Context Area</b>						
Families w/ children	1,156	1,273	3,296	34%	30%	40%
Families w/o children	1,013	1,515	2,308	30%	35%	28%
Householder living alone	777	984	1,876	23%	23%	23%
Other non-family household	434	496	797	13%	12%	10%
<b>Total</b>	<b>3,380</b>	<b>4,268</b>	<b>8,277</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>N. San Jose Context Area</b>						
Families w/ children	452	965	1,827	38%	24%	26%
Families w/o children	370	1,298	2,561	31%	32%	37%
Householder living alone	287	1,352	1,911	24%	33%	27%
Other non-family household	93	450	675	8%	11%	10%
<b>Total</b>	<b>1,202</b>	<b>4,065</b>	<b>6,974</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Santa Clara City</b>						
Families w/ children	9,992	10,563	13,792	27%	27%	32%
Families w/o children	12,154	13,537	14,504	33%	35%	34%
Householder living alone	9,878	9,987	10,981	27%	26%	26%
Other non-family household	4,521	4,439	3,474	12%	12%	8%
<b>Total</b>	<b>36,545</b>	<b>38,526</b>	<b>42,751</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Santa Clara County</b>						
Families w/ children	186,602	197,245	217,606	36%	35%	35%
Families w/o children	173,075	198,316	222,972	33%	35%	36%
Householder living alone	112,935	121,109	132,366	22%	21%	22%
Other non-family household	47,568	49,193	41,770	9%	9%	7%
<b>Total</b>	<b>520,180</b>	<b>565,863</b>	<b>614,714</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

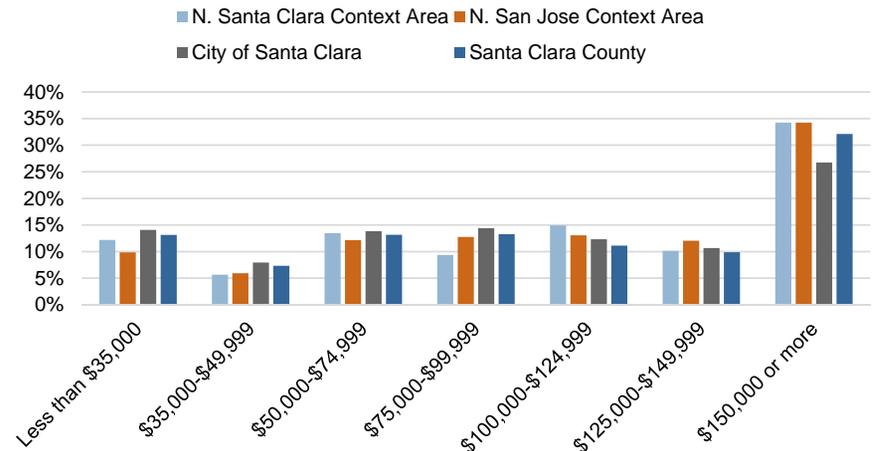
Sources: U.S. Census Bureau, 1990 and 2000 Decennial Censuses; U.S. American Community Survey 5-Year Estimates, 2010-2014; Strategic Economics, 2016.

Figure 08-2-7 Household Type, 1990 to the 2010-2014 Period

	1990	2000	2014	Share of Total	
				1990	2000
<b>North Santa Clara Context Area</b>					
Under 5	712	872	2,630	7%	7%
5 to 17	1,608	1,898	3,610	16%	15%
18 to 24	1,219	1,338	1,707	12%	10%
25 to 44	4,279	5,439	10,326	41%	42%
45 to 64	1,869	2,476	4,078	18%	19%
65 to 74	378	529	955	4%	4%
75 and over	295	451	608	3%	3%
<b>Total</b>	<b>10,360</b>	<b>13,003</b>	<b>23,914</b>	<b>100%</b>	<b>100%</b>
<b>North San Jose Context Area</b>					
Under 5	332	714	1,628	8%	7%
5 to 17	594	1,094	1,535	14%	11%
18 to 24	341	788	1,090	8%	8%
25 to 44	1,782	4,887	9,004	42%	51%
45 to 64	929	1,804	2,789	22%	19%
65 to 74	164	219	576	4%	2%
75 and over	91	107	255	2%	1%
<b>Total</b>	<b>4,233</b>	<b>9,613</b>	<b>16,877</b>	<b>100%</b>	<b>100%</b>
<b>City of Santa Clara</b>					
Under 5	5,880	6,688	9,327	6%	7%
5 to 17	11,703	13,707	17,140	13%	13%
18 to 24	12,503	11,569	13,009	13%	11%
25 to 44	37,344	39,991	42,272	40%	39%
45 to 64	16,845	19,506	25,852	18%	19%
65 to 74	5,851	5,705	6,106	6%	6%
75 and over	3,487	5,195	5,819	4%	5%
<b>Total</b>	<b>93,613</b>	<b>102,361</b>	<b>119,525</b>	<b>100%</b>	<b>100%</b>
<b>Santa Clara County</b>					
Under 5	111,821	119,418	123,124	7%	7%
5 to 17	247,386	296,984	311,287	17%	18%
18 to 24	170,549	155,900	162,358	11%	9%
25 to 44	561,577	596,023	559,663	37%	35%
45 to 64	275,926	353,733	470,422	18%	21%
65 to 74	79,143	87,193	118,011	5%	5%
75 and over	51,175	73,334	96,704	3%	4%
<b>Total</b>	<b>1,497,577</b>	<b>1,682,585</b>	<b>1,841,569</b>	<b>100%</b>	<b>100%</b>

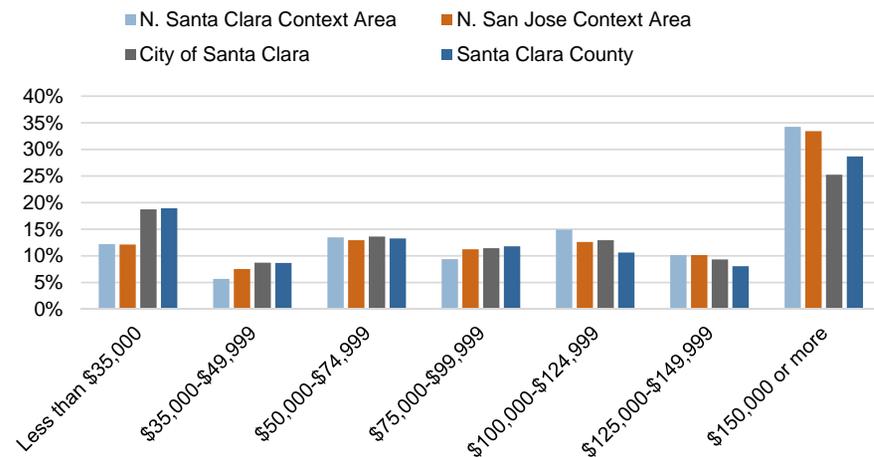
Sources: U.S. Census Bureau, 1990 and 2000 Decennial Censuses; U.S. American Community Survey 5-Year Estimates, 2010-2014; Strategic Economics, 2016.

Figure 08-2-8 Age Distribution, 1990 to the 2010-2014 Period



Sources: U.S. Census Bureau, 2000 Decennial Census; Strategic Economics, 2016.

Figure 08-2-9 Income Distribution, 2000



Sources: U.S. American Community Survey 5-Year Estimates, 2010-2014; Strategic Economics, 2016.

Figure 08-2-10 Income Distribution, 2014

### **Multifamily Housing Development Trends**

**Since 1990, housing development in the North Santa Clara Context Area has continued the area's initial diverse (but lower-density) mix of housing types, whereas housing development in the North San Jose Context Area represents a significant shift from previous land use patterns.** In 1990, the North Santa Clara Context Area already included nearly 3,600 housing units in a mix of single family and multifamily building formats 2.2.11. In contrast, North San Jose was comprised of approximately 1,200 units, 96 percent of which were mobile homes. Since that time, over 3,200 housing units – most of which were in multifamily dwellings – were added to the North San Jose Context Area, while the North Santa Clara Context Area added 5,300 units in a greater variety of building types.

**The early 2000s ushered an era of unprecedented residential growth in North San Jose.** North San Jose's rapid growth is attributed to the 2005 North San Jose Area Development Policy, which allowed residential intensification to support the city's rapid high-tech job growth. Between 2000 and the 2010-2014 period, housing units grew by 74 percent in the North San Jose Context Area.

**City and county development activity has accelerated in recent years with the recovery of the housing market; multifamily housing comprises most permitting activity.** 80 percent of new housing permits issued between 2011 and 2014 in the City of Santa Clara were for multifamily units, compared to 75 percent in

the county. Figure 08-2-12 shows the percentage of building permits issued by type for the City of Santa Clara between 2000 and 2014, as reported by the U.S. Department of Housing and Urban Development.

**The high volume of under construction, planned, and proposed development projects in Santa Clara and its neighboring cities of San Jose, Sunnyvale, and Milpitas suggests that new development, particularly of rental apartments, is continuing at a rapid pace.** In the City of Santa Clara, there are over 2,300 multifamily units under construction and 7,348 units being planned and proposed.<sup>2</sup> In the surrounding cities of San Jose, Sunnyvale, and Milpitas, there are over 24,100 multifamily units being planned and proposed (Figure 08-2-13). The cited projects in just these cities and the City of Santa Clara alone represent the equivalent of nearly 15 percent of Santa Clara County's entire existing multifamily housing units. Significant townhome development activity is also occurring, though this analysis focused on higher-density multifamily development.

**High market rents are driving developer interest in rental housing products.** High asking rents and low vacancy rates are driving developer interest in constructing rental products. Among higher-density multifamily product types, apartment buildings are also often cheaper to build than condominiums since renters generally demand fewer amenities and high-end finishes. According to Marcus and Millichap, a real estate investment services brokerage, Santa Clara saw the greatest rent increases in the San Jose Metro

area, where rents jumped 10.8 percent between 2015 and 2016, with an average effective rent at \$2,629 per month. In comparison, the San Jose Metro area's average effective rent increased by 7.9 percent to \$2,474.<sup>3</sup>

**Based on projected employment and population growth, demand for additional housing in Santa Clara will remain robust over the long term.** The City of Santa Clara has a major and long-standing employment concentration, with an estimated 1.9 jobs per employed resident as of 2014 (versus 1.2 in the county overall), and 2.3 jobs per housing unit.<sup>4</sup> The Association of Bay Area Governments (ABAG) projects that the City of Santa Clara will continue to grow as a regionally significant employment concentration; as of ABAG's 2013 'Plan Bay Area' forecast, the city was projected to grow jobs by 29 percent between 2010 and 2040, and households by 33 percent in that same period. ABAG is in the process of updating these projections, but the city's large base of employment and limited amount of housing will continue to create strong demand for additional housing near the city's office clusters.

### **MULTIFAMILY HOUSING PRODUCT TYPES AND FEASIBILITY CONSIDERATIONS**

This section describes development feasibility considerations for future higher-density multifamily housing development in the TEFA. This market and development feasibility assessment first illustrates and describes the primary types of multifamily housing products developers are pursuing near the TEFA. The

assessment then discusses the location and market factors influencing developer decisions to build these projects, followed by conclusions regarding the potential to attract higher-density housing development to the TEFA.

**DESCRIPTION OF COMPARABLE COMPETITIVE NEW MULTIFAMILY HOUSING PRODUCT TYPES**

**New higher-density multifamily projects built or planned for construction near the TEFA typically fall within two primary product types, defined for this study as “midrise” and “high rise towers.”** In order to characterize the different types of higher-density multifamily products developers are pursuing near the TEFA, Strategic Economics examined the comparable competitive supply of recently-built, proposed, and planned multifamily projects in Santa Clara and the surrounding cities of San Jose, Sunnyvale, and Milpitas. Figure 08-2-14 summarizes the typical characteristics associated with each product type. Figure 08-2-15 lists comparable competitive multifamily development projects and their basic characteristics, distinguishing between midrise housing and high rise towers.

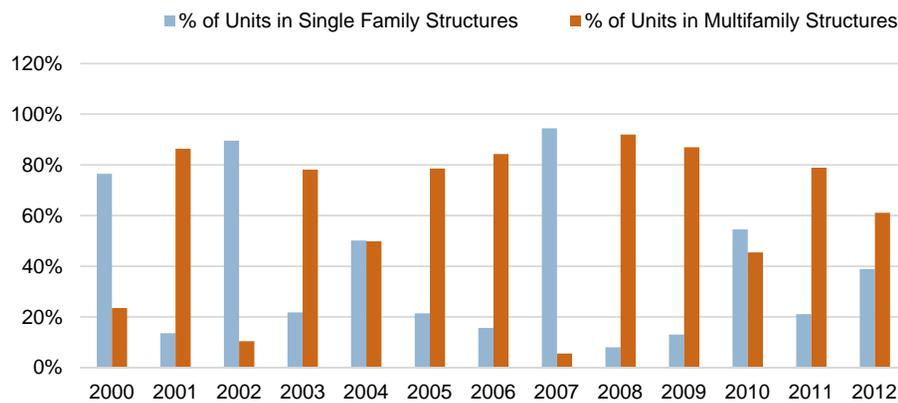
As shown in Figure 08-2-14, midrise multifamily housing products are typically between four and eight stories tall. These products are primarily built of up to five stories of relatively inexpensive wood frame construction (i.e., below 55 feet), but sometimes incorporate a one- to two-story concrete parking podium in order to reach heights of six to eight stories (under 85 feet tall). High rise towers are built of relatively expensive steel and concrete, and are generally twelve or more stories tall (as explained in

	1990	2000	2014	Share of Total		
				1990	2000	2014
<b>North Santa Clara Context Area</b>						
1 Unit: detached	1,473	1,786	2,866	41%	37%	32%
1 Unit: attached	426	616	1,198	12%	13%	13%
2 units	22	26	145	1%	1%	2%
3 or 4 units	251	253	350	7%	5%	4%
5 to 9 units	48	374	213	1%	8%	2%
10 to 19 units	151	477	1,485	4%	10%	17%
20 to 49 units	845	762	1,195	24%	16%	13%
50 or more units	186	504	1,418	5%	11%	16%
Mobile home	191	0	24	5%	0%	0%
<b>Total</b>	<b>3,593</b>	<b>4,798</b>	<b>8,894</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>North San Jose Context Area</b>						
1 Unit: detached	45	225	263	4%	5%	3%
1 Unit: attached	0	699	581	0%	16%	8%
2 units	0	44	90	0%	1%	1%
3 or 4 units	0	97	56	0%	2%	1%
5 to 9 units	0	310	415	0%	7%	6%
10 to 19 units	0	232	311	0%	5%	4%
20 to 49 units	0	163	596	0%	4%	8%
50 or more units	0	1,510	4,023	0%	35%	53%
Mobile home	1,187	1,045	1,207	96%	24%	16%
<b>Total</b>	<b>1,232</b>	<b>4,325</b>	<b>7,542</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>City of Santa Clara</b>						
1 Unit: detached	16,684	17,633	18,483	44%	45%	41%
1 Unit: attached	3,099	3,585	4,443	8%	9%	10%
2 units	842	929	1,108	2%	2%	2%
3 or 4 units	2,783	2,943	3,098	7%	7%	7%
5 to 9 units	3,049	3,467	3,688	8%	9%	8%
10 to 19 units	3,281	3,038	5,110	9%	8%	11%
20 to 49 units	3,676	2,874	3,509	10%	7%	8%
50 or more units	3,809	5,024	5,430	10%	13%	12%
Mobile home	338	102	84	1%	0%	0%
<b>Total</b>	<b>37,561</b>	<b>39,595</b>	<b>44,953</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Santa Clara County</b>						
1 Unit: detached	302,515	323,923	342,467	57%	56%	54%
1 Unit: attached	48,114	52,736	66,530	9%	9%	10%
2 units	10,299	11,112	11,988	2%	2%	2%
3 or 4 units	31,804	35,259	35,579	6%	6%	6%
5 to 9 units	28,725	31,041	33,974	5%	5%	5%
10 to 19 units	30,669	28,441	38,144	6%	5%	6%
20 to 49 units	31,717	27,679	33,047	6%	5%	5%
50 or more units	30,609	49,467	59,571	6%	9%	9%
Mobile home	20,899	19,102	18,554	4%	3%	3%
<b>Total</b>	<b>535,351</b>	<b>578,760</b>	<b>639,854</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Sources:  
 U.S. Census Bureau,  
 1990 and 2000 Decennial  
 Censuses; U.S. American  
 Community Survey 5-Year  
 Estimates, 2010-2014;  
 Strategic Economics, 2016.

Figure 08-2-11 Housing Units By Type, 2000 to the 2010-2014 Period

Figure 2.2.12 - Annual Building Permits for New Housing Construction by Type of Unit: City of Santa Clara, 2000 to 2014



Sources: U.S. Housing and Urban Development, State of the Cities Data Systems (SOCDS) Building Permits Database, 2016; Strategic Economics, 2016

Figure 08-2-12 Annual Building Permits for New Housing Construction by Type of Unit: City of Santa Clara, 2000 to 2014

City	Pending/ Approved	Under Construction/ Recently Completed
Santa Clara	7,348	2,370
San Jose	9,120	18,247
Sunnyvale	1,592	1,424
Milpitas	6,062	N/A
<b>Total</b>	<b>24,122</b>	<b>22,041</b>

Sources: Cities of Santa Clara, San Jose, Sunnyvale, and Milpitas; 2016; Strategic Economics, 2016.

Figure 08-2-13 Multifamily Housing Development Activity by City, 2016

the subsequent findings). The use of wood, concrete, and steel structural materials is primarily driven by building code requirements in order to fulfill fire safety needs.

**Developers of multifamily housing are primarily currently building and proposing future development of midrise products in the market area.** As shown in Figure 08-2-15, units in midrise buildings comprise nearly three-quarters of the total multifamily competitive supply.

**Midrise multifamily housing developments are typically developed at densities between 35 and 75 dwelling units per acre, with heights below eight stories; higher-densities are achievable if unit sizes are small.** As shown in Figure 08-2-15, the density of projects being planned or proposed in Santa Clara and its surrounding cities is in the range of 35 to 75 dwelling units per acre and typically no more than 5 stories in height, although some projects exceed these heights and densities. It is important to note that densities are driven not just by construction type and height, but also by unit size. Smaller unit sizes allow midrise buildings to potentially accommodate higher densities approaching or above 100 dwelling units per acre. For example, two recently completed projects in North San Jose, “River View (Parcel 1)” and “Aire,” were built at 90 and 92 dwelling units per acre, respectively.

**To date, virtually all high rise towers being built in surrounding cities were located in Downtown San Jose, with the exception of one tower project that**

was recently completed in North San Jose’s North First Street corridor; however, shorter towers are now planned for development in other settings. The recently completed Century Center consists of two twelve-story apartment towers, located in close proximity to the San Jose Mineta Airport and the VTA Metro/Airport light rail station. Other tower projects being planned outside Downtown San Jose are in Milpitas.

As demonstrated in Figure 08-2-15, the average density of high rise tower projects in the development pipeline is over 300 dwelling units per acre. As shown, several projects proposed for development in Downtown San Jose will achieve densities of well over 350 dwelling units per acre.

**FACTORS INFLUENCING THE FEASIBILITY OF MULTIFAMILY HOUSING PRODUCT TYPES NEAR THE TEFA**

Developers prefer to build midrise multifamily housing projects in nearby cities because rents and sales prices are not high enough to cover the relatively high construction costs per square foot of high rise towers. Local developers interviewed for this study agreed that midrise products are favored primarily due to lower construction costs; since costs per square foot are lower, developers are able to move forward with midrise projects at a lower rental price point. In contrast, rents need to be significantly higher to incentivize construction of high rise towers, which are more expensive to construct on a per square foot basis.

**Developers with experience building midrise housing in locations similar to the TEFA are increasingly interested in pursuing denser, more “urban” housing products, but are achieving this density by providing**

Typical Number of Floors	Midrise		High Rise Tower	
	Construction Type	# of Residential Stories	Construction Type	# of Residential Stories
	Type V (wood frame)	4-5 max / 55 feet	Type I (concrete and steel)	Unlimited
	Type III (modified wood)	6-8 max / 85 feet		
Parking	<b>Wrap:</b> parking garage in the center surrounded by wood frame construction  <b>Podium:</b> 1 to 2 stories of concrete parking underneath residential; potentially one story below grade		Garage at/above grade (single or multi-level)  Garage below grade	
Typical DU/Acre	35 to 75 DU/Acre, up to approximately 100 DU/acre maximum		Above 150 DU/Acre	

Sources: Strategic Economics, 2016.

Figure 08-2-14 Characteristics of Typical Recently Constructed Midrise and High Rise Tower Projects

**smaller units rather than taller buildings; developers typically pursue these denser midrise projects in locations with supportive amenities and walkability.**

Aire and River View’s Parcel 1, both located in North San Jose, achieved a density of at least 90 dwellings units to the acre (Figure 08-2-16). Other higher-density midrise projects – achieving densities of at least 75 dwelling units to the acre – are planned and proposed in Downtown San Jose and Milpitas (Figure 08-2-15). In order to achieve these higher-densities, these developments include a higher proportion of studios and one bedrooms and small unit sizes. Developers interviewed for this study noted that they are increasingly considering pursuing midrise projects up to seven or eight stories with smaller units; these projects can achieve densities of 100 dwelling units per acre.

**Developers of high rise towers typically need to build projects of at least twelve stories to generate sufficient revenues to cover increased constructions costs.**

Additional – and costly – life safety requirements are required when buildings exceed roughly 75 to 85 feet. Developers are therefore less likely to build multifamily buildings between eight and twelve stories because additional revenue-generating space is necessary to cover the additional expense of construction materials (although the exact height can vary depending on site characteristics and rental rates or purchase prices). According to local developers interviewed for this study, building a high rise tower results in a significant cost increase per square foot of at least 25 percent more than a typical building below 85 feet.

**As demonstrated by recently-completed rental towers, high rise towers are typically built in locations where a**

Project	City	Status	Land Area	Units
<b>Midrise</b>				
First and Reed (598 S 1st St)	San Jose	Approved	0.6	105
Modera	San Jose	Approved	1.0	168
Marshall Square	San Jose	Approved	1.4	195
River View (Parcel 1)	San Jose	Recently Completed	4.0	369
Aire	San Jose	Recently Completed	3.3	293
1201 S Main/llara	Milpitas	Recently Completed	2.8	204
1102 Abel St (Axis)	Milpitas	Recently Completed	5.2	366
Mission Town Center	Santa Clara	Approved	6.4	417
Virginia Terrace Apartments	San Jose	Under Construction	3.7	238
Balbach Condos	San Jose	Under Construction	1.6	101
121 Tasman	San Jose	Recently Completed	2.9	174
Ascent Apartments	San Jose	Under Construction	10.8	650
North Tenth Street Apartments	San Jose	Under Construction	2.9	166
Cobalt Apartments	Santa Clara	Under Construction	4.0	222
Marquis	San Jose	Recently Completed	3.0	155
Mio Japantown	San Jose	Recently Completed	2.0	103
Villas on the Boulevard	Santa Clara	Under Construction	3.6	186
Monticello Village	Santa Clara	Under Construction	16.1	825
McCandless Drive	Milpitas	Approved	23.0	1,154
Lennar 450 Montague Expwy	Milpitas	Pending	10.5	489
1200 Piper Drive	Milpitas	Approved	16	732
Alexis	Santa Clara	Under Construction	1.4	60
Madison Place	Santa Clara	Under Construction	0.7	28
Tuscany Apartments	Santa Clara	Recently Completed	3.4	133
Fruitdale Station	San Jose	Under Construction	6.7	256
Gateway Village	Santa Clara	Approved	12.6	476
Centre Point Mixed Use	Milpitas	Pending	15.7	603
Berryessa Crossing (Phase 2)	San Jose	Recently Completed	13.7	494
Metropolitan Apartments	San Jose	Under Construction	2.9	102
East Weddell	Sunnyvale	Approved	12.0	465
	<b>Average DU/Acre</b>		<b>65</b>	
<b>High Rise Tower</b>				
Gateway Tower	San Jose	Pending	0.5	270
Greyhound Towers	San Jose	Pending	1.6	708
Post and San Pedro	San Jose	Pending	0.5	202
Silvery Towers	San Jose	Under Construction	1.8	640
One South Market	San Jose	Recently Completed	1.0	312
Centarra	San Jose	Recently Completed	1.3	347
NSP3 Towers	San Jose	Approved	1.5	313
Century Center	San Jose	Recently Completed	2.4	376
Landmark Tower	Milpitas	Approved	3.0	450
Parkview Tower	San Jose	Approved	1.5	216
DIRIDON	San Jose	Pending	3.8	325
	<b>Average DU/Acre</b>		<b>284</b>	
<b>Blended Project</b>				
1256 Piper Drive (Tower and Townhomes)	Milpitas	Approved	5.7	308

**rent or sales premium associated with local amenities justifies the higher costs of construction.** Strategic Economics compared values between recently built (2012-2015) midrise and high rise developments in the City of San Jose, as shown in Figure 08-2-16.<sup>5</sup> Among recently constructed apartment buildings in the City of San Jose, rents in Downtown San Jose's high rise apartment towers command a premium of at least 10 percent compared to new midrise buildings. On average, recently built midrise building asking rents are around \$3.29 per square foot, compared to \$3.61 per square foot for a high rise tower.

**Locations likely to experience tower construction generally feature a variety of transportation options, entertainment and retail amenities, and proven market value.** According to developers, high rise towers perform best in areas with strong transit access, walkability, and strong concentrations of amenities (e.g. retail, restaurants, nightlife). Virtually all existing and newly constructed high rise towers reviewed for this study are marketed as high-end luxury residential communities targeted towards young, professionals seeking to live in vibrant and walkable communities.

**High rise condominium tower development activity is now proceeding after several years of inactivity.** According to Polaris Pacific, no high rise condominium towers were built since 2012 in Santa Clara or San Jose, although one is currently under construction in Downtown San Jose. The gap in condominium development is explained by the slowdown of condominium development activity after the 2007

Sources: Cities of Santa Clara, San Jose, Sunnyvale, and Milpitas; news articles; Santa Clara County Assessor, 2015; Strategic Economics, 2016.

Figure 08-2-15 Comparable Competitive Supply of Recently Completed, Under Construction, Approved, and Pending Multifamily Development Projects

to 2009 economic recession following the subprime mortgage crisis. In this current market cycle, several condominium towers are proposed in Downtown San Jose, particularly as the City of San Jose's Downtown High Rise Incentive Program is set to expire at the end of June 2016.<sup>6</sup>

**The recent surge in high rises in Downtown San Jose is partly attributable to the City of San Jose's Downtown High Rise Incentive program – a deliberate public policy and set of incentives to encourage tower development.** In 2007, the City enacted a set of development incentives to encourage high rise development in Downtown San Jose, which included waiver of inclusionary requirements, reduced park fees, and waiver of parking minimums. When this was enacted (during the housing boom), these high rises were only viable as condominiums. It wasn't until 2010 that Downtown San Jose constructed its first high rise rental project. Nonetheless, several high rises under construction or being planned for in Downtown San Jose and Milpitas will be luxury condominiums.

**Higher-density multifamily housing – which often primarily consists of smaller studios and 1-bedroom units – is rarely marketed to or likely to include many families with children.** Based on developer interviews, review of recent development projects, and review of census data, multifamily housing in the examined cities is rarely targeted to or occupied by households with children. The trend is unlikely to change, as unit sizes shrink in denser buildings designed to meet demand from the market area's concentration of young professional workers.

#### **MULTIFAMILY HOUSING DEVELOPMENT POTENTIAL IN THE TEFA**

**The TEFA is well positioned to attract market interest and demand for multifamily housing due to its transportation options, employment access, and proximity to the planned City Place retail, office, and housing development.** The TEFA already features a number of assets that will complement and encourage growth of a transit-oriented, mixed-use neighborhood. The TEFA is well-served by transit via VTA light rail, ACE, and Capitol Corridor. Many of the area's surrounding office clusters are easily accessible via transit or automobile. Future development of City Place – which will add up to 9.2 million gross square feet of retail, office, entertainment, hotel, and parks built in multiple phases – to the north and west of the TEFA will further enhance the desirability of the TEFA by providing retail and employment destinations within easy walking distance.

**Future development in the TEFA is likely to reflect the surrounding area's ongoing transition to increasingly higher density multifamily housing.** Developers of midrise multifamily housing in North San Jose and other nearby areas are pursuing increasingly dense, "urban" projects with smaller units and taller building formats. For example, the "Aire" project in North San Jose was built at 90 dwelling units to the acre. Developers interviewed for this study noted that these higher densities are likely to become the new norm as new higher-density neighborhoods emerge in the South Bay.

**In the immediate term, developers could deliver high-density midrise projects in the TEFA at 100 dwelling**

**units per acre, if allowed under the area's zoning, though achieving this relatively high density in midrise buildings will require inclusion of smaller unit sizes.**

The unit sizes in midrise projects this dense will likely be smaller, on average, than the unit sizes in similar midrise buildings in communities near the TEFA.

**Current achievable rents and sales prices in the TEFA are too low to justify high rise tower construction in the short term.** As explained in this section, high rise towers are a costly and risky development product type. As a result, they are typically built in locations that already feature strong housing demand – reflected in top-of-the-region rents or sales prices per square foot – and include existing urban amenities and multimodal transportation access. Developers are less likely to pursue high rise multifamily projects in the TEFA in the near term, creating the risk that prime sites will already be developed by the time towers are feasible.

**As the neighboring City Place project is built out and local-serving retail and service activities are added to the TEFA, rents and sales prices are likely to increase to the point at which high rise tower development may become feasible; the city can accelerate this process by offering incentives that reduce developer costs and risk, similar to San Jose.** The City of San Jose provided incentives to encourage current high rise development projects. If the City of Santa Clara chooses to prioritize near-term high rise construction, then it should evaluate incentives to encourage their construction. Examples include re-examination of the city's impact fees for multifamily housing, streamlined permitting processes, and inclusion of towers in the TEFA plan Environmental Impact Report.

**2015**

Project	Subarea	Year	Stories	Total Units	Du/Acre	Average Unit Size	Average Rent/SF
<b>Midrise</b>							
River View (Parcel 1)	North San Jose	2013	6	369	92	800	\$3.50
Aire	North San Jose	2013	4	293	90	867	\$3.55
The Verdant	North San Jose	2013	5	498	79	892	\$3.28
Meridian at Midtown	Central San Jose	2014	4	218	64	924	\$3.11
Domain	North San Jose	2013	4	444	63	1,028	\$3.00
Crescent Village	North San Jose	2012	4	1,750	61	897	\$3.32
Avalon Morrison Bay	Downtown San Jose	2013	4	250	56	1,176	\$2.76
Marquis	Central San Jose	2015	3	166	56	838	\$3.46
Epic	North San Jose	2013	5	569	55	862	\$3.56
Misora at Santana Row	Santana Row	2013	5	212	52	1,150	\$3.86
Mio Japantown	Central San Jose	2015	4	103	52	929	\$3.34
Mosaic	Central San Jose	2012	5	386	50	1,091	\$2.71
	<b>Average DU/Acre</b>	<b>64</b>					
	<b>Average Unit Size</b>	<b>955</b>					
	<b>Average Rent/SF</b>	<b>\$3.29</b>					
<b>High Rise Tower</b>							
One South Market	Downtown San Jose	2015	23	312	322	965	\$3.58
Century Center	North San Jose	2015	12	376	157	878	\$3.23
Centerra	Downtown San Jose	2015	21	347	275	935	\$4.02
	<b>Average DU/Acre</b>	<b>251</b>					
	<b>Average Unit Size</b>	<b>926</b>					
	<b>Average Rent/SF</b>	<b>\$3.61</b>					

Sources: realAnswers, 2016; County of Santa Clara Assessor, 2015; Strategic Economics, 2016.

**Figure 08-2-16** Comparable Competitive Supply of Multifamily Rentals by Product Type, Built 2012 to 2015

Developers in the TEFA are likely to pursue housing units targeted to small households without children. Midrise residential projects that also achieve 100 dwelling units per acre typically include mostly studio and one-bedroom apartments with smaller average unit sizes than other product already on the market. This unit mix and tendency towards smaller units is less attractive to families with children than two-bedroom units, or even more spacious one-bedroom units. If the City of Santa Clara chooses to prioritize child-friendly housing, the TEFA plan could potentially codify family-friendly requirements such as inclusion of larger housing units, playgrounds in parks, etc.

**Creation of a desirable multifamily neighborhood in the TEFA will be more successful (and residential buildings will be able to command higher rents and sales prices) if the area is well-served by additional amenities.** The TEFA is generally well-positioned for multifamily housing development due to its proximity to transit, highway access, and recreational opportunities. However, additional value could be created by including local-serving retail and services (such as eating and drinking establishments, dry cleaners, convenience stores, etc.), strong pedestrian circulation within the TEFA and City Place (which will be discussed in the next section), small-scale open space, and pedestrian and bicycle connections to surrounding areas. The following section assesses the potential for the TEFA to incorporate a grocery store and other basic local-serving retail and service uses.

## NEIGHBORHOOD-SERVING RETAIL MARKET ASSESSMENT

This section describes the TEFA's retail market positioning and potential to attract new neighborhood-serving retail. Strategic Economics examined the TEFA's retail potential by examining current market conditions and competitive retail supply in the trade area surrounding the TEFA, interviewing local retail brokers and developers, and by examining projects currently under construction or proposed for development.

For purposes of this report, neighborhood-serving retail is defined as businesses that provide goods and services that people would frequent at least weekly to take care of their personal and household needs. Examples include grocery stores, drug stores, eating and drinking establishments, dry cleaners, hair salons, etc. Strategic Economics focused the analysis on neighborhood-serving retail because the adjacent proposed City Place development will absorb demand for stores, restaurants, and entertainment serving a large regional trade area. City Place is proposed to consist of a 239-acre mixed-use development, with an emphasis on regional retail uses, as well as office and housing. Retail development at City Place will range between 1.3 and 1.8 million square feet, most of which will be dedicated to fashion, lifestyle, and entertainment uses.<sup>7</sup>

By definition, neighborhood-serving retail serves a relatively small primary trade area of about a one- to three-mile radius. However, some shopping center formats combine neighborhood-serving retailers

with other general merchandise retailers serving a larger trade area. A good example of this is when a grocery store and a Home Depot co-locate in the same shopping center. In this case the center's primary trade area expands to a three- to five-mile radius. Figure 08-2-17 provides a basic overview of shopping center types; neighborhood-serving retail is typically found in the Strip or Convenience Center and Neighborhood Center categories and, to a lesser extent, Community Centers. Day-to-day needs retailers, restaurants, and cafes are sometimes located in standalone strip centers or on the ground-floor of mixed-use residential buildings, but are also often co-located in neighborhood and community centers with grocery store anchor tenants. Other types of shopping centers that serve much larger trade areas – such as “lifestyle centers” and “regional shopping malls” – are excluded from the table below since the focus of this analysis is on neighborhood-serving retail.

Following this introduction, the next section examines market conditions and the competitive supply of retail in the One-Mile Trade Area (approximately five-minute drive) and the Three-Mile Trade Area (approximately ten-minute drive) of the TEFA. The section concludes with an assessment of the Tasman East Focus Area's positioning for attracting neighborhood-serving retail.

## RETAIL MARKET CONDITIONS AND COMPETITIVE SUPPLY

This section provides an overview of the current retail market conditions and competitive retail supply in the One-Mile Trade Area and Three-Mile Trade Area surrounding the Tasman East Focus Area. Figure 08-

2-18 maps the location of existing shopping centers within a one-, three-, and five-mile radius of the TEFA.

This section also examines the competitive supply of grocery stores – and the neighborhood-serving retail uses co-located with them – currently serving areas closest to the TEFA. Figure 08-2-19 shows a map of existing grocery stores, recently closed grocery stores, and ones expected to open in the immediate term. Special consideration has been given to grocery stores because this use tends to anchor other neighborhood serving shops. In addition, having a grocery store in close proximity to dense housing can reduce people's dependence on automobile trips for some non-work related trips. Having a grocery store in the TEFA would help make the area more transit- and less automobile-oriented.

### **All but eight percent of the One-Mile Trade Area's 242,000 square feet of retail space is located at North San Jose's @First community center (Figure 08-2-18).**

Other centers within the One-Mile Trade Area consist of smaller strip retail built in the early 1990s. @First itself includes a Target, CVS, a vacant former Fresh & Easy grocery store space, and a collection of smaller retailers and restaurants. Although @First is currently the closest major retail competition and supply relative to the TEFA, its freeway-centric location adjacent to Highway 238 and big box anchor tenant positions the center to serve a larger trade area for less frequent trips.

Nearly 1.9 million square feet of retail space is located in the Three-Mile Trade Area, 34 percent of which consists of neighborhood and strip retail centers (Figure 08-2-18). The remainder of the Three-Mile Trade Area's total retail space is dispersed between one power center and four community centers. These types of shopping centers are anchored by grocery stores, home furnishing stores, and/or general merchandise stores, and often serve a larger trade area than the neighborhood-serving retail uses examined throughout this section. The community centers depicted in Figure 18 are @First, Rivermark Village, Mercado Santa Clara, and Milpitas Square.

As shown in Figure 08-2-19, two grocery stores currently operate within the three-mile radius of the TEFA, but no grocery store is located within one mile of the TEFA. The map in Figure 08-2-19 shows existing, planned, and recently closed grocery stores, along with the number of households and workers each grocery store currently serves within its one-mile trade area. A Safeway and Walmart Neighborhood Market are the two closest grocery stores to the TEFA. The Safeway currently serves over 14,100 households and nearly 38,000 workers within its primary trade area, while the Walmart Neighborhood Market serves 6,375 households and over 26,300 workers. The former Fresh and Easy, located in North San Jose's @First shopping center, was the closest grocery store to the TEFA, but closed at the end of 2015. It is unclear whether a grocery store will occupy the 20,000 square feet space.

Type of Shopping Center	Typical Sq. Ft. Range	Acres	Typical Anchors	Trade Area Size/ Drive-time	Examples
Strip or Convenience Center	Less than 30,000	Less than 3	Un-anchored, or anchored by a small convenience store (7-11 etc.)	<1 mile/ < 5 minutes	El Camino Real centers
Neighborhood Center	30,000 to 125,000	3 to 5	Convenience-oriented, typically anchored by a grocery and/or drug store	1-3 miles/ 5-10 minutes	El Monte Center, Blossom Valley Center
Community Center	125,000 to 400,000	10 to 40	General merchandise or convenience-oriented anchors, may include discount stores, grocery stores, drug stores, and/or large specialty stores (home improvement/ furnishings, sporting goods, etc.)	3-6 miles/ 10-15 minutes	San Antonio Center, Downtown Sunnyvale

Source: ICSC Research and CoStar Group; Strategic Economics 2016.

Figure 08-2-17 Relevant U.S. Shopping Center Classifications and Characteristics

According to commercial brokerage firm, Cushman and Wakefield, retail tenant demand remains robust in the San Jose Metro Area, particularly for new Class A/ B+ space. At the end of 2015, Santa Clara's vacancy rate was at 3.5 percent, compared to five percent in the San Jose Metro overall. The average asking rent in Santa Clara is slightly higher at \$28.80 per square foot per year on a triple net basis, compared to the metro average asking rent of \$28.08. These rates reflect what is currently available in the marketplace, most of which is Class B or C space.

## PLANNED RETAIL PROJECTS

**Significant retail development is planned at City Place, located immediately adjacent to the TEFA. However, City Place will likely include very little neighborhood-serving retail.** The City Place community masterplan plans to build between 1.3 - 1.8 million square feet of retail, most of which will be dedicated to fashion, lifestyle, and entertainment uses. According to the developer, the maximum amount of local-serving retail would be in the 20,000 sq feet range and may include a small market and neighborhood services. The final tenant mix is still uncertain.

**Two new grocery stores are planned for development in the three-mile trade area surrounding the TEFA; while these stores will fulfill unmet market niches, neither is located especially close to the TEFA itself.** A new neighborhood center, anchored by Whole Foods, will be opening in the late summer of 2016 as part of Santa Clara Place, which will add 1.7 million square feet of office space and up to 2,000 housing units. This area currently serves about 5,650 households and over 41,500 workers. Grocery Outlet in Sunnyvale is also expected to take over the lease of a recently-closed Fresh and Easy, which will serve over 11,800 households and 23,800 workers within its primary trade area.<sup>8</sup> Combined with the Safeway and Walmart Neighborhood Market, the four grocery stores are all located two to three miles from the TEFA, and cover a wide variety of price points (from discount groceries to the high-end Whole Foods).

Neighborhood-Serving Retail Potential in the TEFA

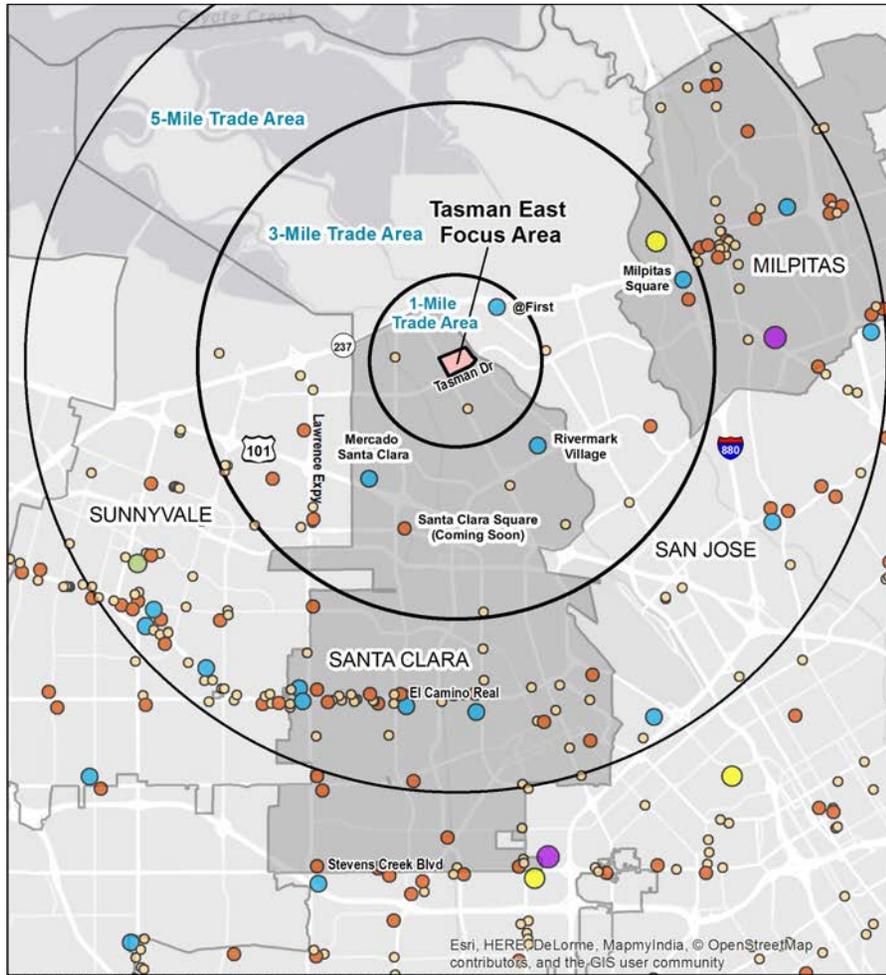
**Existing residents and workers within the three-mile radius of TEFA are already well-served by grocery stores and neighborhood-serving retail.** A variety of grocery stores and neighborhood or strip retail centers already capture demand from existing residents and workers. Future housing growth in the three-mile radius of TEFA— including the 2,000 housing units and additional office space planned at Santa Clara Square, near Bowers Avenue and Highway 101 – will also be served by planned retail development, including the aforementioned Whole Foods, several restaurants, and basic services.

**Despite this nearby supply of grocery stores and neighborhood retail, the TEFA itself is not well-served by the existing retail supply.** The TEFA is currently occupied by low-density light industrial properties and largely surrounded by open land. As result, the area lacks the workers and residents needed to support neighborhood-serving retail.

**However, residential and employment growth at the TEFA and City Place will generate significant new demand for a grocery store and other neighborhood-serving amenities, generating increased demand for retail in and near the TEFA.** The current spatial distribution of grocery stores and neighborhood-serving retail is largely focused on serving existing concentrations of residents and workers, and located along major roadway and freeway transportation routes (Figure 08-2-19). The TEFA and surrounding areas currently lack workers and residents, although nearly 10,000 households and over 10,000 workers are already located within a mile of the TEFA. Over time, these existing households and workers will be joined by

the addition of up to 1,680 households at City Place, a 700-room hotel, thousands of workers in City Place's retail and office spaces (between 3.2 to 6.7 million square feet), and additional households in new housing to be built in the TEFA. The combined total workers and households within a mile of the TEFA will create significant market demand for neighborhood-serving retail closer to the area.

**The early phases of retail at City Place are unlikely to include neighborhood-serving retailers, creating an opportunity for the TEFA to capture neighborhood-serving retail opportunities.** The City Place program plans to build between 1.3 and 1.8 million square feet of retail, most of which will be dedicated to fashion, lifestyle, and entertainment uses. There are plans to add up to 20,000 square feet of retail as part of the residential component of City Place, but this retail may be built in a later phase and primarily fulfill the needs of City Place households and visitors. As a result, the TEFA can potentially capture the surrounding area's demand for groceries, day-to-day retail, and local-serving restaurants and cafes.



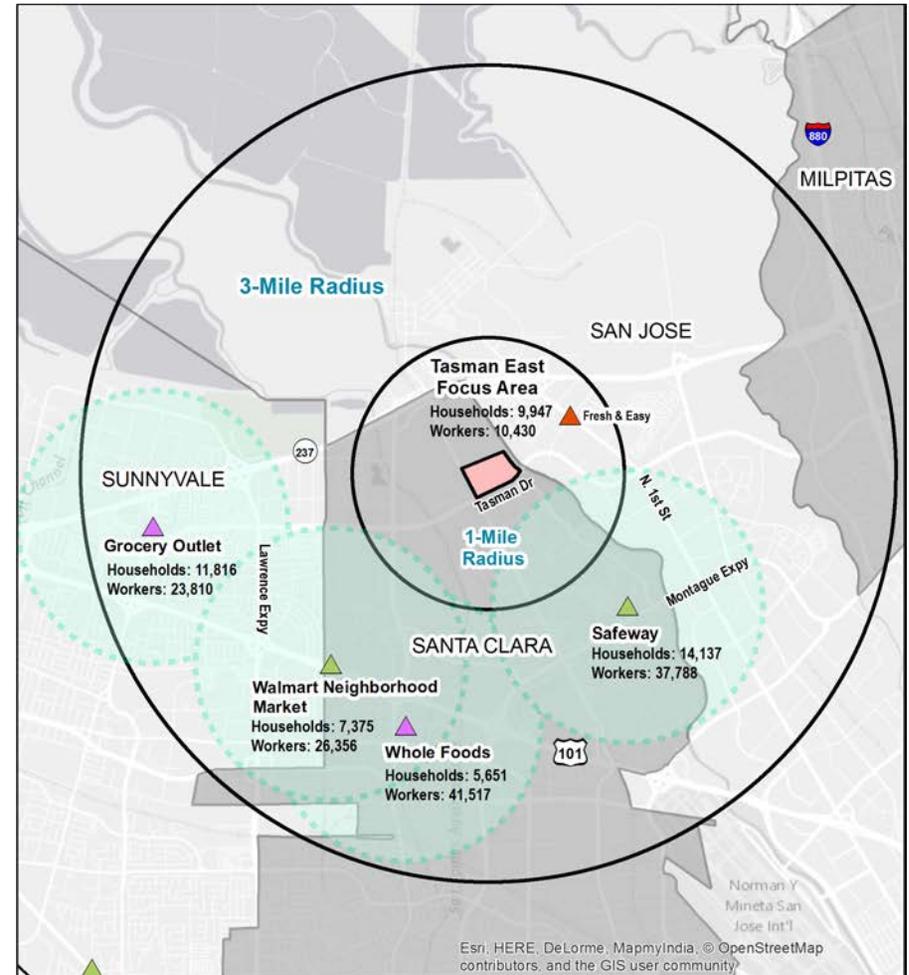
Sources: CoStar Group, 2016; U.S. Census Tiger Line Data, 2014; Strategic Economics, 2016.

**Existing Retail Centers:  
One, Three, and Five-Mile Trade Areas of Tasman East Focus Area**

- Strip Center
- Neighborhood Center
- Community Center
- Lifestyle Center
- Power Center
- Regional Mall



Figure 08-2-18 Existing Retail Centers



Sources: CoStar Group, 2016; LEHD "On the Map", 2014; U.S. Census American Community Survey 5-Year Estimates, 2010-2014; Strategic Economics, 2016.

**Grocery Stores:  
One and Three-Mile Radius of Tasman East Focus Area**

- ▲ Existing Grocery Store
- ▲ Coming Soon
- ▲ Recently Closed
- 1 Mile Trade Area



Figure 08-2-19 Grocery Stores

**The ability of the TEFA to capture demand for grocery stores will depend on whether and where other grocery stores and neighborhood centers are built prior to these uses in TEFA.** Given the magnitude of planned development activity at City Place, potential residential growth in the TEFA, and ongoing growth in nearby North San Jose, strong potential exists for grocery stores to eventually add new locations in or near the TEFA. Since housing and worker growth in the TEFA and City Place will only support a limited amount of grocery demand, the TEFA's ability to include a grocery store is contingent on whether it captures this demand before other nearby locations.

**The potential to capture a grocery store in TEFA will improve when better north-south access is created – when Lick Mill Boulevard is extended – and connectivity is improved within the TEFA and between the TEFA and City Place.** From a retail perspective, the TEFA currently lacks excellent connectivity to its surrounding trade area; the TEFA can only currently be directly approached from the south and west (at two different elevations) and no major street runs directly through the area. When Lick Mill Boulevard is extended through Tasman East, the site will have excellent access from the north and south, although access from the west will remain challenging. This puts even greater emphasis on the need for excellent internal circulation both within the TEFA, and connecting to City Place so that its residents can easily access a grocery store.

**Regardless of whether the TEFA captures demand for a grocery store, residential and worker growth in the area will drive demand for basic food, beverage, and**

**personal services to serve as needed amenities for the housing.** The TEFA's internal residential growth – coupled with spillover demand from worker and resident growth at City Place – is likely to support at least a minimal amount of day-to-day retail amenities. These include limited quantities of convenience stores and services such as salons and dry cleaning.

**The TEFA's ability to capture demand for eating and drinking places will require the area to complement City Place's options rather than compete with them.** The TEFA's internal residential growth is likely to support limited quantities of restaurants and cafes, but the survival of these uses will require capturing additional demand from the surrounding area and growth at City Place. Given that City Place will feature a high concentration of these uses, the TEFA will need to include complementary offerings positioned to provide a more relaxed, neighborhood-centric, and/or independent or boutique feel.

## Footnotes

1. *The 2014-based census block groups for North Santa Clara Context Area used in this analysis includes: Tract 5049.01 Block Group 1; Tract 5050.01 Block 1, 2, 3, 4, and 5; and Tract 5050.07 Block Group 1 and 2. The 2014-based census block groups for North San Jose Context Area include: Tract 5050.06, Block Group 1 and 2; Tract 5050.08, Block Group 1 and 2; and Tract 5050.09, Block Group 1, 2, and 3.*
2. *This includes 2,000 residential units approved for Santa Clara Square near Bowers Avenue at Highway 101, and 1,360 residential units approved at City Place.*
3. *Marcus and Millichap, 1Q 2016. Multifamily Research Market Report: San Jose Metro Area.*
4. *U.S. Census Longitudinal Employer-Household Dynamics data, 2014. This dataset estimates 105,041 jobs and 54,231 employed workers in Santa Clara as of 2014.*
5. *City of San Jose rental data obtained from realAnswers.com in May 2016. realAnswers is a commercial vendor that tracks asking market statistics for large apartment communities with 50 or more units.*
6. *City of San Jose. Memorandum: Downtown Commercial High-Rise Development Incentives. 20 November 2014.*
7. *Related Companies. "CityPlace Santa Clara Master Community Plan," June 1, 2016.*
8. *"Safeway, Grocery Outlet snap up South Bay Fresh & Easy Leases." Silicon Valley Business Journal. 16 Dec. 2015.*

## 08.3 INFRASTRUCTURE REPORT

### EXISTING INFRASTRUCTURE CONDITIONS

#### Storm Drainage

Storm drainage facilities in and around the Tasman East Specific Plan area are owned and maintained by private property owners, the City of Santa Clara's Department of Public Works and the Santa Clara Valley Water Agency (SCVWA).

Private systems in the individual parcels typically discharge through 12-inch through 24-inch lines into the backs of public catch basins in the public rights-of-way. The local public system consists of surface inlets and gravity storm drain pipes in streets. These vary in size between 12-inch and 33-inch. They generally flow northeasterly in Calle Del Mundo and Calle De Luna and north in a 33-inch pipe that runs in the north-south section of Calle De Luna. The system flows into the City's Tasman Channel in the northeast corner of Tasman East on the project side of the Guadalupe River's western levee. The Tasman Channel carries flows of approximately 3,000-LF to the Eastside Retention Basin. A pump station pumps stormwater from this basin through the levee and into the Guadalupe River. The River, which is under Santa Clara Valley Water District (SCVWD) jurisdiction, conveys flows to the San Francisco Bay.

Federal Emergency Management Agency (FEMA) current Flood Insurance Rate Map (FIRM) number 060885C0062J, dated February 19, 2014 identifies major portions of the plan area as potential Flood Hazard Zones and subject to localized flooding. Approximately 80% of the Plan area is in Zone AH

(elevation 8, North American Vertical Datum – 1988), which is defined as areas subject to inundation by the 1-percent chance event. The FIRM, whereby the BFE was derived from detailed hydraulic analyses, defines this event as having shallow flooding with average depths of between 1-foot and 3-feet. Mandatory flood insurance purchase requirements and floodplain management standards apply to areas with this Zone AH.

The remaining roughly 20% of Plan area is designated as Zone AO with probable ponding depths up to 1-foot during the 1-percent chance event. This includes several pockets north of Calle de Luna, primarily at the center of the block between Calle de Luna and Calle del Mundo. The portion of the site south of Calle de Luna is generally shown as Zone AO with the exception of the streets and parcel frontages.

The water level of the Guadalupe River adjacent to the site is presented in the FEMA Flood Insurance Study (FIS) dated February 19, 2014. The 100-year water level in the River adjacent to the site is between elevations 14 and 15 feet (NAVD 88). FEMA computer model runs of the River are available on the Santa Clara Valley Water District Web Site. Based on FEMA's October 1994 analyses, the 100-year reported flow delineated on the FIS is 13,000 cfs (located at the River reach point downstream of Highway 17). The Guadalupe River model shows water levels of approximately elevation 15.8 within the Project vicinity.

FEMA requires that levees provide a minimum freeboard of 3 feet above the Base Flood Elevation (BFE) all along their length, and an additional 1 foot within 100 feet of structures (such as bridges) or wherever the flow is restricted. The top of levee adjacent to the site is about elevation 25, significantly above the FEMA requirement for levee freeboard.

The BFE of 8 at the Project is significantly lower than the BFE of about elevation 15 in the Guadalupe River, as adjacent levees provide flood protection to Tasman East. Runoff from the Project area flows to the Eastside Detention Basin and Lift Station to the north of the Project.

The City of Santa Clara further refined the 100-year event water levels analyses within the project area as part of their Storm Drain Master Plan (prepared by Schaaf & Wheeler Consulting City Engineers, dated December 2015). This Master Plan provides calculations that delineate a reduced inundation area, significantly less than indicated by the FEMA FIRM map. The County's published LiDAR topography shows streets below elevation 8, but most of the developed portion of the site above elevation 8. Based on this information, the FEMA FIRM overstates the portion of the site that would be inundated during a 100-year storm event. Using the LiDAR data, only streets and parcel frontage would be inundated during the 100-year storm event.

### SEA LEVEL RISE

Runoff from the project area flows to the Eastside Lift Station located about 3,700 feet north of the site. Because all project flows are pumped, the Project is isolated from the direct effects of sea level rise. The primary impact associated with sea level rise would be hydraulically to the Lift Station's performance. As sea level rise increase, there would be a minor decrease in the pumping rate associated with the higher discharge water level. An increase in sea level would have only a minor impact on water levels in the Project area provided the levee separating the Guadalupe River flows is maintained. The low point of the levee is about elevation 18 (north of State Route 237). With no changes, the levee will provide the required three feet of freeboard for a 100-year tide of about elevation 15. The current 100-year tide in this area is elevation 11.3. The levee is adequate for a sea level rise of more than 3-ft.

Provided the City upsizes pumps to accommodate the higher discharge water level within the entire watershed, there would be no long-term change in Project 100-year water levels associated with sea level rise.

### WASTEWATER TREATMENT

Wastewater from Tasman East is conveyed through the City of Santa Clara's wastewater collection system to the San Jose/Santa Clara Regional Wastewater Facility (SJ/SC RWF), which is approximately two miles to the northeast in the Alviso area of San Jose. The SJ/SC RWF Plant provides wastewater treatment for the

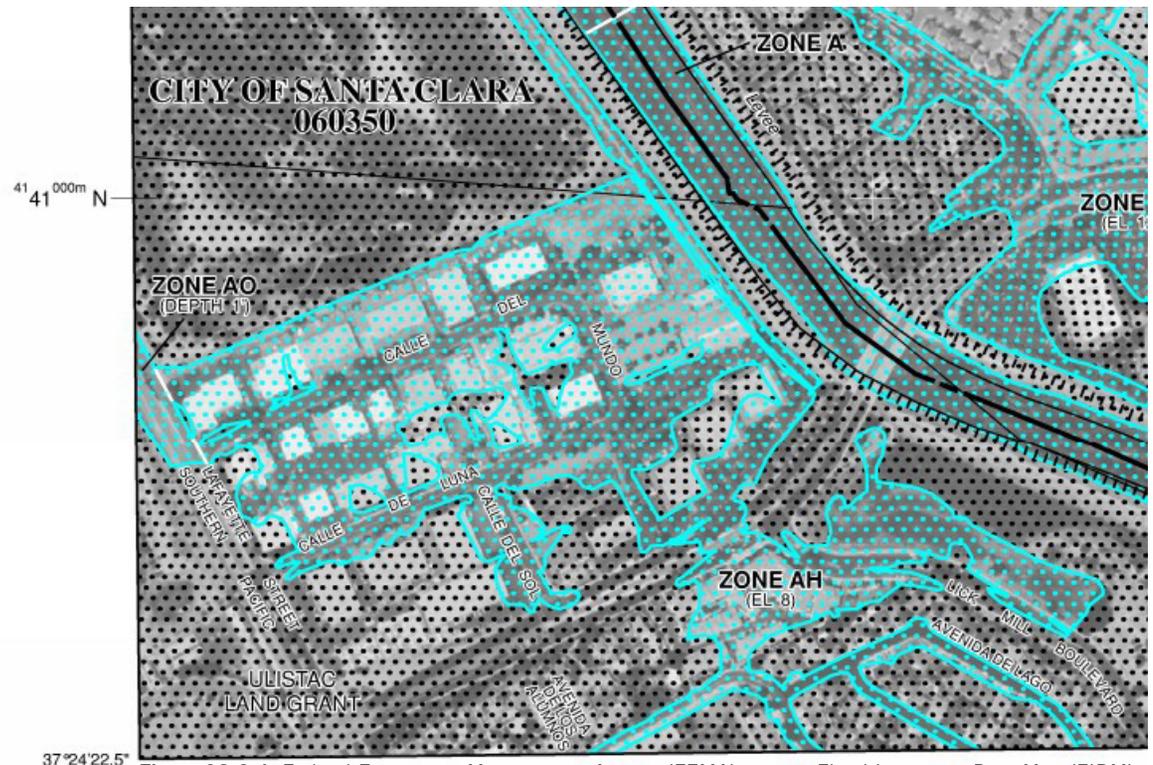


Figure 08-3-1 Federal Emergency Management Agency (FEMA) current Flood Insurance Rate Map (FIRM) number 060885C0062J, dated February 19, 2014, showing the Tasman East project area.

cities of San Jose, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno.

The SJ/SC RWF has an existing capacity to treat 167 MGD, though the National Pollution Discharge Elimination System (NPDES) permitting program limits the amount of treated wastewater that can be discharged to the San Francisco Bay to 120 million gallons per day (MGD) average dry weather flow. This is due to potential impacts of additional freshwater discharges to saltwater marsh habitat, as well as pollutant loading to the San Francisco Bay. The NPDES permit contains a trigger that, if the 120 MGD average dry weather effluent flow is exceeded, additional mitigation activities are required. Currently, discharges are averaging 110 MGD.

#### **WASTEWATER CONVEYANCE**

Wastewater conveyance facilities within Tasman East are owned and maintained by the City of Santa Clara Department of Water and Utilities (SCDW&U). The facilities consist of gravity pipe lines constructed in 1973 with vitrified clay (VCP), as well as the Primavera Lift Station, which consists of 6 identical Flygt 3127 pumps having an estimated total capacity of 5.7 mgd . This station handles wastewater from Tasman East, as well as incoming flows from a 24-inch gravity main in Tasman Drive that runs northward up Calle Del Sol.

Wastewater flows from Tasman East to the west to a trunk system in Lafayette Street. As it flows north it increases from a 36-inch, to a 42-inch, then to a 48-inch gravity line then enters a control chamber to the Rabello Pump Station and the Northside Pump

Station. These two-stations work in parallel to convey flows through a combination of 36-inch Force Mains, a Junction Structure, and a 48-inch Force Main to the Santa Clara Influent Junction Structure. This junction combines City of San Jose's system and the Santa Clara system just prior to entering the SJ/SC RWF.

Figure 08-3-2 shows an overview of the City's Wastewater Conveyance System.

#### **WASTEWATER GENERATION RATES**

Based on 2013 and 2014 water billing records in the City's customer billing database, existing Base Water Flow (BWF) of 0.036 MGD is generated at the site. Assuming full build-out at the existing Light Industrial Zoning Designation (50% FAR and 0.15 gpd/sf wastewater generation), 0.157 MGD would be generated.

In April 2016, RMC Water and Environment prepared the City's Sanitary Sewer Master Plan to guide improvements to the City's wastewater system to accommodate current and future development. The study used future (based on Phase III Development of the 2035 General Plan) Peak Wet Weather Flow (PWWF) assumptions to analyze the system. The 2035 General Plan indicates a land use designation for Tasman East of "High Density Residential," with a density of 40 Dwelling Units per Acre, which would yield a BWF of 0.336 MGD.

#### **WASTEWATER SYSTEM CAPACITY**

The Sewer Master Plan indicates that the Rabello and Northside Pump Stations will be operating effectively

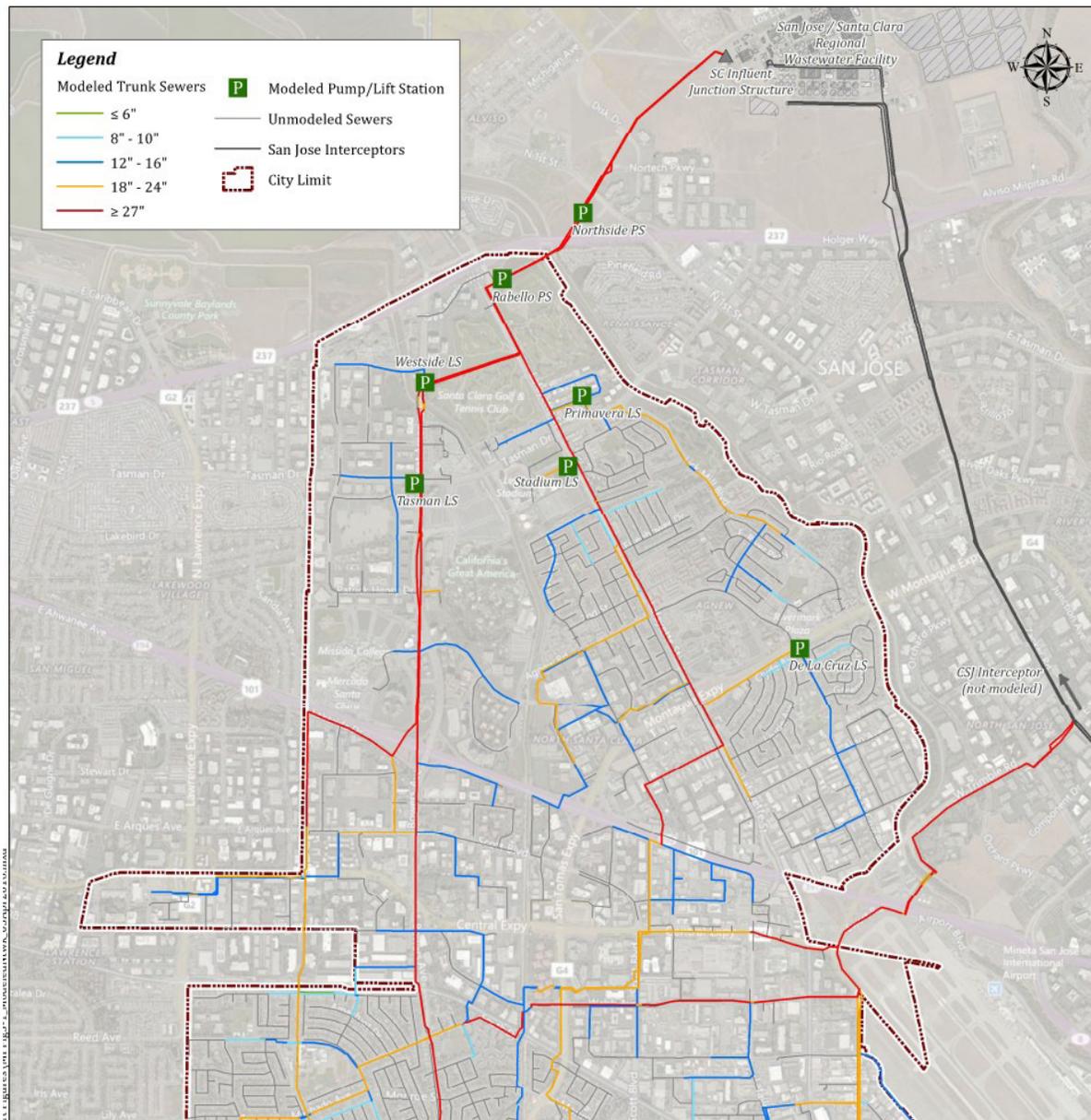
at the Estimated Firm Capacity (total of ~41 MGD) during future PWWF conditions. The study indicates that the Primavera Lift Station has a capacity of 5.7 MGD, and projects flows of 2.0 MGD in 2035. The Master Plan does not indicate any other elements of the conveyance system between Tasman East and the SJ/SC RWF that are anticipated to need upgrades before 2035.

In the event that more development occurs than is anticipated by the 2035 General Plan, the Firm Capacity of the Rabello and Northside Pump Stations will need to be upgraded to meet the demand. The upgrades would include additional wet well and pumping capacity as well as, potentially, force main improvements.

#### **Potable Water Facilities: Water Supply and Demand**

Potable water in the City of Santa Clara comes from three sources, including local, city-owned wells; the Santa Clara Valley Water District (SCVWD); and the San Francisco Public Utilities Commission (SFPUC). In Tasman East, water is provided entirely by the SFPUC through turnouts to the Bay Division Pipelines of the Hetch Hetchy delivery system. Figure 3 shows sources of water by area.

Table 1 indicates the anticipated volume of water that will be used from each source to meet the



expected demands projected in the City's 2010 Urban Water Master Plan (UWMP).

The City's contract with the SFPUC indicates that if certain conditions are met, the City may be required to reduce or eliminate its take from SFPUC.

If the City needed a difference source of water supply than from SFPUC, the City would consider maintaining its existing 2010 UWMP total water supply projections by increasing groundwater utilization, increasing imported SCVWD surface water supply, or a combination of the two supplies.

**WATER DISTRIBUTION**

The water distribution system is owned and operated by the City of Santa Clara Department of Water and Sewer and consists of a pipe network which lies predominantly beneath the traveled roadways in the public street rights-of-way, and a system of reservoirs that serve to store water and regulate pressures. The City is split into 4-distinct pressure zones and the project site is in Zone I.

Within Tasman East's existing streets, 12-inch asbestos cement mains (constructed in 1973) connect to 12-inch mains in Lafayette Street (asbestos cement, constructed 1971) on the west, and in Tasman Drive (cast iron, constructed in 1986) to the south .

Figure 08-3-2 City of Santa Clara wastewater conveyance system. Source: City of Santa Clara Sanitary Sewer Master Plan Update, Final Report, April 2016.

### RECYCLED WATER

South Bay Water Recycling has been serving the City of Santa Clara for more than 10-years. There are currently 33-miles of recycled water pipelines within Santa Clara's city limits with 224 active recycled water services.

There are no recycled water facilities within Tasman East, though the main transmission line from San Jose enters the City of Santa Clara in Tasman Drive on the west bank of the Guadalupe River. At the intersection of Calle Del Sol and Tasman Drive is a 30-inch transmission main.

### GAS FACILITIES

The site is served gas by Pacific Gas and Electric (PG&E) facilities, including a 4-inch distribution main on the east side of Lafayette street that serves 2-inch distribution mains in Calle Del Mundo (south side of street), Calle De Luna (north and west side of street), and Calle Del Sol (west side of the street). Additionally, there is a transmission main on the west side of Lafayette Street at Tasman East's western frontage. The system was installed to serve the existing industrial land uses in Tasman East.

### ELECTRICAL FACILITIES

The City of Santa Clara's municipal electric utility, Silicon Valley Power (SVP), provides electric utility power to all residences as well as commercial and industrial businesses in the City. In 2013, SVP's power mix was provided from natural gas (43.7 percent), renewable resources (24.2 percent), large hydroelectric (17.77 percent), coal (8.4 percent), and unspecified

**TABLE 1: WATER SUPPLY PROJECTIONS BY WATER SOURCE (WITH SFPUC) (ACRE-FY/YR)**

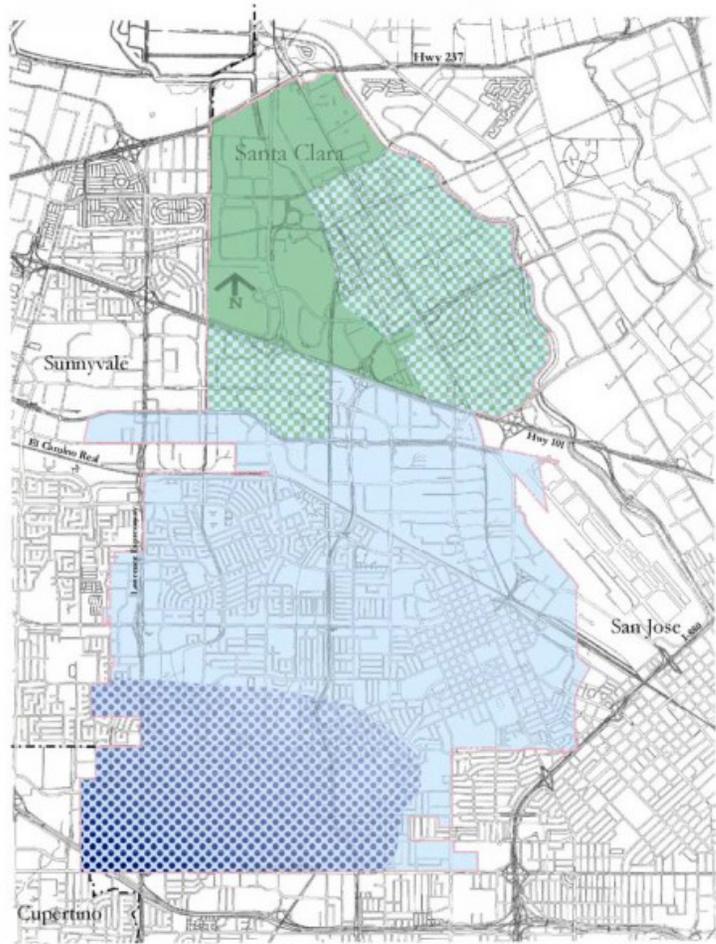
SOURCE	2010	2015	2020	2025	2030	2035
Groundwater	13,980	23,048	23,048	23,048	23,048	23,048
SFPUC	2,454	5,040	5,040	5,040	5,040	5,040
SCVWD	4,372	4,570	4,570	5,236	5,236	5,236
Recycled Water	2,409	4,000	4,000	4,300	4,500	4,500
Conservation	0	694	694	795	930	930
Total	23,215	37,352	38,419	38,698	38,754	38,754

**TABLE 2: WATER SUPPLY PROJECTIONS BY WATER SOURCE (WITHOUT SFPUC) (ACRE-FY/YR)**

SOURCE	2010	2015	2020	2025	2030	2035
Groundwater	13,980	23,048	23,048	23,048	23,048	23,048
SFPUC	2,454	5,040	0	0	0	0
SCVWD	4,372	4,570	4,570	5,236	5,236	5,236
Recycled Water	2,409	4,000	4,000	4,300	4,500	4,500
Conservation	0	694	694	795	930	930
Total	23,215	37,352	33,379	33,658	33,714	33,714

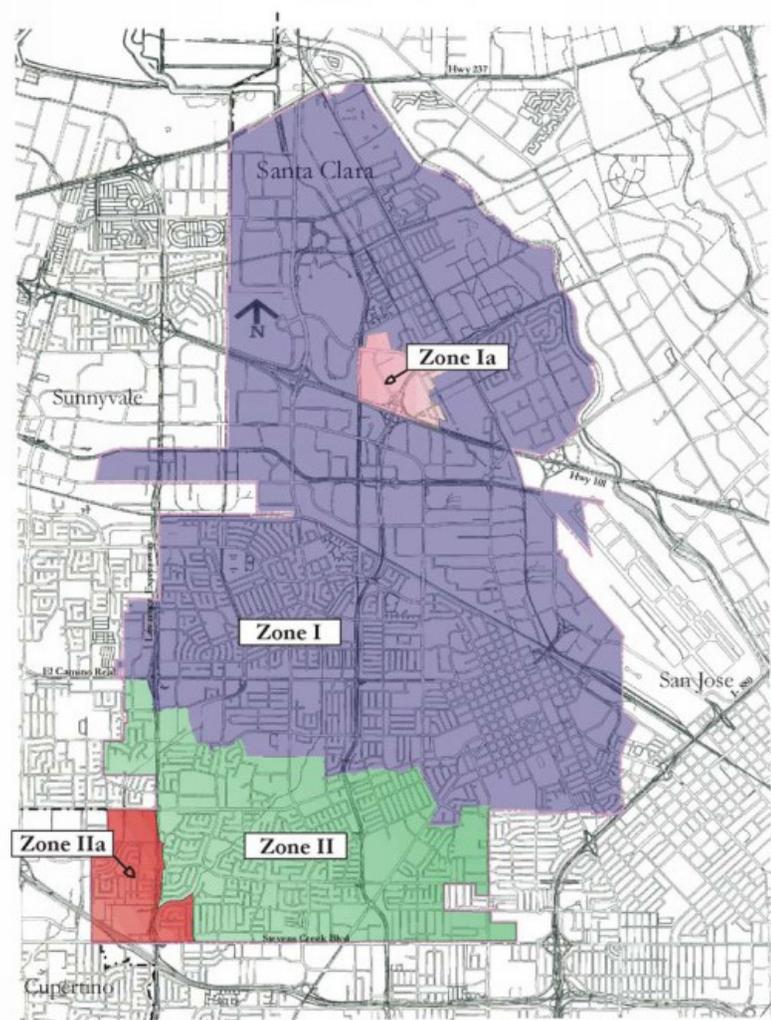
**TABLE 3: WATER USE PROJECTIONS (ACRE-FY/YR)**

	2010	2015	2020	2025	2030	2035
Total Water Use	23,213	31,259	33,053	34,605	36,071	37,433



- SFPUC Hetch-Hetchy
- Blend of SFPUC Hetch-Hetchy and Well Water
- City of Santa Clara Well Water
- A Blend of Well Water and SCVWD

**Figure 08-3-3** Source of Water by surface area for the City of Santa Clara. Source: 2010 Urban Water Management Plan, City of Santa Clara Water Utility



**Figure 08-3-4** Water pressure zones for the City of Santa Clara. Source: 2010 Urban Water Management Plan, City of Santa Clara Water Utility

sources of power, meaning electricity from transactions that are not traceable to specific generation sources (6.0 percent).

The existing electrical distribution system consists of both overhead and underground facilities. SVP's electric distribution maps indicate that overhead 12kv lines at the rear property lines serve all parcels within the Project Area. At the project frontage are 3-separate overhead 115kv transmission lines owned by Pacific Gas and Electric, as well as an underground 230kv SVP underground transmission line which turns east and runs along the northern boundary of Tasman East.

### TELECOMMUNICATIONS

AT&T and Comcast have communications infrastructure adjacent to Tasman East on an overhead joint pole line that runs north/south along the east side of Lafayette Street. The individual parcels within Tasman East are served from overhead joint pole lines at the rear property lines.



Figure 08-3-5 Electrical infrastructure diagram for Tasman East. Source: Silicon Valley Power EC Maps

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## 08.4 TRANSPORTATION DEMAND MANAGEMENT

### PARKING

#### Existing Regulations and Framework

Existing on-street parking within the study area along Calle De Luna and Calle Del Mundo is unpriced and not time limited during the day and is prohibited between the hours of 12:00 a.m. and 5:00 a.m. In order to maintain right-turn lanes, curbside parking along Calle Del Sol is prohibited entirely. All on-street parking within the study area is prohibited on Levi's Stadium event days, with parking signage updated seasonally to reflect event schedules, see Figure 08-4-1. All existing off-street supply is privately owned and regulated at the discretion of property owners.

#### Surrounding Neighborhoods

On-street parking on public streets in the neighborhood directly south of the study area, across Tasman Drive, is unregulated (i.e. on Calle De Escuela) However, some residential streets in the neighborhood are privately maintained, with public and event parking prohibited at all times.

The proposed CityPlace development, just north of the Specific Plan area, will employ a park-once strategy aimed at allowing visitors, employees, and residents to leave their vehicles in a single location that is able to provide convenient access to multiple on-site destinations. Given the mixture of uses planned for development, parcels with non-conflicting demand are anticipated to accommodate parking demand by sharing the supply. Given that different uses have different peak times, the development is slated to build slightly less parking than would otherwise be required. In order to promote shared parking and reinforce the park-once strategy, off-street parking will be provided in locations

with close proximity to high-demand locations. On-street parking will be provided along some local streets in the development, especially within the mixed-use core to help meet short-term parking needs and serve ground-floor retail. A parking management and wayfinding program will be implemented where feasible to provide real-time information on parking availability and location. The proposed parking supply rates for CityPlace, based upon shared use adjustments to the city code, are provided in Figure 08-4-2.

Per the Draft Environmental Impact Report for the project, CityPlace will provide more than 27,800 parking spaces, which amounts to more than the projected peak parking demand of less than 24,000 vehicles.



Figure 08-4-1 Existing On-Street Parking Regulations

Figure 08-4-2 CityPlace Parking Supply Requirements

LAND USE	ZONING CODE REQUIREMENT (SPACES)	CITYPLACE SUPPLY RATE (SPACES)
Residential	1.0 to 2.5 per unit	1.5 per unit
Retail	5.0 per 1,000 sf.	4.5 per 1,000 sf.
Office	3.3 per 1,000 sf.	3.0 per 1,000 sf.
Restaurants	Greater of 5.0 per 1,000 sf or 1.0 per 3 seats	1.5 per 1,000 sf.
Entertainment	Greater of 31.25 per 1,000 sf of usable seating area or 1.0 per 4 seats	2.5 per 1,000 sf.
Hotel	1.0 per room	1.0 per room

**Santa Clara General Plan 2010-2035**

The City of Santa Clara 2010-2035 General Plan Update, adopted in 2010, lays out broad goals and specific policies in regard to a host of topics including land use, circulation, and housing. General mobility and transportation goals and policies from the Plan that pertain to parking at new developments on the scale of the specific plan area include: providing parking at levels that do not exceed average demand and encourage the use of non-auto modes, flexibility in addressing unique development types and locations, allowances for lower parking standards for mixed-use or transit-proximate developments, and parking standards that promote a range of non-transportation goals including economic development and public safety, among others. Many of these goals and policies would support an aggressive TDM program and lower-than-typical parking requirements at Tasman East.

**Existing Vehicle Ownership**

The census tract that encompasses Tasman East contains approximately 3,400 existing housing units, more than half of which are single-family homes. The vehicle ownership ratio within this census tract is approximately 1.81 vehicles per occupied housing unit, rising to 2.18 vehicles per unit when narrowing to owner-occupied units alone compared to 1.52 vehicles for units occupied by renters. Most housing within the Specific Plan area will be in multi-family buildings, and the proposed unit mix is more diverse than exists in the area today. Those facts, as well as the demand-reducing effects of unbundling parking from residential leases and of the robust suite of TDM strategies proposed in this Chapter, should mean that the future vehicle ownership ratio within Tasman East is likely to be below the existing ratios.

**Figure 08-4-3 Existing City Parking Requirements**

Code Analysis Land Use	Low	High	Code Req	Section	Required Spaces		
	Size	Size			Low	High	
Studios	294	315	units	1.0	Table 8.12	294	315
1 BR Apartments	1,932	2070	units	1.5	Table 8.12	2,898	3,105
2 BR Apartments	1,722	1845	units	2.0	Table 8.12	3,444	3,690
3 BR Apartments	252	270	Units	2.5	Table 8.12	630	675
Open Space (est)	10	10	acres	1		10	10
						7,276	7,795
	4,200	4,500				(1.73)	(1.73)

**Figure 08-4-4 Existing Non-Residential Parking Requirements**

Use	Planned SF	Code Requirement (per 1,000 SF)	Required Spaces	Exceptions
Retail Stores, Shops, Services, Restaurants, Bars, Taverns	100,000	5	500	1 per 3 seats for restaurants, bars, and taverns if greater

**Parking Minimums**

As shown in Figure 08-4-3, existing City requirements result in a parking ratio of 1.73 spaces per unit, which is equivalent to between 7,376 and 7,795 spaces within the East Tasman Area. For retail, restaurant, and other similar land uses, minimums are generally five spaces per 1,000 square feet, with some exceptions by use; see Figure 08-4-4. Those totals are well above observed parking ratios in a range of mixed-use districts across the country,

which tend to fall between 1 and 2.5 spaces per 1,000 square feet of non-commercial space. Given Tasman East’s proximity to transit and its mixed-use character, the ranges seen in other cities might represent a more appropriate parking ratio for the Specific Plan area; see Figure 08-4-10.

## EXISTING TDM FRAMEWORK

General mobility and transportation goals and policies from the City of Santa Clara 2010-2035 General Plan Update that pertain to transportation demand management (TDM) at new developments on the scale of the specific plan area include: implementation of TDM programs at new developments to decrease vehicle miles traveled (VMT) and promote increases in average vehicle occupancy during commute hours, site design measures that encourage the use of modes other than single-occupancy vehicles, and participation in shuttle and other programs that encourage the use of regional transit systems, among others

In 2013 the City expanded further on the vision set forth in the General Plan by adopting the Santa Clara Climate Action Plan (CAP), which outlined strategies to create a more sustainable, healthy, and livable community. The robust TDM policies identified in the CAP may not be suitable for the entirety of Santa Clara and are thus applicable only to the Transportation Management Districts shown in Figure 08-4-6. The Project site is within Transportation Management District 1 (North of Caltrain). As shown in Figure 08-4-5, projects consisting of more than 25 housing units or containing in excess of 10,000 non-residential square feet are required to achieve a minimum VMT reduction. VMT reductions are not identified for mixed use developments within District 1 because of the limited amount of mixed-use development in the district. However, reductions on the order of 20% are identified for mixed-use projects in other districts.

Figure 08-4-5 Minimum VMT Reduction Required by Land Use

	GENERAL PLAN LAND USE DESIGNATION							
	Medium Density Residential	High Density Residential	Regional Commercial	Neighborhood Mixed Use	Community Mixed Use	Regional Mixed Use	Low Intensity Office/R&D	High Intensity Office/R&D
<b>Average trip generation rate*</b>	6	7	8	8	8	8	11	7
<b>Minimum % VMT reduction per project</b>								
<b>(Minimum % VMT reduction per project from TDM programming)</b>								
<b>District 1</b>	15%	20%	N/A	N/A	N/A	N/A	20%	20%
	(5%)	(10%)					(10%)	(10%)

\*Daily number of trips per housing unit or per 1,000 non-residential square feet

In order to achieve these objectives, the Plan establishes the following goals for transportation and land use:

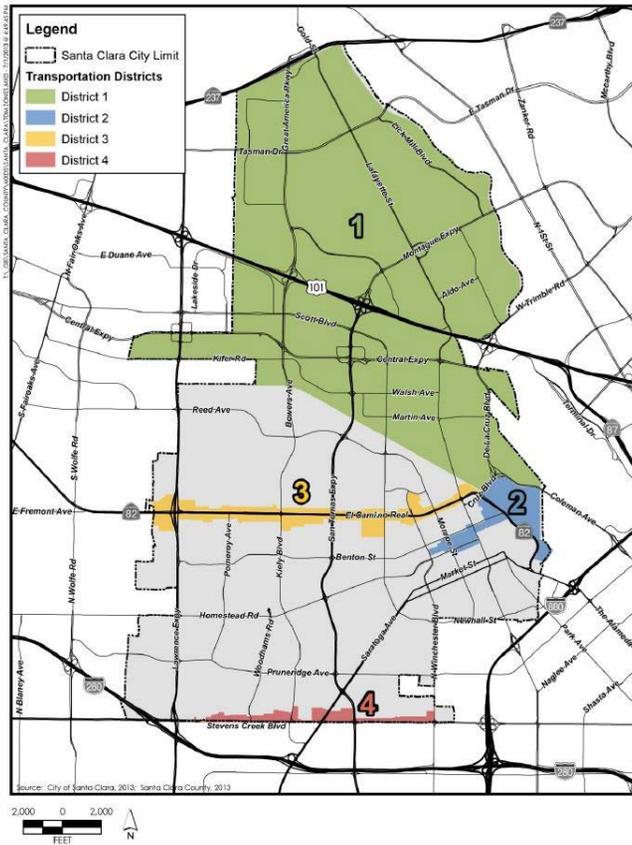
- Establish land uses and transportation options that minimize single-occupant vehicle use.
- Require new development located in the city's transportation districts to implement a TDM program to reduce drive-alone trips.
- Revise parking standards for new multi-family residential and nonresidential development to allow that a minimum of one parking space, and a recommended level of 5% of all new parking spaces, be designated for electric vehicle charging.

## TDM STRATEGY

### Approach and Rationale

While the plan area is well situated to facilitate multimodal lifestyles, a robust package of incentives, ongoing programs, and infrastructure investments will be critical in getting residents and visitors to choose modes other than single-occupancy vehicles for as many trips as possible because the area around Tasman East is still a place in which driving is the dominant transportation mode today. The effects of TDM programs implemented across the country – including some of the most successful in the country which are in the Bay Area – show that targeted programming and infrastructure can induce people to make more sustainable choices than they might otherwise. Tasman East aims to apply lessons from those encouraging examples.

**Figure 08-4-6** Santa Clara Transportation Management Districts - Source: City of Santa Clara



**CIRCULATION**

Tasman East’s transit-oriented nature and its proximity to major residential, retail, and office developments north of Montague Expressway in Santa Clara, San Jose, and Milpitas make the plan area uniquely positioned to encourage multimodal lifestyles. While the default transportation option in much of the Santa Clara Valley is the private automobile, Tasman East is just a short walk or bike ride from a range of activities, and its location adjacent to the Valley Transportation Agency’s light rail system and to Amtrak’s Capitol Corridor intercity rail service will give residents and employees easy non-auto access to destinations near and far.

The transportation vision laid out in this chapter seeks to maximize the mobility opportunities associated with the plan area’s context. Providing an additional roadway connection through the center of the project site will make it easy to travel through the site on foot or by bike. With pedestrian-only connections through several green spaces, it will be quick and easy to walk from anywhere on the site to the retail- and office-rich environment at CityPlace. Wide sidewalks and relatively narrow road widths will make pedestrians feel safe and comfortable traveling through the site and will facilitate connections to the major adjacent transit stations.

Ongoing programs will also make it easier to get by without using a car. A proposed Transportation Management and Benefits District will administer a range of transportation services that will make

using bicycles and transit easier, and required transportation demand management programs for each development in the neighborhood will incentivize travel by modes other than single-occupancy vehicles. Parking management will ensure that parking is available and easy to find for those who find it necessary to travel by car.

This chapter details the ways different modes are expected to travel to and through the site and the range of other plan elements that seek to create a range of travel options and encourage environmentally-sensitive and spatially efficient travel choices.

The Tasman East TDM program is centered on an ambitious target for reducing single-occupancy vehicle trips and vehicle miles traveled relative to the rates seen today in the surrounding area. A new plan-area-wide entity, The Tasman East Transportation Coordination Group (TETCG), comprised of property owners and developers of residential development, will be charged with implementing and managing programs that are most cost effectively executed at a neighborhood scale. The owners and managers of individual parcels will be paying and voting members of the TETCG, and they will also be required to implement their own site-level programs that ensure that they are helping to encourage their residents, employees, and visitors to make smart travel choices. The TETCG and the owners of individual parcels will also be required to regularly monitor travel behavior and adjust programs to ensure that they are working effectively. Finally, the City will play an important role in holding everyone accountable and supporting various players as they work to meet targets.

#### **Sitewide Mode Split**

Because the strategies outlined in the TDM program below are generally aimed at encouraging people to shift to modes other than private automobiles, this should translate VMT reduction on the order of 20%. This reduction is consistent with the city's Climate Action Plan. This reduction is considered reasonable given the many characteristics of the site that make it particularly ripe for encouraging multimodal lifestyles, including its high levels of density relative to its surroundings, its mixed-use nature, its close proximity to what is anticipated to be a major shopping destination in CityPlace, and its location in the center of a regionally important cluster of jobs. The TDM program components described below have

been designed to enable the neighborhood to comfortably comply with the target.

#### **SITEWIDE PROGRAM COMPONENTS**

To reach the target, the following are TDM program components that shall be provided for the entire site and administered by the TETCG, which is described below.

##### **Tasman East Transportation Coordination Group (TETCG)**

This organization will provide transportation services, support for non-motorized modes, and/or personal travel planning assistance. The programs implemented are typically most cost-efficient when implemented at the district scale, rather than by single building managers.

The remainder of this section describes the specific TDM programs that are anticipated to be under the TETCG's purview.

##### **Universal Transit Pass Program**

Universal transit passes typically provide unlimited transit rides on local or regional transit providers for a monthly fee that is lower than the individual cost to purchase a pass, based on a bulk discount provided by the transit agency. By providing a universal pass to all residents and/or employees of a given site, tenants who currently do not use transit will often try taking transit since there is no cost barrier to do so. For this reason, universal transit pass programs are much more effective at reducing vehicle trips than a standard transit subsidy.

The TETCG will work to create partnerships with the Valley Transportation Agency (VTA) to establish a universal pass for local transit services that the managers of individual parcels can choose to buy into as part of their own TDM strategies. VTA's Smart Pass program is a universal transit

pass program that is available to any residential complex with 25 units or more in Santa Clara County. The program requires that building management purchase a pass for every resident or employee of the development. It is available in two forms: (1) "Regular," which is valid for unlimited rides on all VTA service, and (2) "Express," which is valid for unlimited rides on all VTA services as well as the Highway 17 Express, Dumbarton Express, and Monterey-San Jose Express bus service. Smart Pass pricing is based on the number of residents/employees and level of VTA services at a given site.

The TETCG would be responsible for establishing the Smart Pass program. The TETCG will purchase Smart Passes (currently priced at \$46 per pass for purchases of 3,000 passes or greater) for each resident of Tasman East after occupancy of 3,000 residents in constructed units. The TETCG must offer Smart Passes for a period of three years. Afterwards, the TETCG may propose an alternate measure that is at least as effective in reducing single vehicle trips as the Smart Passes. Individual parcel owners would be represented on the TETCG and be required to defray the costs of covering their residents and/or employees.

##### **Bike Sharing**

Bike share programs reduce the barriers of owning a bike and make it convenient for people to rely on bicycling for short trips, thereby reducing the dependency on vehicles for such trips. Flexible bike share systems, such as Social Bicycles and Zagster, use "smart bikes" to establish a system at a much lower startup cost, compared to standard bike share systems with fixed infrastructure like docking stations, and they generally allow for more flexibility for users of the system. "Smart Bikes" are equipped with GPS monitoring, touch pad reservations

and access, and online fleet monitoring. Flexible bike share systems use the publicly available bike parking supply by allowing users to electronically lock a bike to any existing bike rack, and they often have a pricing model that encourages trips within a core area.

The TETCG shall establish and operate a district-wide bike share program. In addition, the TETCG shall monitor the progress of the regional Bay Area Bike Share program and work to establish a dock within Tasman East if the system expands to north San Jose and/or the City of Santa Clara.

#### **Electric Scooters**

Electric scooter corrals shall be provided within multiple areas in the Specific Plan Area to facilitate the access and parking of e-scooters in a manner harmonious with the pedestrian environment.

#### **On-Site Bicycle Repair Facilities**

On-site bicycle repair facilities range from a simple do-it-yourself bicycle stand with support tools including tire gauges, air pumps, wrenches, and air compressors for tires, to a full-service, staffed bicycle repair facility. Larger developments often include additional amenities such as bike supply vending machines. Investments in bicycle repair facilities reduce barriers to owning and riding a bicycle and help keep bicycles in circulation.

On-site bicycle repair facilities shall be provided for district-wide use at a central location(s), and these facilities shall be staffed as needed and maintained by the TETCG.

#### **Information and Marketing**

Effective marketing and promotion of TDM programs are essential to their success. If residents, employees, and the general public are unaware of the available transportation options and programs, they will not take advantage of them, especially in areas like the Santa Clara Valley where driving is the default mode choice. Ongoing and tailored marketing efforts will be needed to ensure that programs are well utilized. Information on transportation options and/or links to the appropriate website and/or app shall be distributed to all prospective residential tenants and all prospective employees who receive an offer to work within the neighborhood. It will also be included as a component of resident and employee welcome packets or employee orientation. Furthermore, information and/or links shall be posted in prominent locations for all residents and employees, such as apartment lobbies, bus stops, and/or lunchrooms.

Below is an overview of the two information and marking measures that shall be administered by the TETCG on a district-wide level:

##### *Resident and Employee Handbook*

At the beginning of the year, an up-to-date transportation handbook shall be distributed either in print or electronically to all new and existing residents and employees. This information should also be posted on the TETCG's website, and distribution of the information should evolve with advances in information technology. The handbook should at a minimum include the following information:

- Transportation coordinator contact information for each parcel

- Commute trip planning information, including links to the 511 Rideshare program
- Subsidies or financial incentives provided through the TDM program
- Walking and biking routes within the area, including estimated walk and bike times to key destinations
- Local transit options and schedules, including links to VTA, Capitol Corridor, BART, and Caltrain schedules and route maps

##### *Website (initial) and Mobile App (long-term)*

Creating a website or smartphone application that serves as a comprehensive source of transportation and TDM information has proven highly effective in raising awareness of alternatives to drive-alone mobility and commute options. Such tools can provide specific information on costs, benefits, and multimodal options available to employees and residents as well as links to citywide or regional information. The TETCG shall develop a TDM informational website for release by the time that, at maximum, 50% of residential units are occupied. Development of a smartphone application and/or another channel for an as-yet undeveloped technology should be a long-term consideration as warranted by need and interest.

#### **REQUIRED PARCEL-SPECIFIC TDM COMPONENTS**

Described below are the baseline TDM programs that all new developments will be required to implement at the parcel level. The applicant may also choose to negotiate with the TETCG, public entity, or another property owner/ employer to provide select baseline services on their behalf. The project applicant must submit documentation showing an agreement with the TETCG or other entity to

provide services on their behalf, as well as a description of the services that will be rendered.

#### **TETCG Membership**

Each parcel/project site shall join the TETCG and all tenants shall be TETCG members in perpetuity.

#### **Establish Site-Wide Mode Share Target, Commit to Monitoring and Reporting Routines, and Submit TDM Plan**

Establishing robust monitoring programs is critical to ensuring that individual developers/property owners have the data they need to adjust TDM programs to make them as effective as possible. Reporting can help ensure that the TETCG can adjust its own efforts and can help the City ensure that the neighborhood as whole is meeting its target mode split. Periodic surveys or data on travel behavior collected using an accepted alternative approach will be the cornerstone of this site-specific monitoring and reporting effort. Developers/property owners should adjust TDM programs over time based on the data.

Developers/property owners must summarize the details of the TDM programs to be implemented, the site-wide mode share target, and monitoring and reporting routines in a TDM Plan to be submitted to the City during the entitlement process.

*Plan Requirement: Before building permits will be issued, developers/property owners shall submit a TDM Plan that includes descriptions of all TDM programs to be implemented, a mode share target, and a plan for periodically monitoring travel behavior, reporting on it, and adjusting TDM programs based on it.*

#### **On-Site Transportation Coordinator**

An on-site employee transportation coordinator shall be established for each parcel/project site to implement and manage the TDM program and to serve as a liaison between the developer/property owner and the TETCG. At a multi-tenant parcel, it may be more feasible and efficient for the property owner to designate a single TDM coordinator rather than establish a transportation coordinator for each individual tenant. This role may be filled on a full-time or part-time basis.

This position is essential in ensuring that residents and employees are aware of transportation options and how to utilize TDM programs. It will also ensure that tenants have a point of contact for any questions that may arise, that parcel-level programs run smoothly, and that programs and services are coordinated with the TETCG and its other members.

Typical roles of transportation coordinators include:

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

*Plan Requirement: Identify an individual or job classification that will serve as the on-site transportation coordinator and if this will be a full or part-time*

*position. All applicants must describe the duties and responsibilities of the transportation coordinator.*

#### **Bicycle Parking and Amenities**

Adequate bicycle parking encourages bicycle ridership by offering riders the same level of access and security as motorists. On-site bicycle parking should include bike lockers, bike cages, or indoor bicycle parking for those parking long-term such as residents and on-site employees, as well as convenient short-term racks for visitors. In addition, showers and changing facilities for employees shall be provided for parcels containing commercial space by the developer/property owner.

*Plan Requirement: Provide short-term and long-term bicycle parking spaces in prominent and convenient locations in all buildings. For residential buildings, long-term bicycle parking shall be provided at a minimum ratio of 0.5 spaces per unit. For retail portions of buildings, provide two short-term bicycle parking spaces per 1,000 square feet of gross floor area.*

*Provide a description of the type of short- and long-term parking facilities that will be provided. Indicate on a site/building plan where bicycle parking, as well as showers and lockers (as applicable), will be located.*

#### **OPTIONAL PARCEL SPECIFIC PROGRAM COMPONENTS**

##### **Car Sharing**

Car sharing programs allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis. Car sharing has been shown to significantly reduce vehicle ownership and VMT. Making these vehicles accessible to residents/employees increases the vehicle availability for non-car owners and reduces the need for households to own more than one vehicle.

A Transit Cooperative Research Program (TCRP) publication “Car-Sharing: Where and How it Succeeds” provided a comprehensive evaluation of the effects of car sharing programs throughout the U.S. and importantly, the effects on users of such programs. The empirical study findings indicated that on average, about 20 percent of car sharing members give up their car (or a second or third vehicle) and about 40 percent of members forego purchasing a new car.

Two potential car share operators are City CarShare and Zipcar. Scoot is another potential operator and provides flexible electric motor scooter share in the Bay Area. Other car sharing services, such as point-to-point (such as Car2Go) or peer-to-peer (such as Getaround), are also opportunities to reduce residents’ need for private vehicles.

*Plan Option: Developers/property owners shall provide car share spaces at a rate of at least one per 75 units, up to 10 spaces per development, at no cost to car share companies. Parking spaces reserved for car share vehicles should be conveniently placed next to building entrances to promote the use of these vehicles. These vehicles would be reserved for residents/employees but will also be made available to the general public.*

#### **Parking Preference Program**

Parking preference lease-up programs are used by developers/property owners to ensure that a certain proportion of units get filled by residents who do not own a vehicle. This program requires that two waitlists be established, one for prospective households who self-certify that they do not own a motor vehicle, and a second for the entire pool of applicant households. A non-automobile preference is applied by alternating the

selection of qualifying households between those who self-certify that they do not own an automobile and the next household at the top of the entire waiting list. In other words, the first household is selected from the list of those without a vehicle, and the next household is selected from the entire waiting list (regardless of vehicle ownership), and so on until all spaces are filled.

*Plan Option: Developers/property owners may allocate residential vacancies in a manner to ensure that a certain proportion of households do not own a motor vehicle. The tenant selection process is described above.*

#### **Universal Transit Pass**

Developers/property owners can opt into the site-wide universal transit pass program administered by the TMBD. The trip-reduction advantages of universal pass programs are discussed in the section describing the responsibilities of the TMBD.

*Plan Option: Developers/property owners may opt in to the site-wide universal transit pass program and cover the costs of their residents/employees.*

#### **Additional Secure Bicycle Parking**

Developers/property owners can increase the profile of cycling as a transportation option by providing more than the minimum bicycle parking called for in the required TDM plan item.

*Plan Option: Provide 1 secure bicycle parking spaces or more per residential unit and two secure bicycle parking spaces or more per 1,000 square feet of retail gross floor area.*

#### **Car Share Memberships**

Providing a car share membership and covering program membership fees can break down barriers to trying car share and increase the utility of the required car share spaces in reducing the need to own a private vehicle.

*Plan Option: Provide a car share membership and cover program membership fees for each household.*

#### **Residential Guaranteed Ride Home**

Guaranteed ride home programs are typically used as a supportive employee TDM measure. Recently, a number of residential developments have offered similar guaranteed ride home programs to residents. These programs provide security and reduce barriers to using non-auto modes by subsidizing fast and convenient transportation in the event of a qualified emergency. Subsidies should be made available to those who opt to not own and park a car, and may be used for on-demand transit, taxi, and/or transportation network company (TNC) services such as Lyft and Uber.

*Plan Option: Developers/property owners may provide up to \$600 or six (6) trips per year (whichever is lower) to get home in qualified emergencies for residents who do not own a car or rent a parking space.*

#### **Bike Buddy Program**

Bicycling can be intimidating for new users or those not used to it as a means of commuting. A Bike Buddy program pairs a beginning or novice bicyclist with an experienced rider who already knows safe routes and riding techniques. The buddies also provide “safety in numbers” on the road. In many cities, “bike trains” have become a popular way for bicyclists to commute, where

a large group is organized to bike together on a common commuting route

*Plan Option: Developers/property owners may organize and administer a bike buddy program for residents/employees.*

#### **On-Site Amenities and Services**

Offering on-site amenities such as a café, ATM machine, post-office, dry cleaning, pharmacy, as well as other types of retail services can reduce the need for residents/employees to make vehicle trips for small errands and conveniences. Reducing the need for these types of trips makes using other modes of transportation for commuter purposes more feasible by reducing the need for chaining.

*Plan Option: Developers/property owners may provide amenities and services, such as those described above, on-site.*

### **TDM Trip Reductions**

There are challenges inherent in trying to estimate the effects of any one TDM measure. While research on vehicle trip reduction strategies often attempts to isolate the stand-alone effects of implementing such policies and programs to understand the actual relationship between specific strategies and travel behavior, it is difficult to isolate these effects. In practice, TDM measures are implemented concurrently, as they are synergistic. Quantification of potential trip reductions from TDM for both city mandated TDM guidelines, such as San Francisco SF SHIFT Standards, and employer campus programs have been established through metrics set by GHG monitoring agencies like the California Air Pollution Control Officers Association (CAPCOA). In a 2010 report, CAPCOA provides a way to quantify the total impact of different strategies implemented together in various areas and communities throughout the US. The CAPCOA report is based on an extensive literature review of the effectiveness of TDM and other GHG-reduction strategies implemented across the US, and provides clear guidance on the assumptions and limitations of each measure.

TDM strategies are not additive but rather complementary and synergistic. When additional measures are implemented, the marginal benefit of each new program diminishes because the baseline it is working from has already been reduced by prior strategies. This means that if one implements 11 strategies, with each estimated to reduce vehicle trip making by 10%, one would not expect a 110% overall reduction in vehicle trip making (rather, it would be 69%, see methodology below). To prevent this kind of result, the CAPCOA methodology includes maximum reduction levels associated with each category of strategies, based on existing research. For

example, parking policy and pricing strategies can achieve a maximum reduction of 20%. This is separate from the impact of other TDM strategies, which can achieve a combined maximum reduction of 15%.

In general, the calculation is as follows : (note: all reductions are expressed as a % reduction of trips, with all percentages expressed as decimals)

- Trip Reduction Estimate =  $1 - (1 - \text{Unbundle Parking}) * (1 - \text{Transit Pass Subsidy})$
- Estimated maximum VMT reductions: Unbundle Parking (13%), Transit Pass Subsidy (20%)
- Trip Reduction Estimate =  $1 - (1 - .13) * (1 - .20)$

Multiple trip reduction components are calculated in a similar way. For instance:

- Trip Reduction Estimate =  $1 - (1 - \text{TDM \#1}) * (1 - \text{TDM \#2}) * (1 - \text{TDM \#3}) * \dots\text{etc.}$

### **Potential Trip Reductions**

CAPCOA strategy designations, descriptions and potential trip reduction ranges for the TDM elements of this program are shown in Figure 8.4.7. Elements listed as supporting strategies are those that when grouped with other measures have potential trip reduction calculated by CAPCOA but do not have sufficient evidence to support effective trip reduction on their own.

### **Plan Level Trip Reduction**

Plan level trip reduction was accounted for in the EIR, and was estimated to meet or exceed the 10% trip reduction requirement. See figure Figure 08-4-7.

Figure 08-4-7 Plan Level Trip Reduction

CAPCOA Strategy	CAPCOA Description	Tasman Project Elements	CAPCOA Trip Reduction
Increase Density (LUT-1)	Designing the Project with increased densities reduces GHG emissions associated with traffic in several ways. Density is usually measured in terms of persons, jobs, or dwellings per unit area. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. This strategy also provides a foundation for implementation of many other strategies which would benefit from increased densities. For example, transit ridership increases with density, which justifies enhanced transit service.	<ul style="list-style-type: none"> <li>High-density residential</li> </ul>	0.8 - 30.0%
Increase Diversity of Urban and Suburban Developments (LUT-3)	Having different types of land uses near one another can decrease VMT since trips between land use types are shorter and may be accommodated by non-auto modes of transport. For example when residential areas are in the same neighborhood as retail and office buildings, a resident does not need to travel outside of the neighborhood to meet his/her trip needs.	<ul style="list-style-type: none"> <li>On-site retail</li> <li>On-site open space</li> <li>Neighborhood serving amenities</li> </ul>	0.9 - 30.0%
Increase Destination Accessibility (LUT-4)	The project will be located in an area with high accessibility to destinations. Destination accessibility is measured in terms of the number of jobs or other attractions reachable within a given travel time, which tends to be highest at central locations and lowest at peripheral ones. The location of the project also increases the potential for pedestrians to walk and bike to these destinations and therefore reduces the VMT.	<ul style="list-style-type: none"> <li>Proximity and access to City Place</li> </ul>	0.9 - 30.0%
Increase Transit Accessibility (LUT-5)	Locating a project with high density near transit will facilitate the use of transit by people traveling to or from the Project site. The use of transit results in a mode shift and therefore reduced VMT. A project with a residential/commercial center designed around a rail or bus station, is called a transit-oriented development (TOD).	<ul style="list-style-type: none"> <li>Proximity to transit including VTA light-rail</li> </ul>	0.5 – 24.6%
Integrate Affordable and Below Market Rate Housing (LUT-6)	Income has a statistically significant effect on the probability that a commuter will take transit or walk to work. BMR housing provides greater opportunity for lower income families to live closer to jobs centers and achieve jobs/housing match near transit. Lower income families tend to have lower levels of auto ownership, allowing buildings to be designed with less parking which, in some cases, represents the difference between a project being economically viable or not.	<ul style="list-style-type: none"> <li>A minimum of 10 percent of all units that receive a discretionary approval before 2021 will be affordable by deed restriction to households making an average of 100% of area median income with this number increasing to 15% thereafter.</li> </ul>	0.04 – 1.20%

CAPCOA Strategy	CAPCOA Description	Tasman Project Elements	CAPCOA Trip Reduction
Improve Design of Development (LUT-9)	The project will include improved design elements to enhance walkability and connectivity. Improved street network characteristics within a neighborhood include street accessibility, usually measured in terms of average block size, proportion of four-way intersections, or number of intersections per square mile. Design is also measured in terms of sidewalk coverage, building setbacks, street widths, pedestrian crossings, presence of street trees, and a host of other physical variables that differentiate pedestrian-oriented environments from auto-oriented environments.	<ul style="list-style-type: none"> <li>• Neighborhood street design</li> <li>• Bicycle Parking</li> </ul>	3.0 – 21.3%

**Project Level Trip Reduction**

Developers are expected to prepare a TDM Plan demonstrating that their selection of TDM strategies will meet a further 10% trip reduction. See figure Figure 08-4-8.

**Figure 08-4-8** Project Level Trip Reduction

CAPCOA Strategy	CAPCOA Description	Tasman Project Elements	CAPCOA Trip Reduction
Limit Parking Supply (PDT-1)	<p>The project will change parking requirements and types of supply within the project site to encourage “smart growth” development and alternative transportation choices by project residents and employees. This will be accomplished in a multi-faceted strategy:</p> <ul style="list-style-type: none"> <li>• Elimination (or reduction) of minimum parking requirements</li> <li>• Creation of maximum parking requirements</li> <li>• Provision of shared parking</li> </ul>	<ul style="list-style-type: none"> <li>• 20% of all parking spaces to be counted towards both residential and commercial uses in the Transit Residential zoning district.</li> <li>• Parking ratios below existing minimum parking requirements.</li> </ul>	5.0 – 12.5%
Unbundle Parking Costs from Property Cost (PDT-2)	<p>This project will unbundle parking costs from property costs. Unbundling separates parking from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost from the property cost. This removes the burden from those who do not wish to utilize a parking space. Parking will be priced separately from home rents/purchase prices or office leases. An assumption is made that the parking costs are passed through to the vehicle owners/drivers utilizing the parking spaces.</p>	<ul style="list-style-type: none"> <li>• Partially unbundled parking</li> </ul>	2.6 – 13.0%
Implement Commute Trip Reduction Program – Required Implementation/ Monitoring (TRT-2)	<p>Multi-strategy program that encompasses a combination of individual measures described in sections 3.4.3 through 3.4.9. It is presented as a means of preventing double-counting of reductions for individual measures that are included in this strategy. It does so by setting a maximum level of reduction that should be permitted for a combined set of strategies within a program that is contractually required of the development sponsors and managers and accompanied by a regular performance monitoring and reporting program.</p>	<ul style="list-style-type: none"> <li>• Car-share</li> <li>• End of trip bicycle facilities</li> <li>• Guaranteed ride home program</li> <li>• Information and marketing including commute and active travel planning, transit routes and schedules, web page, and transportation coordinator.</li> <li>• Performance monitoring and reporting</li> <li>• Universal transit pass program</li> </ul>	4.2 – 21.0%
Implement Bike-Sharing Programs (TRT-12)	<p>This project will establish a bike sharing program. Stations should be at regular intervals throughout the project site. The number of bike-share kiosks throughout the project area should vary depending on the density of the project and surrounding area. Bike sharing programs have minimal impacts when implemented alone. This strategy’s effectiveness is heavily dependent on the location and context. Bike sharing programs should be combined with Bike Lane Street Design (SDT-5) and Improve Design of Development (LUT-9).</p>	<ul style="list-style-type: none"> <li>• Bike-share facilities</li> </ul>	Supporting Strategy

CAPCOA Strategy	CAPCOA Description	Tasman Project Elements	CAPCOA Trip Reduction
Provide Electric Vehicle Parking (SDT-8)	This project will implement accessible electric vehicle parking. The project will provide conductive/inductive electric vehicle charging stations and signage prohibiting parking for non-electric vehicles. The benefits of Electric Vehicle Parking may be quantified when grouped with the use of electric vehicles and or Neighborhood Electric Vehicle Network (SDT-3).	<ul style="list-style-type: none"> <li>• Additional EV charging allowances</li> </ul>	Supporting Strategy
Require Residential Area Parking Permits (PDT-4)	This project will require the purchase of residential parking permits (RPPs) for long-term use of on-street parking in residential areas. Permits reduce the impact of spillover parking in residential areas adjacent to commercial areas, transit stations, or other locations where parking may be limited and/or priced.	<ul style="list-style-type: none"> <li>• RPP for surrounding neighborhoods</li> </ul>	Supporting Strategy

## **PARKING STRATEGY**

Getting the parking right will be critical to the success of Tasman East as a vibrant, interesting neighborhood. Provide too much parking and the space required to store cars will squeeze out built area that could generate activity. Requiring too much parking can also make projects less appealing to developers, and make housing less affordable. Provide too little and there is danger – particularly in the early years of the new plan – that people from a broader area that is currently auto-dependent will be discouraged from coming to the neighborhood at all.

Achieving a balance between parking supply and development is a critical challenge in developing the character of transit-oriented development. Denser mixed-use development sited around high quality transit increases the potential for multiple trips to be linked through alternative and active modes and fosters the type of urban form that creates a “park once” environment for motorists. In addition, transit-oriented and mixed-used developments promote self-selection, by providing alternative access options for households who do not own a private automobile. Recent research of TOD projects around the United States suggests that TOD residents are twice as likely not to own a car as other households, while they are two to five times more likely to commute by transit than others in their region.

Transit-oriented mixed-use developments typically produce far fewer vehicle trips than standard trip generation models estimate. Furthermore, they produce lower rates of parking demand than what is estimated by traditional parking generation ratios because many sites share parking between commercial and residential

uses, unbundle parking from residential rents, and charge market rates for commercial parking. Despite reduced levels of demand compared to traditional development, most transit-oriented mixed-use developments with residential and commercial components in suburban areas require some amount of parking to achieve market feasibility and to secure project financing. This section aims to identify the happy medium, in which competitively priced parking yields an appropriate amount of parking availability at peak times.

### **Residential Parking Ratios**

Plan Requirement: A minimum parking ratio of 1.0 space per unit shall be provided for residential development. This rate represents a 25% reduction relative to ITE rates for apartments. This reduced ratio should be achievable through implementation of the TDM strategies outlined in this Plan which lower rates of parking demand. Per other parking provisions of the plan, parking above the first space shall be unbundled from residents' leases. Residents shall have the option to purchase permits for additional spaces in the neighborhood's shared supply as needed at market prices. These additional spaces shall not be reserved, but rather a permit shall enable a driver to enter a district parking facility with a pass purchased on a monthly basis.

The following sections provide a discussion of alternate sources of parking requirements, and why they are not appropriate for this project.

### **Municipal Requirements**

Municipal minimum parking requirements, such as those shown previously in Figure 8.4.3, are often based on the codes of other cities or small samples of parking

occupancy data from the 1950s and 1960s that relates to low-density single-use sites without any TDM strategies or transit links. Therefore, municipal parking requirements often overestimate parking demand for high density, mixed use locations with TDM and high quality transit service. Recently published research discredits mid-twentieth century requirements for high rates of parking provision based on auto-oriented suburban conditions, by demonstrating that higher rates of parking provision produce higher rates of traffic and trip generation.

### **ITE Parking Generation Rates**

Another source of information on parking rates includes the Parking Generation Manual published by the Institute of Transportation Engineers (ITE). As shown in Figure 08-4-9, the ITE rates suggest a ratio of 1.24 to 1.32 parking spaces per unit for the Project, which is equivalent to between 5,192 and 5,561 parking spaces within the East Tasman Area.

While the ITE rates result in a ratio significantly lower than the city requirements, they are recognized as providing conservative (high) estimates of parking demand, with the official conditions that rates are primarily based on data from suburban low-density, single-use sites with little to no transit, no TDM strategies, and free parking. Data for the ITE Parking Generation Manual was collected in the 1980s and 1990s, prior to the era of big data. For high density, transit-oriented sites such as future development in East Tasman, the ITE rates are likely to overestimate parking demand.

Figure 08-4-9 Unadjusted ITE Parking Ratios for Tasman East Focus Area

ITE Analysis Land Use	Low End Size	High End Size	Low		High		
			Rate	Spaces	Rate	Spaces	
<b>Proposed Project</b>							
Studios (1)	294	315 units	1.23	362	1.23	387	
1 BR Apartments	1,932	2070 units	1.23	2,376	1.23	2,546	
2 BR Apartments	1,722	1845 units	1.23	2,118	1.23	2,269	
3 BR Apartments	252	270 units	1.23	310	1.23	332	
Open Space (2)	10	10 acres	2.60	26	2.60	26	
					5,192	5,561	
Total project parking, ITE method	4,200	4,500			(1.24)	(1.32)	

(1) Low/Mid-Rise Apartment (Land Use 221) based on ITE's Parking Generation, 4th Edition, average rates, weekday, suburban.

(2) City Park (Land Use 411) based on ITE's Parking Generation, 4th Edition, average rates for smaller (10 acre) site

**Figure 08-4-10 Parking Occupancies at Comparable Sites**

Development	City	Available Parking Per Unit	Occupied Parking Per Unit	Occupied Parking Per Bdrm	Pct Occupied Parking	Unbundled Rate	Transit Pass Program	Car-share membership	Street Parking Time Limit
Hillsdale Gardens	San Mateo	0.98	0.76	0.43	77%				X
Madera Apartments	Mountain View	1.37	0.88	0.62	64%	\$100	EcoPs	X	X
Verandas Apartments	Union City	1.5	0.99	0.85	66%				X
Vendome Apartments	San Jose	1.47	1.16	0.7	79%		\$50 off		
Esplanade Apartments	San Jose	1.48	1.19	0.78	80%	\$45			

Source: TransForm GreenTRIP Database

**APA and ULI Methodologies (Comparable Sites)**

More accurate methodologies for estimating parking demand include the APA Flexible Parking Requirements and the ULI Shared Parking Manual. These methodologies rely upon the use of data on existing land uses at or comparable to the subject site. The ULI methodology additionally provides adjustments for implementation of TDM strategies.

Comparable sites to the Project shown in Figure 08-4-10 deploy a range of TDM strategies and have peak overnight parking rates that range from 0.8 to 1.2 occupied parking spaces per unit. Associated TDM measures include unbundled parking, carshare membership and on-site availability, bikeshare availability, transit pass programs (such as EcoPass), and transit information such as transit screens with real-time arrival information. Sites also feature supportive parking management in the surrounding area including on-street time restrictions and/or residential permit parking programs.

The lower-than-ITE parking ratios demonstrated in the above projects are reinforced by research undertaken by SJSU and VTA, based on transit-oriented residential

developments in Santa Clara County. Analysis screening criteria for these developments included the presence of free parking, therefore the sample did not include any sites with unbundled parking (and hence it omitted some of the projects with more robust residential TDM implementation). From the sample of 12 transit-oriented residential developments analyzed, the research found a peak parking rate of 74%, which means that 26% of spaces remained empty at peak times—considerably lower than the optimal utilization rate of 90 to 95% for off-street parking facilities.

**Parking Banking and Adjusting Parking Ratios**

While residential components of the project will be required to provide parking at a minimum ratio of 1.0 spaces per unit, demand may fall below these rates for early phases of the project given the site's TDM requirements and technology-driven changes in travel behavior that are already evident today and are anticipated to grow in the coming years. If a development built early in the life of the plan shows consistent availability, future developments should be able to lease a portion of the early development's spaces to meet its parking requirements.

The City of Santa Clara should also monitor early rates of residential parking utilization in the neighborhood and adjust requirements based on a consistent pattern of underutilization.

Finally, sites committing to a more ambitious mode share target and more robust TDM programs may have parking requirements reduced, at the City's discretion.

*Plan Option: Residential developments shall be able to satisfy a portion of their required parking provision through leases of consistently unused parking spaces in earlier residential developments on the site. The City of Santa Clara shall adjust residential parking requirements in the neighborhood as needed based if residential parking utilization patterns are consistently lower than the recommended minimum ratio of 1.0 spaces per unit.*

*Sites committing to a mode share target lower than 59% and to more robust TDM programs to reach the more ambitious target shall be eligible for lower residential parking minimums at the discretion of the City.*

## Unbundling

Providing parking free of charge or at highly subsidized rates encourages higher rates of car ownership and use, which undermines TDM efforts and results in more parking spaces to achieve the same rate of availability. The practice of automatically assigning a certain number of parking spaces to individual units, and including the cost of these spaces in the rental or purchase price, also reduces the feasibility of development and makes housing less affordable for those who prefer not, or cannot afford, to own a vehicle. Unbundled parking separates the cost of a parking space from the sale, lease or rental price of housing. When consumers receive the correct price signal for parking, they are more likely to consider living without a car or a second car. Property managers may also apply revenue from unbundled parking towards the funding of other TDM components.

*Plan Requirement: Parking spaces beyond 1 space per unit shall be unbundled from all rents and leased to residents by developers/property owners on a month-by-month or annual basis.*

## PARKING MANAGEMENT

### Residential Parking Permit (RPP) Program

Mitigating spillover parking is a common concern in existing residential neighborhoods near developing neighborhoods. Residential Parking Permit (RPP) programs are a way to manage parking spillover into residential neighborhoods and/or manage an increase in residential parking demand. RPPs operate by exempting permitted (resident) vehicles from the parking restrictions and time limits for non-metered, on-street parking spaces within a geographic area. Typical RPPs allow for those without a permit to park for two to four hours during a

specified time frame, such as 8 a.m. to 6 p.m., Monday to Friday. Residential permit holders are exempt from these regulations and are allowed to park long-term (essentially storing their vehicle on-street).

*Plan Option: In the event that Tasman East creates spillover parking, developers/property owners should work with the City to implement an RPP program in the residential neighborhood directly south of the Project on streets such as Calle De Escuela. As part of a potential expansion of its existing RPP program, the City of Santa Clara should consider updating the systems used to administer the program, to make it easier to purchase permits and guest passes and to make enforcement more cost-efficient.*

### Operations and Technologies

In recent years, various techniques have emerged to increase the efficiency of providing and monitoring parking. These options should be considered as alternatives to conventional parking provision for regular or peak parking demand. Key techniques and technologies include the following:

- Valet parking, which employs people to increase parking capacity during peak periods and special events.
- Stacked or mechanical parking involving the use of hydraulic lifts to boost the capacity of regular residential or employee parking facilities.
- Fully automated or robotic parking garages, which allow very space efficient storage of vehicles without need for human ingress/egress.

Information on availability and prices is also important in ensuring that potential visitors receive the signals prices aim to send. Real-time availability information for an overall facility can be derived from the access control of the parking garage, calculated based on the number of entries and exits at any given time. This information, in addition to current prices, can be shared via dynamic message boards at the edges of the neighborhood or near facility entrances, as well as on the TMBD's website and parking price and availability aggregators like ParkMe.

*Plan Option: Innovative parking operations and technologies may be implemented to improve the efficiency of parking supply and improve the overall resident and visitor experience.*