Design Development Framework

BART Silicon Valley Extension

Downtown San José Transit Oriented Development (TOD)

23rd April 2021

Santa Clara Valley Transportation Authority

Doc Number: 385606-MMW-ZZZ-X-RP-AR-155001

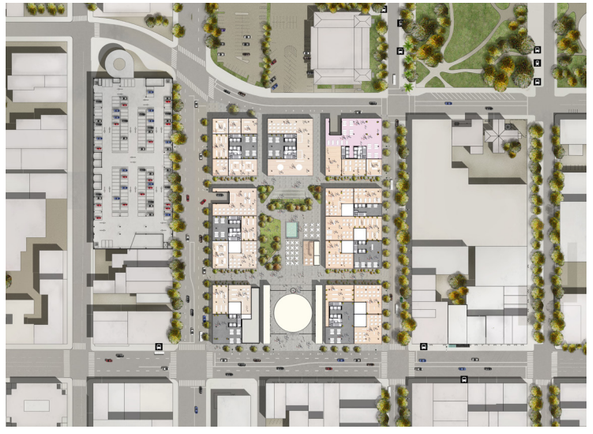
Contents

Contents

Chapter 5

Chapter 6

Chapter 7



Chapter 8

Executive Summary

1

1.0 Purpose

The Design Development Framework (DDF) arose from a straightforward question posed by members of the VTA Board of Directors:

How can VTA ensure world-class Transit-Oriented Development (TOD) is built on the block that will house the Downtown San José BART Station, where VTA owns most of the block?

The DDF is the result of extensive analysis of the Downtown VTA Block, VTA and City goals and requirements, and other factors that go into creating world-class TOD. It is not intended to serve as a plan, rather as a resource for VTA, other property owners, developers, members of the public, and others to use to inform future work to develop the Block.

The VTA Block, which includes the future Downtown San José BART station, represents an incredible development opportunity, one which will draw upon the rich history of the city center and reinforce its key location between transit and institutional, cultural, and recreational destinations. The heart of this new development will be focused around the creation of a bustling zone of pedestrian activity and a shared common space, with commuters mixing with residents, students, workers, and visitors to create an active urban environment, both day and night.

1 Executive Summary

1.1 Overall Goals

With the vision in mind for the VTA Block to contribute to a vibrant urban environment while building from Downtown's rich history, VTA commissioned this DDF document to outline potential opportunities for the VTA Block and identify key elements that will produce world-class TOD. The DDF document provides guidance for a variety of design approaches and offers criteria by which these design approaches can be evaluated for the most successful outcomes. This document is the result of design exercises and conversations which ran in parallel with BART Silicon Valley Phase II Extension Project (BSV Phase II Project) processes, and DDF content has been shared with the public at BSV Phase II Project Community Working Group (CWG) meetings and other forums for feedback. VTA engaged key stakeholders, including the City of San José, adjacent property owners, the Downtown Business Association, the Downtown Residents Association, and others during this process to gather their input and feedback on the proposed framework.

The key goals of the DDF document are:

- To provide a framework for developers to create world-class TOD to optimize the balance between development opportunities and the creation of high-quality public spaces.
- To align with VTA's goals of promoting public transit and bicycle use and pedestrian activity.
- To generate revenue for VTA to support ridership and VTA services through the highest and best use of property owned by VTA.
- To outline key decisions and opportunities for future developers regarding critical issues such as parking, site access, shared amenities, and overall program structure for the future development.
- To identify the key design constraints related to building adjacent to (or over the top of) the future BART station, including structural requirements, egress requirements, services, bicycle storage, and other items that will need to be coordinated and integrated with future TOD on the site.
- To explore how VTA and future development partners can engage in public-private partnerships to create successful TOD.
- To provide a tool that allows VTA, members of the public, interested stakeholders, City representatives, and others to understand the approach to creation of world-class TOD, and how to evaluate development plans and design proposals as they are presented.

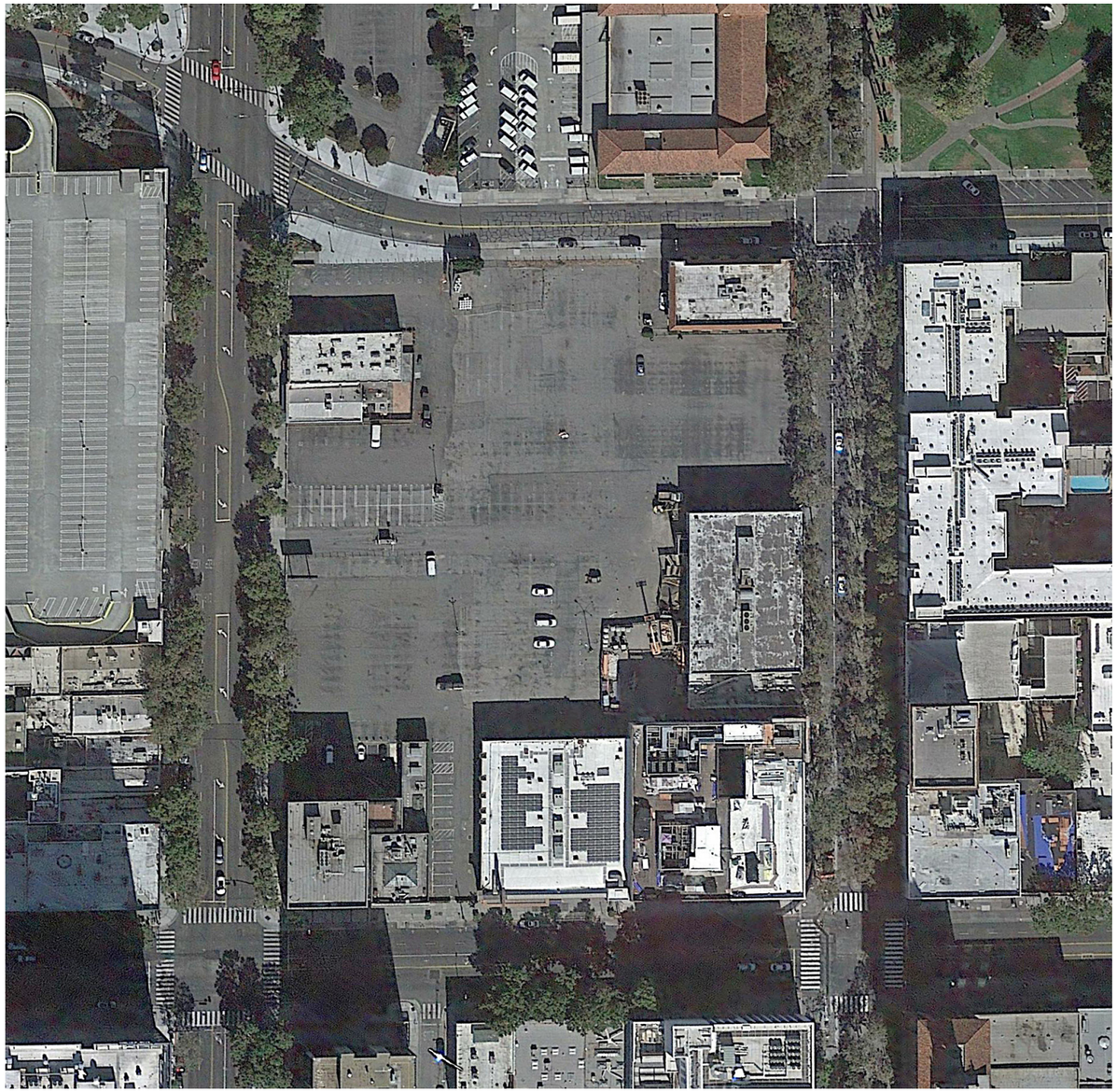


Fig. 1-01 Existing Site View

Fig. 1-02 Artistic Impression of BART Plaza

1 Executive Summary

In addition to providing a framework for future developers, this document provides historical context, key elements for successful outcomes, sustainability goals, massing studies, and potential approaches to the challenges on the site, such as parking and phasing of future construction.

Integrating mixed-use development with public transit, including development above transit stations, has been accomplished all over the US and globally. The benefits of this approach are well established, including reduction in vehicular traffic, and a more pedestrian friendly, mixed-use urban environments. World-class TOD can be evaluated by what it gives back to the community, and how it enhances the station area, as well as the revenue it generates to support transit use overall.

1.2 Value is Greater than the Sum of Parts

Why has VTA gone through the exercise of creating a Design Development Framework? How does this further advance the goals already set out in VTA's TOD Policy?

The DDF specifically addresses the unique challenges and opportunities of the VTA Block, where VTA is the majority owner of the city block in Downtown which will house the new BART station. However, there are multiple property owners on the block, and if all parties went about developing their land independently and in isolation, without a coherent vision or shared interests, the ultimate result would likely be a disjointed development with redundant elements and less than optimal shared benefits for the community. It would also result in less buildable area and a less diverse development program. In short, it would be a missed opportunity for everyone.

By thinking about the VTA Block as a whole, the principal concept of the DDF is to develop shared visions and aspirations for the block which work to the benefit of all property owners and the overall community in order to provide enhanced value to all parties compared to outcomes associated with uncoordinated approaches. Of course, the mechanisms for accomplishing this vision will require significant work beyond the scope of the DDF, and if parties can work toward a collective framework for future TOD on the block, the value of the block will indeed be greater than the sum of its individual parts.

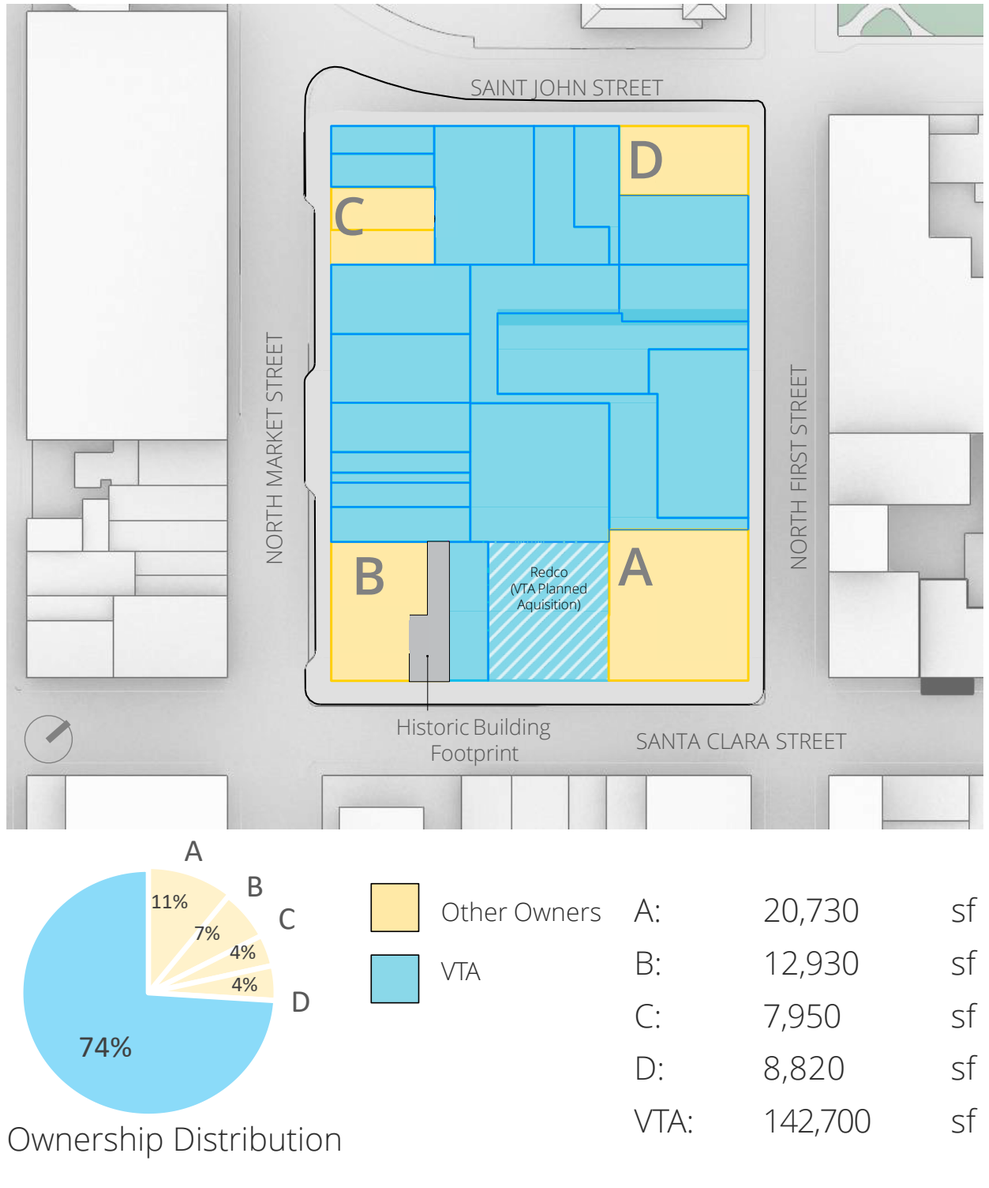


Fig. 1-03 Site Ownership Diagram

Fig. 1-04 Artistic Impression of Public Rooftop Amenity Space

1.3 Design Guidelines

The heart of the DDF is a series of Design Guidelines, which help define what successful development means on the VTA Block. These guidelines are not intended to be rigid requirements, but rather to establish priorities and criteria for evaluation of different proposed design concepts. While the document goes into more detail on each topic, below is a summary of the key design guidelines that form the core of the DDF:

Public Realm Activation

At the heart of the VTA block will be a publicly accessible plaza which is easily accessed directly and from all directions. The critical aspect for the success of the project is that both the plaza and the various street frontages are active and vibrant at all times of day. The new BART station will bring thousands of people to and from the site each day, which will strongly contribute to an active public realm. The mix of uses will also contribute to office workers, residents, and guests utilizing the public spaces at different times of day. The DDF proposes having a broad mix of retail, food, beverage, and other active functions at street level that are sized appropriately to support local businesses, including an event performance space at the northern end of the plaza. Public art can also create a unique sense of place and community within the plaza. With a combination of these strategies and components, the VTA Block will create a new gathering place and focal point of the community.

Improve Access and Connectivity

The plaza is connected to adjacent streets via a series of 'paseos,' which are pedestrian-only walkways that also subdivide the VTA Block into a series of distinct parcels. These paseos follow a historic urban pattern in Downtown to break up large city blocks to create a more walkable environment. The paseos also allow for active frontages on multiple sides of the buildings.

Urban Character and Public Interfaces

Along Santa Clara Street and other key corridors in Downtown, there is a historic pattern of a consistent 'podium' of 40 to 60 foot high buildings. While some recent developments have created gaps and provided setbacks along the street frontage, the City of San José's design guidelines and the DDF both incorporate the idea that respecting and reinforcing this historic podium improves the overall urban fabric and provides a consistent architectural expression while still allowing for design flexibility.

It is important to maintain flexibility for design of individual buildings in order to allow for variety and creative expression, and there are significant benefits to the DDF giving some guidance regarding material selection that provides consistency and ensures high quality and durable materials are used. It is also important to align material choices with the sustainability goals of the project, and materials that are locally sourced have lower amounts of embodied carbon. In addition, the DDF identifies and distinguishes more solid materials for the podium bases of the buildings (such as stone or concrete) from the towers above, which can have lighter and more open façades. This guidance helps integrate the project with its historic urban frontage context, particularly along Santa Clara Street, while still allowing for design flexibility and variation along the different streets and buildings.

Historic Sensitivity

As part of careful evaluation of the historical context of the site, there are two key historical factors considered in the DDF: the historic Building and Loan structure and the St James Park historic district.

The historic Building and Loan structure at 81 West Santa Clara Street dates back to1926. The DDF assumes no development on this parcel, and describes the implications for the future of the block if this site remains in its current state.

The DDF also notes that the northwest corner of the site lies within the St James Park historic district, which will require further discussion and coordination with the City of San José to determine how this might impact the development of the proposed building on that parcel.

Social Equity and Environmental Responsibility

The DDF is aligned with VTA's TOD Policy in advocating for more housing units to be built close to public transit, at a range of densities and affordability levels. This is complemented by a range of guidelines which enhance the publicly accessible spaces at ground level, including the plaza with public art and a community center to host events and performances.

Environmental responsibility guidelines include a target of net-zero energy, and encouragement of a holistic approach to sustainability, including low carbon materials, centralized utilities and improved mobility and accessibility.

1 Executive Summary

Public Realm Activation

Fig. 1-05

Urban Character and Public Interfaces

Fig. 1-06

Social Equity and Environmental Responsibility

Fig. 1-07

Improve Access and Connectivity

Fig. 1-08

Historical Sensitivity

Fig. 1-09

Contribution to Downtown's Skyline

Fig. 1-10

1 Executive Summary

1.4 Applying the Design Guidelines

The DDF also explores multiple massing configurations and creates a series of parameters by which development options could be evaluated for their adherence to the design guidelines. Among the parameters that are utilized to evaluate different options are:

- Comfort in the outdoor environment of the plaza, including access to daylight, shaded space, and protection from wind
- Access to views, both of St James Park and the mountains beyond
- Resource management, including embodied carbon and benefits of construction phasing
- Spatial and urban performance metrics, including floor area ratio (FAR), optimizing outdoor amenity space (e.g., rooftops and terraces), and compatibility with adjacent space and development

1.5 Sustainable Approach to Development

This section discusses the DDF's sustainability goals, including net-zero energy. It includes options to design, build, operate, and maintain the block to be more sustainable, with focuses on materials, health, wellness, technology, and water, mobility, and energy management.

1.6 Flexible Approach to Parking

Parking is one of the key areas where all property owners can benefit by working together on a shared strategy. Given how rapidly demand for parking is shifting, the DDF provides a framework that embraces options rather than proposing one fixed parking solution . The parking options provided by the DDF take into account parking provided in the area as a whole, understands that the future BART station will also change demand for parking, and follows trends that are in-line with parking provided by other recent developments in the area. The DDF also assesses what could be provided in terms of parking on site without compromising the public plaza and other urban character components. The concepts envisioned in the DDF are within ranges currently being explored by other proximate developments. Parking provided could also be repurposed for other uses later.

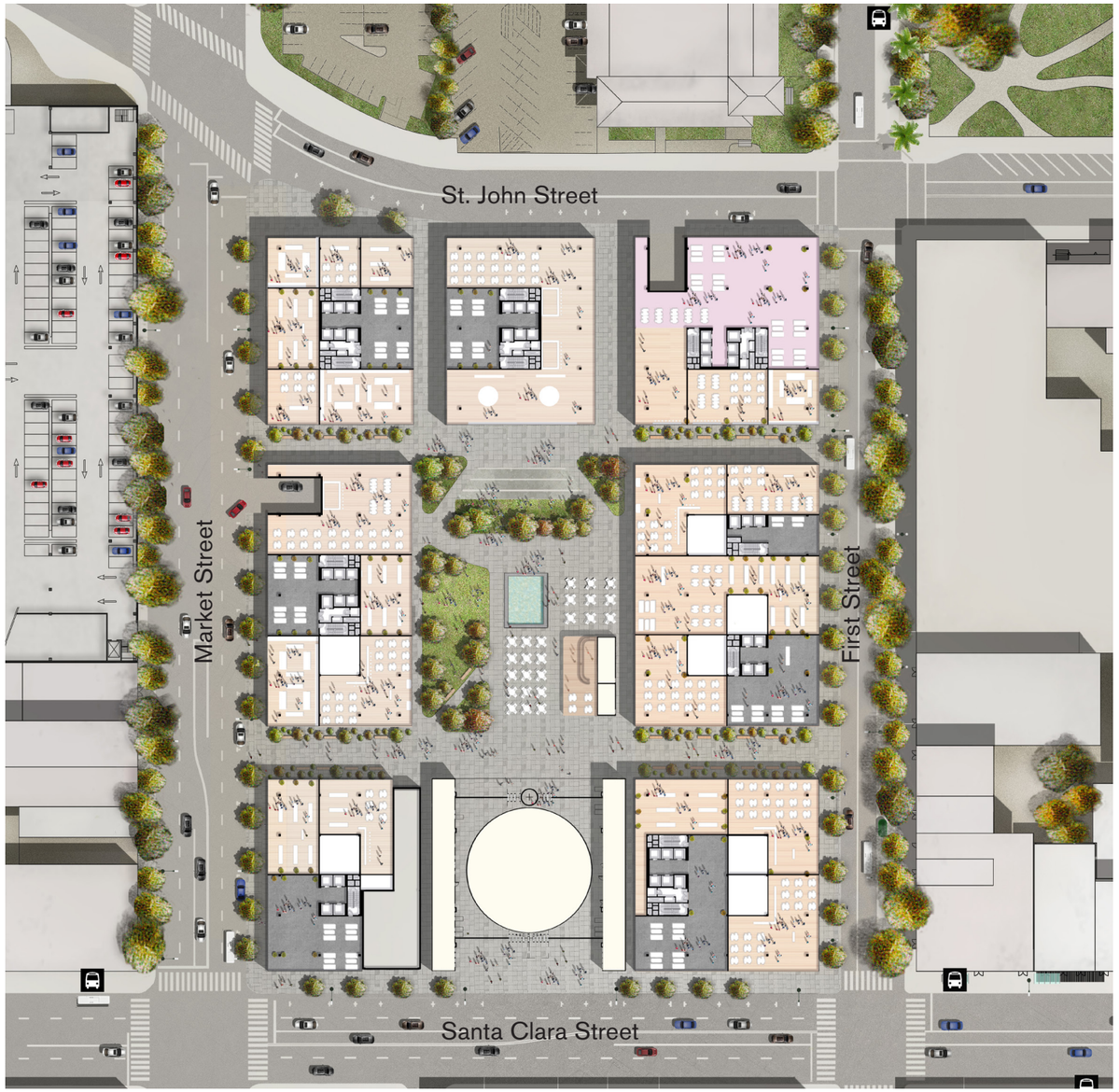


Fig. 1-11 Proposed Site Plan Ground Floor (Not shown : TOD Above BART Station)

1.7 Coordination with Future Station

The DDF team worked closely with the BSV Phase II Project team to coordinate future BART station requirements with future TOD on the VTA block. The depth of the basement level below the plaza has been sized to allow for planting and landscaping on the plaza above. There are some back-of-house components that need to surface at the plaza level, and it is proposed that those elements be integrated into a pavilion building in the plaza, which would also house a café or restaurant to further activate the plaza and station area.

1.8 Looking Forward

The DDF provides a framework for development of the VTA Block, and it is intended to provide flexibility. VTA intends to use the DDF to inform future work with developers, and as with any other development in Downtown, as the local land use jurisdiction, the City of San José would be responsible for processing applications to develop the VTA Block and ensuring that the community is appropriately engaged in the process. This document lays the foundation for successful, world-class TOD on the VTA Block that helps maximize the benefits associated with the BSV Phase II Project. By working together to establish and achieve shared visions, we can transform Downtown for the benefit of generations to come.

DDF Contents

Fig. 1-12 Artistic Impression of Future TOD on VTA Block from Santa Clara Street

Historical Context

2

Back to the Future: Downtown San José Past, Present, and Future

Downtown San José has a long history as the commercial, cultural, and civic heart of San José. This chapter provides context for the Design Development Framework (DDF) within the historical evolution of Downtown San José, and the lessons it provides to create a vibrant future.

While the region has been inhabited since pre-Columbian times, modern occupation of the Downtown area began in the late 1700's. Downtown's history is rooted in public transportation, including an electric streetcar system that circulated throughout the city center starting in the nineteenth century. Through the middle of the twentieth century, the Downtown area thrived with a mix of retail and commercial uses and many visitors. Downtown's retail hub rapidly declined after the 1960s when suburban development, including shopping centers, proliferated throughout the South Bay, enabled by the newly created Santa Clara County Expressway system.

The following pages contain a series of historical maps and images that document and illustrate the importance of the VTA block within Downtown's historical framework. One of the key goals of the DDF is to provide dense mixed-used urban development adjacent to the future Downtown BART station to help restore vital and historic links between public transit and lively urban communities. The DDF draws upon historically successful strategies to create vibrant public spaces – including integration of a central plaza and connecting pedestrian paseos – in order to entice people to walk, interact, and further activate the area. The DDF also respects historic and current urban frontages, which is especially important along Santa Clara Street.

2 Historical Context

2.1 Santa Clara Valley's Original Business Center

Prior to the 1950s, Downtown San José was the main business, civic, and social center of the agriculturally rich Santa Clara Valley, also known as "Valley of the Heart's Delight". Like many historic downtowns in the United States, Downtown was the city's primary shopping district through World War II, including for local farmers and visitors from outside the area.

During this period, First Street was one of the principal commercial streets: J.C. Penney was at the corner of First and Santa Clara streets and (heading south) was Hart's, Blum's, Woolworth's, Hale Brothers, Goldeen's and Sears, Roebuck and Co.

In 1887, the first City Hall was built in the middle of what is today Plaza de César Chávez, one of the oldest public spaces in California – a space that also housed on its perimeter California's first State Capital (see Fig. 2-04).

2.2 Driving Growth Outward and a Declining Downtown Center

As farmland was converted to subdivisions and office parks, the Valley of the Heart's Delight eventually became the Silicon Valley, and San José's Downtown became just one node in a series of walkable town centers between San José and Palo Alto, 16 miles away. San José's pro-growth machine was focused more on annexation and outward suburban growth rather than the vitality of Downtown.

San José's population ballooned from 95,000 in 1950 to 450,000 in 1970, and what was once a 17-square-mile city mushroomed to 136 square miles. As San José grew both in size and population, the notion of what comprised the city expanded and dispersed to the point where the historic Downtown became much less of a focal point for commercial and civic activity

Fig. 2-01 Funding for the Santa Clara County Expressway System was secured in 1961. This photo shows the Interstate 280 and Highway 87 in the 1970s.

THE LINES OF THE SOUTHERN PACIFIC REACH ALL PARTS OF CALIFORNIA AND THE PACIFIC COAST.
ITS COAST LINE IS NOW COMPLETE AND IN OPERATION, WHICH PLACES
SAN JOSE
DIRECTLY ON ONE OF THE GREAT TRANSCONTINENTAL THOROUGHFARES OF THE NATION

PACIFIC OCEAN

MT. HAMILTON

SANTA CLARA COLLEGE 1851

SANTA CLARA COLLEGE 1901.

HOTEL ST. JAMES.

KING'S CONSERVATORY OF MUSIC.

NOTRE DAME CONSERVATORY OF MUSIC

NOTRE DAME HALL

COLLEGE OF NOTRE DAME

ST. JOSEPH'S CHURCH AND ACADEMY

PUEBLO FOUNDED 1779

FOUNDED IN 1850.

UNIVERSITY OF THE PACIFIC

SAN JOSE SANATORIUM AND HOME

SAN JOSE BUSINESS COLLEGE

SANTA CLARA AND FIRST STS.

TRINITY EPISCOPAL CHURCH.

SECOND PRESBYTERIAN CHURCH.

PRIVATE RESIDENCE SAN JOSE.

WASHBURN COLLEGE PREPARATORY SCHOOL

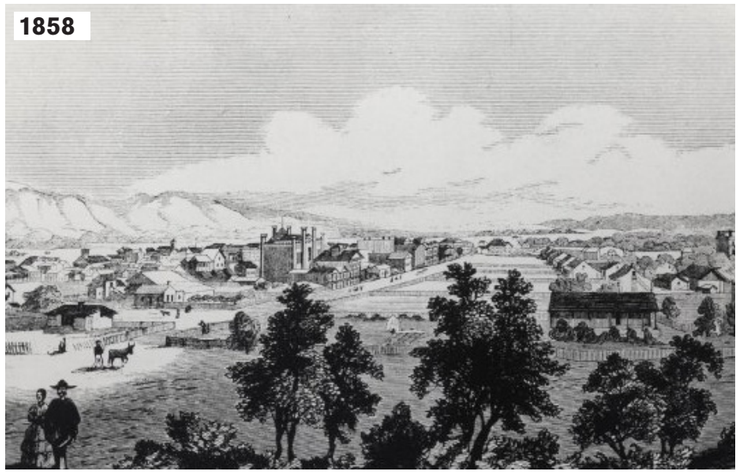
POPULATION 30,000.

SAN JOSE

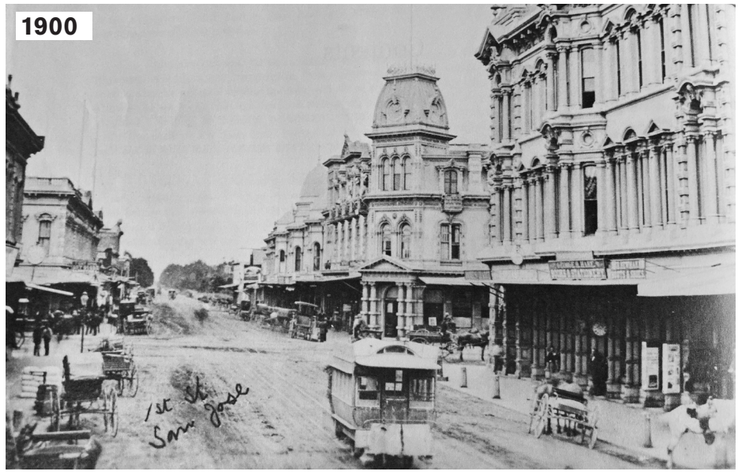
CALIFORNIA

THE VICTORY THEATRE

Fig. 2-02 Historical Map of San José Town (1901)



1850, San José became the first State Capital and has been an important place in California history.



San José debuted its electric streetcar system in 1888, replacing the horse-drawn carts that had been the dominant mode since 1868.

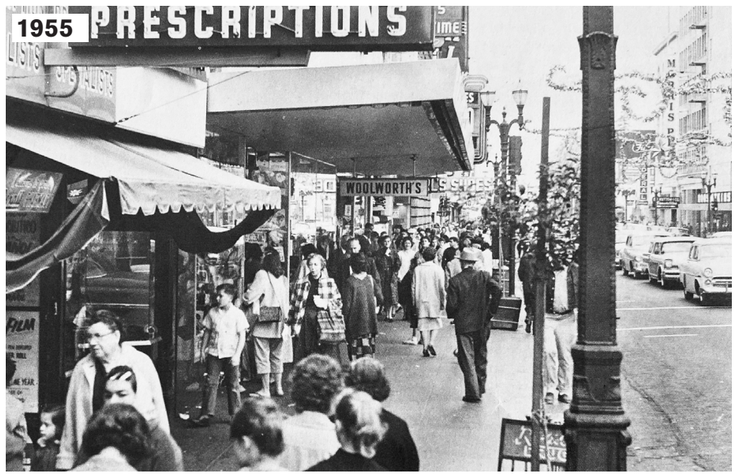
View from First Street, one of the main retail streets in San José.

Downtown was the business, civic and social center of the agriculturally rich Santa Clara Valley.

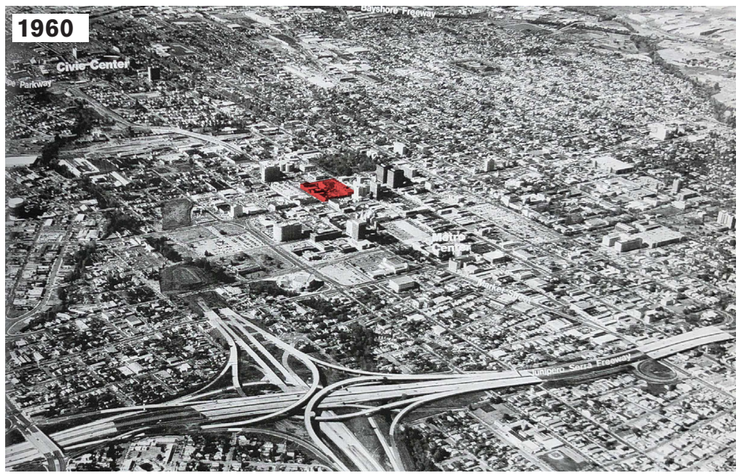
In 1934, the city moved its rail tracks from Fourth Street to the west end of Downtown, where it built Cahill Station, which is now Diridon Station.

With the streetcar taken away from the city center, streets were dominated by cars.

Fig. 2-03 Historical Timeline photos (1858-2020)



3 years after this photo was taken, San José moved its city hall out of Downtown. This exodus removed hundreds of workers from Downtown.

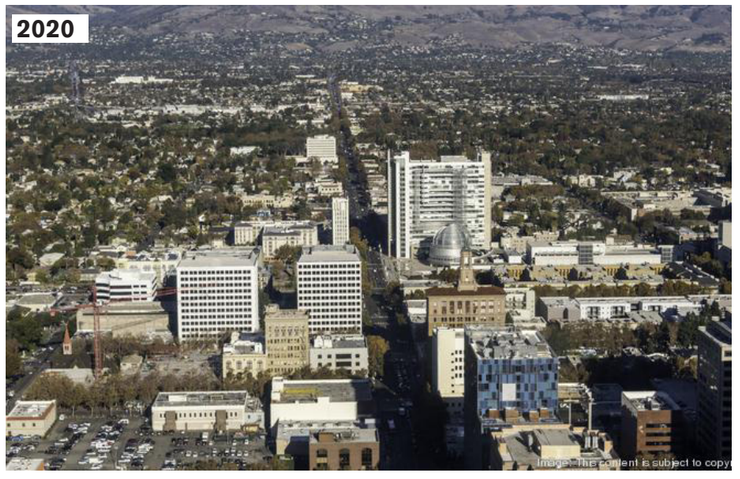


Funding for the Santa Clara County Expressway System was secured in 1961.

View of San Pedro street. Competition between city and suburbs led to a deserted city center.

In 1980 investment for adding, extending and upgrading highways was secured.

When light rail opened in 1987, it wasn't met with expected success. People still preferred to drive to their jobs, which were mostly concentrated in North San José.



San José today, where a new downtown cultural district emerges.

2.2 Driving Growth Outward and a Declining Downtown Center (cont.)

Through the 1960s, City leaders continued to pursue an outward growth agenda. In 1958, San José moved its City Hall out of Downtown to a newly built office park and civic center on North First Street, nearly 2 miles to the north. Santa Clara County offices followed City Hall out of Downtown. This exodus removed hundreds of public sector and newspaper workers from Downtown. Such jobs are typically a core part of the critical mass of employees in a Downtown, typically providing a solid base of retail customers.

The challenge of keeping jobs in Downtown was not unique to San José. What makes San José distinct is that the civic functions were moved out of Downtown . Further, as the regional economy continued to shift after World War II, Downtown San José failed to evolve and retain its vitality.

San José converted two-way neighborhood streets in and around Downtown into pairs of high-capacity one-way streets in order to accommodate large volumes of vehicles for people who drove from south San José to the north through Downtown and adjacent neighborhoods. These two-way to one-way conversions were intended to protect the Downtown from being overrun with traffic, but, in practice, these changes allowed car travelers to pass through — and around — Downtown at higher speeds, thereby degrading the quality of these street for non-drivers and the quality Downtown generally.

During this period, the City Council also reversed its policy of opposing large-scale retail development outside of Downtown, and many shopping centers began opening outside of Downtown. Every new neighborhood had orchard land that was converted into a neighborhood shopping center with a supermarket and a dozen or more stores. The continued growth of the Valley Fair Mall and establishment of Santana Row created a new retail center in the center of the Santa Clara Valley that is likely to sustain that role in the decades to come.

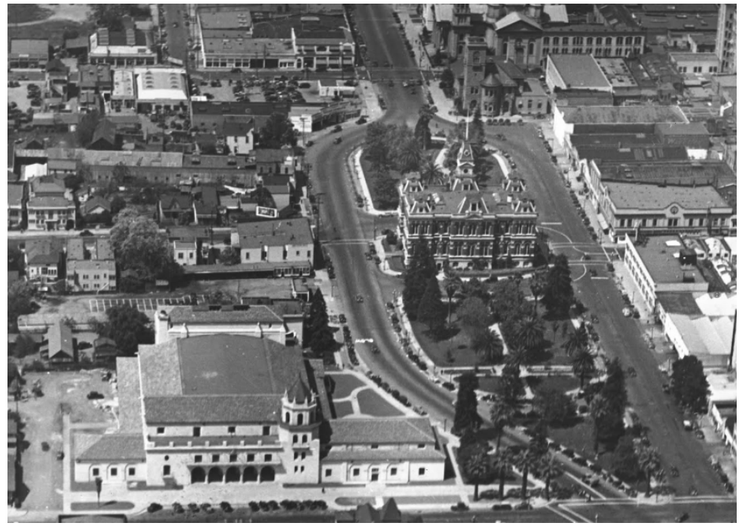


Fig. 2-04 San José City Hall, originally located on Plaza de César Chávez, playing an important role as the centerpiece of the Downtown area. (1910)

Fig. 2-05 Image shows the relocated City hall at the suburbs of San José. (1980)

Fig. 2-06 Roos Atkins and J.C. Penny, retail anchors on First and Santa Clara streets, abandoned Downtown San José by the early 1970's due to the downturn of the 1960's.

Fig. 2-07 Santa Clara County Courthouse and Hall of Records [ca. 1915], part of Saint James Square City District and National Register Historic District.

2.3 Back to the Future: Towards a New Downtown

The planned Phase II extension of VTA's BART to Silicon Valley project through Downtown San José has catalyzed a renaissance for Downtown San José. Businesses like Adobe have recently built flagship headquarters here. Historic locations like San Pedro Square have been transformed into active, pedestrian-friendly destinations. The proposal by Google to create Downtown West as a new district with high-rise mixed-use development in the Diridon Station area shows the potential for public transit paired with dense mixed-use transit-oriented development to breathe new life into Downtown San José.

By understanding Downtown's history, the VTA Block DDF aims to build upon these recent actives. Another focal point for urban life in Downtown San José will be revitalized, right at the core of where it all began over a century ago.

Fig. 2-08 Historical Sites: First Street (Left) and Bank of Italy (Right)
Source: San José Downtown Design Guidelines and Standards, 2019

Fig. 2-09 Historical Landmark Location Map

Design Guidelines

3

The core purpose of the DDF is to provide design guidelines that can be used by VTA, development partners, and others to inform and evaluate efforts to advance development of the VTA Block to create successful world-class TOD. For each of the guidelines, precedent studies, references to the City of San José's Downtown Design Guidelines, and /or site specific analysis are provided where relevant to explain how the DDF design guidelines can best be applied to efforts to advance development of the VTA Block.

The DDF design guidelines provide concrete guidance for realizing the DDF vision. The DDF is built from five guiding principles, each of which explained in more detail in this chapter:

- Public Realm Activation
- Improve Access and Connectivity
- Urban Character and Public Interfaces
- Historical Sensitivity
- Social Equity and Environmental Responsibility

3 Design Guidelines

3.1 Public Realm Activation

One of the guiding principles of the DDF is the notion that the future development will provide active public spaces that are designed and programmed in ways that are inviting to the community.

VTA's majority ownership of the block, and collaboration with other owners on the block, provides unique opportunities to redesign the block in a coordinated and complementary manner. Rather than each property owner developing their property independently, the DDF advocates for a unified approach that also promotes flexibility, variety, and distinct architectural forms for each building. Such an approach ensures the creation of higher-quality TOD, and it allows each property owner to developer more square footage on its property than would be possible with each owner acting independently.

As Downtown's growth in the early twentieth century was focused around transit and pedestrians, Downtown's future is also very connected to restoring a vibrant mix of pedestrians, transit, and commercial, cultural, and social activities. The Downtown BART station will generate tens of thousands of new pedestrians daily. The DDF design guidelines seeks to leverage this transformational uptick in activity to create a dynamic and thriving urban environment on and around the VTA Block. Placing a plaza at the center of the VTA Block helps achieve this goal by:

- Providing direct entry to/from the BART station from/to the plaza
- Creating multiple connections and links between Downtown destinations through the VTA Block
- Simplifying links to public transit, including to BART, and VTA light-rail on First and Second streets and public bus services all around the block and throughout Downtown
- Providing pleasant and dynamic outdoor space and amenities for the public and occupants and users of adjacent development
- Housing other elements and functions, such as public art, performance spaces, and retail uses that will help keep the site and area active, safe, and inviting 24/7

San José, the greater Bay Area, and beyond have many precedents for public plazas, and some aspects are more successful than others. A few plaza precedents are shown in figures 3-08 through 3-15.

Fig. 3-01 Site Context - 3D Google Map

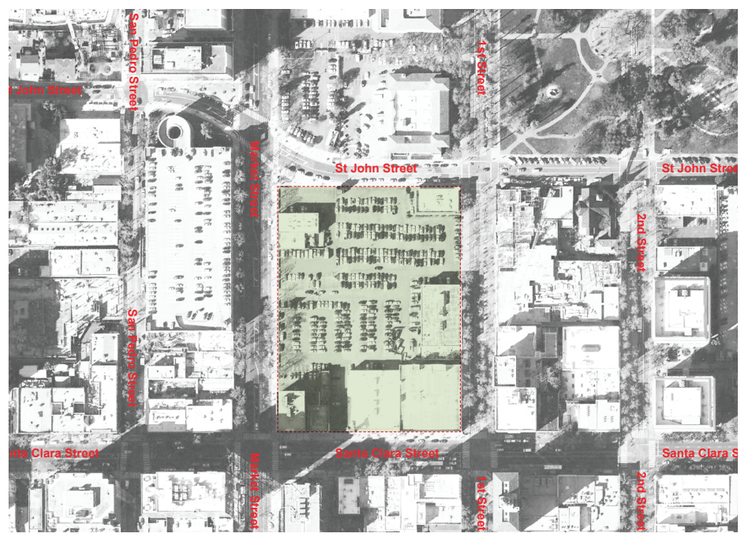


Fig. 3-02 Site Context - Surrounding Streets

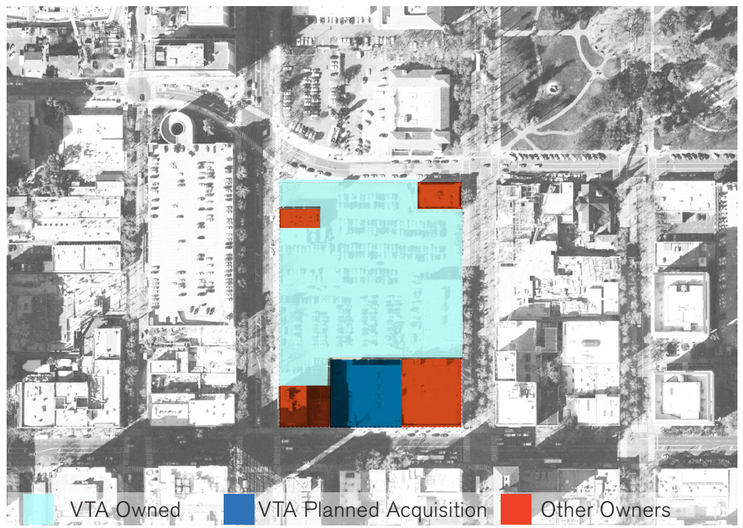


Fig. 3-03 Site Context - Parcels

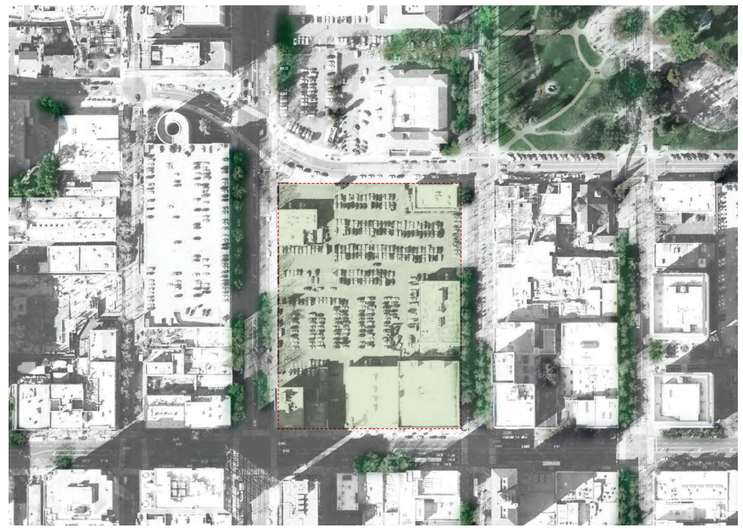


Fig. 3-04 Site Context - Existing Green Space

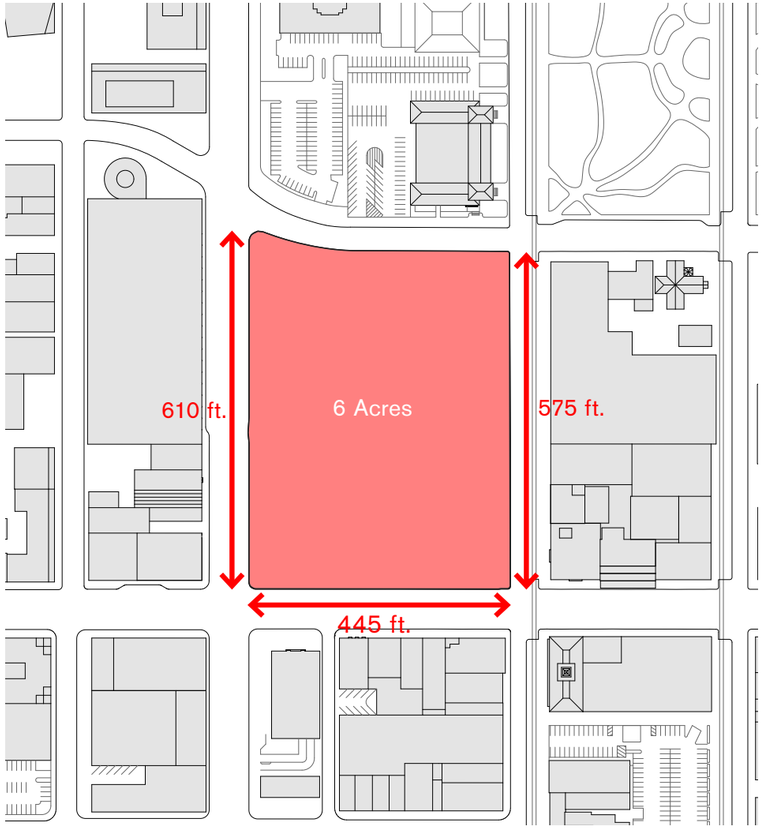


Fig. 3-05 Existing Site Conditions and Dimensions

- Reduce block size to promote better architecture, increase views, increase wind flow for natural ventilation, and create multiple transportation routes for people who walk and bike and emergency and service vehicles.

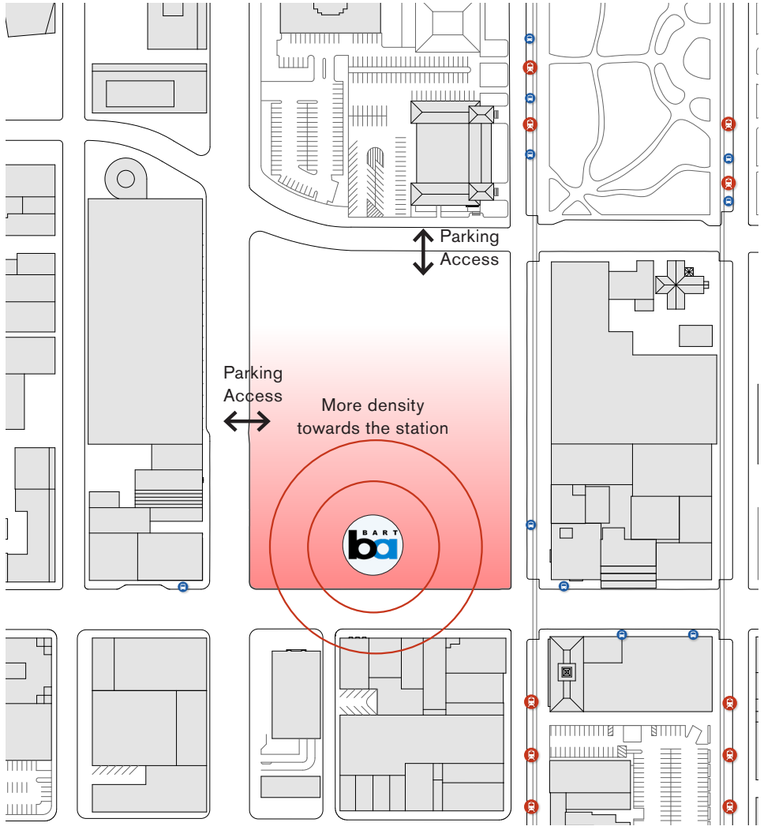


Fig. 3-06 Guidelines for Relationship to Transit

- Place high density development near transit, particularly rail transit stations, to facilitate transit use.
- Locate commercial building lobbies near transit stops and stations.
- Do not create parking or vehicular access on streets with light rail or bus rapid transit.
- Locate vehicular curb cuts away from bus stops, rail stations, and light rail corridors.
- Place a building's active frontages and amenities near rail transit stations and bus stops.

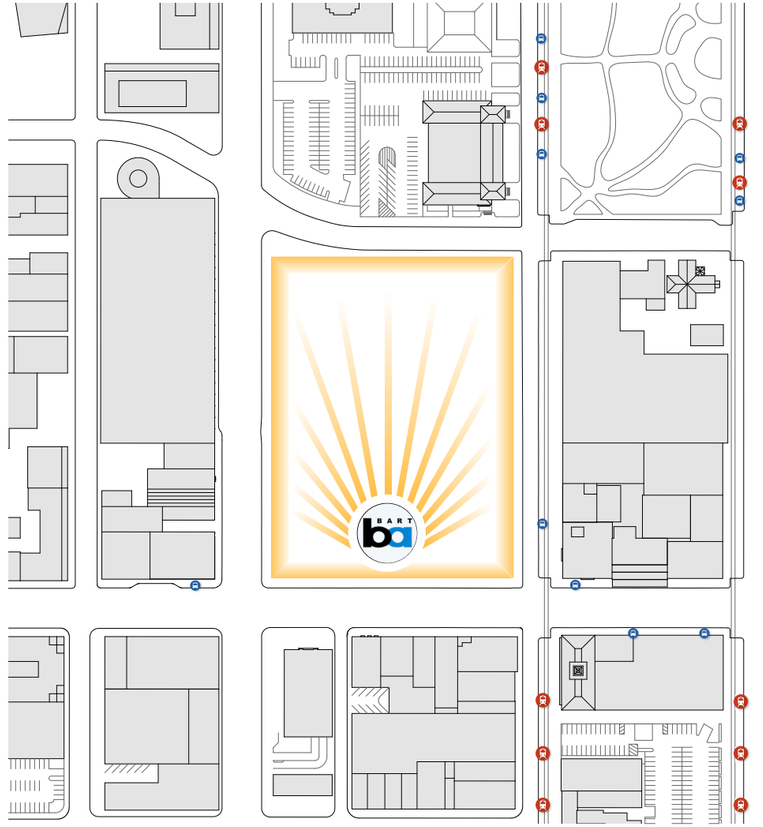


Fig. 3-07 Guidelines for Activation Around Transit

- Emphasize transit by orienting activities and amenities to stations.
- Place high density of development near transit.
- Keep transit stops and station areas active to promote safety and integrate transit into the activity of nearby development.
- Add benches and landscaping to benefit transit patrons.

Fig. 3-08 Plaza de César Chávez

The Plaza de César Chávez is one of the oldest public spaces in the city, has a rich landscape, and is relatively well used. It is also surrounded by busy roads that separate it from its surrounding urban context, thereby limiting its potential for greater activation.

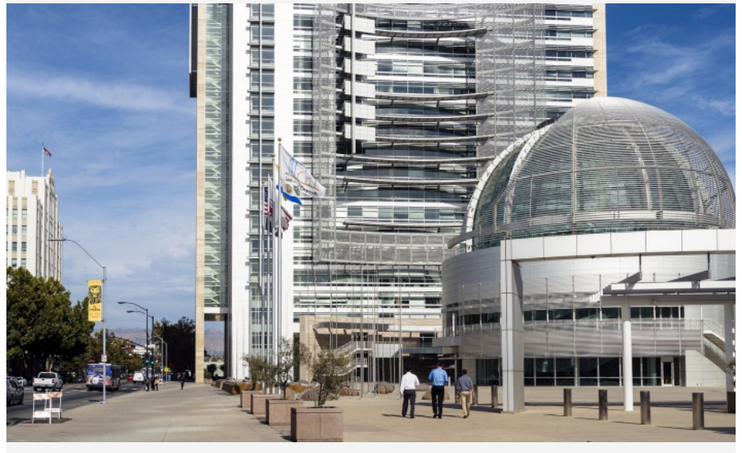


Fig. 3-09 City Hall Plaza

The City Hall plaza is a partially enclosed functional public space. It suffers from a lack of landscape design and activation features such as shaded/sheltered areas and amenities such as cafe or retail spaces that would enhance experiences for visitors to the space. This plaza does successfully host many large-scale events and is reasonably well-suited for large events.

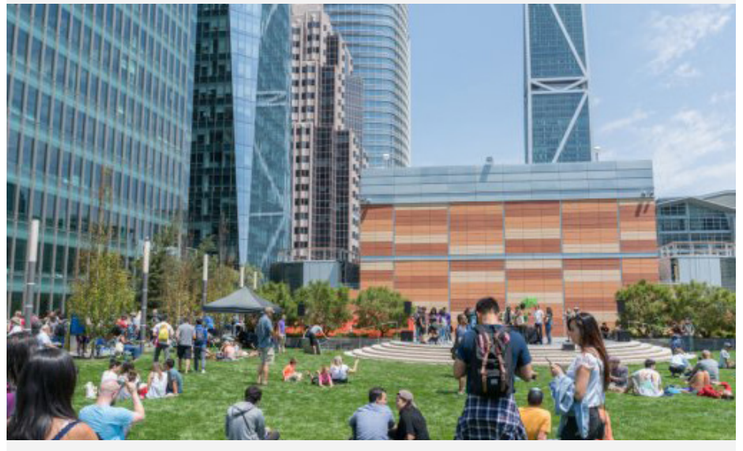


Fig. 3-10 Transbay Transit Center, San Francisco

The Salesforce Transit Center Park sits atop the roof of the transit facility, and this configuration has both pros and cons. An advantage of being on the rooftop is that the park becomes a quiet oasis removed from the busy, vehicular-oriented street. A disadvantage of being on the rooftop is that the park is less accessible to the public, and it does not directly connect with pedestrian-oriented activities.

Fig. 3-11 Canary Wharf Station
London, England

Perhaps most critical to the successful activation of the plaza space is the fact that the new BART station will bring tens of thousand of passengers to and from the station every day.

Fig. 3-12 Spitalfield Market
London, England

Fig. 3-13 Outdoor Performance Space
Marseille, France

Plaza activation will be further enhanced by creating the right mix of programming to the space. This could include both food and beverage (above) as well as event spaces for performances and informal gatherings (below).

Fig. 3-14 Public Art: The Bean
Chicago, Illinois

Public art is another key feature to activate the plaza and allow for community involvement.

Fig. 3-15 City Center DC
DC, Washington

Providing mid-block pedestrian links into the plaza will enhance connectivity and allow for additional active storefront spaces in the design.

Precedent Project: City Center, Washington, DC

City Center in Washington, DC has a scale, density, and mix of uses that is similar to the VTA Block envisioned in the DDF. City Center is located one block from the Gallery Place/Chinatown Metro Station, and it sits at a crossroads between multiple cultural, institutional, and retail destinations. City Center utilizes its prime location and proximity to transit to leverage pedestrian activity and attract high-end retail tenants at ground level and integrate a range of commercial and residential spaces into the buildings above.

Previously enclosed by a single, vast structure, the new City Center breaks the site down into smaller, more pedestrian friendly blocks that bridge new connections between diverse downtown communities. Drawing inspiration from European street patterns that have more connectivity in the pedestrian grid, the scheme reinstates and expands upon the original alleyways system.

The tree-lined avenues, complete with classic Washington ‘globe’ streetlights, are re-planted with local species that integrate seamlessly with the historic context.

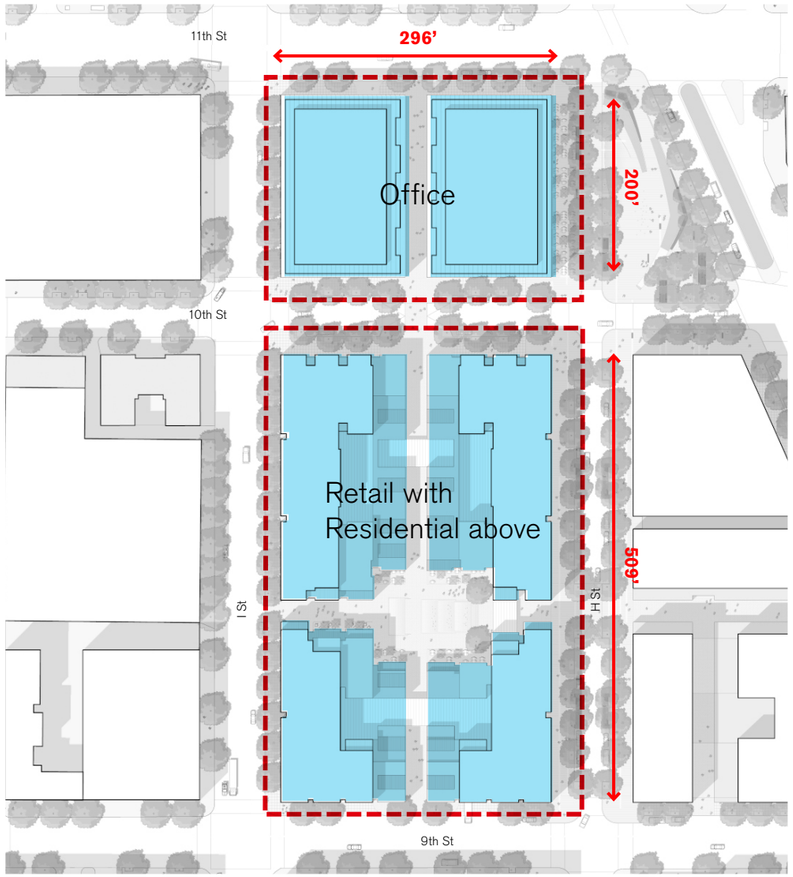
The following strategies from the City Center precedent are also fundamental to the design guidelines for the VTA Block included in the DDF:

- Dense mixed-use urban development
- Street-facing retail and residential units on upper levels
- Public art and water features set within a central plaza/courtyard
- Retail area and outdoor seating occupy the ground level for activation, connected by a series of pedestrian streets.

Fig. 3-16 Public Realm, Plaza and Water Features

Fig. 3-17 Retail Area and Outdoor Seating

Guideline: The DDF places great emphasis on activating the ground plane around the station by creating a dynamic public space at the heart of the VTA Block. The creation of a plaza is therefore essential. The plaza should be surrounded by buildings, provide clear and direct access to the BART station, be active day and night, have good access to sun and daylight, protection from wind, be fully accessible with no steps or grade separations, and create easy connections to adjacent destinations.



Site Area: 266,187 sq.ft.
Ground Floor Area: 168,636 sq.ft.
Site Coverage: 63.4%

Total Building Area: 1,482,971 sq.ft.
FAR: 5.6

Fig. 3-18 City Center Urban Design Precedent

Fig. 3-19 City Center Urban Design Precedent

3.2 Improve Access and Connectivity

Understanding foreseeable pedestrian activity within and around the site is critical to understanding how the VTA Block can be designed to fit within, complement, and enhance a heart of Downtown's urban fabric. Many popular destinations are within a short five minutes or less walk of the VTA Block. Figure 3-20 shows the 'Four Cornerstones,' the cultural, civic, recreational, and academic/institutional destinations that surround the site. One of the core goals of VTA Block development is to simplify pedestrian movements to create more easy pedestrian connections to and from public transit. The figures that follow all demonstrate how vital connectivity is to the success of the VTA Block.

Compared to other urban grids, Downtown San José has large blocks that create longer walking distances. New mid-block pedestrian connections, or paseos, are critical to creating a more walkable Downtown and to bring it closer to other more walkable urban centers, like New York, Washington DC, or San Francisco (see fig. 3-24 through 3-26). There is already a partial network of paseos in Downtown, although the existing paseos tend to be isolated fragments, rather than a coordinated and connected paseo network (see fig. 3-27). Paseo connections like those envisioned in the DDF could provide inviting alternative routes for people who walk through Downtown, including by providing new options to access transit, like that which will be available at the future Downtown BART station.

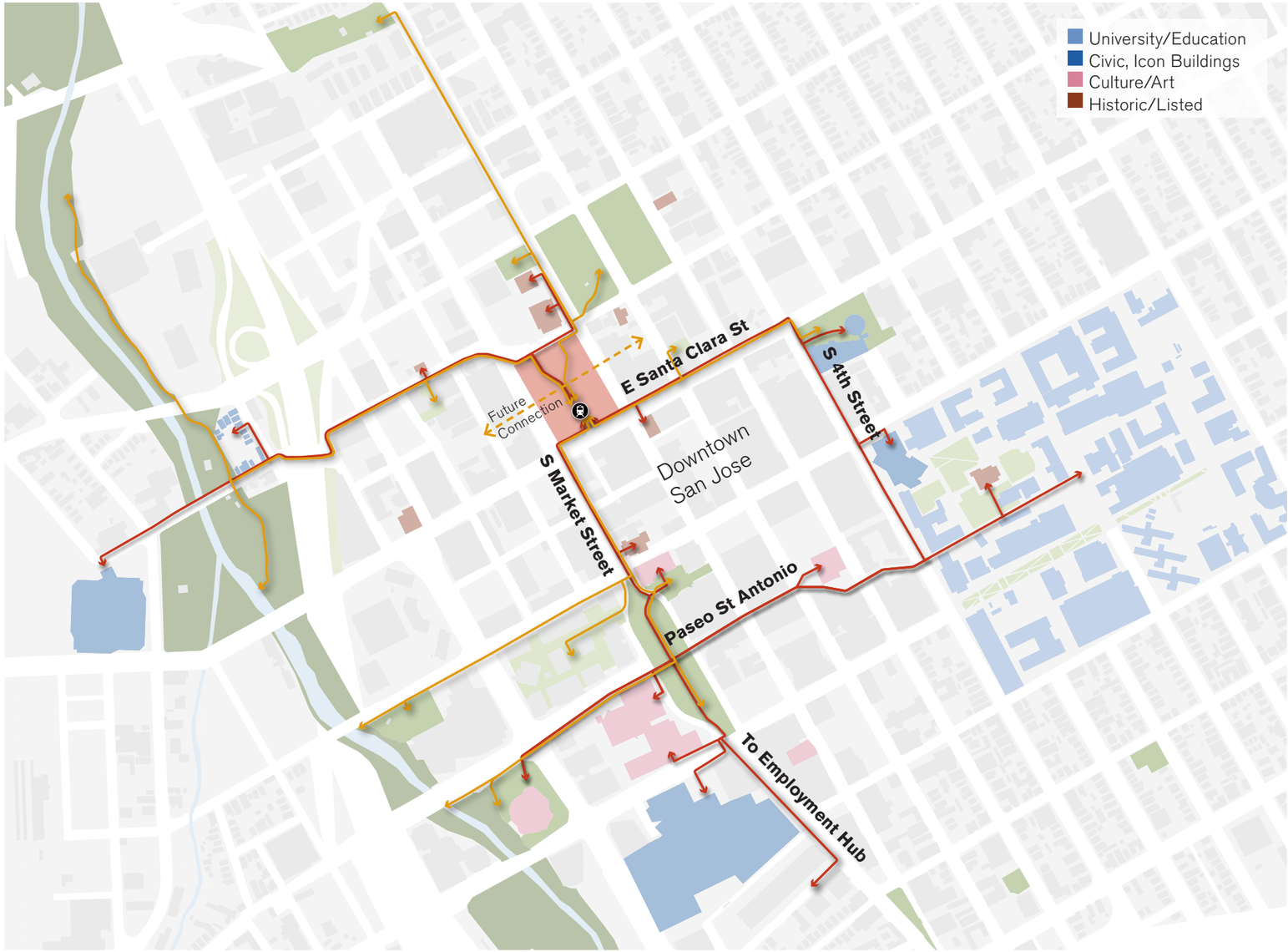


Fig. 3-20 Downtown Four Cornerstones

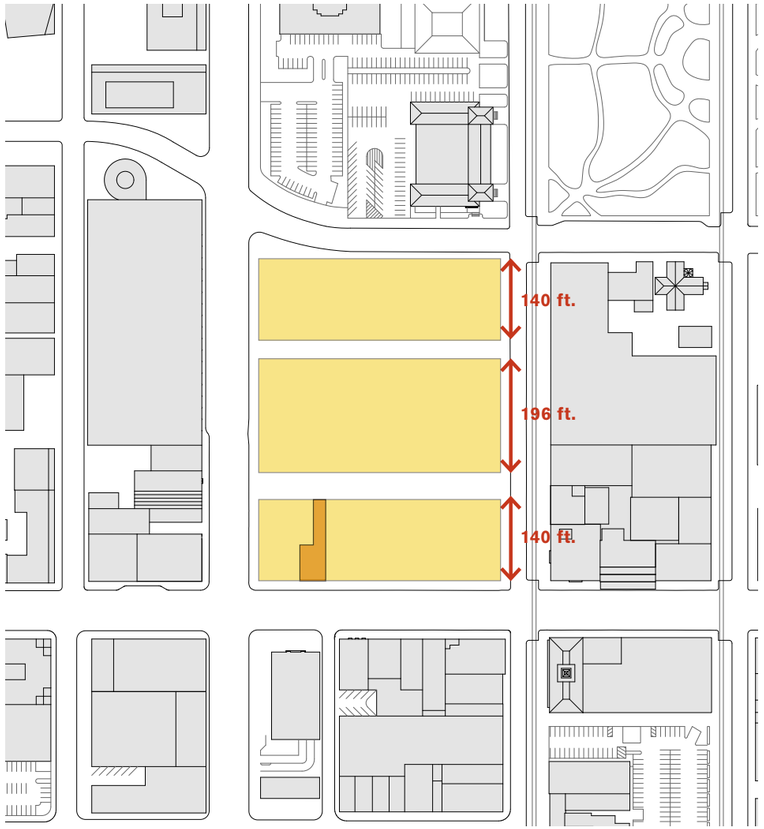


Fig. 3-21 Guidelines for Block Sizes

- When developing parcels that make up more than 75% of the area of a block that exceeds the maximum size of 250 feet, divide the block so that all resulting blocks are less than 200 feet in length
- When feasible, connect the ends of new streets or paseos with existing streets and paseos in adjacent blocks.
- Do not vacate (sell or give away) or construct buildings upon an existing public street right-of-way that lies along a view corridor

Existing S&L Building

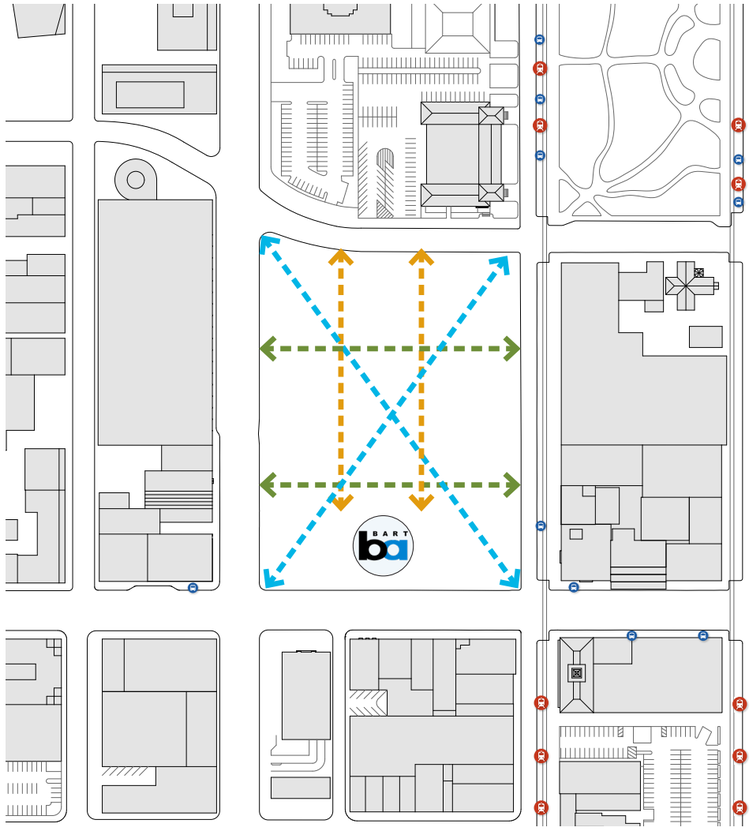


Fig. 3-22 Guidelines for Mid-Block Connections

- Use paseos to create routes to transit stations
- A paseo may have built space above or below the pedestrian surface as long as the paseo appears public and safe
- Design paseos with end-to-end visibility from connecting Public Space. Align and connect the ends of paseos with streets, other paseos, or open spaces
- A new paseo may be created only on a block that is over 3 acres in size with over 400 feet between streets on the longest side

Potential Paseo connecting to BART
Potential Paseo Connecting to Bus Stations
Potential Paseo Introduced to Reduce Block Length

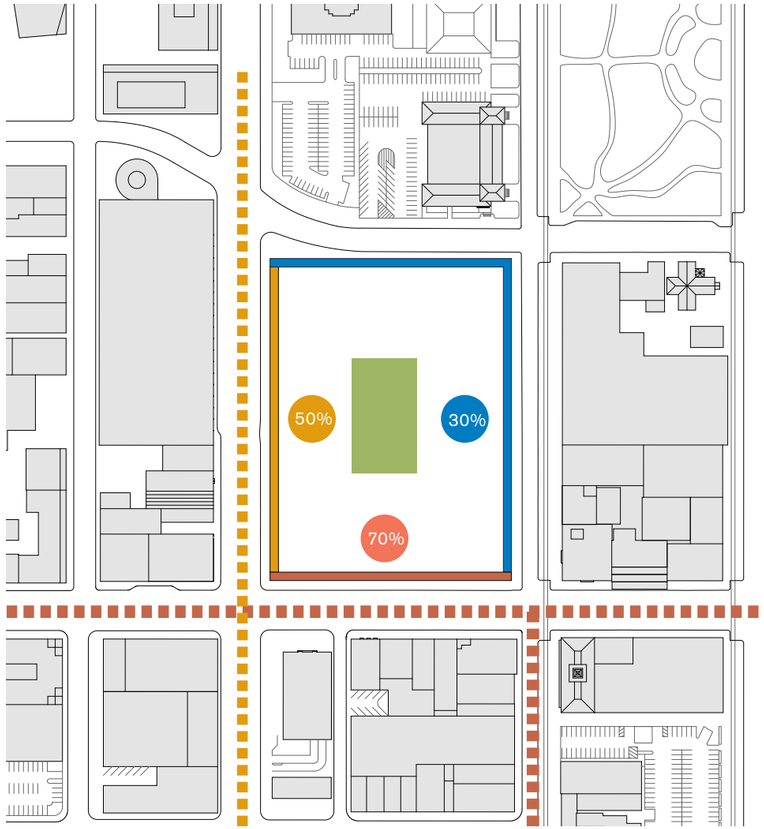


Fig 3-23 Guidelines for Building Placement

- Create a streetwall* along at least 70% of the property or setback line when facing a Primary Addressing Street, at least 50% when facing a Secondary Addressing Street and at least 30% when facing any other street
- Use buildings to create edges for streets and public parks
- Place buildings to preserve view corridors crossing the site, especially designated view corridors
- Bring buildings to the sidewalk to frame the street

*: Streetwalls are the front walls of buildings along the street edge.

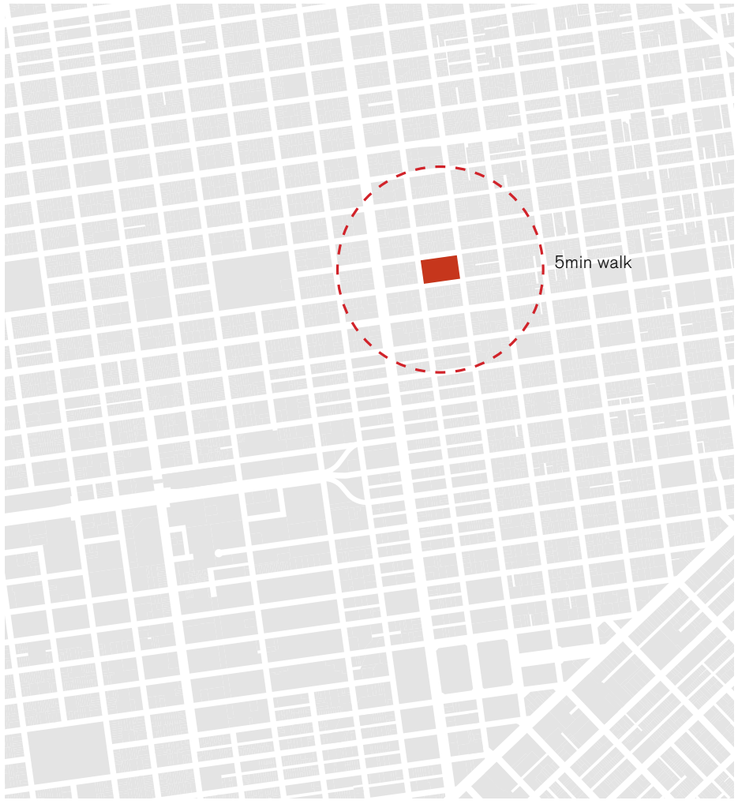
Primary Addressing Street
Secondary Addressing Street

Downtown San José

- San José City scores 33th in walkability (50.5/100) compared to all USA cities
- Downtown San José has walk score of: 77/100, transit score of:62/100 and a bike score of: 89/100

Fig. 3-24 (5) min. Walk Radius in Downtown San Jose.

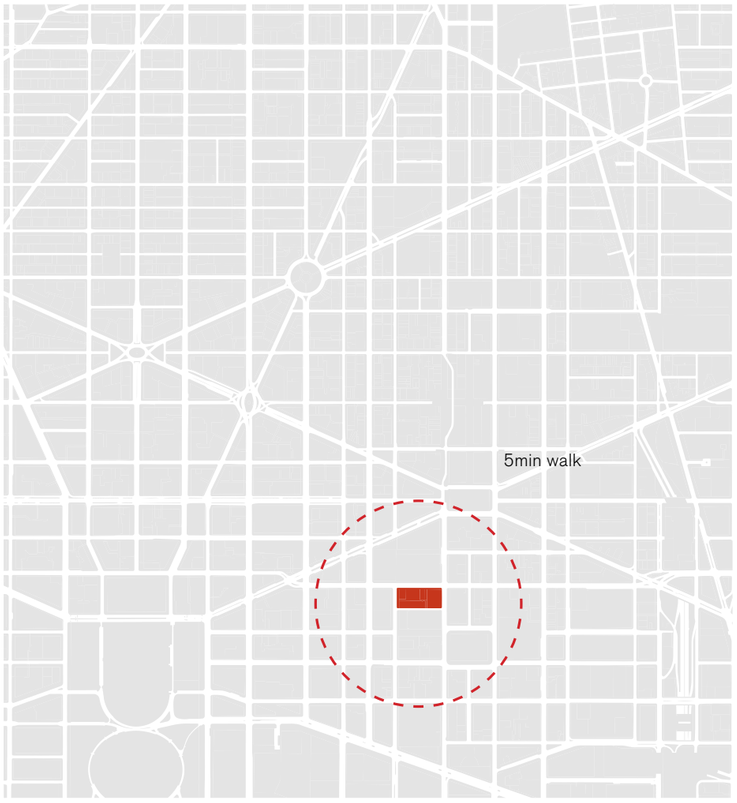
Downtown San Francisco



- San Francisco has the 3rd highest walk score (86.0/100) of all USA cities
- Downtown-Union Square has walk score of: 99/100, transit score of: 100/100 and a bike score of: 84/100

Fig. 3-25 (5) min. Walk Radius in Downtown San Francisco

Washington DC



- Washington DC scores 9th in walkability (77.3/100) compared to all USA cities
- Downtown Washington has walk score of: 97/100, transit score of: 100/100 and a bike score of: 90/100

Fig. 3-26 (5) min. Walk Radius in Washington DC.

Paseo Network Today - Existing and Proposed

Fig. 3-27 Existing Passages

Vision for New Slow Movement Network

Fig. 3-28 Proposed Passages

Precedent Project: Laneway Revitalization, Melbourne, Australia

“Laneways” are narrow streets and pedestrian paths established in Melbourne in the Victorian era. During the nineteenth and twentieth centuries the laneways were privatized, closed off, and neglected. Today, the newly revitalized laneways are popular attractions with high-quality paving materials and lighting, cafes, bars, street art, and cultural events. The revitalization of Melbourne’s laneways began in the early 1990s when the City of Melbourne and state government worked to protect and upgrade the remaining laneways. This was part of a larger laneway regeneration program intended to bring people back to the city after work hours by making the city an exciting, safe, and hospitable environment.

Before: During the 19th and 20th centuries the laneways were privatized, closed off, built in, and neglected.

After: Pedestrian-priority spaces with no vehicular traffic, quality paving materials and custom designed lighting; obstacles, bollards, curbs, and redundant street elements removed; and activation programming like cultural and arts events instituted.

Methods used:

- Incentivize university population to live in the city: The city worked with universities to encourage the large international student population to live in the city and bring along cultural diversity and energy to public areas.
- Invitation to local retailers to take up laneway spaces: The streets were cleaned up, and active street frontages and mixed-use development were encouraged. Small local retailers, particularly cafés, were encouraged to move into the CBD and take up laneway spaces facing the street.
- Public art program: An ongoing, temporary public art program was developed, bringing a sense of excitement and discovery to the laneways.
- Nighttime activities: Nighttime activity was encouraged with incentives for retailers to stay open for longer hours.

Before

After

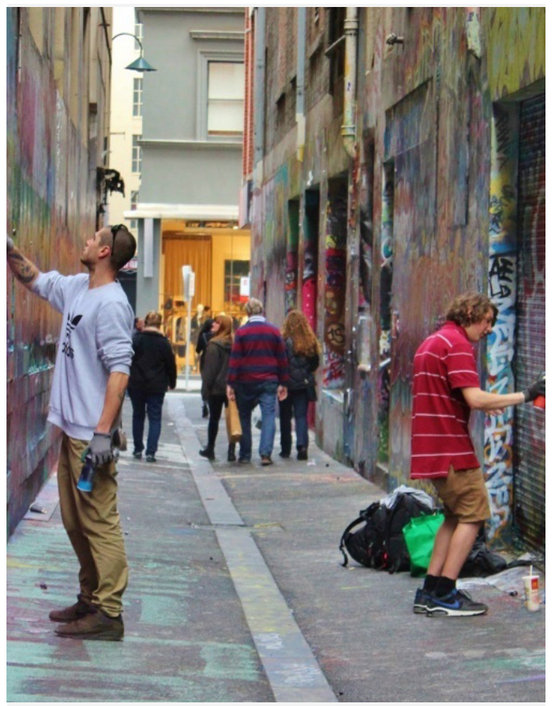
Fig. 3-29 Melbourne, Australia Laneway Paseo Precedent

Incentivize university population to live in the city and bring along a cultural vibe

The city worked with universities to encourage the large international studen t population to live in the city and bring along cultural diversity and energy to public areas.

Invitation to local retailers to take up laneway spaces

The streets were cleaned up, and active street frontages and mixed-use development were encouraged. Small local retailers, particularly cafés, were encouraged to move into the CBD and take up laneway spaces facing the street.



Public Art program

An ongoing, temporary public art program was developed, bringing a sense of excitement and discovery to the laneways.

Nighttime activities

Nighttime activity was encouraged with incentives for retailers to stay open for longer hours.

Fig. 3-30 Melbourne, Australia Laneways Retail Precedents

3 Design Guidelines

The Downtown BART station has entrances and exits on both the north and south sides of the station, with visual connectivity through the station to and from the plaza. The BART station has direct access to and from the plaza. The paseos envisioned in the DDF for the VTA block make the central plaza, BART station, and general area more accessible, walkable, and desirable from multiple directions.

Based on our site analysis and precedent studies, the paseos have been sized to be greater than 25 feet wide with a wider paseo to the north of the station, as it will also provide periodic emergency and service access of the north entrance to the station, but be closed to all other vehicular traffic.

The DDF envisions that people will be able to easily access the site and its central plaza. The blue arrows in Fig. 3-32 represent pedestrian access routes which allow a convenient path of travel to and from all directions and potential destinations.

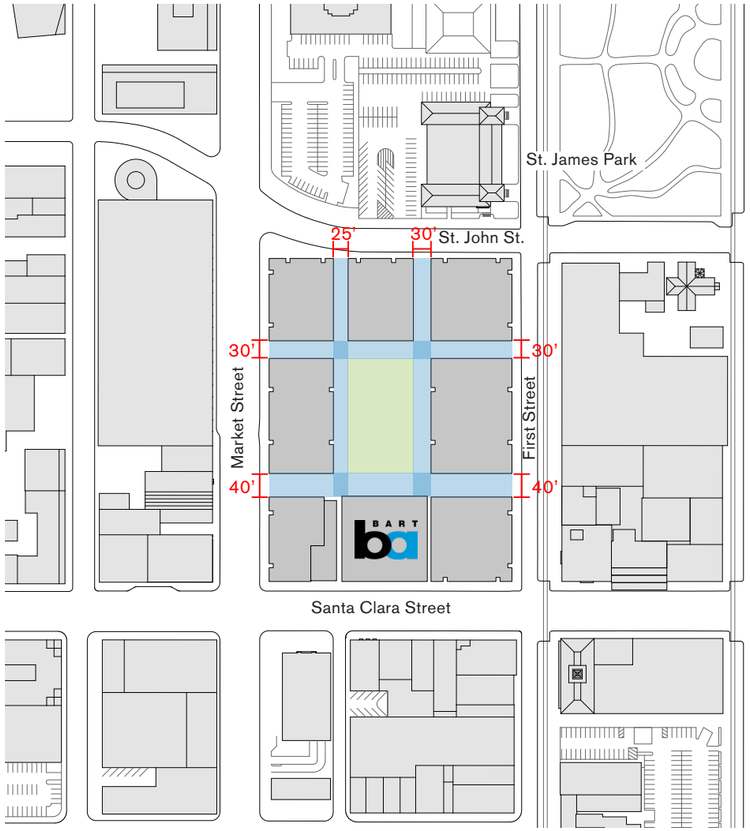


Fig. 3-31 Paseo Dimensions

Public Paseo
Public Plaza

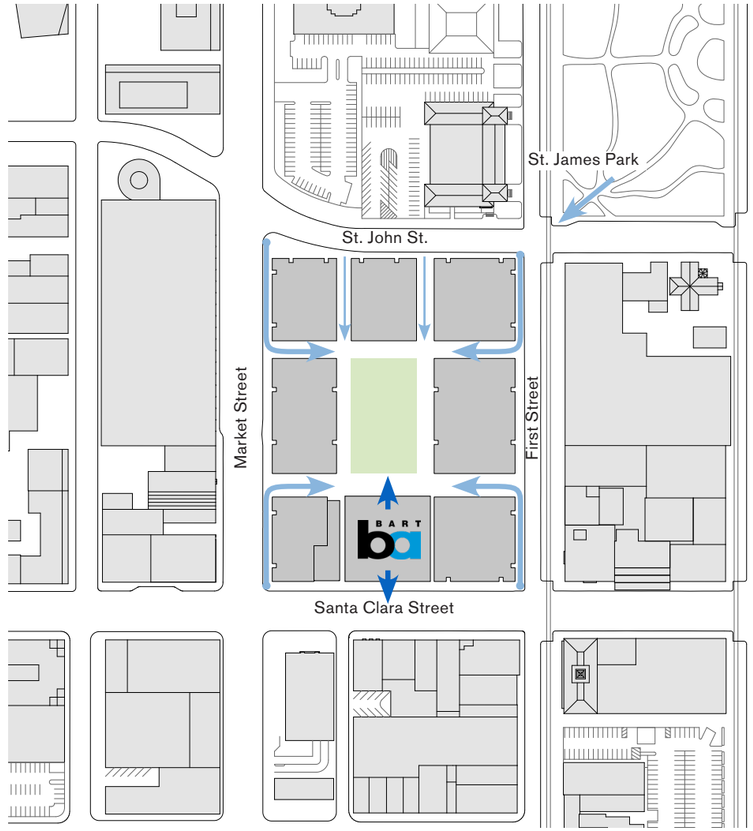


Fig. 3-32 Site Circulation

Public Access
BART Patron
Public Plaza

Paseo de San Antonio (1:3 to 1:4 ratio)

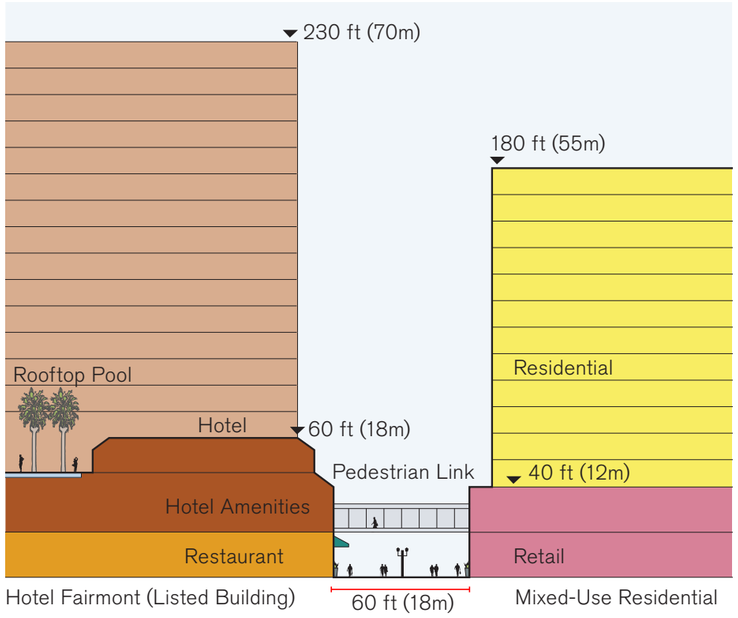


Fig. 3-33 Paseo de San Antonio Analysis

Paseo between 2nd and 3rd Street (1:3 to 1:4 ratio)

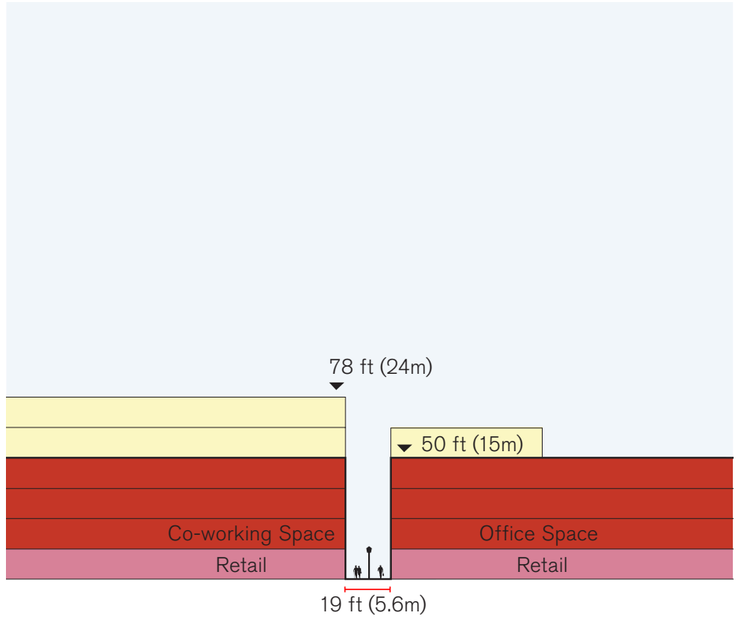
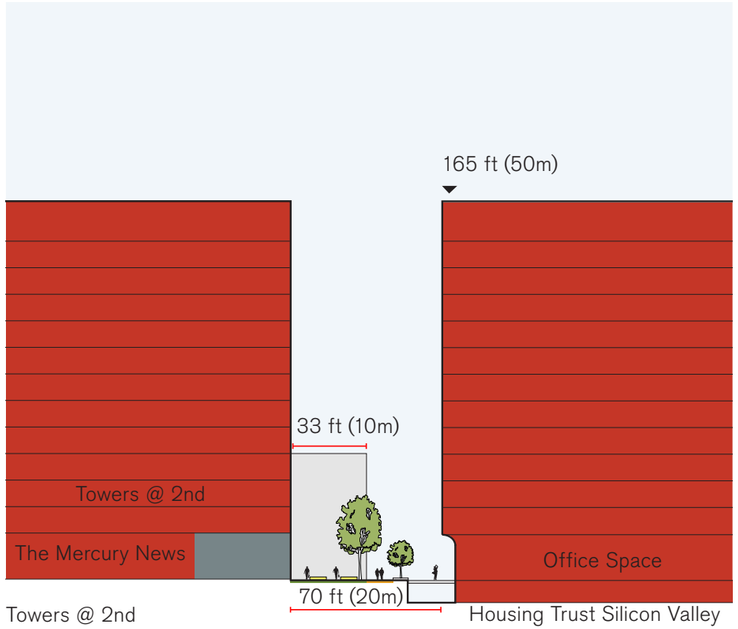


Fig. 3-34 Paseo Between 2nd and 3rd Street Analysis

Towers @ 2nd Paseo (1: 2.5 to 1:5 ratio)



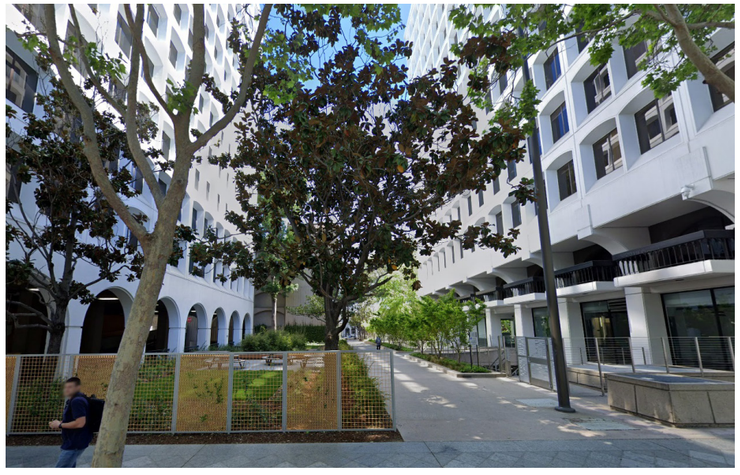


Fig. 3-35 The Mercury News Paseo Analysis

Precedent Project: Santana Row

A more local example is Santana Row, a high-end shopping center that recreates a European urban shopping experience with sidewalk cafés and a “park once” strategy that is enabled by structured parking at access points. Recognizing that this is not a precedent from a historic downtown , Santana Row’s commercial success is partially based on the fact that it replicates the small-scale pedestrian-friendly experience of a nineteenth century tree-lined European city street with human-scale and active shopfronts. Santana Row’s building heights and street and sidewalk widths are scaled to complement each other nicely. Wider sidewalks provide space for outdoor seating and dining, and trees on the edge of the sidewalk provide shade and beauty.

Another important aspect of pedestrian connectivity and access is intuitive circulation and easy navigation through public spaces. VTA has been engaged with the City of San José on wayfinding efforts that will help people navigate Downtown by making it easier to identify and find key destinations, including transit stops. This program should be consulted as part of continuing efforts to make Downtown more accessible, understandable, and enjoyable for all.

Guideline: The DDF recommends that the existing paseo network in Downtown be expanded and enhanced, including by dividing the VTA Block into a discrete set of developable parcels that help create an environment for better connectivity. The paseos should be pedestrian friendly and sufficiently wide to allow for landscaping, outdoor seating, and other amenities.

Fig. 3-36 Santana Row Buildings and Walkways

Fig. 3-37 Santana Row Precedent Section

Fig. 3-38 Santana Row Precedent Plan View

3.3 Urban Character and Public Interfaces

As described in Chapter 2 - Historical Context, development in Downtown is commonly not set back from the sidewalk, and there is a historic building height datum of 40 to 60 feet (or three to four stories), particularly along the historic Santa Clara Street corridor. The City of San José's Downtown Design Guidelines reference this historic precedent, and recommend a 40 to 60 foot datum for a 'podium' of front-facing construction, and towers should be set back above this point. To align with city guidelines and create a unified approach for VTA Block development, the DDF embraces the 'podium' concept included in the City of San José's Downtown Design Guidelines.

The DDF envisions more solid building bases up to the podium level and that the towers above are set back and articulated with geometry and materials that are different than the podium base. The point of transition between the podium base and the setback towers above also creates opportunities for occupiable amenity spaces at the podium level, such as landscaped terraces, recreation space, and outdoor seating areas with retail uses like food and beverage.

Fig. 3-39 Artistic Impression of BART Station

3 Design Guidelines

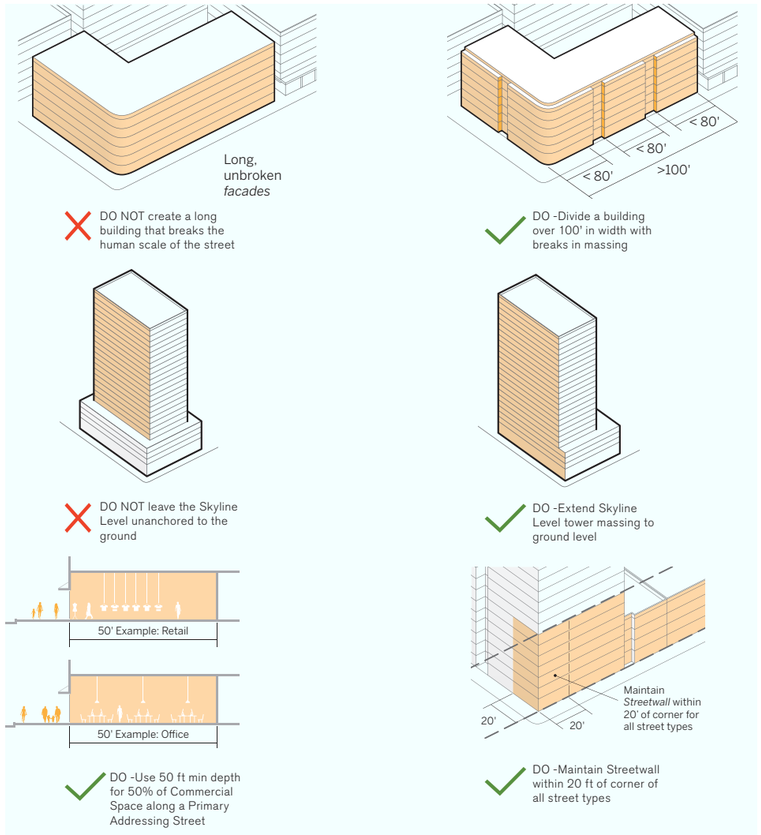


Fig. 3-40 Guidelines for Podium Level Massing

STANDARDS

- Divide *Podium Level* building massing facing *Public Space* that creates a *facade* wider than 100 feet into visibly articulated smaller masses no wider than 80 feet using projections and recesses, materials, shadow relief, or other architectural elements (refer to diagram).

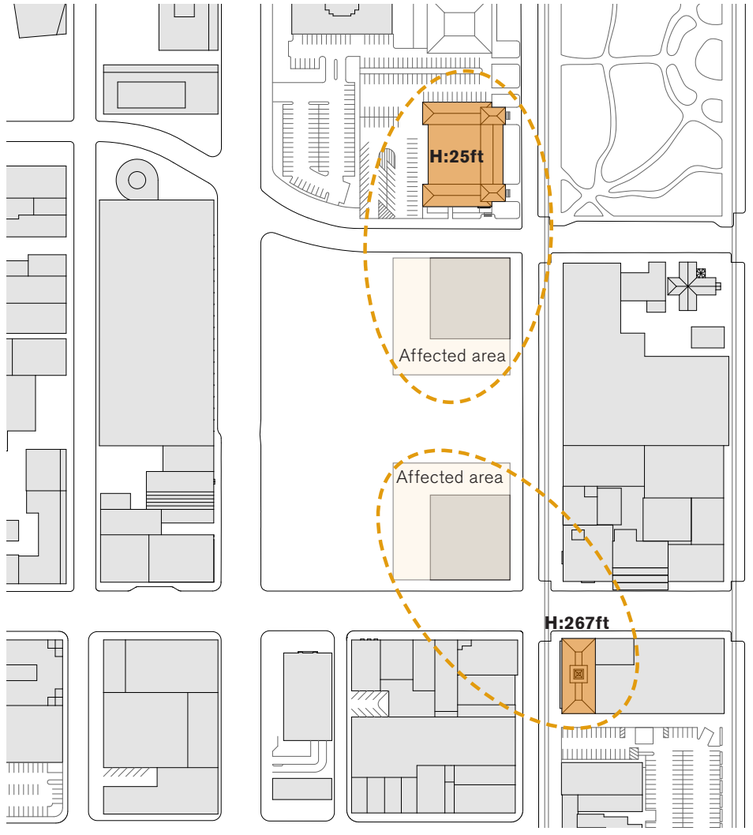


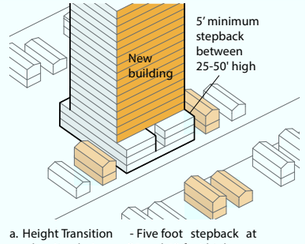
Fig. 3-41 Guidelines for Creating Massing Transitions

STANDARDS

a. Height Transition (see Illustration a): If a new building 100 feet tall or more is across the street from or adjacent to either:

1. A historic building 45 feet tall or less
2. A site for residential use that is limited to a building 45 feet tall or less

The new building must step back its street-facing facade 5 feet minimum from the front parcel or setback line at an elevation between 25 and 50 feet.



a. Height Transition - Five foot stepback at an elevation between 25 and 50 feet high

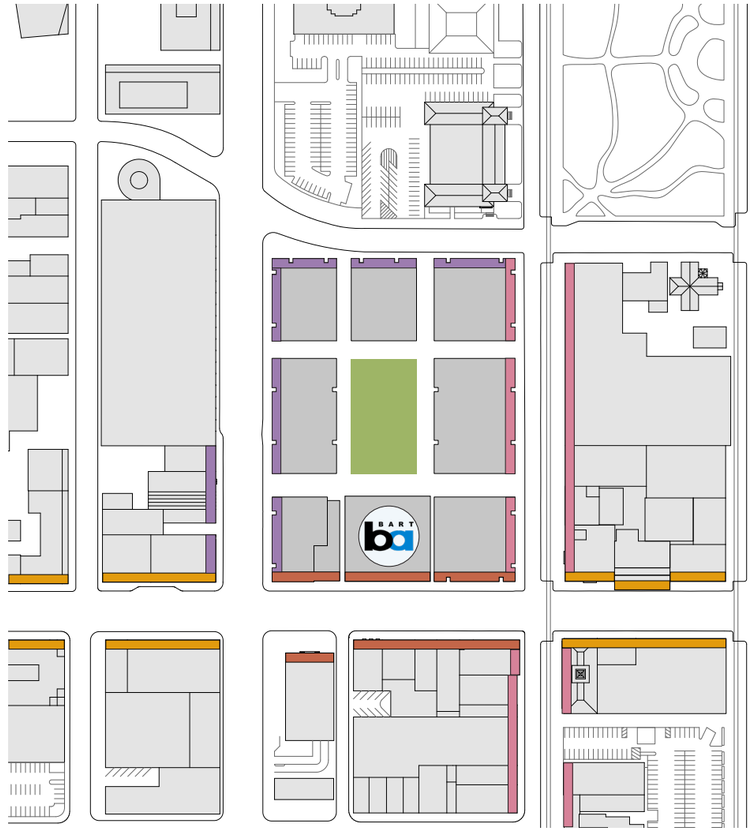


Fig. 3-42 Guidelines for Arrangement of Activities

STANDARDS

- Place a ground level building *facade* along 70% of each parcel's *Public-Space*-facing property lines (within 10 feet) or *setback* lines (within 3 feet). Streets for this standard do not include Highways 87 or 280, highway ramps, or railroad alignments. For a project located within a historic district or context, refer to adopted historic district guidelines and to Guideline (f) in Section 4.2.4.

- Station Related Activities
- First Street Historic Commercial Corridor
- Santa Clara Commercial Corridor
- Local Retail and Food & Beverages

Blue background denotes direct extract from the San Jose Downtown Design Guidelines

b. Width Transition (see Illustration b): If a new building is across the street from or adjacent to a historic building that is both:

1. 45 feet tall or less
2. More than 30 feet narrower than the new building

The new building must create gaps in the Podium Level above the ground floor to divide its street-facing massing into segments no more than 30 feet wider than the widest of the applicable historic buildings. Gaps must be 5 feet minimum width and depth.

Note: There is no need to limit the massing width of a building adjacent to historic buildings that occupy their full lot width, such as historic storefronts. Thus, if a historic building's street-facing facade continues to within 5 feet of its parcel edges, it does not trigger the Width Transition requirement.

c. Rear Transition (see Illustration c): If a new building 100 feet tall or more is across a parcel line interior to a block from either:

1. A historic building 45 feet tall or less
2. A site for residential use that is limited to a building 45 feet tall or less

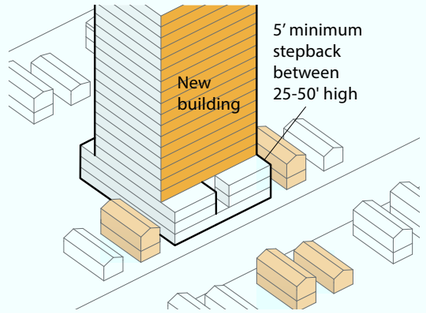
The rear portion of new building must maintain a transitional height of 70 feet or less within the first 20 feet from the property line.

RELATED GUIDELINES

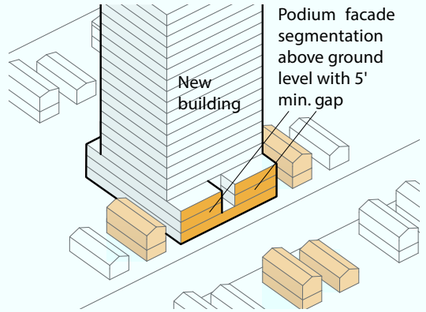
4.2.3 - Civic Icon Adjacency
4.2.4 - Historic Adjacency

GENERAL PLAN REFERENCE

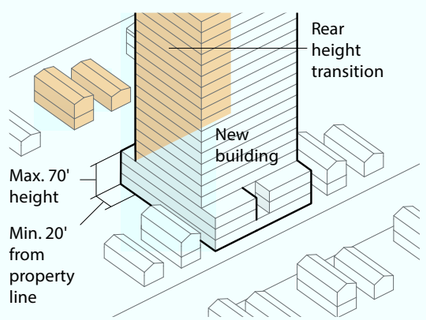
- CD-5.3, LU-9.6, LU-14.9, CD-1.14, CD-2.3, CD-4.5, CD-4.8, CD-1.12



a. Height Transition - Five foot stepback at an elevation between 25 and 50 feet high



b. Width Transition - Facade segments no more than 30' wider than historic buildings



c. Rear Transition - Height maximum 70' within 20' of property line

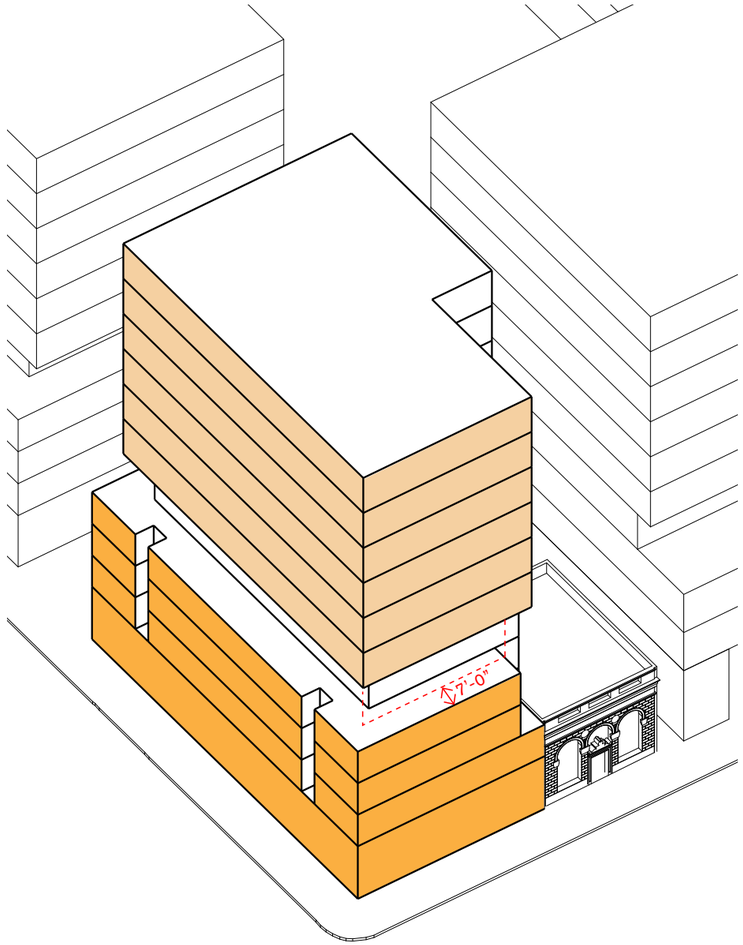


Fig. 3-43 Revised TOD Massing

Blue background denotes direct extract from the San Jose Downtown Design Guidelines

A historical datum of 40 to 60 feet exists along Santa Clara Street as a podium, and the DDF is aligned with the City of San Jose guidelines in recommending that this feature of the urban frontage be respected.

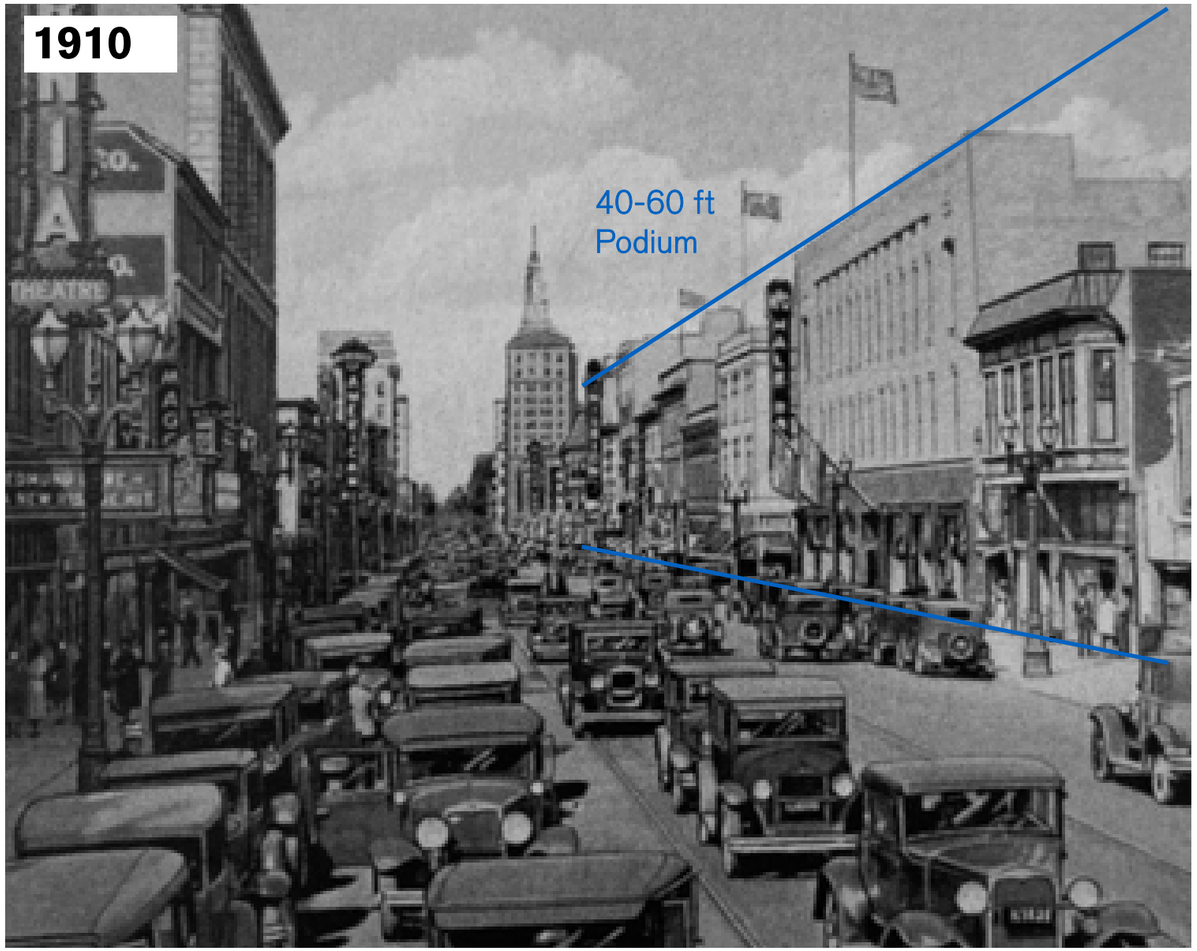


Fig. 3-44 (1910) View of First St.

Fig. 3-45 (1950) View of First St.

Precedent Project: Hearst Tower, New York, NY

In this project, a new tower was constructed on top of an existing historic building. The tower above has a distinctly modern glass façade with a different geometry and material expression that clearly distinguishes it from the more solid masonry materials expressed in the historic building below. The way the building meets the ground and the pedestrian experience at street level remains at a human scale, and is not impacted by the new development above.

It is likely that all buildings on the block will not be developed at the same time, and VTA would prefer that world-class TOD on the block be realized in a manner that promotes a variety of creative expressions (e.g., by different architects, with distinct characteristics from one building to another, etc.). However, VTA also recognizes that the most successful TOD is integrated with the community around it while adhering to certain common principles that provide unity and coordination within and between developments. Creating a framework to establish coherence while maintaining flexibility is at the core of the DDF.

Fig. 3-46 Hearst Tower, NYC

Fig. 3-47 View down 8th St.

Guideline: To maintain cohesive urban character and public interfaces, the DDF recommends the following:

- All new buildings should adhere to an approximately 60 foot podium height from ground level
- Lower podium buildings should be clad with high-quality solid materials like stone or concrete that are appropriate for the historic context
- Towers above the podium should be architecturally distinguished from the podium building through setbacks, changes of material, or other methods. Material selected for the towers should be high-quality, convey permanence, and be environmentally appropriate (both in their sourcing and their embodied carbon)
- Rooftop space created from stepping-back towers at the top of podium levels should be utilized as outdoor amenity spaces, such as landscaped terraces or recreation space for commercial or residential uses, or food and beverage outdoor seating areas for retail use, as feasible.
- Rooftop spaces on top of towers should also be occupiable wherever feasible and appropriate in order to provide outdoor amenity spaces that have views of the surrounding city and landscape
- The massing of the towers should be stepped in ways that maximize daylight to the plaza, provide views for occupants, and avoid casting shadows on St. James Park

Fig. 3-48 Artistic Impression of BART TOD

3.4 Historic Sensitivity

Given the site's prominent location in Downtown and the varied character of the architecture along the four adjacent streets that bound the site, it is important that new development on the VTA Block remains of a scale and character that complements neighboring developments. To some extent, the use of the aforementioned guidelines in this chapter regarding podium height, materials, and setbacks will all contribute to the creation of new buildings which feel appropriate within their context.

A few other key historic factors are highlighted by the DDF for future consideration:

First, the historic Building and Loan structure located at 81 West Santa Clara has been listed as a potential historic resource and eligible for listing in the National Register of Historic Places (NRHP) through a formal process involving federal agencies. The building sits at the middle of the block, adjacent to the future BART station. This property is also privately owned and not under VTA's control. The building is of a scale and quality that it could fit very well within the podium concept already articulated in the DDF. Any future development that interacts with this site requires sensitivity regarding the historic building so that its historic character is not diminished.

Fig. 3-49 Historic San Jose Building and Loan Association Building 2019 (Top) and 1930 (Bottom)

4.2.9 81 West Santa Clara Street (Map Reference E-23)

The San Jose Building and Loan building at 81 West Santa Clara Street was determined individually eligible for the National Register under Criterion C in 2003. Its period of significance is 1926, its construction date, and the historic property boundary

Fox Building [a] 40 North Fourth Street, San Jose	467-20-016	1919	2S	JRP 2002
San Jose Building and Loan 81 West Santa Clara Street, San Jose	259-34-018	1926	2S	Franklin Magi 2002/JRP 2002
James Clayton Building 34 West Santa Clara Street, San Jose	259-40-038	1880s / 1910s / 1920s	2S	Glory Anne Laffey 1991 / JRP 2002

[a] APN: Assessor's Parcel Number

[b] Status Codes for the National Register of Historic Places:

- 1 Listed in the NRHP
- 2 Determined eligible for listing in the NRHP through a formal process involving federal agencies.
- 3 Appears eligible for listing in the NRHP as judged by the qualified person completing or reviewing the DPR 523 form for the property.
- S Considered a separate or individual property
- D Considered a contributor or potential contributor to a historic district or potential historic district
- B Considered both an "S" and "D" property
- 2S2 Determined eligible for separate listing through a consensus determined by a federal agency and the California Office of Historic Preservation (OHP)
- * These properties are listed in the NRHP or were previously determined eligible. Information regarding the evaluators is not required in the HRER.

[c] Building(s) has been demolished.

Source: JRP Historical Consulting Services LLC, Historic Resources Evaluation Report (HRER), 2002, and Addendum Draft Technical Memorandum to the HRER, February, 2008.

"Determined eligible for listing in the NRHP through a formal process involving federal agencies"
- Silicon Valley Rapid Transit Corridor Final EIS

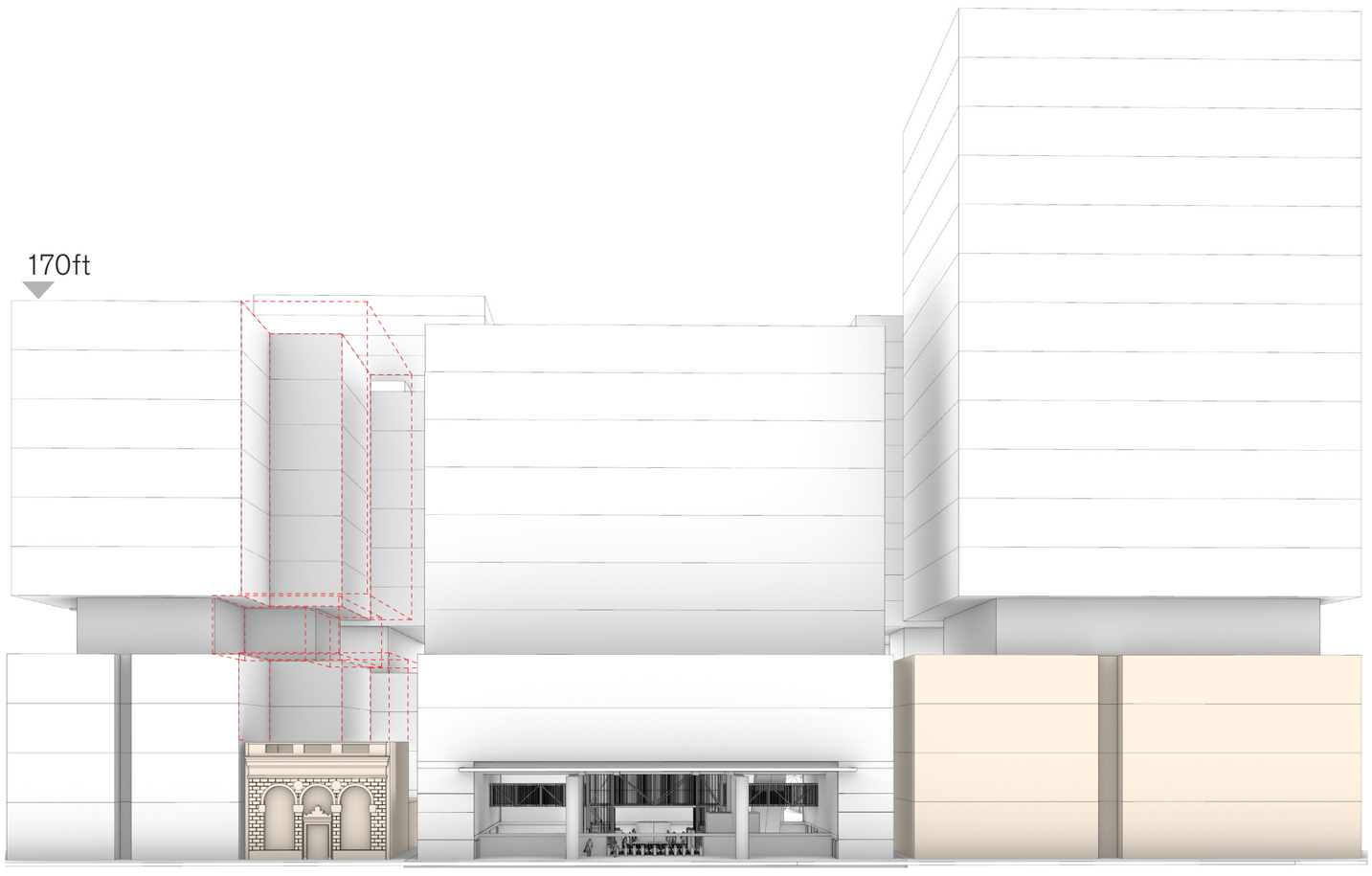
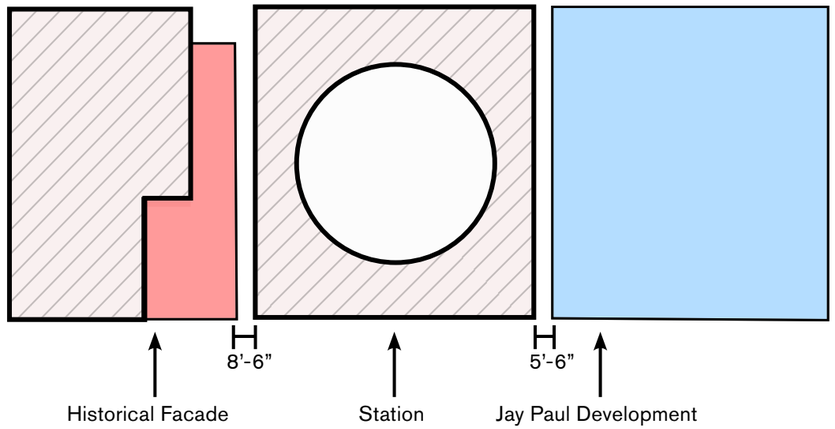
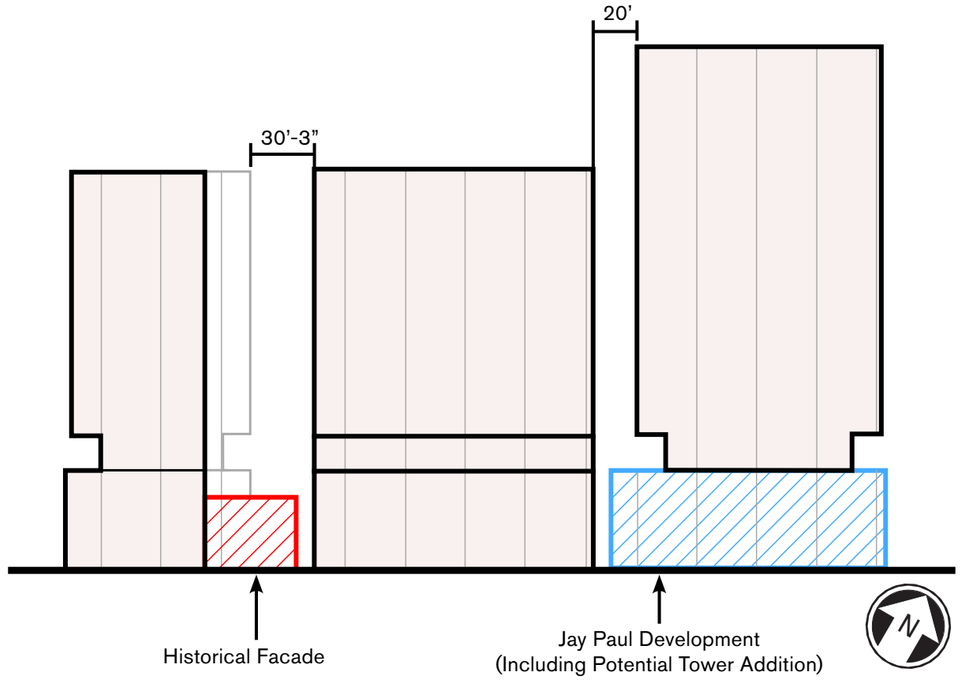


Fig. 3-50 Historic San Jose Building and Loan Association Building Parcel Analysis





3 Design Guidelines

Another key historic consideration is that the northwest corner of the site, which is diagonally opposite St James Park, falls within the boundaries of the St James Park Historic District. While the existing building on this site does not appear to be historic, the St James Park Historic District guidelines would limit the building height for any new development on this site to only one story taller than any adjacent buildings, or, in any case, no greater than 70 feet. The future buildings that would be adjacent to a future building at the corner of St John and First Street would likely be taller than 70 feet.

The St James Park Revitalization Strategy has been developing plans to renovate and activate St James Park including plans for event spaces, playgrounds and a Park Paseo and Monument Walk. Last updated in 2019, the 25% Plans show a children's playground facing the corner of St. Johns and First streets. The Levitt Pavilion is also planned for the park; it would be a venue for future performances and events. Revitalization of St James Park would create valuable amenities for the community that would complement the VTA Block.

With St James Park's proximity in mind, another key consideration for future development of the VTA Block is to minimize shadows cast over the park, which could happen in the afternoons during winter months when the angle of the sun is lower.

All of these factors should be considered as part of future activities to advance development of the VTA Block.

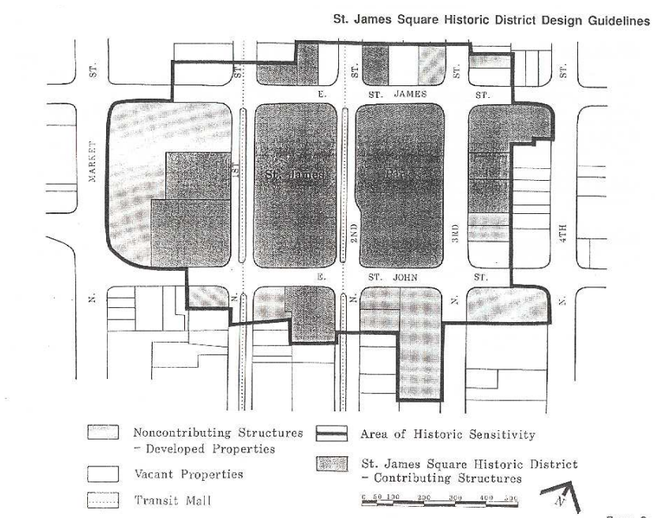


Fig. 3-51 St. James Square Historic District Map

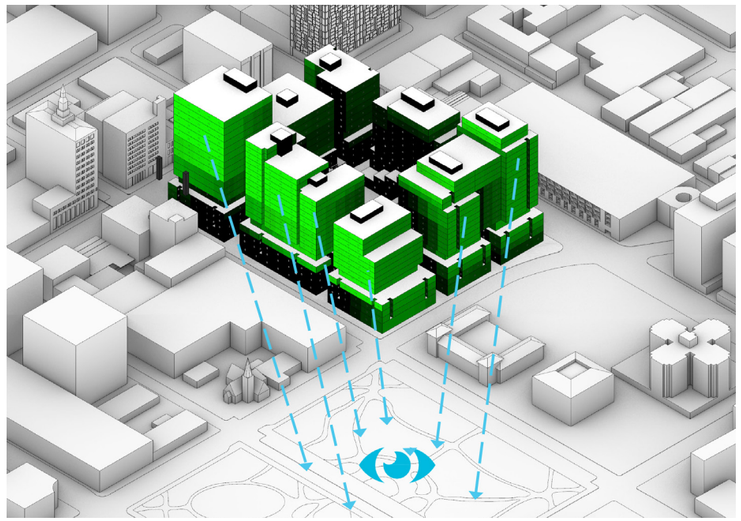


Fig. 3-52 View from North-East

Fig. 3-53 St. James Park

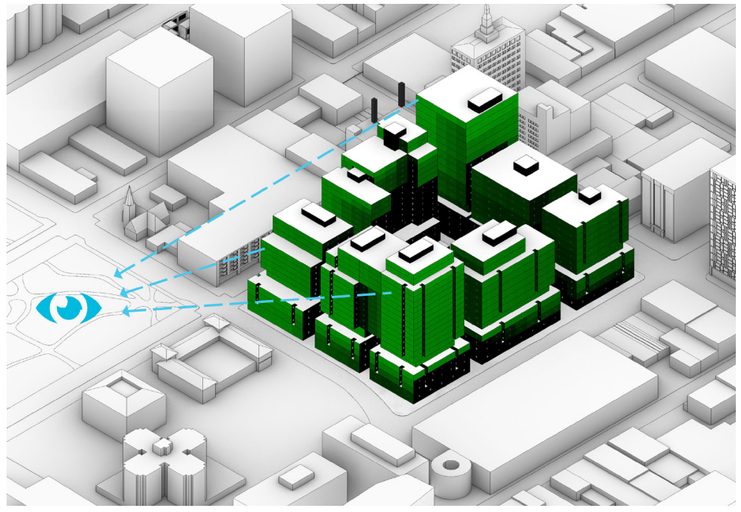


Fig. 3-54 View from North-West

3 Design Guidelines

Guideline: While neither of the two properties with constraints created by historic buildings or districts are owned by VTA, sensitivities associated with these sites must be taken into account as part of activities to advance development of the VTA Block. Further consultation with the City of San José will also be needed to ensure that VTA Block massing adheres to local regulations, including the following recommendations of the DDF:

- The corner parcel at St. John and First Street, diagonally opposite St. James Park, must be designed in a manner that considers its impact on the park and the St James Park Historic District. A shadow study should be undertaken to determine any potential impact on the public park.
- The treatment of the buildings adjacent to the Building and Loan building, located at 81 West Santa Clara Street, should be explored further and reviewed with the City of San José to avoid diminishing any contributing features of the historic building.
- Site access to 81 West Santa Clara Street should be retained in its current configuration.
- Strategies to be considered for adjacencies to the historic building may include setbacks and adjustment to podium height(s) to align with the roofline of historic building.

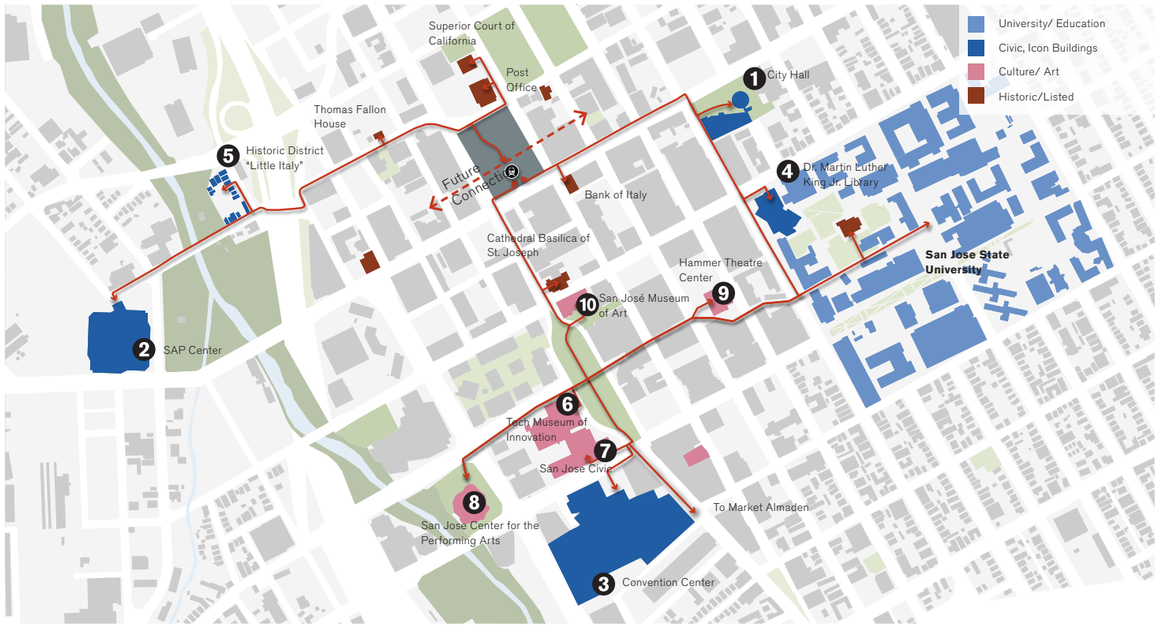


Fig. 3-55 Downtown San Jose Landmark Destinations Map

These figures show other key destinations within a 15 min walking distance of the VTA Block. These destinations make up the '4 cornerstones' of critical adjacencies: University/Education ([4] San Jose State University), Civic and Iconic Buildings ([1] City Hall and [2] SAP Center), Cultural and Arts ([8] Center for Performing Arts and [6] Museum of Innovation) and Historical/Cultural landmarks (Post Office building, San Pedro Square, Bank of Italy)

Fig. 3-56 Landmark Destinations

3.5 Social Equity and Environmental Responsibility

The VTA Block represents one of the greatest opportunities for VTA to ensure that TOD addresses issues of social equity and ensures that new development is undertaken in an environmentally sustainable manner. The DDF is shaped by VTA's Transit-Oriented Communities work that occurred concurrently with the BSV Phase II Project and VTA's TOD Policy, particularly its commitments to the creation of affordable housing.

Adopted in 2016, VTA's TOD Housing policy sets a minimum of 20% affordable housing units within any TOD development. Within this requirement, of the 20% affordable units, at least half should be targeted to extremely-low or very low income households. The policy does not allow for payment of in-lieu fees, off-site development, or other actions that sidestep the objective to create mixed-income residential development.

Updated in November 2019, VTA's TOD Policy reinforces VTA's commitment to the following goals that are most relevant to the DDF:

- Provide housing at a range of density and affordability levels and guarantee affordable and workforce housing units across targeted income levels
- Support commercial and retail spaces that support local businesses and living wage jobs
- Enhance mobility choices
- Community services and other amenities should be integrated into safe and walkable neighborhoods
- Generate revenue to sustain transit capital investments and operations
- Incorporate a comprehensive approach to sustainable design, construction, operations, and maintenance to advance net-zero development policies.

The list above is not comprehensive, but it serves as a sample of VTA's sustainability and equity goals that TOD can help to achieve.

To further VTA's achievement of its equity goals, the DDF also proposes that the ground-floor retail spaces be sized to support small-scale local businesses, that some portion of the ground-floor spaces be allocated to a community center, and/or that space be reserved for community events, performances, exhibits, and/or meetings.

For more information about VTA's goals for sustainable development and corresponding content in the DDF, please refer to Chapter 5 – Sustainable Approach to Development which addresses this topic in more detail. For sustainability-focused design guidelines, the following is a sampling of potential strategies that the DDF recommends be explored and prioritized in future RFP/RFQs:

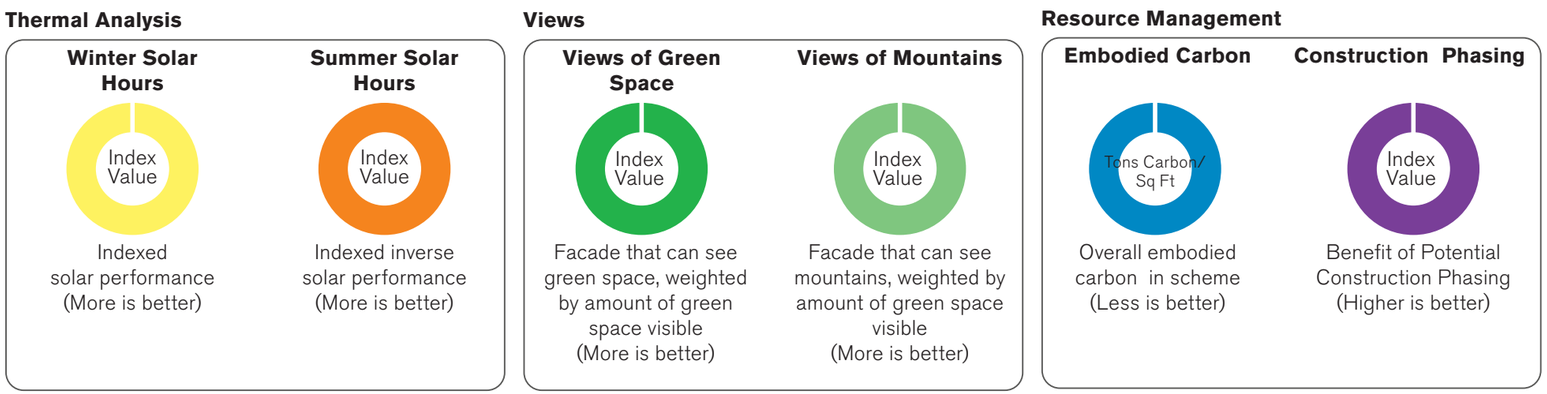
- Target net zero energy as a goal for future development on the block.
- Explore structural solutions for the building that will reduce embodied carbon, such as mass timber, light-weight concrete admixtures, and recycled material content.
- Explore opportunities for efficiencies by centralizing utility services and exploring energy distribution strategies like micro-grids to further reduce energy consumption.
- Implement strategies that promote transit use and minimize single-occupant vehicle trips to reduce congestion and pollution.

Guideline: Social equity and environmental responsibility are vitally important, and VTA's policies document VTA's consistent commitment to sustainable and equitable approaches and outcomes. VTA will seek public-private partnerships that advance achievement of VTA's sustainability and equity goals when reviewing and approving proposals to advance development of the Downtown VTA Block.

Measuring Success

As a tool to evaluate and balance the various priorities of the DDF guidelines, a system of visual 'Dials' has been developed. Some of the key measurable criteria for successful TOD have been translated into the graphics as shown in figure 3-57, and this tool has been utilized to evaluate different test fits and massing options which are shown in Chapter 4 – Applying the Guidelines. These guidelines will also be used in the future by VTA, as the project develops, to evaluate different proposals and determine how successfully they adhere to the DDF principles.

Matrix Evaluation Criteria



Solar performance calculated based on average sunlight hours to the rooftops, facades, and ground plane for each of the schemes. The inverse of this performance is used for summer-based evaluations, as fewer sunlight hours is more desirable during the summer.

All dials are indexed to provide easy comparisons between options. As new options are added, previous options dial values may change. Indexed values serve to compare between options, and single options results should not be looked at in isolation.

Fig. 3-57 Evaluation Dials

Applying the Design Guidelines

4

This chapter describes how the design guidelines presented in Chapter 3 can be applied in order to develop and evaluate world-class TOD options for the VTA Block, and how they were applied to identify the baseline development concept presented in the DDF – VTA will use this DDF baseline concept to evaluate future development proposals for the VTA Block, while remaining open and flexible to proposals that are improvements from the DDF baseline.

The DDF process developed and evaluated multiple ‘test fits’ to determine the best ways to achieve development goals within environmental, regulatory, and political frameworks. These test fit options for world-class TOD on the VTA Block were evaluated using criteria that were established as part of the DDF process. Figure 4-07 shows the array of different massing options studied and the four massing scenarios chosen for further consideration.

Based on input and feedback from stakeholders, one of the schemes was further developed, shown in Figure 4-15. It is important to note that this massing does represent a “recommended” massing or plan for the VTA Block, rather the latest iteration of an ongoing process of refinement that will continue. VTA will ultimately work with a master developer to develop the principles and concepts expressed within the DDF into a master development plan for the Block, with broad-based involvement by the public, stakeholders, and City, that will provide the final massing, design, development strategies, and actions needed to create world-class TOD on the VTA Block.

4 Applying the Design Guidelines

4.1 Target Density, Program and Surrounding Context

Development massing options were evaluated in coordination with development feasibility analyses that identified a target floor area ratio (FAR) of approximately eight square feet of occupiable space for every square foot of land area within the VTA Block. This 8 FAR is in line with other recent developments in Downtown. The mix of occupiable space uses was also derived from prior financial market analyses.

Fig. 4-01 Artist impression of Massing

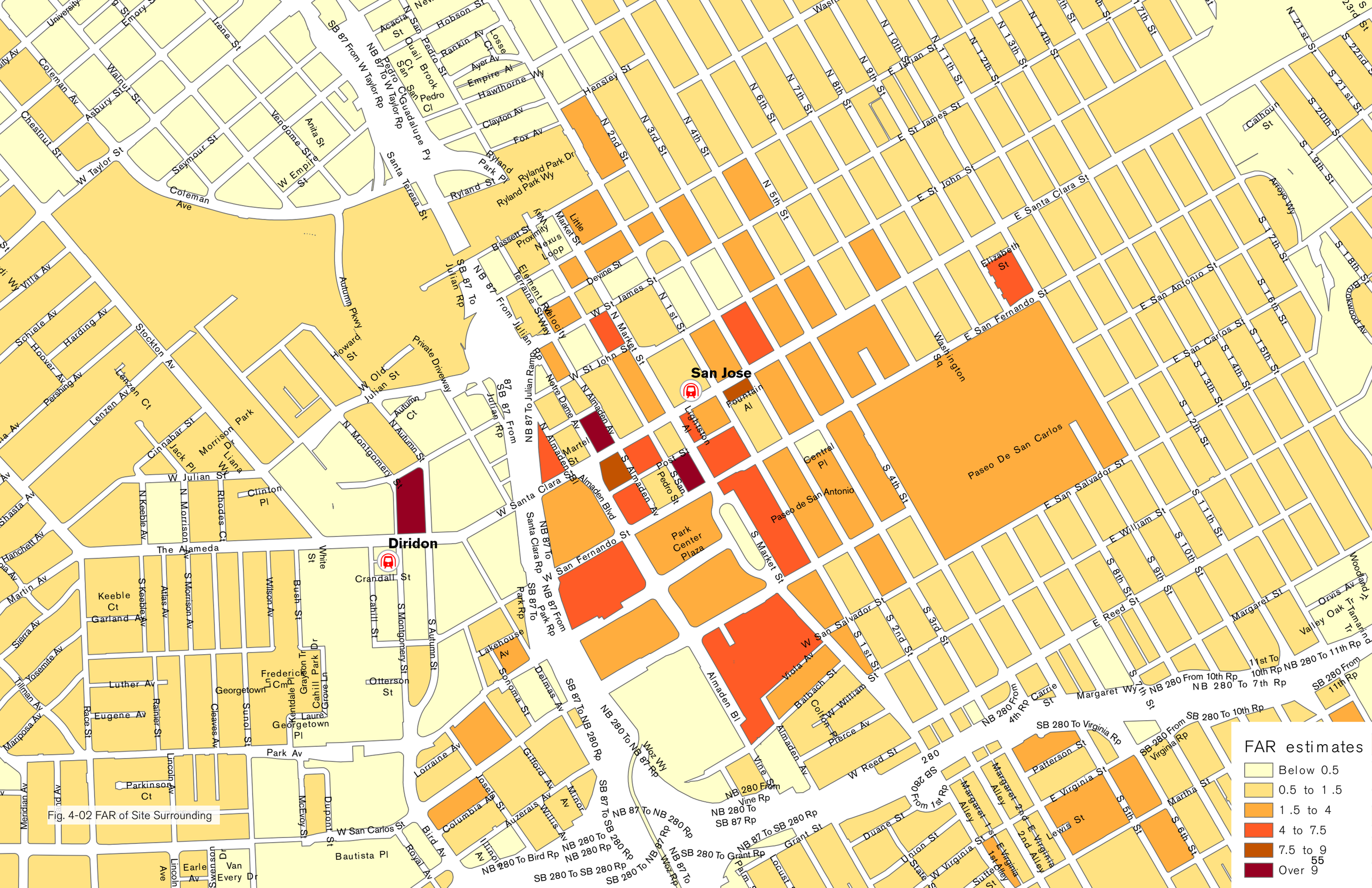
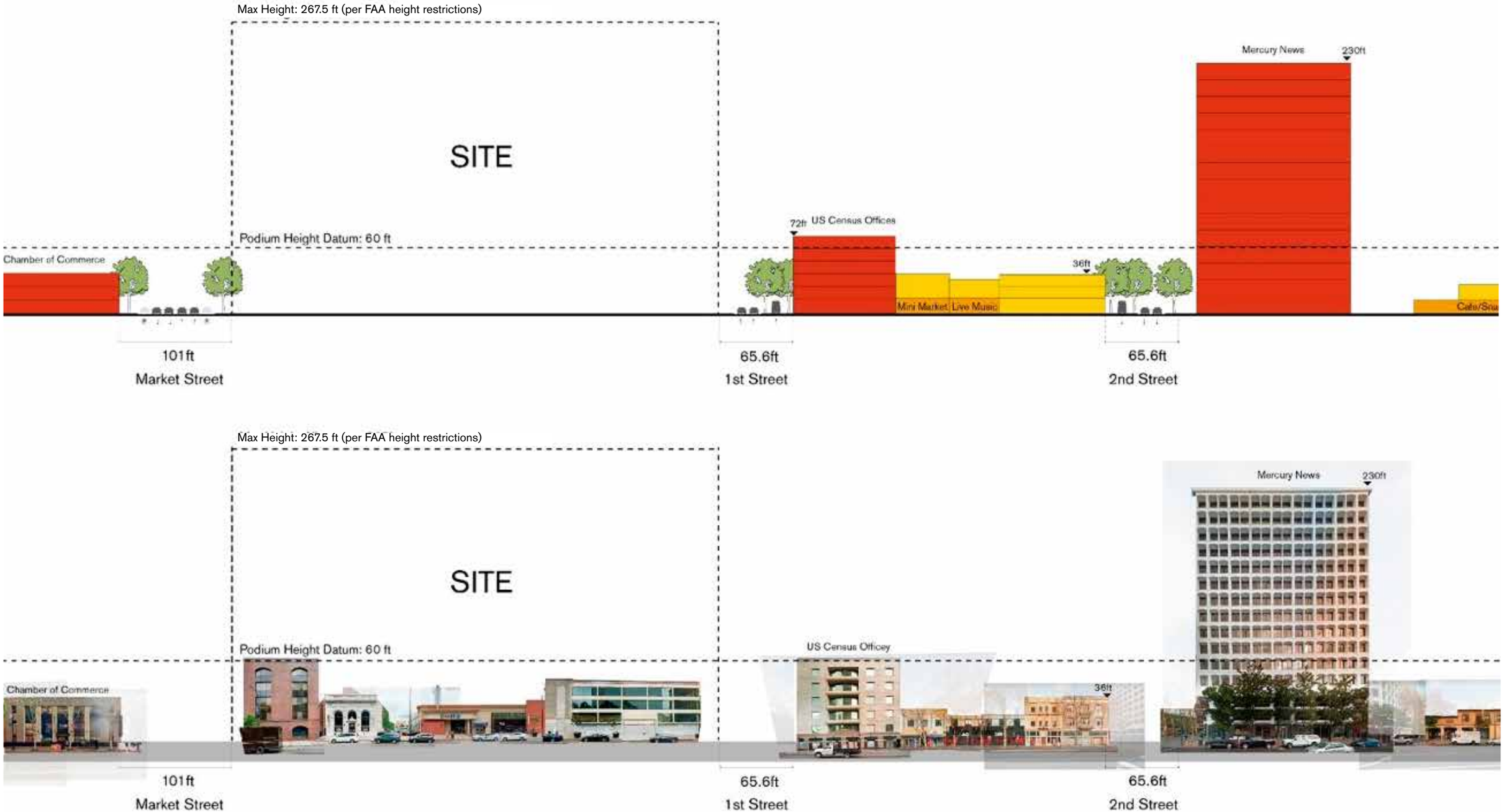


Fig. 4-02 FAR of Site Surrounding

Fig. 4-03 Section Diagram

Fig. 4-04 Section Diagram


Max Height: 267.5 ft (per FAA height restrictions)
SITE
Podium Height Datum: 60 ft
Chamber of Commerce
72ft
US Census Offices
Mini Market, Live Music
36ft
Mercury News
230ft
Cafe/Sna
101ft
Market Street
65.6ft
1st Street
65.6ft
2nd Street
Max Height: 267.5 ft (per FAA height restrictions)
SITE
Podium Height Datum: 60 ft
Chamber of Commerce
US Census Offices
36ft
Mercury News
230ft
101ft
Market Street
65.6ft
1st Street
65.6ft
2nd Street

4 Applying the Design Guidelines

4.1 Target Density, Program and Surrounding Context (cont.)

The four corridors which frame the VTA Block accommodate different needs and have different characters (e.g., transit-oriented, pedestrian-oriented, car-oriented, historic, civic, urban park, etc.) . Uniform 60-foot building podium heights would complement the character of all framing corridors with a design element that unifies developments on the block. The distinctive character of each side of the block also suggests certain uses for the buildings that face them. Figure 4-05 shows suggestions for how building massing and occupiable uses might be integrated with the context of the block.

The DDF envisions that all parcels fronting Santa Clara and Market streets, which are major commercial thoroughfares, would house commercial and office uses. The DDF also envisions that quieter First and St John streets that connect to St James park are better suited for residential and hospitality uses. In the test fit shown in figure 4-06, the corner site at St John and First streets is shown as a hotel use, although the viability of a hotel at this site is dependent on discussions with the City regarding the recommended building heights in the St James Park Historic District Guidelines, as noted in Chapter 3.

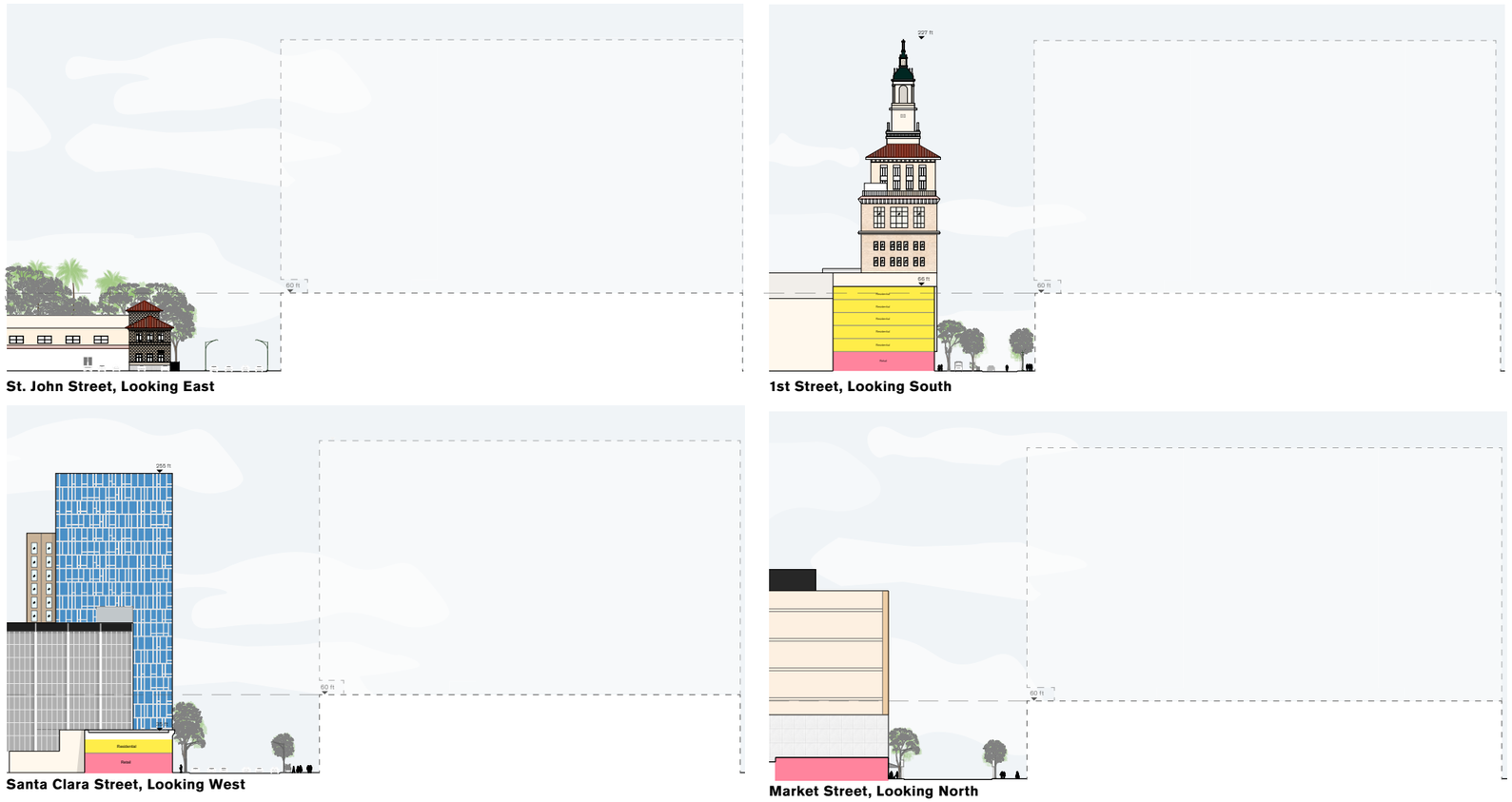


Fig. 4-05 Surrounding Streets Analysis

Fig. 4-06 Functions Diagram

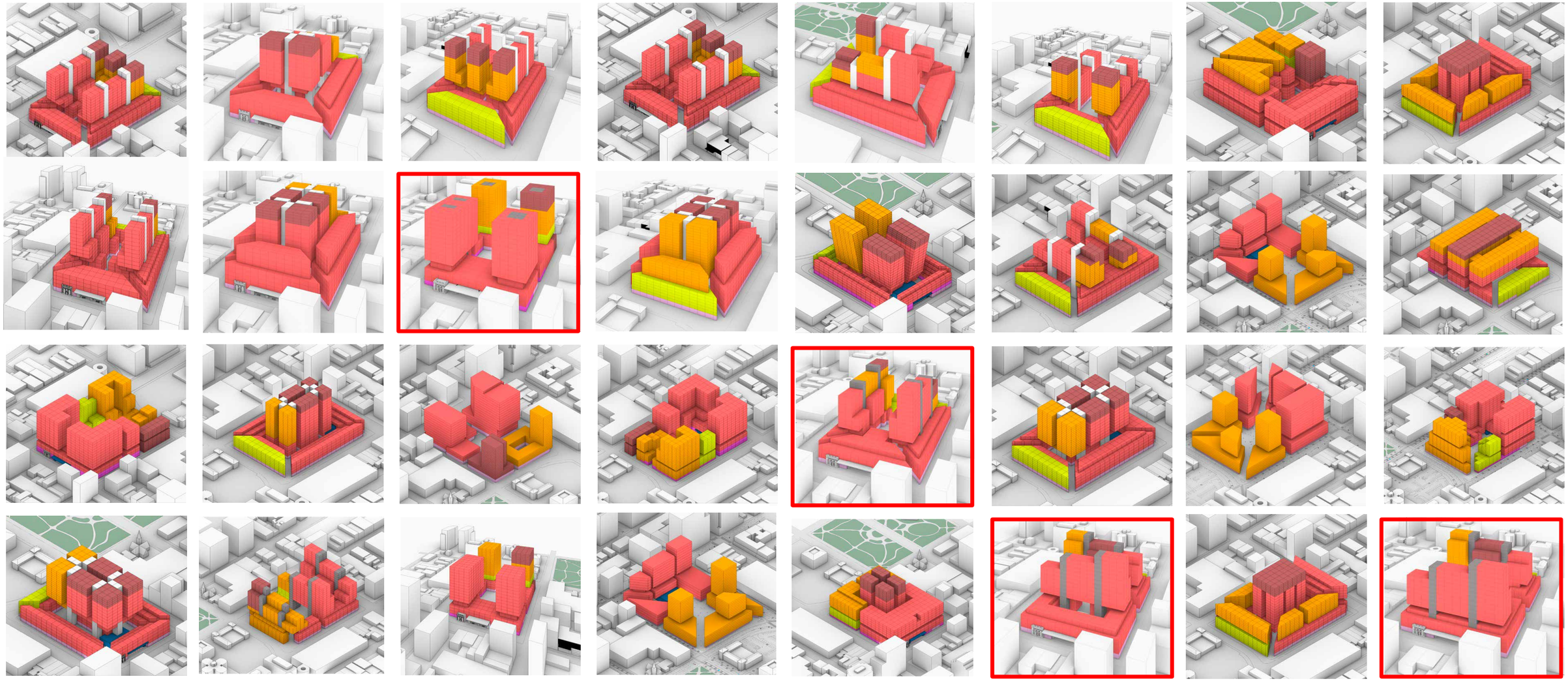


Fig. 4-07 Massing Studies

Fig. 4-08 Stakeholder Meeting, February 2020

Fig. 4-09 Massing Model

4 Applying the Design Guidelines

4.2 Summary of Massing Approach

This series of diagrams begins with a solid mass that is the full size of the site and 267 feet tall, the maximum allowed height (Step 1).

From this theoretical mass, the central plaza is carved away to create a public space at the heart of the development for all of the reasons outlined elsewhere in this document (Step 2).

Pedestrian paseos are then introduced to provide access to the plaza, particularly on the long north-south city blocks (Step 3).

Setbacks are provided at the historic Building and Loan building on Santa Clara Street and for the BART station (Step 4).

A 60 foot podium height is established, with outdoor amenity space created where towers are set back from podiums (Step 5).

The towers set back from the podium bases will have a lighter more transparent architectural expression. (Step 6)

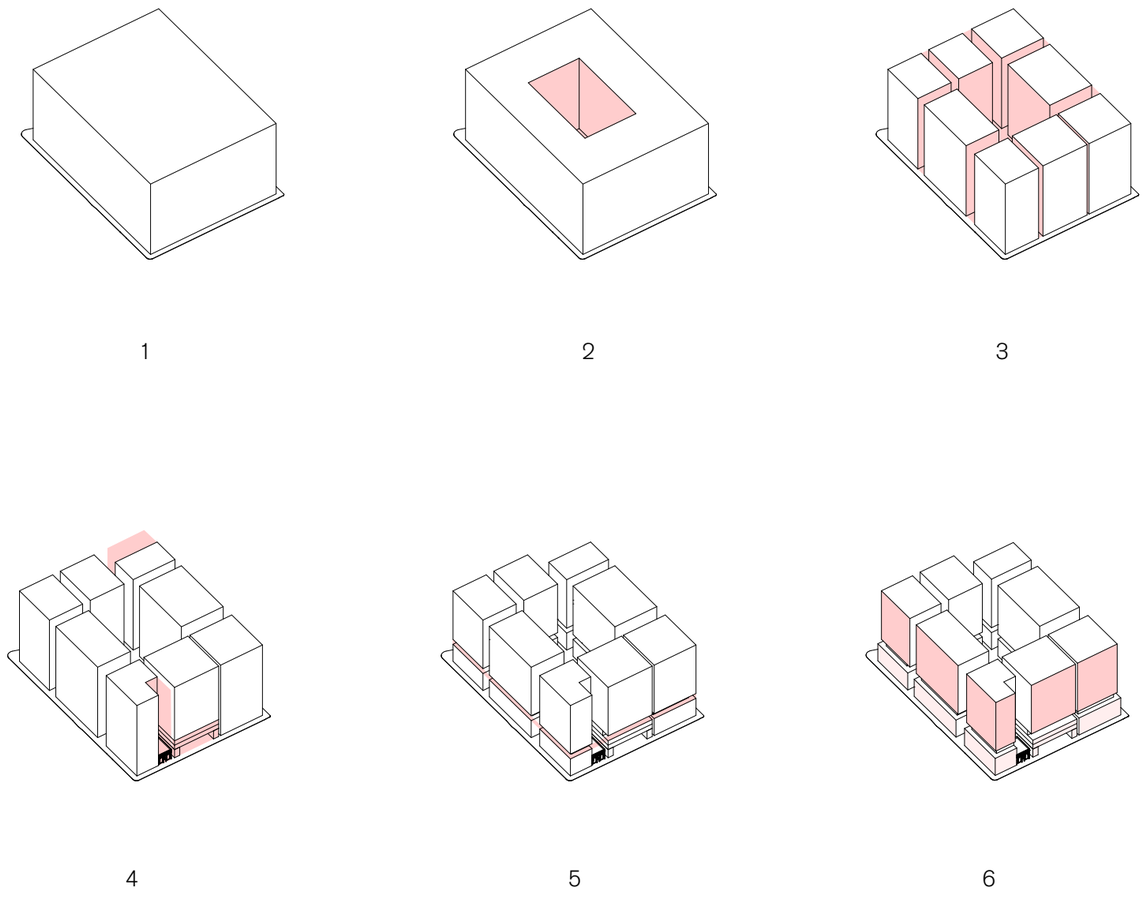
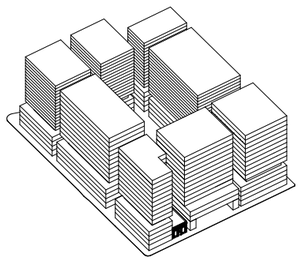
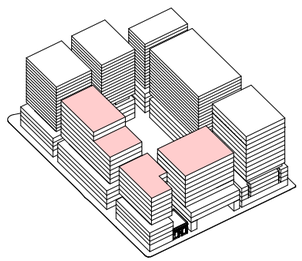


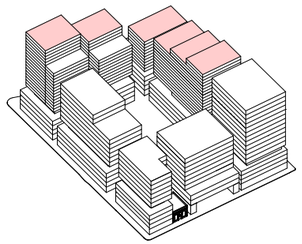
Fig. 4-10 Massing Studies



7



8



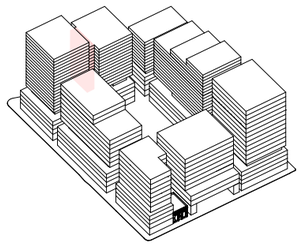
9

Proposed floor-to-floor heights vary depending on the interior program, with residential floor-to-floor heights of 13ft and commercial at 15ft. Ground floor retail will have 18ft clear. (Step 7)

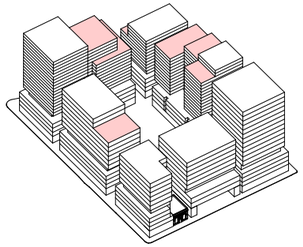
The DDF suggests that building heights should be lowered near the corner of Santa Clara and Market streets in order to allow more sunlight into the plaza and provide better views of Downtown for building occupants. (Step 8)

The DDF also suggests that building heights should be lowered near the corner of St John and North First streets in order to provide better views of St James Park and the east hills. (Step 9)

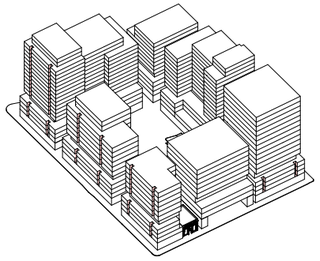
To avoid units looking into each other via facing windows, the two residential towers at the northeast of the site are merged above podium level. (Step 10)



10



11



12

The DDF suggests further terracing the residential towers to provide enhanced views and more usable outdoor amenity space. (Step 11)

The DDF also suggests that building frontages be articulated to have more aesthetically pleasing buildings that better contribute to Downtown's urban character. (Step 12)

4 Applying the Design Guidelines

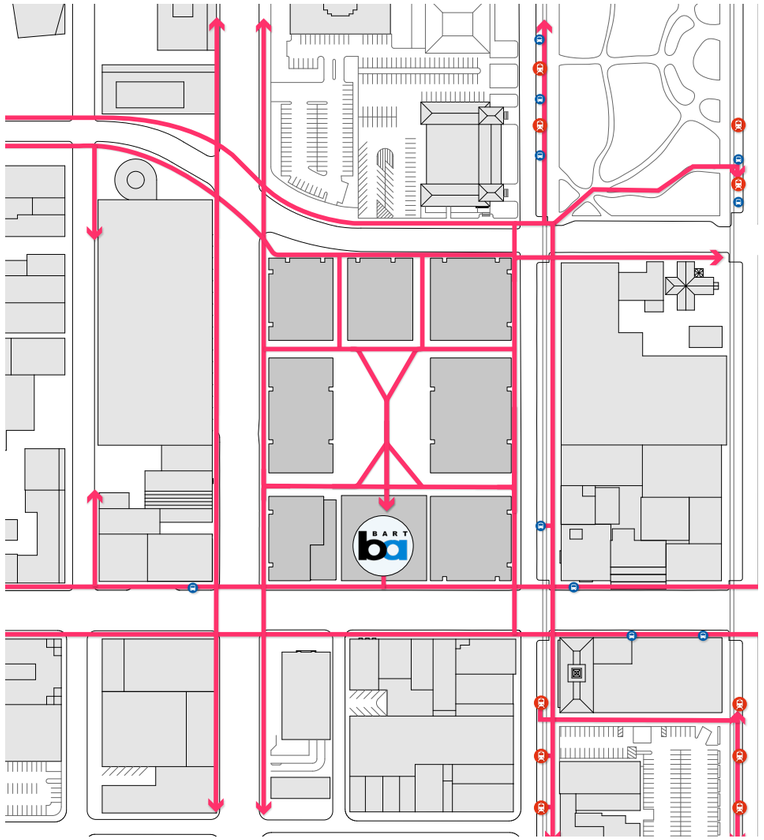


Fig. 4-11 Pedestrian Circulation Diagram

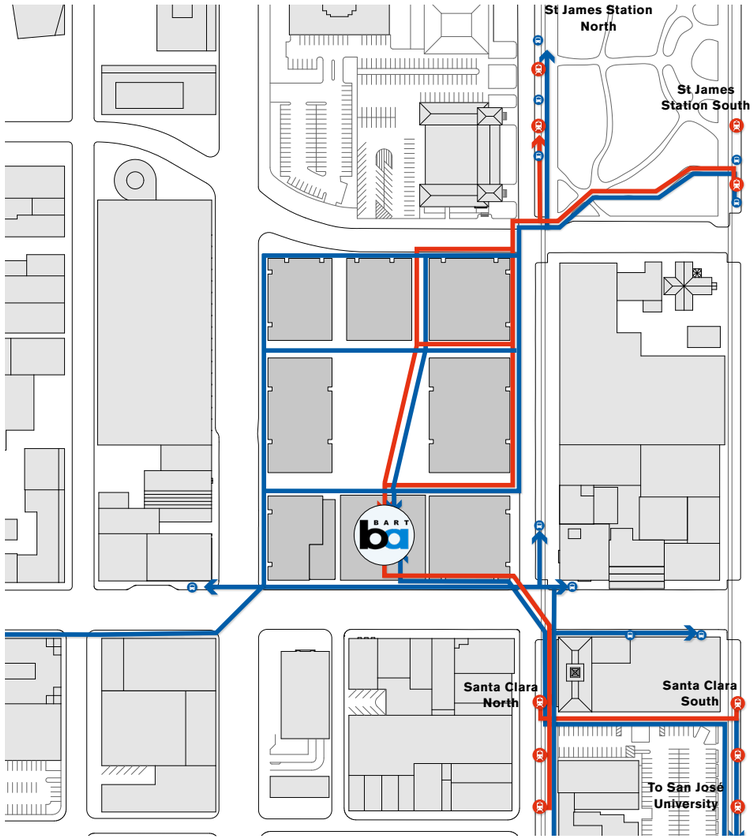


Fig. 4-12 From BART Station to other Transportation Links

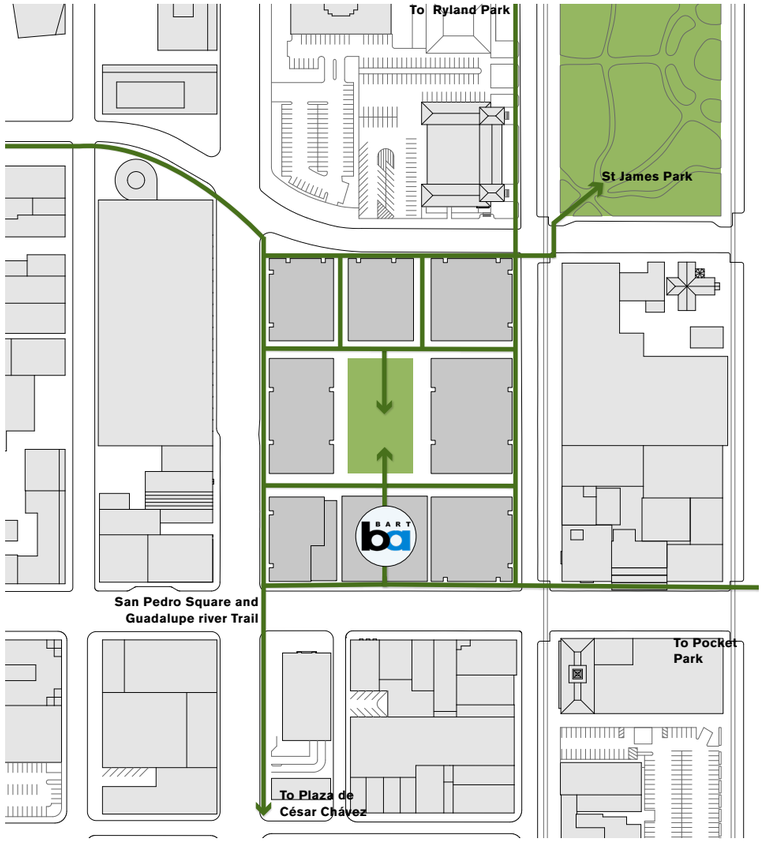


Fig. 4-13 From BART Station to Open Spaces

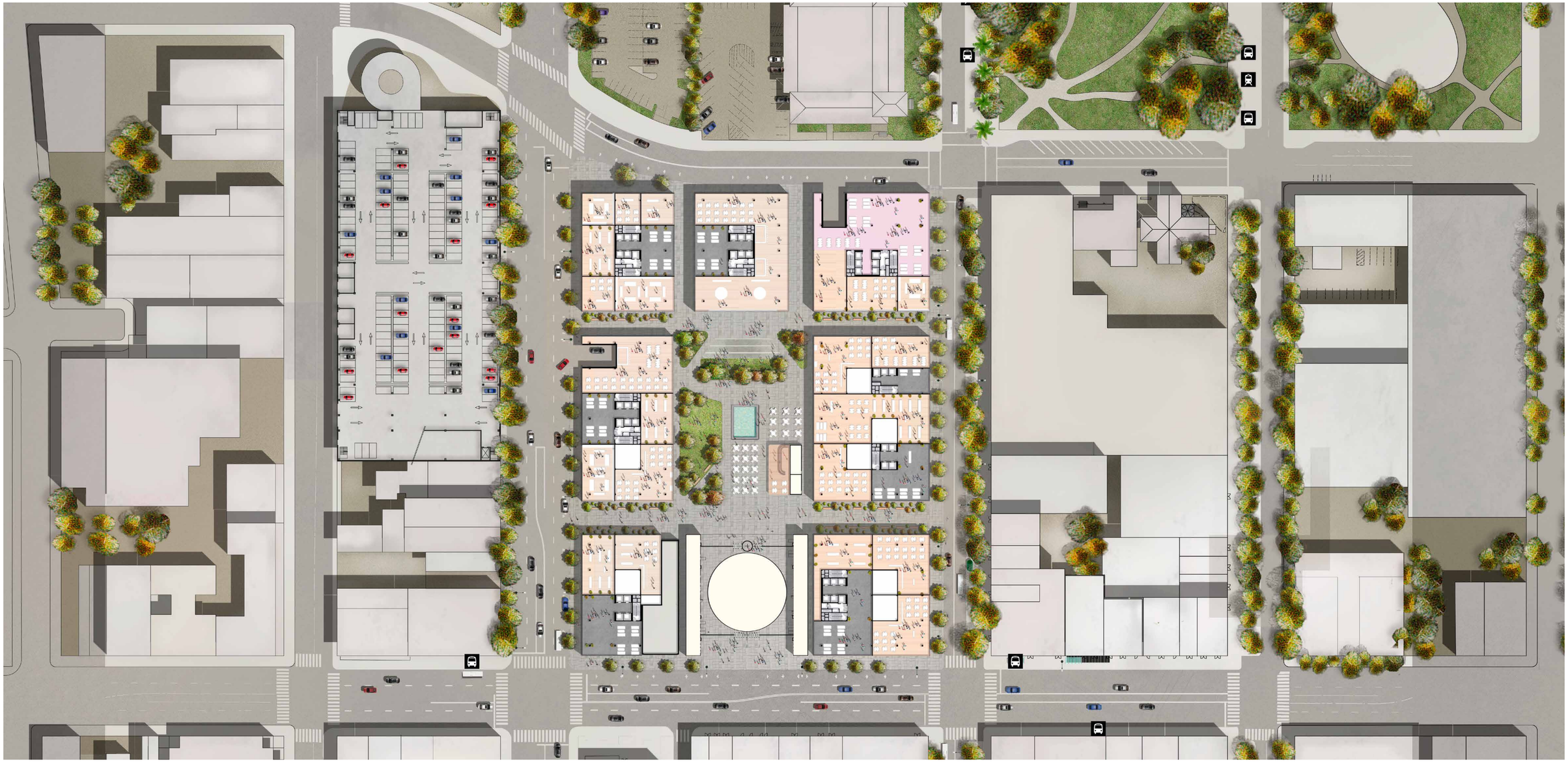


Fig. 4-14 Proposed Site Plan Ground Floor (Not shown: TOD Above BART Station)

4.2 Summary of Massing Approach (cont.)

Within this conceptual massing shown in Fig, 4-15, the overall project can achieve the FAR 8 target and also meets the FAR 4 minimum shown in Fig 4-15 that is required for this site by City of San José's regulations.

The massing for the test fit solution was evaluated using the design guidelines described in Chapter 3. It achieves high scores for thermal comfort at the plaza, the quantity and quality of views from the residential units, and access to rooftop amenity spaces. The terracing down of the buildings to the southwest and northeast corners aligns closely with the guidelines regarding access to views, outdoor spaces, and not casting shadows on the plaza or St James Park. The inclusion of a significant number of residential units will contribute to an active public realm, and advance VTA's social equity goals by creating much-needed affordable housing close to public transit. Finally, the dual-oriented retail spaces at the ground floor can be configured in smaller footprints to support small business enterprises.

Total Area : 1,825,000

FAR : 8.0 *

Fig. 4-15 Illustrative Massing

*Note: All numbers are indicative and subject to further development.

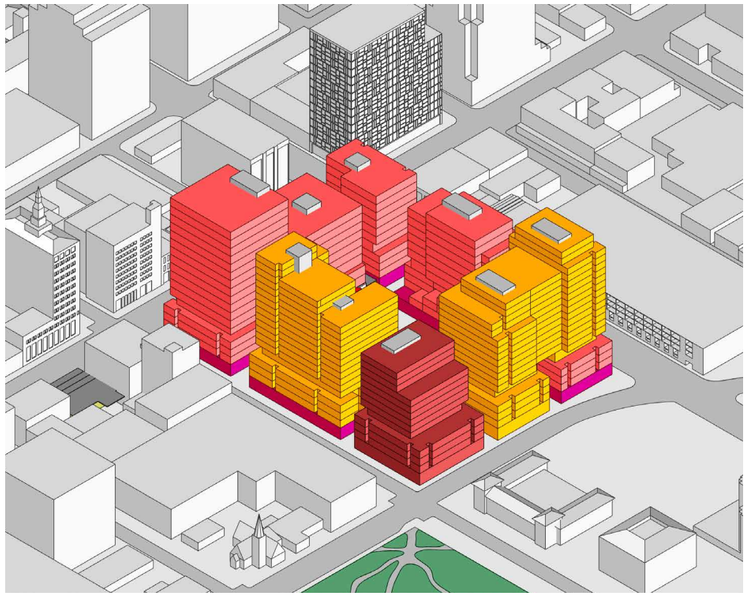


Fig. 4-16 View frotm North-East

Fig. 4-17 Site Concept

Plot Area (sf.) 228,162

Usage	GFA (sf.)	GFA%	FAR
Retail	115000	6.3	0.5
Office	815000	44.7	3.6
Hotel	160,000	8.8	0.7
Total Commercial	1,090,000	60	4.8
Market Rate Resi.	584000	32	2.6
Affordable Resi.	146000	8	0.6
Total Residential	730,000	40	3.2
Grand total:	1,825,000	55	8.0

FAR 8.0 *

GFA 1,825,000 sq ft (appr)

Fig. 4-18 Total FAR Chart

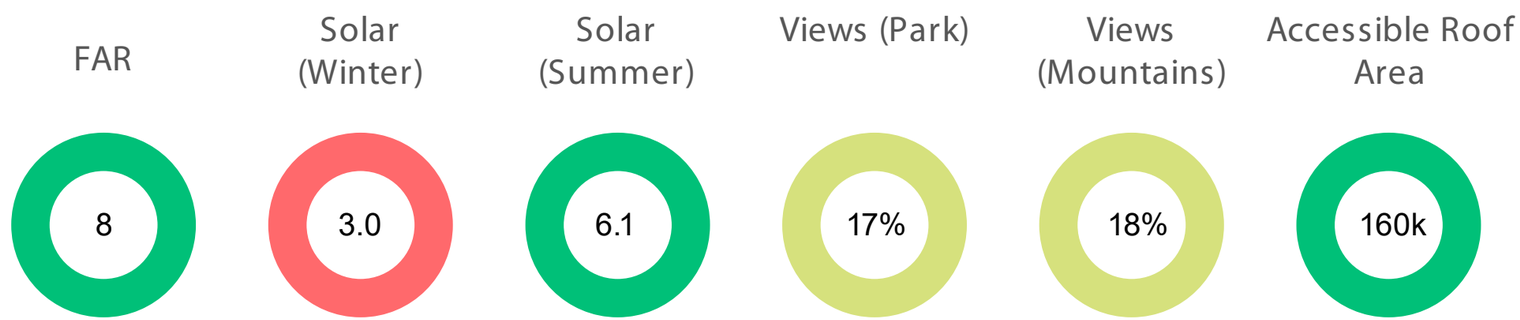


Fig. 4-19 These ‘dials’ show the performance of the massing. Based on our study of the various options, this iteration of the design scored highest overall.

*Note: All numbers are indicative and subject to further development.

Fig. 4-20 Artist impression of Plaza

Podium/ Tower Splits

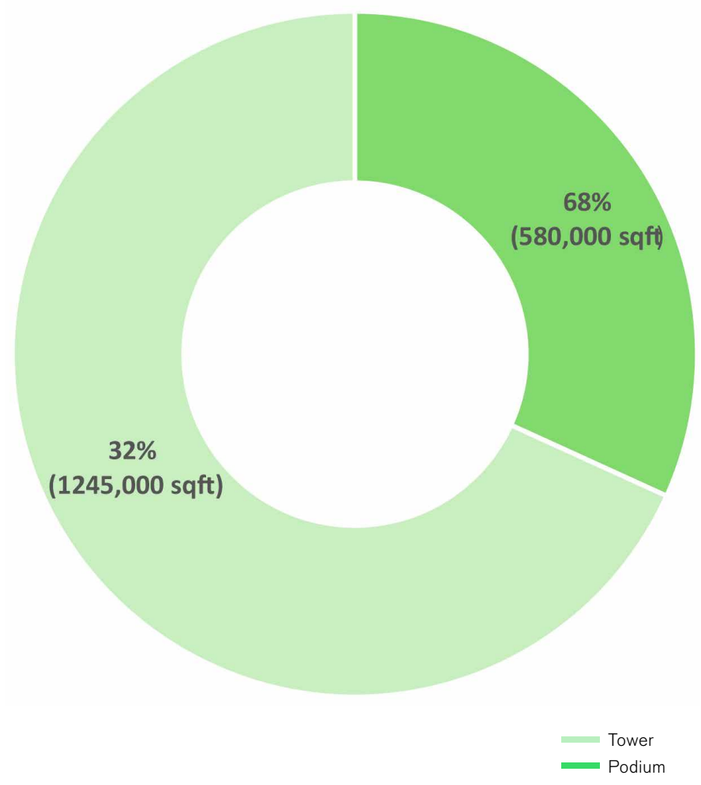


Fig. 4-21 Podium Tower Splits Chart

Area Summary

	Area (sqft)
Retail	106000
Office	719000
Hotel	143400
Residential (Market Rate)	552500
Residential (Affordable)	138100
Core	166000
Total	1825000

Fig. 4-22 Area Summary

*Note: All numbers are indicative and subject to further development.

Fig. 4-23 Conceptual Rendering

4.2 Summary of Massing Approach (cont.)

Figures 4-24, 4-25 illustrates the viewshed from the development to St James Park and the mountains beyond. These views have been optimized, particularly for the residential units, through orientation and terracing of building masses. Outdoor amenity spaces could be provided, both at the podium level and on rooftops. The desire for activated rooftop space was a key goal from discussions with stakeholders that stemmed from the lack of publicly accessible rooftop spaces in Downtown.

Fig. 4-24 St. James Park

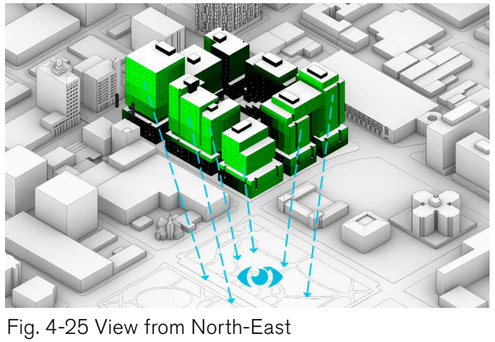


Fig. 4-25 View from North-East

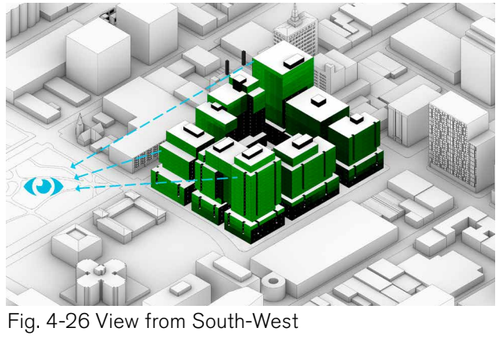


Fig. 4-26 View from South-West

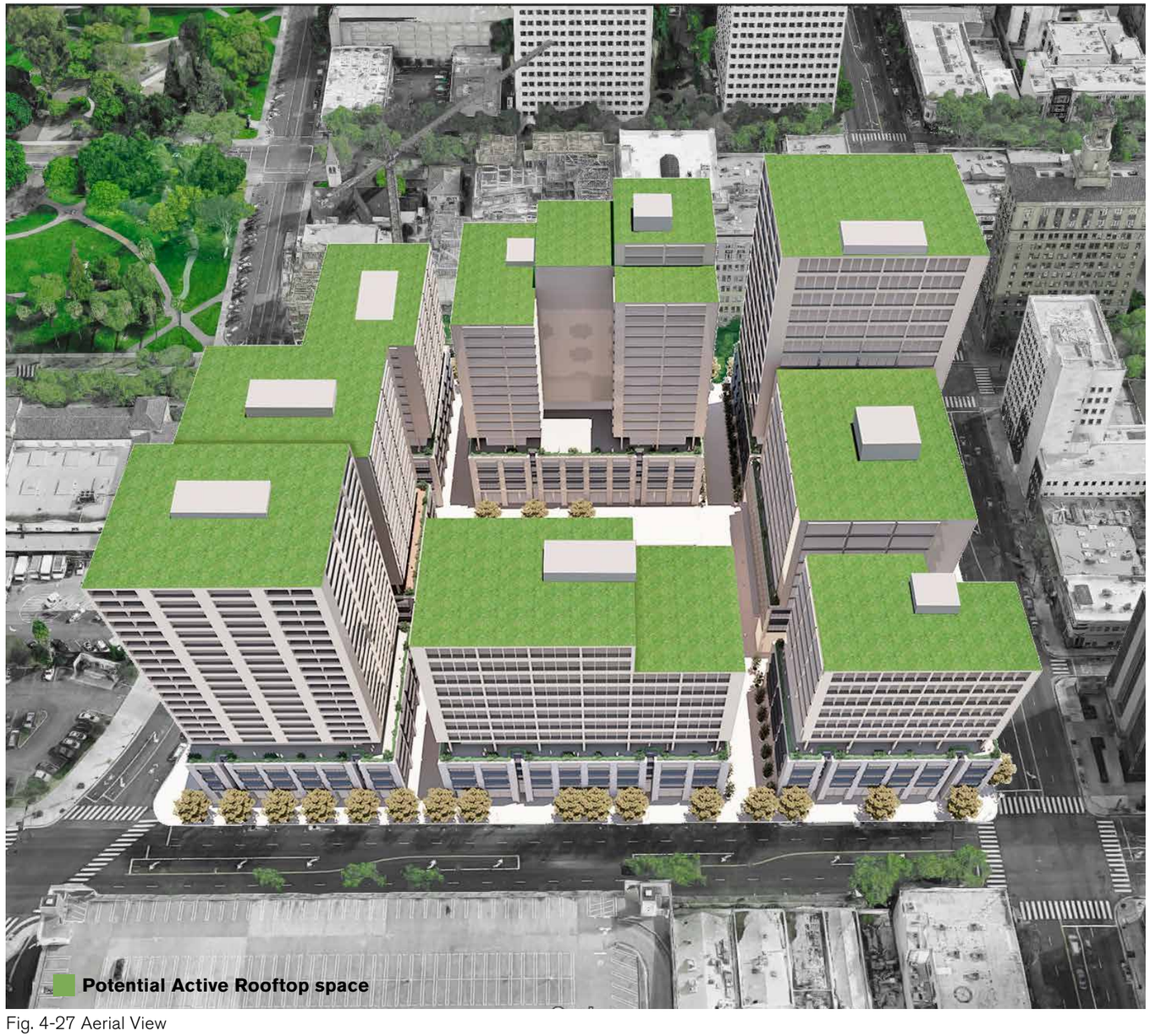


Fig. 4-27 Aerial View

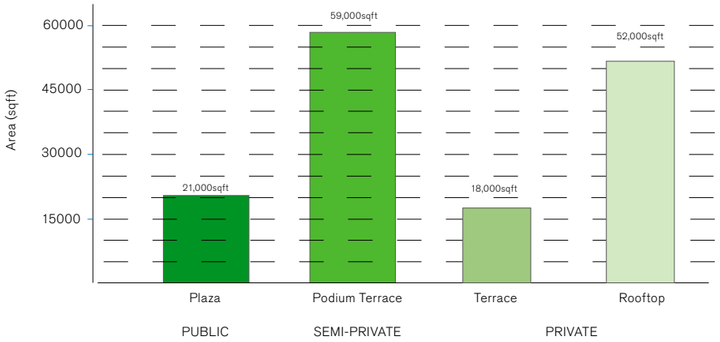
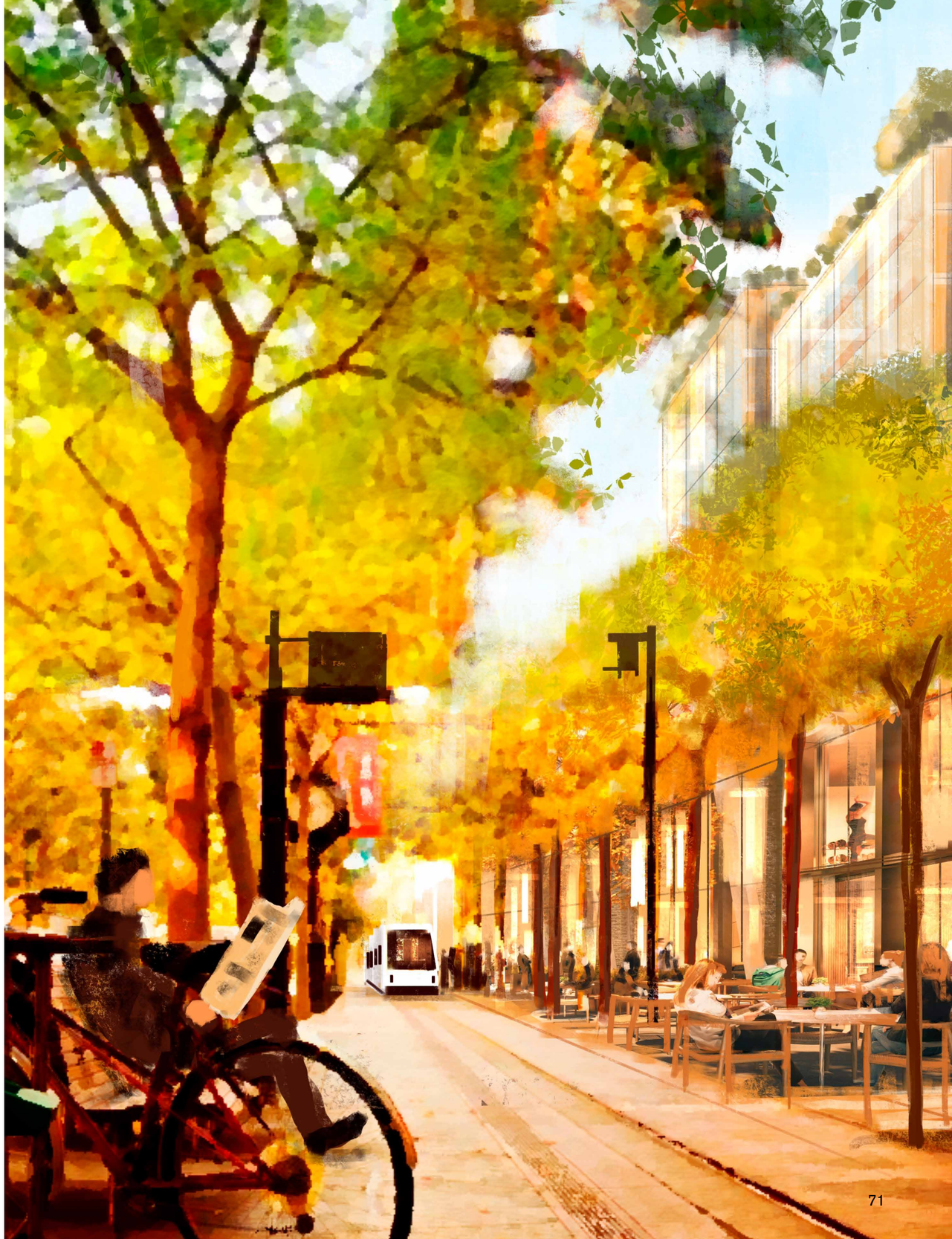
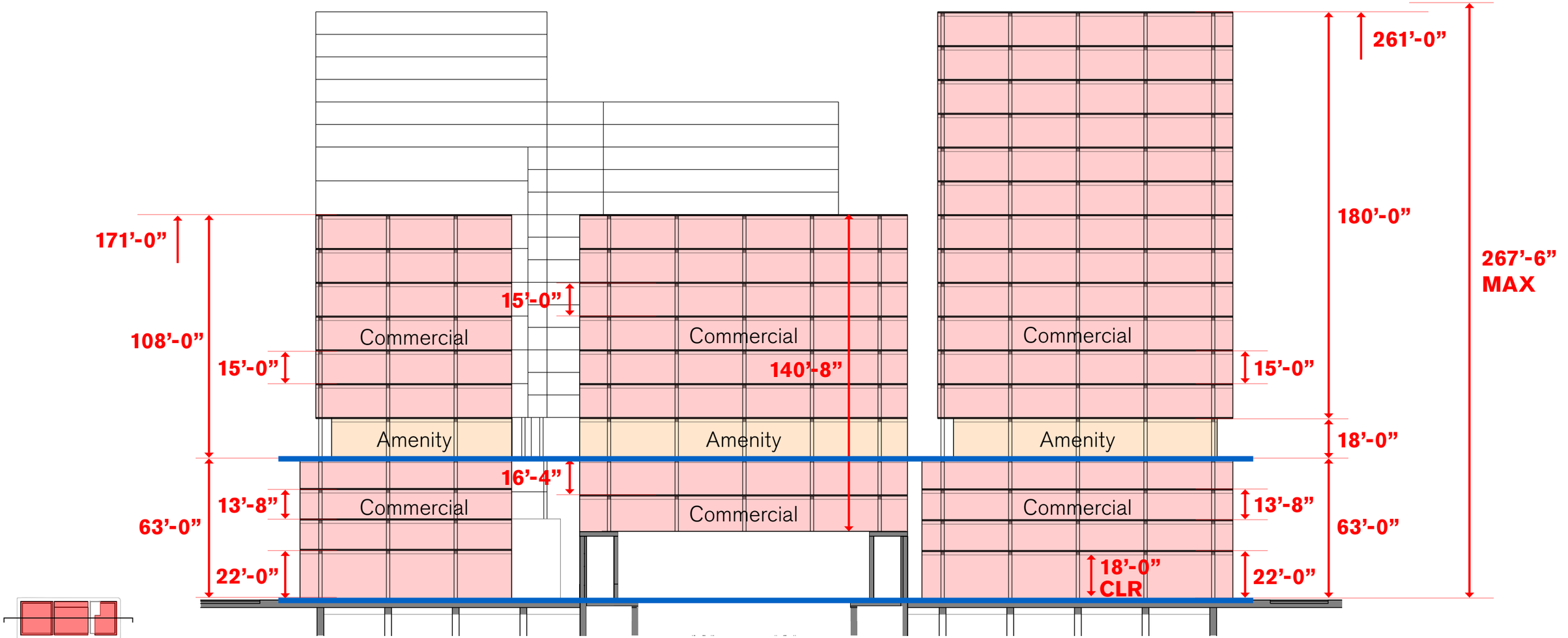


Fig. 4-28 Green Space Area Summary

Fig. 4-29 Green Space Top View





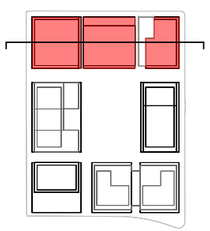
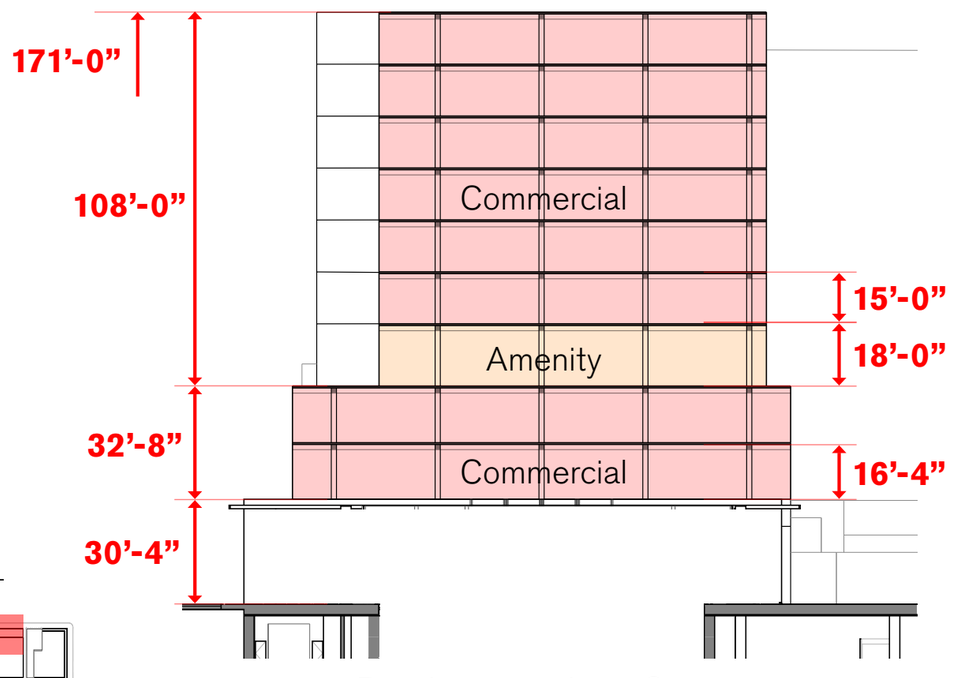


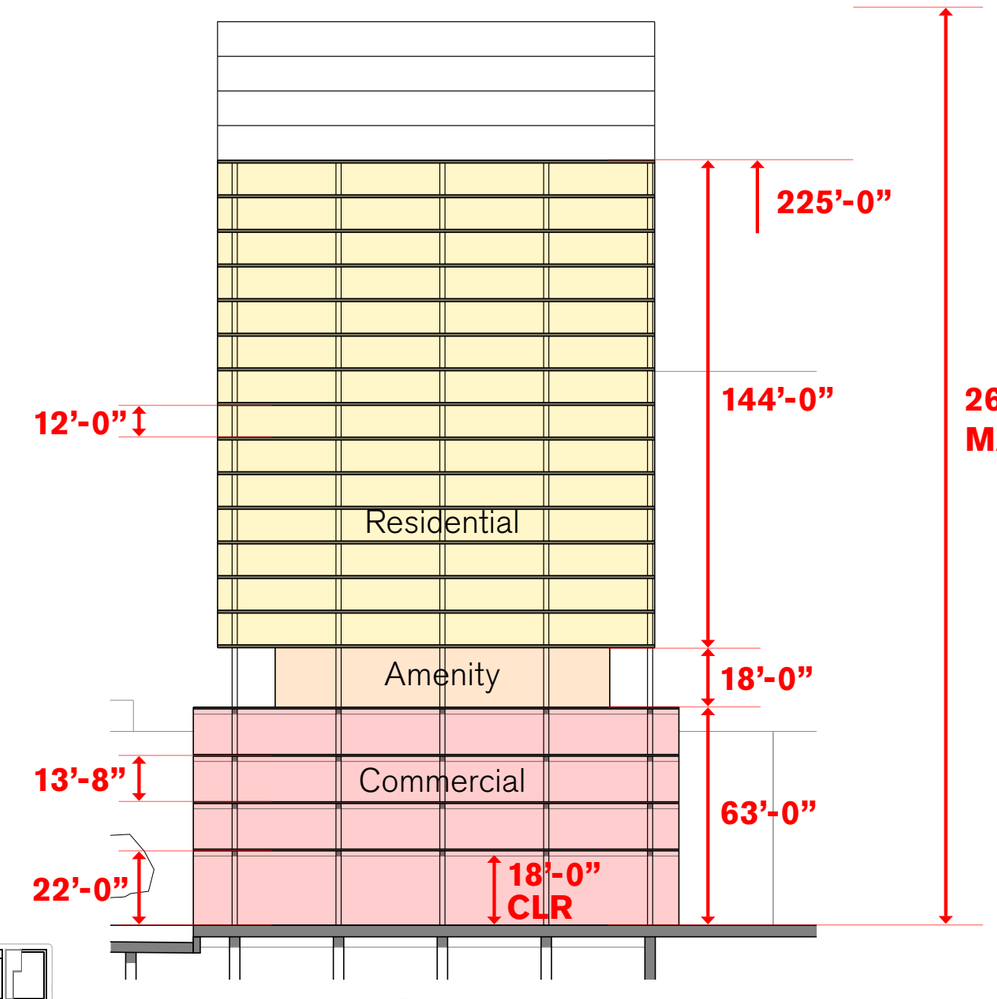
Fig. 4-30 Sectional Organization

Fig. 4-31 VTA Block TOD Visualization



Development above Station

Fig. 4-32 Sectional Organization



North Development

Fig. 4-33 Sectional Organization

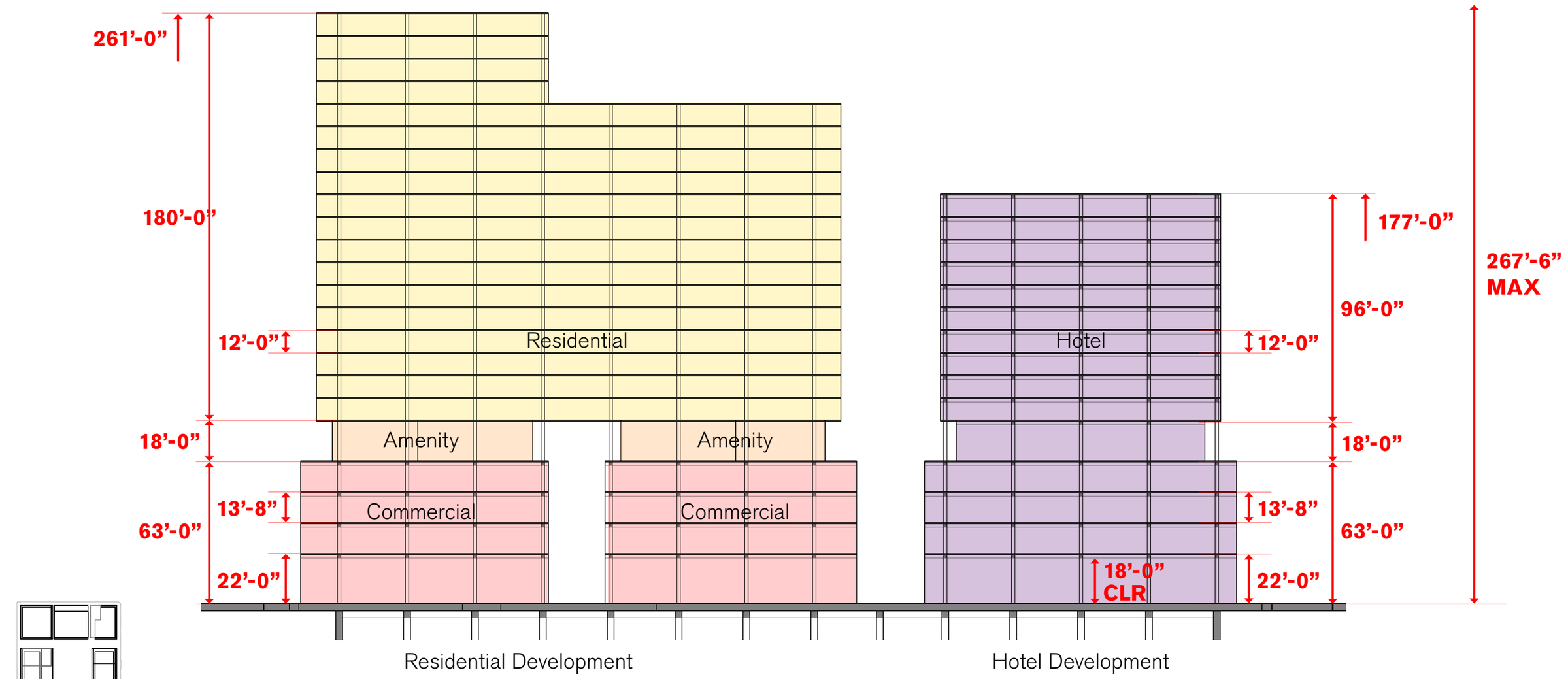


Fig. 4-34 Sectional Organization

4.2 Summary of Massing Approach (cont.)

To further test the validity of the test-fit massing, understand the potential for a basement shared by the different property owners, and further develop the parking scenarios discussed in Chapter 6, a preliminary 30 foot by 30 foot structural grid was applied to the different parcels (a common sizing for cost-effective construction), with provisional core sizing and location also indicated per figure 4-34. The preliminary structural grid analysis helped to shape the treatment and dimensions of setbacks above the podium and the layout of the parking bays below ground to avoid transfer structures. This proof-of-concept study also provided early guidance that informed TOD interface discussions with the BART station, as discussed in Chapter 7.

While the DDF test fit is not a complete design, it does reflect many of VTA's goals for the block, and it will be used by VTA as a baseline from which to compare and evaluate future massing schemes and test their effectiveness relative to the design guidelines.

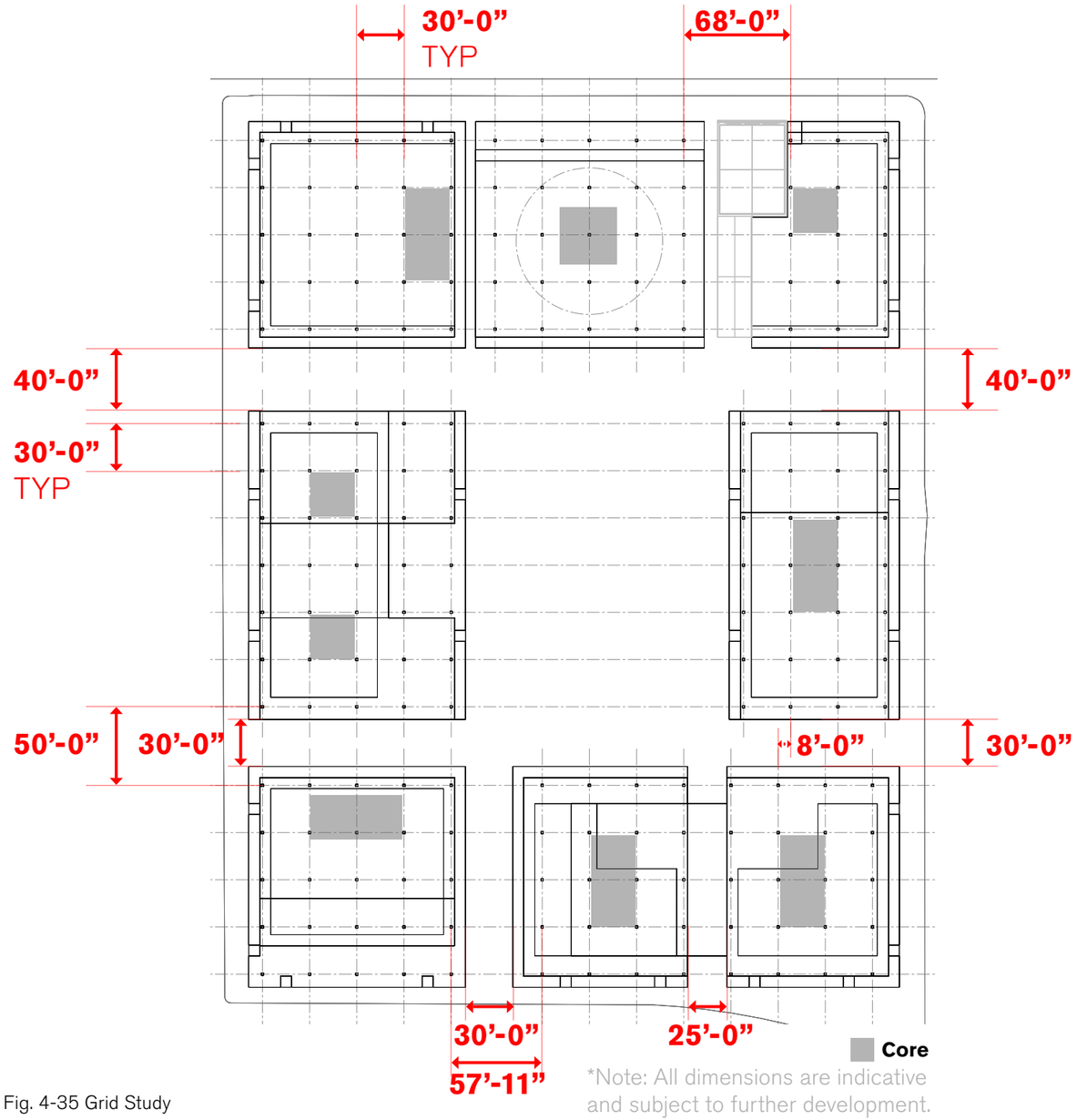
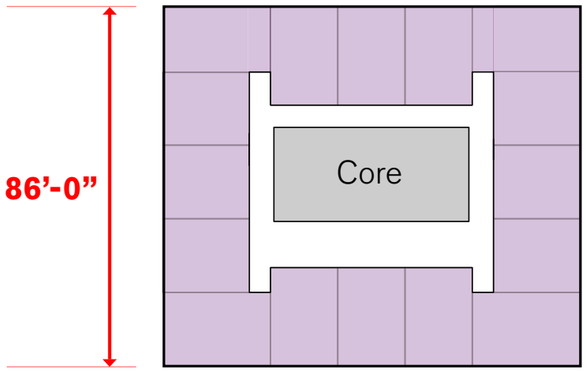


Fig. 4-35 Grid Study

Hotel Development



Residential Development

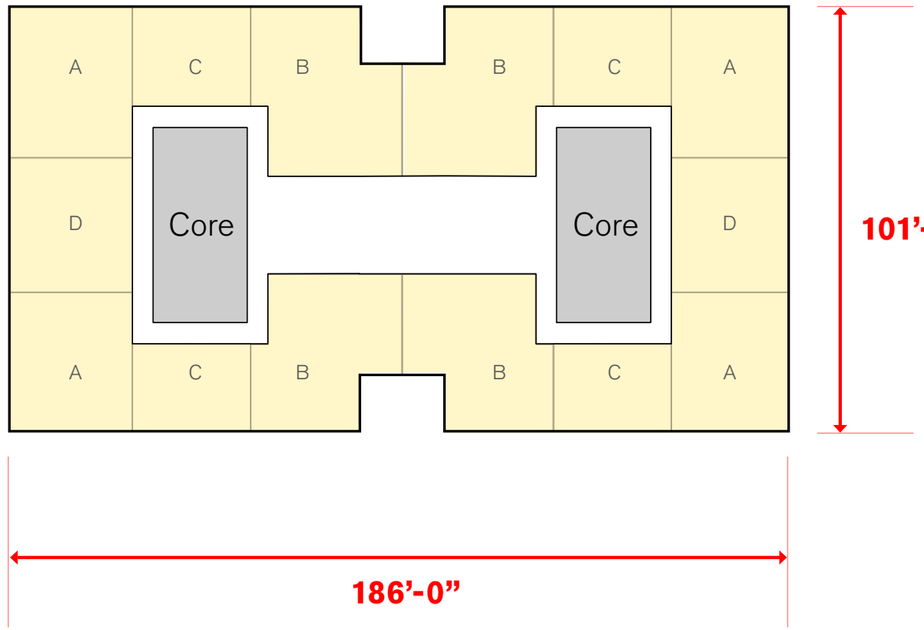
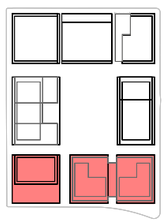


Fig. 4-43



Hotel Room keys per floor: 16
Area per Room: 560 sqft
Floor Area per floor: 9000 sqft

2 Bedroom
Type A : 1600 v
Type B : 1900 sqft

1 Bedroom
Type C : 1000 sqft
Type D : 1400 sqft

Units per floor: 14
Floor Area per floor: 20800 sqft

Fig. 4-36 Typical Floor Plan

4.3 Future Flexibility of the DDF

The DDF is intended to be a flexible framework for the development of the VTA Block. The test fit massing can be adjusted to accommodate changing priorities.

For example, if one area of mass on the site needs to be reduced in order to provide more buffer to the historic building, this mass could be shifted to another portion of the block and the block could retain the overall FAR balance (see figure 4-38). Especially considering that VTA owns most of the block, massing swaps like these could occur throughout the block.

Due to anticipated market demand for larger sized floorplates on some of the buildings, there are opportunities to integrate buildings above the podium level to accommodate larger floorplates that potentially achieve greater efficiency in terms of number of cores (i.e., vertical building infrastructure shaftways for things like electricity, water, elevators, and staircases). These concepts would need to be explored further as development of the VTA Block is advanced in order to determine the optimal configurations for development that is expected to advance. Figure 4-37 shows how different parcels could be combined to achieve larger floorplates.

Fig. 4-37 Larger Floorplate Options

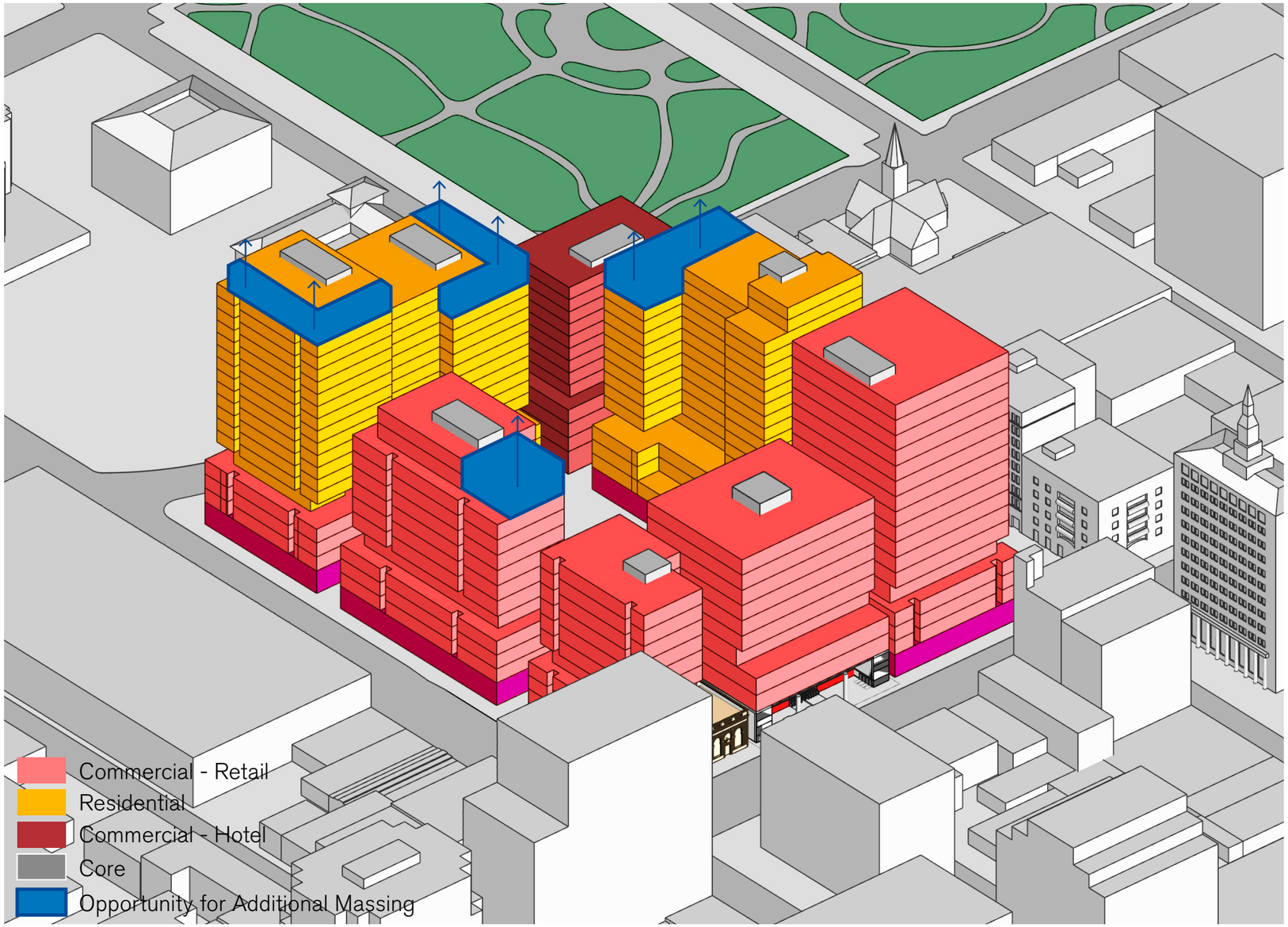


Fig. 4-38 Opportunity for Additional Massing

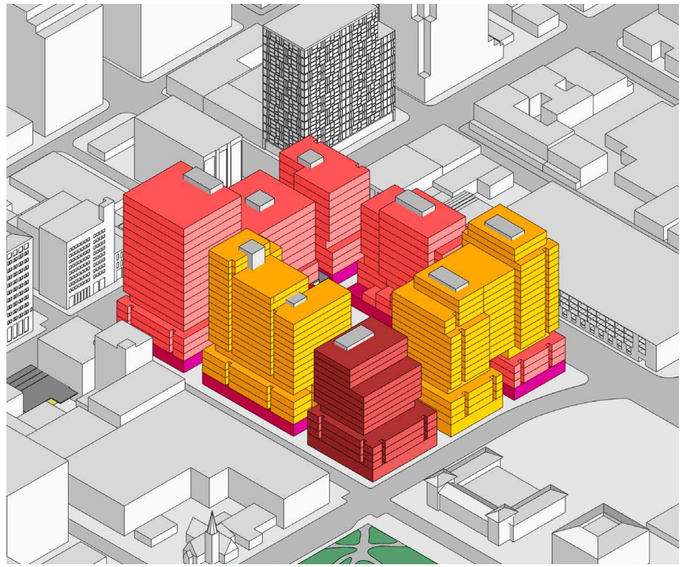


Fig 4-39 View from North

Fig 4-40 Site Plan

Sustainability Approach to Development

5

The built environment – including buildings, streets, highways, transit systems, parking lots and all the physical elements of cities – accounts for roughly three quarters of greenhouse gas emissions, with buildings alone accounting for about 40%. Over the next decade, government agencies are expected to release more stringent building standards, including revisions to Title 24, California's Building Energy Efficiency Standards, which is likely to enforce increasingly stringent sustainability requirements. By 2030, the same year BART revenue service is projected to commence, the CA Energy Efficiency Strategic Plan is expected to mandate all residential and commercial construction to be Zero Net Energy.

The VTA Block provides an opportunity to reimagine how urban development can complement the environment. Through technological innovation and thoughtful design, it is possible for the block to generate more renewable energy than it consumes, release less carbon, reduce water demands, divert construction materials from the waste stream, and promote transit and active transportation. This document outlines strategies and key areas of focus to integrate sustainable practices into the VTA Block.

5 Sustainability Approach to Development

5.1 Sustainability Guidelines

Feature Goal: Net Zero Energy
A net–zero community is designed and organized to balance emissions and promote best–practices in sustainable development.

The vision for this site is net–zero energy. Achieving this goal requires thoughtfully designed buildings that maximize energy efficiency and embrace infrastructure systems that balance, integrate, and optimize energy and water demands between users.

A Step Further: Regenerative Design
Regenerative design takes net–zero a step further by repairing and regenerating environmental and human systems, leaving a net positive impact.

This more holistic approach strategically finds ways to restore ecosystem processes and reverse environmental damage. Regenerative design is rooted in the reproduction of natural processes and remediation harm. Regenerative design should be considered through a commitment to water self–sufficiency through rainwater catchments and treatment and green wall and roof design. Additionally, a key goal is to generate more renewable energy than the buildings consume.

Key Sustainability Focus Areas
This document identifies six overarching areas that should be used to evaluate efforts to advance sustainable development of the VTA Block:

- Energy Management
- Mobility Management
- Water management
- Materials, Resources, & Waste
- Health & Wellness
- Information and Communications Technology

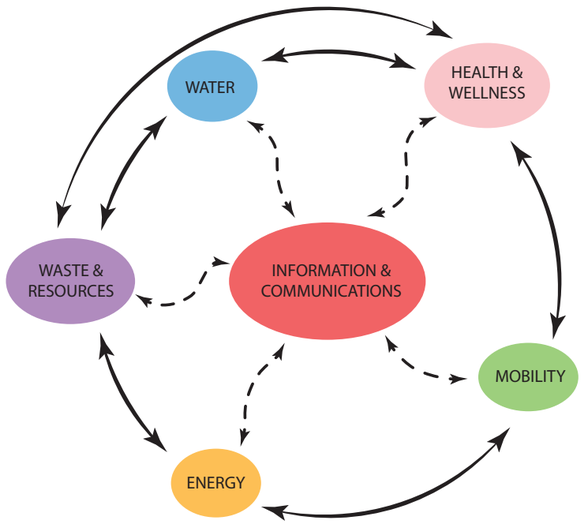


Fig. 5-01 Key Sustainability Focus Areas

Fig. 5-02 Regenerative Design at McGilvra Place Park - Seattle, WA

Fig. 5-03 Regenerative Design at Hassalo on Eighth - Portland, OR

5.2 City and Regional Perspective

VTA and the City of San José's Sustainability Efforts
VTA and the City of San José are strong proponents of sustainability, and some of their sustainability efforts that frame why the DDF has been developed and what is included in it are below.

Dense urban environments facilitate the sharing of resources through economies of scale, thereby conserving resources and reducing waste on a per capita basis. By prioritizing dense transit-oriented infill development, VTA and San José are making the region more environmentally sustainable.

VTA and San José regularly work together to create dense mixed-use transit-oriented development that promotes transit, walking, and biking. VTA and San José also regularly work together to develop more sustainable travel options, including interconnected networks of green open spaces, and to provide real-time information to individuals so they can make more informed and sustainable travel decisions that reduce vehicle miles traveled and greenhouse gas emissions.

Further, San José is committed to providing 100% clean energy by 2021[1], which addresses the goals of the Paris Agreement, see Fig. 05-05. In addition, VTA has already taken steps to electrify its transit fleets and construct zero net energy transit facilities, as seen in Fig. 05-04.

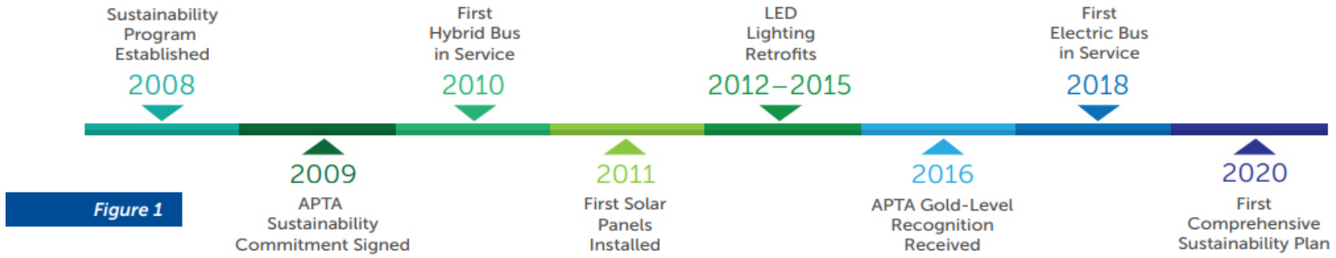


Fig. 05-04 Visual Representation of VTA's Sustainability Program

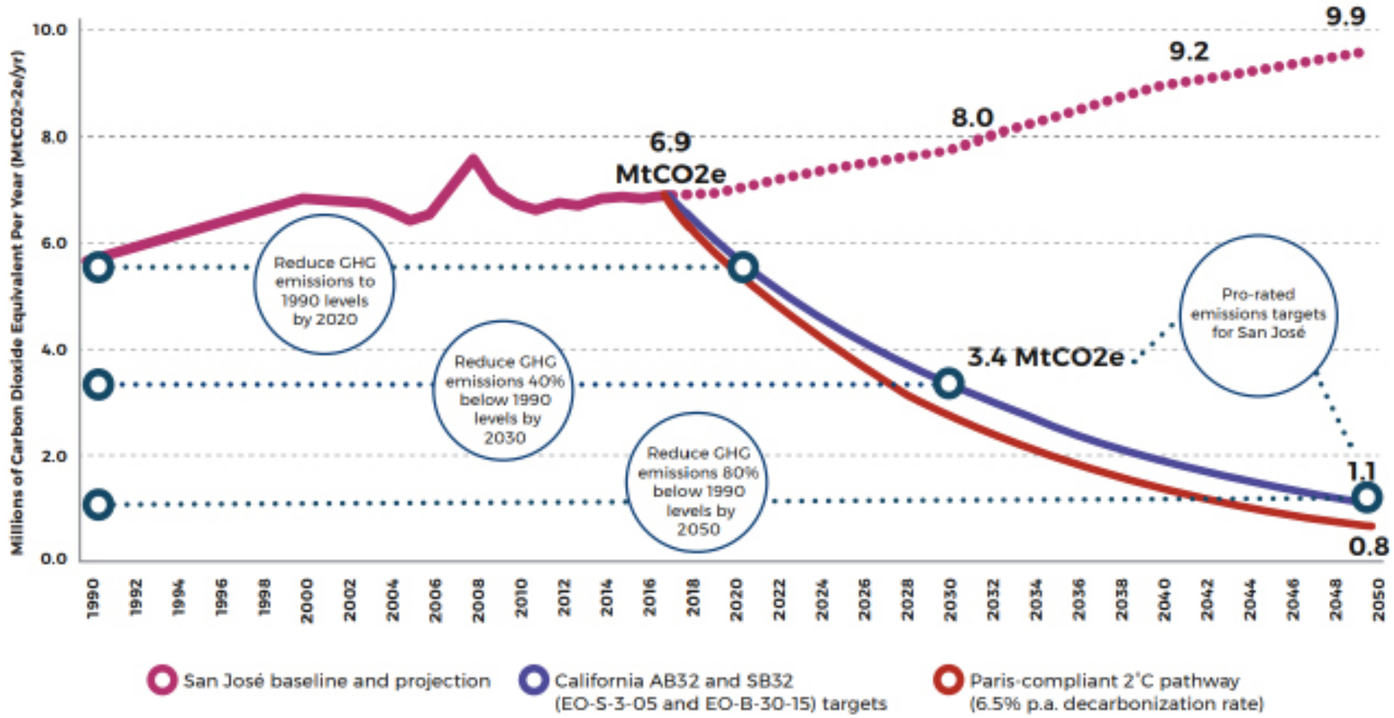


Fig. 05-05 San Jose's Contribution to California & Paris Agreement Goals

1 https://www.sanjoseca.gov/home/showpublisheddocument/66591/637401786995170000

5 Sustainability Approach to Development

5.3 Energy Management - Net Zero Energy

The VTA Block should consider leveraging energy conservation strategies that benefit from economies of scale. For example, combined heat and power systems are significantly more energy efficient because they recover heat from energy generation to provide space heating. There are also various geothermal technologies that can be leveraged to reduce heating and cooling loads across seasons and increase the efficiency of HVAC systems. While these systems may be cost prohibitive in small-scale applications, savings associated with these approaches over the life cycle of the block should be further considered.

Energy needs can also be balanced across the block, and smart metering and sub-metering helps to understand consumption and facilitate predictive analytics.

The natural climate for San José also offers high levels of sunlight, which provides opportunity to harvest daylight and capture solar energy, including through a centralized, block-level energy management system that collects, stores, and redistributes energy and heat based on various demands through the block across different seasons, days, and times.

Solar heat gain can lead to uncomfortable urban heat island effects and increased cooling needs. Solar heat gain should also be balanced with daylight harvesting opportunities, which reduce electrical lighting demand for the building. To help reduce unwanted heat gain, the block should incorporate plenty of landscaping and native vegetation, both at the ground level and on the building roofs. Specifying materials with high albedos also helps reflect light and heat away from the block. The VTA Block should also further consider leveraging summer winds and evaporative cooling to passively cool outdoor public spaces.

Fig. 5-07 Centralize Energy Management

Fig. 5-08 Integrated Photovoltaics

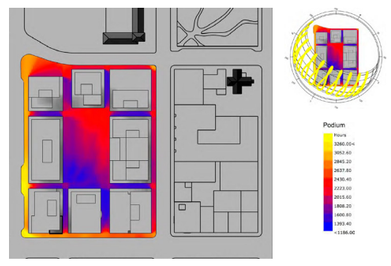


Fig. 5-09 Solar Heat Gain of VTA Block

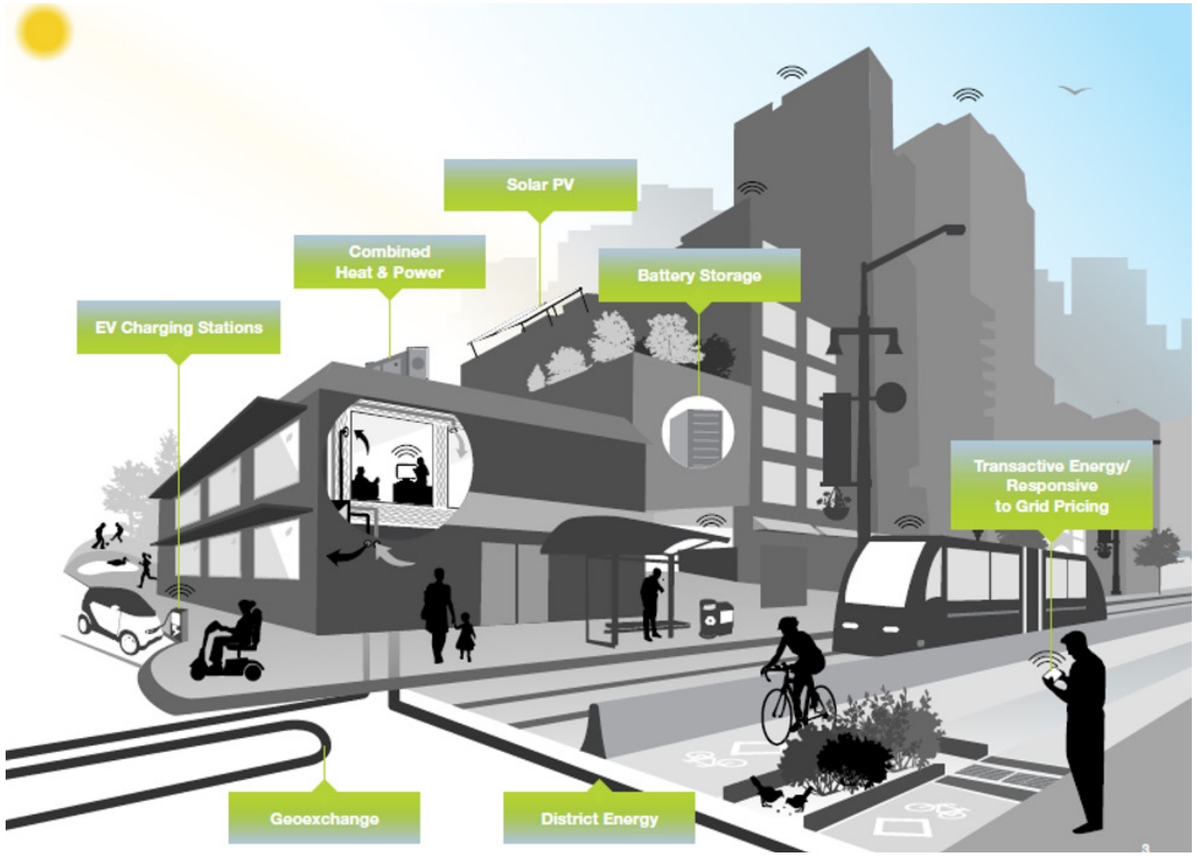


Fig. 5-06 Energy Conservation Strategies

5 Sustainability Approach to Development

Future efforts to advance development of the VTA Block should consider room placement, natural airflows, building envelope performance, and exceeding insulation requirements mandated by code, as well as utilizing non-thermal bridging assemblies[1], green roofs, blue roofs[2], double skin facades[3], and thermal massing.

Given that San José has significant diurnal temperature swings, future efforts to advance development of the VTA Block should also consider opportunities for night flushing to dissipate heat stored in the buildings thermal mass. Passivhaus concepts further enhance building envelope performance by ensuring an air-tight building envelope. Mechanical rooms that generate heat should also generally be located on the north side of the building, where temperatures are naturally cooler. The natural climate of San Jose also lends itself to natural ventilation. The year-round mild to warm temperatures create an excellent opportunity to bring in outside air and reduce reliance on HVAC. Natural ventilation systems options include atriums, solar chimneys, Trombe walls[4], double skinned facades, and cross ventilation[5].

After passive energy management strategies have been selected, active energy management strategies should be considered. When properly maintained, intelligent building systems can provide powerful insights and optimizations. Intelligent building systems to consider include asset management platforms, building automation systems, sub metering and smart metering, daylight harvesting lighting controls, digital twins, and ongoing virtual commissioning systems[6].

1 https://ncma.org/resource/thermal-bridges-in-wall-construction/

2 https://www.pwdplanreview.org/manual/chapter-4/4.6-blue-roofs

3 https://facadesplus.com/rpbws-active-double-skin-facade-kick-starts-a-new-generation-of-campus-design-at-columbia-university/

4 https://ncma.org/resource/passive-solar-design/

5 http://pure.tudelft.nl/ws/portalfiles/portal/68494605/Natural_summer_ventilation_strategies_for_energy_saving_in_high_rise_buildings_a_case_study_in_the_Netherlands.pdf

6 https://www.isa.org/intech-home/2019/july-august/features/why-bother-with-a-digital-twin

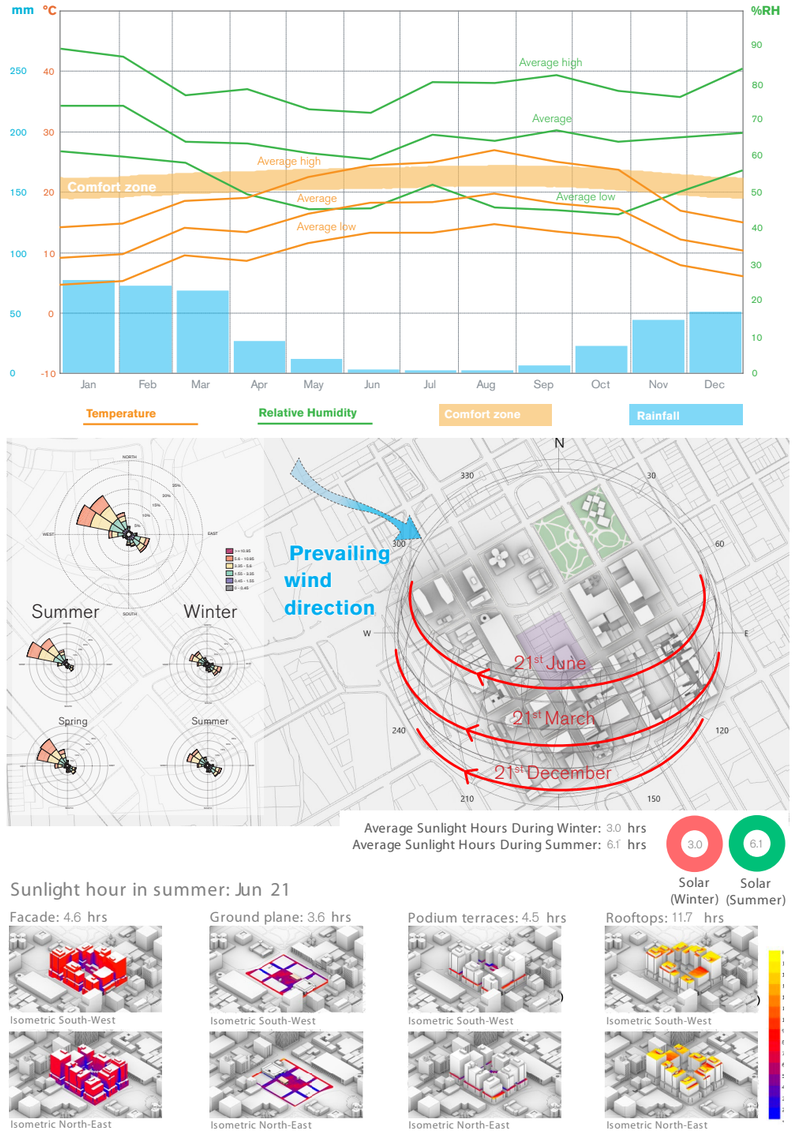
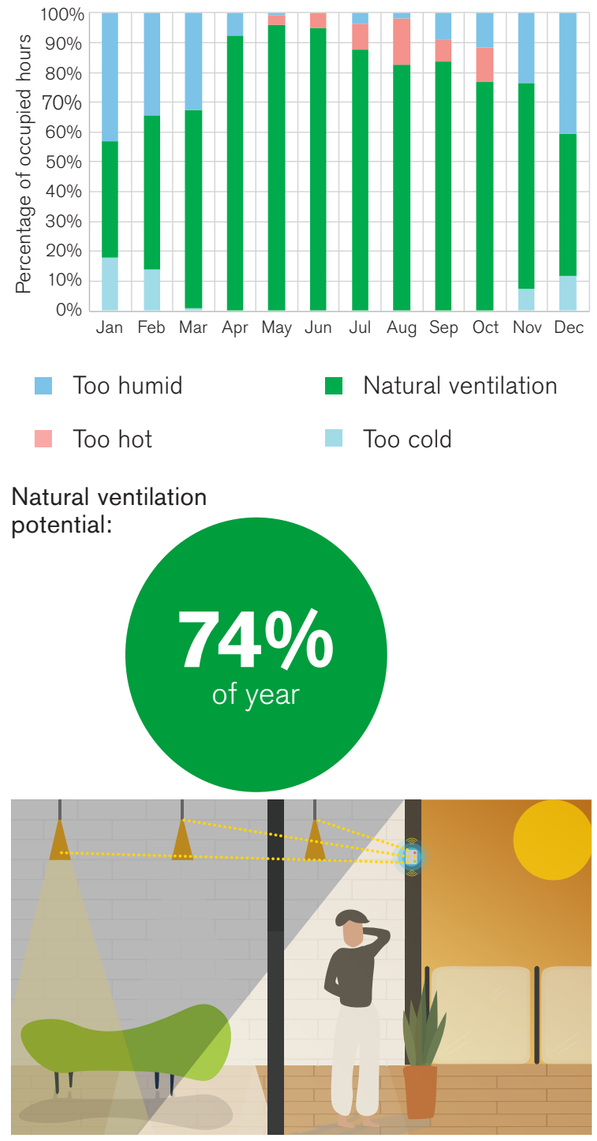


Fig. 5-10 Climatic Analysis of the VTA Block



5.4 Mobility Management

Shared parking strategies that integrate sensors, counters, and real-time information guidance that can track parking utilization over time and facilitate shared or pooled parking resources should be explored as part of future efforts to advance development of the VTA Block.

The VTA Block could also incorporate dynamic and flexible curbsides that can be designated for different uses for things like different times of day, special events, and changing needs within the community. This approach could facilitate resolution of competition for limited curbside between BART-station related activity and activity at new development on the block.

Future efforts to advance development of the VTA Block should also consider providing access to locker rooms and showers for users of secured bike storage.

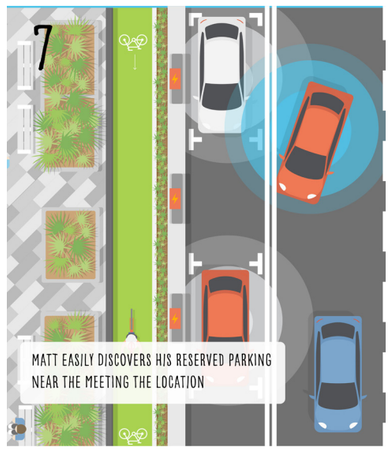


Fig. 5-11 Flexible Curbside Management

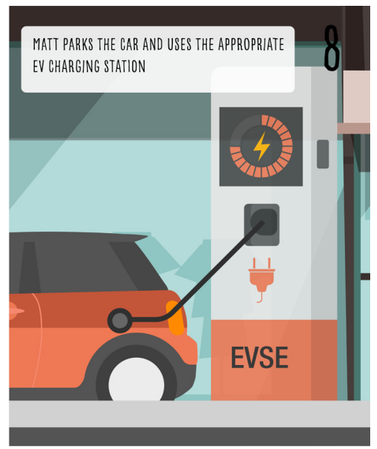


Fig. 5-12 EV Parking Management System

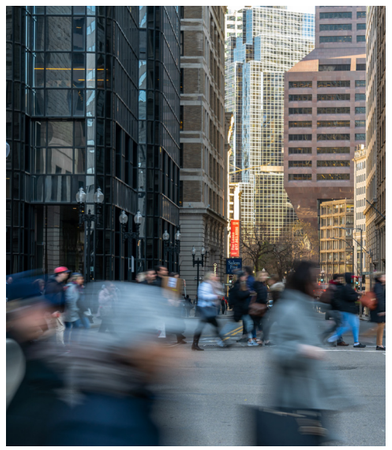


Fig. 5-13 Promote Active Transportation

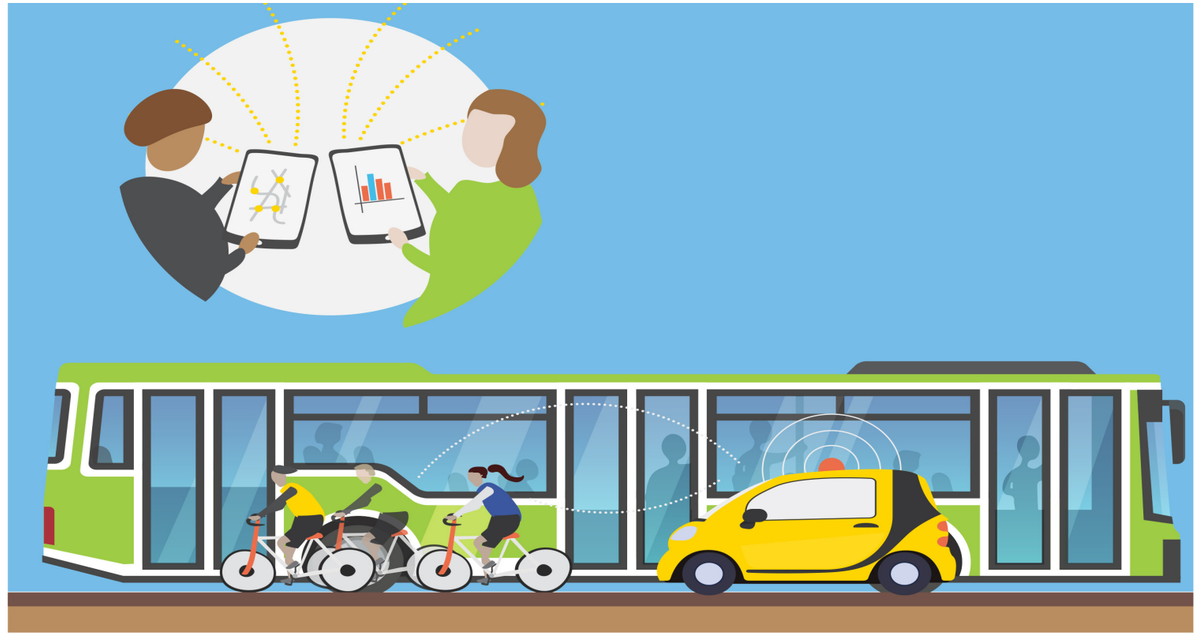


Fig. 5-14 Encourage mixed mode of transportation by prioritizing safety

5.5 Water Management

The first consideration for water management should be to protect natural hydrology systems, including by reducing runoff and improving site permeability. Rainwater harvesting, stormwater capture systems, and greywater reuse systems can help reduce the amount of water that leaves the block, especially with block level centralized systems. Biofiltration and groundwater recharge strategies can also contribute to site permeability and promote healthy soils while filtering common runoff pollutants out of the water, providing localized evaporative cooling, and generally contribute to the quality of place – green roofs, bioswales and rainwater gardens are specific treatments that can help achieve these outcomes. Greywater collection and filtration systems, collect polluted water, filter it, responsibly recycle it, and release it.

Landscaping should generally incorporate xeriscaping practices specifying native and adapted plants that require less artificial watering. Light, moisture, weather, and predictive sensing systems can also create additional water conservation opportunities.

Plumbing systems should prioritize low-flow fixtures, aerators, and WaterSense labels. Where possible, the building should connect to recycled water purple lines and greywater reuse systems. Sub-metering and smart sensors can monitor consumption and help identify leaks early. Anonymized water consumption data can also be shared with building users alongside conservation goals through interactive displays to inspire the community to implement water conservation strategies.

Fig. 5-15 Weather and soil monitoring systems conserve water and ensure that plantings stay alive and healthy

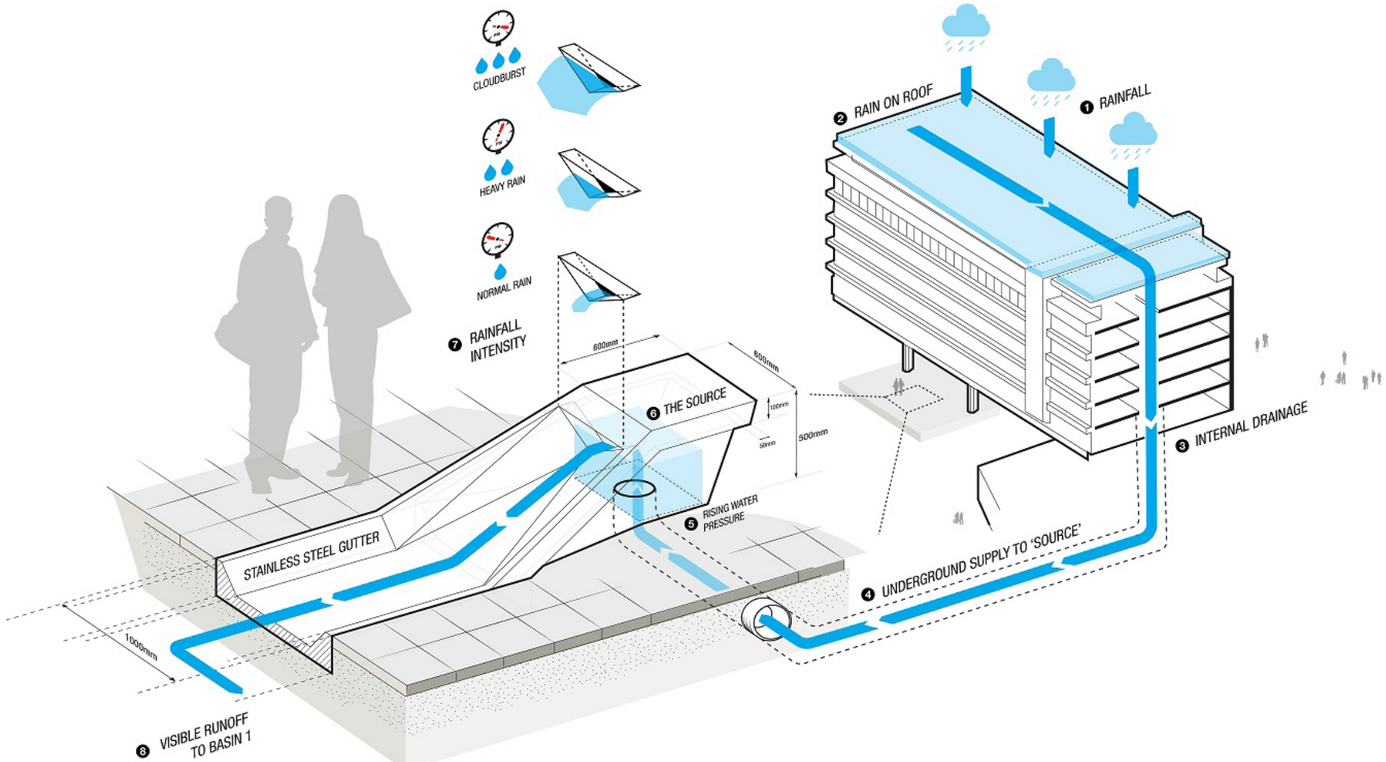


Fig. 5-16 Bentemplein Water Square as a Case Study in Centralized Water Management

5.6 Materials, Resources, & Water

The most important consideration in optimizing resources and reducing waste is to increase the useful life of equipment, materials, and assemblies. This can be done by selecting higher quality materials that age gracefully and don't need to be replaced as often – they may cost more up front, but less throughout the life of the project. In addition, well-maintained products that are regularly cleaned and repaired do not have to be replaced as often, not only reducing costs over time, but decreasing waste.

Materials with low embodied carbon that reduce their impact on the planet throughout their entire life cycle – from extraction to manufacturing, to their use and reuse – should be further considered, as should local and renewable materials that can be easily upcycled or recycled at the end-of-life.

Future efforts to advance development of the VTA Block should also consider strategies to sequester carbon, such as planting trees. The VTA Block should also have various waste, recycling, and compost collection points throughout, with centralized collection point(s) for specialized waste items such as mercury, batteries, and electronics. Future efforts to advance development of the VTA Block should also consider strategies to consolidate and streamline waste movement through the side and pickup services. Construction waste diversion plans that meet or exceed local regulations should also be considered.

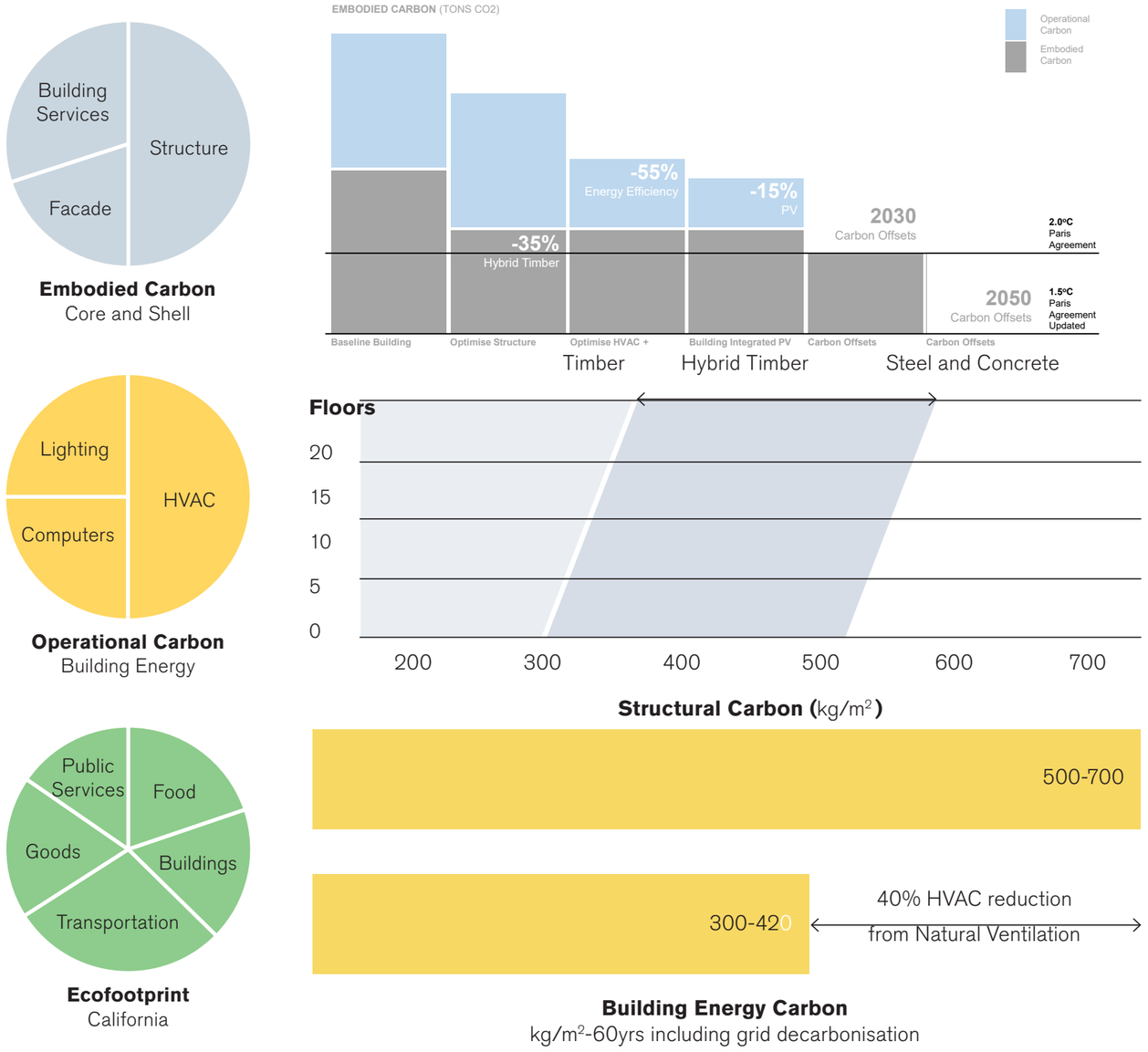


Fig. 5-17 Reduce Embodied Carbon of Construction to Optimize Long-Term, Cradle-to-Cradle Impact

5 Sustainable Approach to Development

As alternatives to traditional concrete or steel building structural systems, mass timber and hybrid systems are recommendations for developers to explore further due to the potential environmental and structural benefits summarized below.

Mass Timber Structures
When permitted by local codes and TOD programming requirements, reducing loads through the use of timber can be of significant benefit. In these instances, it may be possible to support the light TOD structure directly on top of the transit facility, as the loads imposed are considered much more manageable than the loads imposed by heavier concrete or steel structures. While these types of structures may be capable of spanning over a facility, they are less likely to be used as transfer structures, due to their limited material strengths and more complex connection requirements.

Hybrid Systems
Often hybrid type systems are utilized, where the advantages of each of the different structural materials are used in combination with one another, to the benefit of the structure overall. For example, light weight timber could be supported on a concrete slab which in turn is supported directly on top of a transit facility. This type of over-site development will be needed to meet the essential facility safety factors of the station. Hence, the lighter structure is more efficient and could allow for taller development with the same loading on the station foundations as a smaller traditional steel or concrete frame building.

Advantages to using mass timber are:
- Lighter structure, resulting in reduced seismic forces and less concrete in the foundations, therefore less embodied carbon (40% potential reduction of weight)
- Timber production requires less energy compared to other building materials, and often timber products are produced using renewable energy.
- Timber sourced from forests certified by FSC will typically have a lower embodied carbon than timber from forests that aren't, due to responsible forestry practices and not just clear cutting, though there are also some smaller companies that can't afford the certification but who follow the recommended practices.
- Timber buildings contribute to better energy efficiency due to wood's thermal properties (an insulator), resulting in lower operational carbon and lower operational costs.
- Wood construction on site is typically very quick compared to a poured concrete structure, therefore reducing the length of construction and the associated emissions of operating a construction site.
- Incentive to undertake better forest management practices, since mass timber can make use of the smaller or lower quality wood removed from a forest as part of regular thinning/health efforts.
- Allows for designing in modules and taking advantage of prefabricated/modular design and construction. Elements are made in a factory which allows for reduced material waste and more efficient construction on site
- Economic/social impact: Can provide employment and economic opportunities and benefits for timber-dependent communities
- Social Impact: Improved occupant wellness, comfort, and wellbeing with exposed mass timber/biophilia

Fig. 5-18 Hybrid CLT Construction, Confidential Corporate Campus - Mountain View, CA

5.7 Health and Wellness

Strategies to support and promote health and wellness on the VTA Block could include strategies for clean air and water. Air and water could be monitored for pollutants and people informed when thresholds are exceeded, and filtering systems can be used to clean air and water. Windows could also be programmed to automatically close when outside air quality is poor and opened when it is good, and air intakes and exhausts can be positioned to not contaminate occupied spaces.

Efforts to advance development of the VTA Block should also include noise reduction strategies such as space programming that is designed around a sound mapping plan, mechanical and electrical systems that reduce background noise levels, walls and doors with high sound transmission class (STC) ratings, noise buffers, and acoustic materials and treatments on walls, floors, and ceilings.

Open space and active transportation options also support health and wellness by supporting physical activity, encouraging social connections, and/or offering respite.

5.8 Information and Communications Technology

Information and communications technologies could be used within the VTA Block to enable and support sustainable outcomes by collecting and applying data to inform building management system operations and influence users decisions like which transportation option to take and when and how much energy and water to consume.

Fig. 5-19 Health and Wellness Features and Information and Communications Technology to Achieve Sustainability

Flexible Approach to Parking

6

A long-term decline of parking demand is underway, driven by generational change, an increase in multi-modal mobility, and interest in more urban and less impactful lifestyles. Real estate developers are concerned about the risk of building hugely expensive structured and underground spaces that may not be in demand in the long-term. Rather than putting forward one prescriptive parking solution, this document provides context, guidance, and options to be considered as part of future efforts to advance development of the VTA Block.

The DDF considers it likely that the City of San José will dramatically reduce, or even eliminate, minimum parking requirements within Downtown. It also appears likely that the market will want at least some parking for future TOD on the VTA Block, even with a BART station immediately adjacent. This document provides a summary of parking provided by other recent developments in the area and then evaluates options for parking to serve the development envisioned by the DDF on the VTA Block.

In contrast to the block today, which is dominated by surface parking, the creation of a dynamic and walkable ground plane that accommodates pedestrian and community activities requires a compatible and complementary parking strategy.

6 Flexible Approach to Parking

6.1 District Approach to Parking

One component of such a parking strategy could be a district parking approach. There are over 7,500 parking stalls within a five minute walk of the site, including an existing city-owned parking garage across Market Street from the VTA Block. Some percentage of the parking demand for the block could well be accommodated off-site by employing a district approach to parking.

Figure 6-03 shows transit stops near the VTA Block and public and private parking within a third of a mile of the block.

6.2 Underground Parking

The DDF also explored options for underground parking . Underground parking is often twice or more the cost of above ground parking structures, however it does more than above-grade or surface parking to enable vibrant walkable places.

6.3 Shared Parking

Shared parking could also benefit developers, property owners, and tenants because it could reduce the amount of costly underground parking that may need to be built. Shared parking is most successful when developments have a mix of uses that require parking at different times of day (e.g., residential parked at night and office parked during the day), and there are many examples of operating and successful shared parking configurations. Shared parking also typically requires a lot of upfront coordination, especially regarding sharing of construction costs and agreement on management and operations approaches.

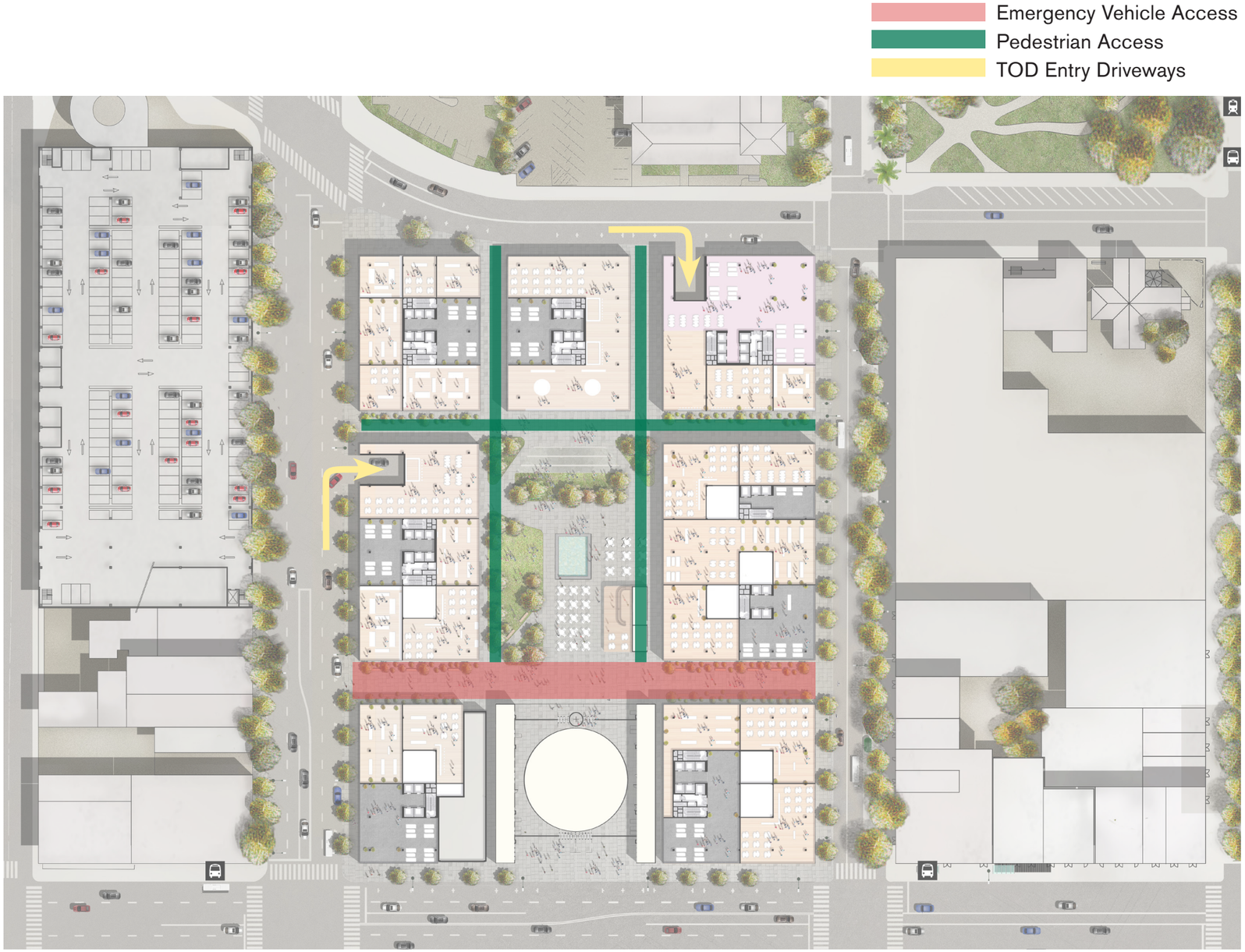


Fig. 6-01 Groundfloor Concept

6.4 Other Approaches: No Parking and Adaptable Parking

Other approaches to parking for the VTA block could include ‘zero parking’ or ‘adaptable parking’ approaches. Under a zero parking approach, all off-street parking for the block could be provided via a district approach like that described above. An adaptable parking approach could create options that could work within the uncertainty of future demand. One option for an adaptable parking approach is to provide above grade structured parking with larger floor-to-floor heights that could eventually accommodate occupiable uses, and this space could later be converted from parking to space for something else.

6.5 Parking Capacity

Figure 6-02 outlines the wide range of different parking requirements and options, from the current San José requirements on the left side to a more market-driven approach shown on the right. As noted above, the City of San José is considering reducing minimum parking requirements for Downtown.

The studies described herein all take into account the fact that no parking can be provided above or below the BART station facilities.

As shown in figures 6-04 given an assumed structural grid and core layout for the buildings above, including the need for parking to wrap around BART station “back of house” support facilities, analysis conducted as part of DDF development determined that two levels of underground parking can accommodate approximately 670 standard parking stalls. With the use of specific parking management techniques (i.e., valet parking in drive aisles to increase capacity) and double stackers in parking stalls, and taller parking structure floor-to-floor heights (which also require deeper excavation), two levels of underground structured parking could accommodate up to 1145 parked vehicles. The figures 6-05, 6-06 that follow show conceptual layouts of two levels of underground parking in more detail and relationship of these parking facilities to the BART station footprint. Of course, the operational cost of a parking management system would need to be factored into any cost analysis.

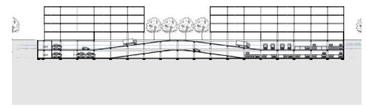
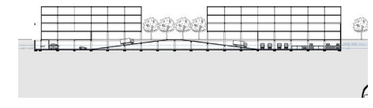
Current City Requirement		**Current Market Demand**	**Cost Effective TOD Approach**
1688 Carpark Spaces	1688 Carpark Spaces	800-1000 Carpark Spaces	400-500 Carpark Spaces
standard single	double stacker	double stacker	double stacker
			
7 Levels	4 Levels	2 Levels	1 Level
81 feet below grade	64.5 feet below grade	32 feet below grade	17.5 feet below grade
high carbon cost	high/mid carbon cost	mid carbon cost	lower carbon cost

Fig. 6-02 Parking Requirement Diagram

6 Flexible Approach to Parking

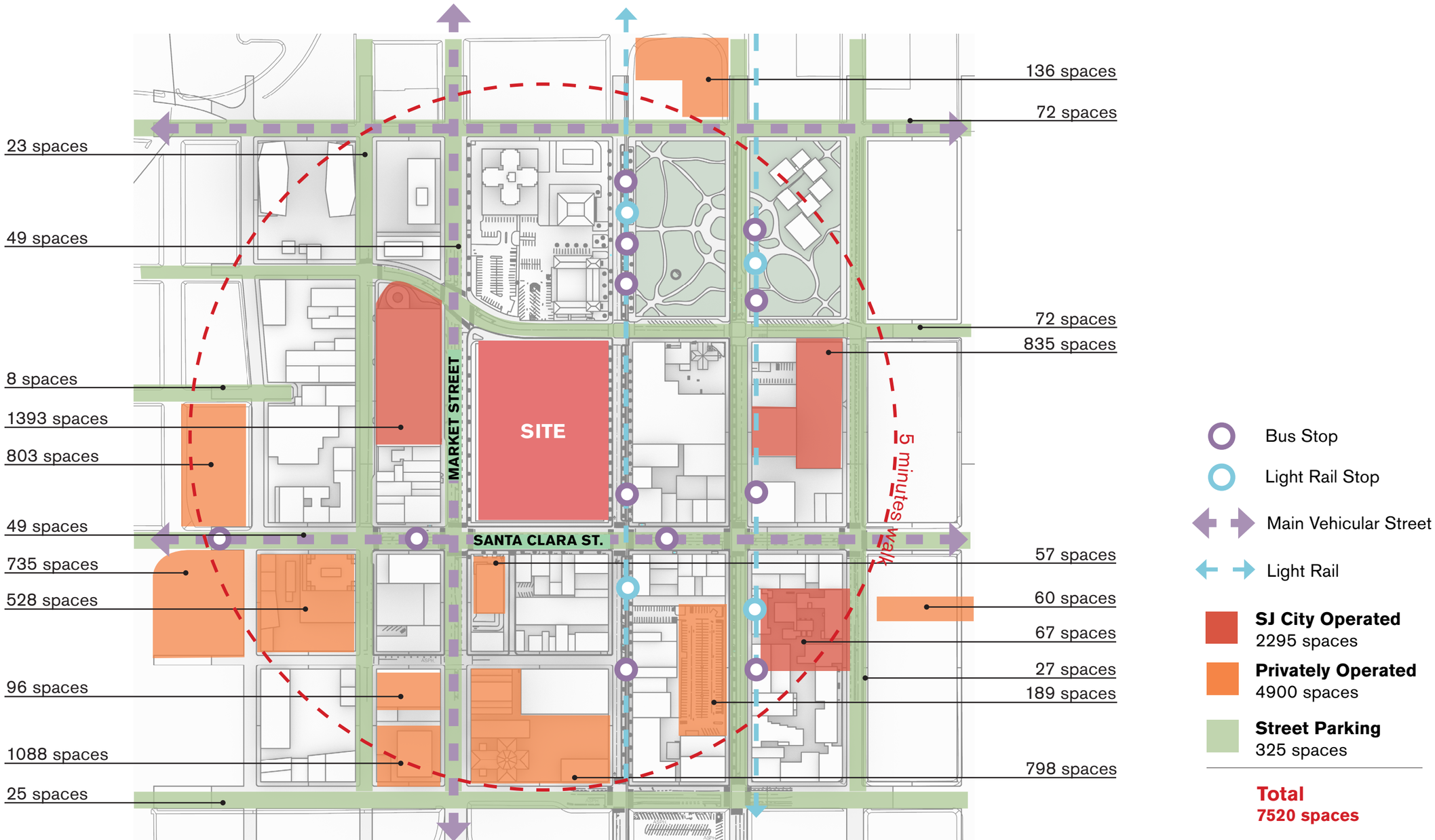


Fig. 6-03 Downtown San José Parking Map

6 Flexible Approach to Parking

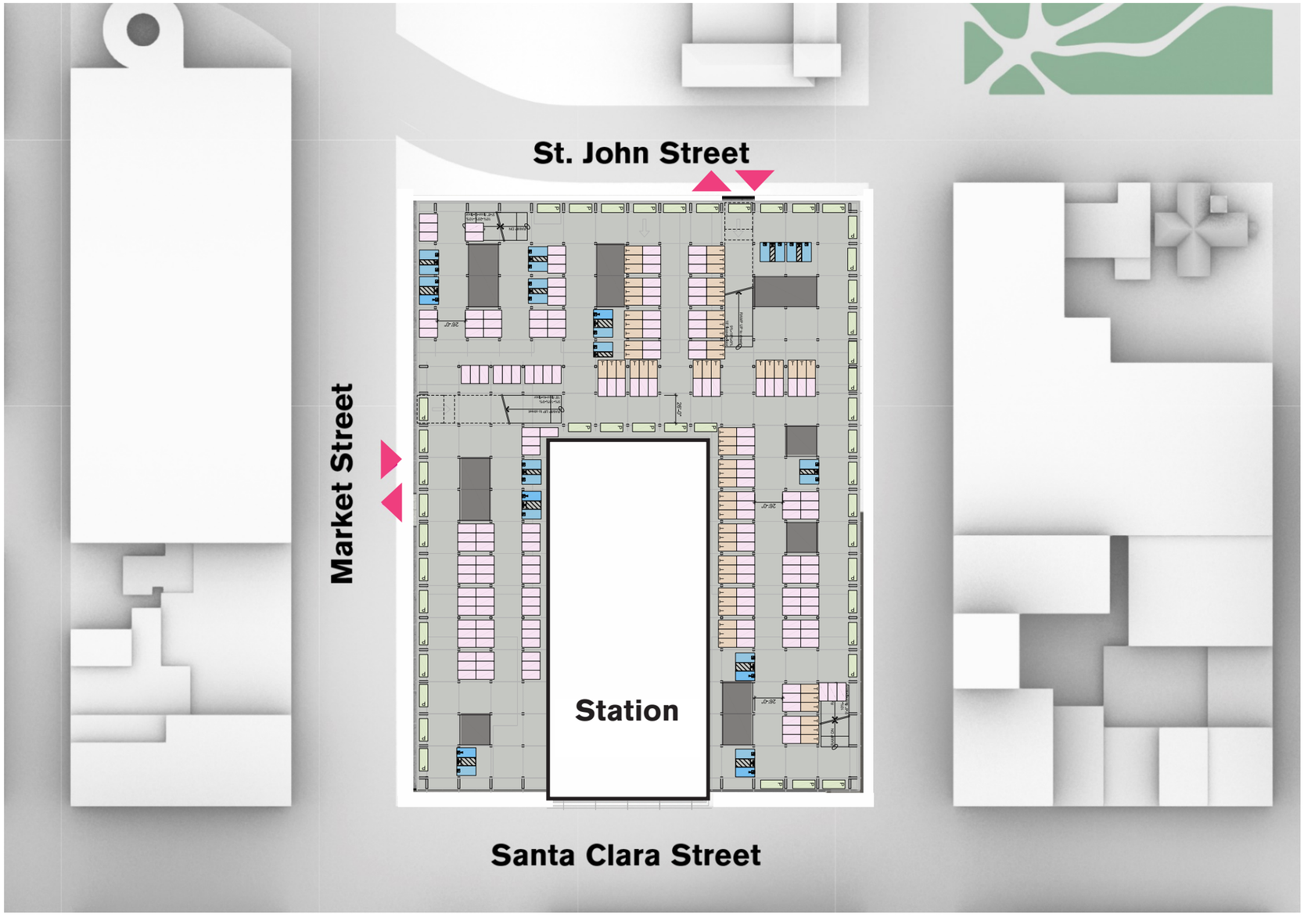


Fig. 6-04 Basement Level 1 Concept

One approach the DDF has taken to understand options for parking capacity is to understand how much can be provided in a two level basement. The answer ranges from appx 670 standard parking stalls to appx 1150 stalls using double stackers and valet parking.

Base for two levels :	670 Total Spaces
Using Double Stackers :	915 Total Spaces
Using Double Stackers + Valet :	1145 Total Spaces

6 Flexible Approach to Parking

This page shows a detailed parking layout for the B1 basement level, along with the current station footprint.

B1 Level Plan

Base Summary:

	175 Standard
	25 ADA Spaces
	45 Parallel
	60 Tandem
	305 Total Spaces
Using Double Stackers :	550 Total Spaces
Using Double Stackers + Valet :	660 Total Spaces

Fig. 6-05 Basement Level 1 Parking Layout

*Note: Stall count is not final and are subject to development.

Property Line

6 Flexible Approach to Parking

This page shows a detailed parking layout for the B2 basement level, along with the current station footprint.

B2 Level Plan

Base Summary:

265 Standard
45 Parallel
55 Tandem
365 Total Spaces

With Valet : 485 Total Spaces

Fig. 6-06 Basement Level 2 Parking Layout

*Note: Stall count is not final and are subject to development.

Property Line

6.6 Access and Loading

Two vehicular access points to underground structured parking have been provisionally located off Market and St John streets. This is to avoid the existing light rail and narrow width of First Street and the BART station, bus traffic, and pedestrian traffic along Santa Clara Street. Two entry and exit points should be adequate for a two-level basement of this size.

In terms of service access and loading, the ramps envisioned in the DDF would be sufficient for small trucks and delivery vans. Larger axle vehicles would need to load and unload at street level due to the tight turning radii resulting from the tight footprint of the basement. There could also be some service access to the plaza and the back of the buildings via the new paseos. These routes would be closed to public vehicular access; however, they can still provide periodic access for service and emergency vehicles to the TOD sites, just as they would for the station . An effective curb management approach for TOD at the street level will need to be well coordinated with the BART station to ensure the space needed for both uses is well balanced.

6.7 Parking Demand

Figure 6-03 maps out a number of recent developments in the project vicinity and demonstrates the wide range of parking ratios for these new developments. Given VTA's goals of promoting transit use, the future BART station being part of the block, and the many other transit options in very close proximity, the DDF assumes that excessive and costly parking is not desirable. A ratio of 0.5 parking stalls per 1000 square feet of development can be achieved with the proposed two-levels of underground structured parking.

Ultimately, the DDF seeks a flexible approach to parking that can adapt to uncertain futures for parking demand and evolve over time. The DDF also seeks to enable solutions where parking does not dominate the VTA Block ground plane in order to promote a walkable urban environment that encourages public transit use.

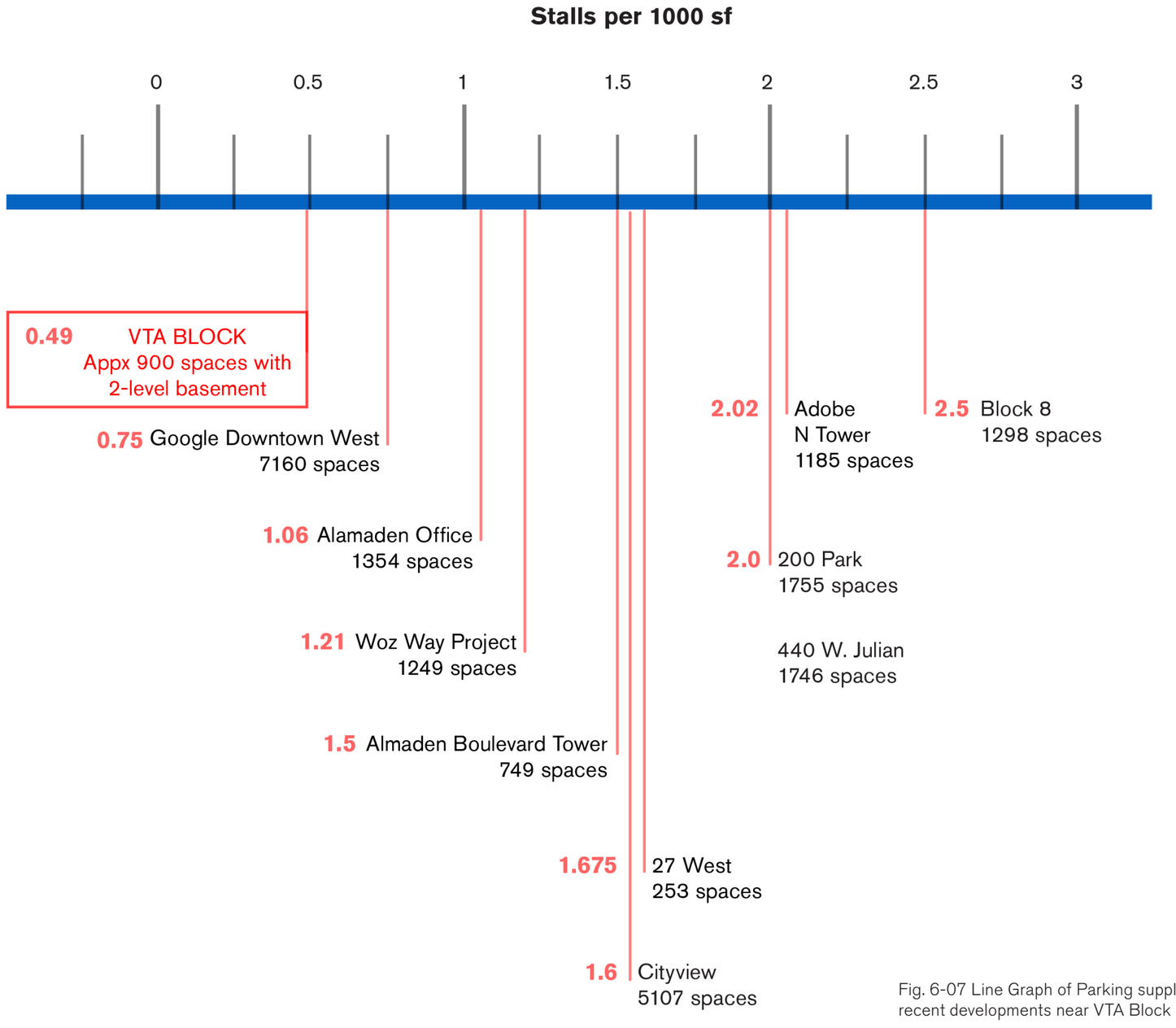


Fig. 6-07 Line Graph of Parking supply at other recent developments near VTA Block

Figures 6-08 and 6-09 show the excavation depth required for two levels of double stackers or triple stackers. Note that the deeper depth required for triple stackers also requires longer ramps, which make it inefficient or impractical.

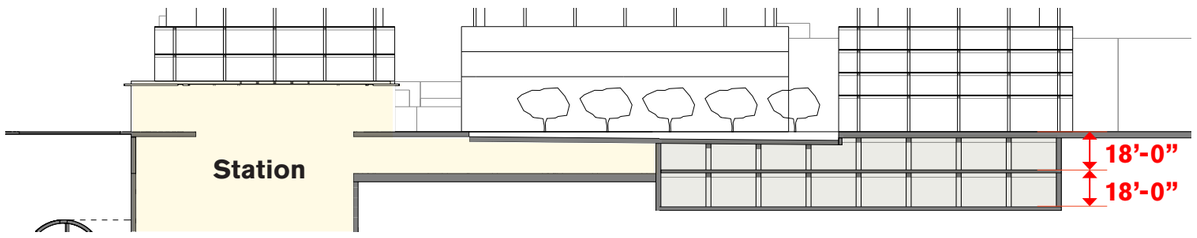


Fig. 6-08 Alt. Floor to Floor : 18’ - Double Car Stackers

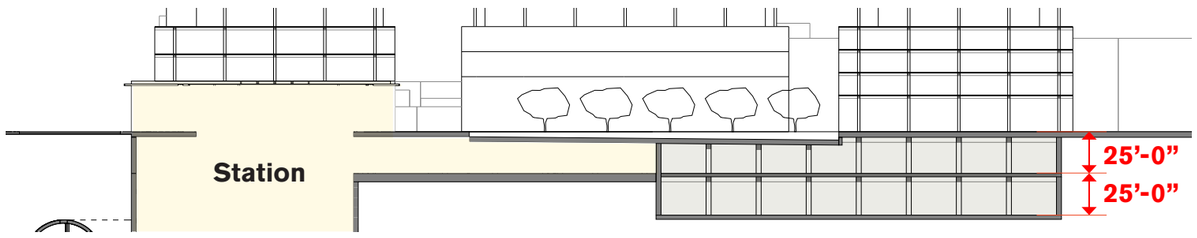


Fig. 6-09 Current Floor to Floor 25’ : Triple Car Stackers

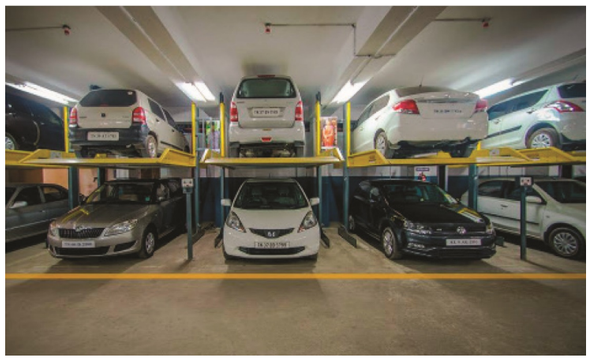


Fig. 6-10 Double Stacker Options

Fig. 6-11 Triple Stacker Options

Integration of Station Design with TOD

7

Development of the DDF involved close coordination with preliminary BART station design in order to ensure that future BART station requirements are taken into account in a manner that will enhance both projects as they advance.

7 Integration of Station Design with TOD

7.1 Structural Coordination

BART requires that its new stations be designed to an “essential services building,” level of seismic performance, per Article 1 in Chapter 4 of the California Division of the State Architect (DSA) regulations on Structural Safety (DSA-SS). These enhanced requirements ensure that stations can quickly resume operation after a maximum potential earthquake. This is a much stricter standard than what is applied to commercial buildings – it is focused on ensuring that occupants can safely evacuate, and it reduces the potential for more extensive damage that may take a considerable amount of time to repair before occupancy and operations can resume.

BART standards require that development above a station be designed to the same “essential service” standard. This requires a more intensive structural design, with structural elements carried down through the station to the ground and extra work done at the time of station construction. Issues related to locations of structural elements, building mass and height, and associated extra costs require careful study and focused attention to address these issues.

Work performed to date by VTA’s BSV Phase II Project team includes a structural analysis and feasibility study that has to date identified a nine-story building as the maximum feasible TOD over the station. It is shown directly on top of the BART station in the test fit massing shown in Chapter 4, with shear wall locations and seismic analysis validating the structural design for the TOD above the station at a conceptual level. The station design work is ongoing, and if future analysis determines that a TOD building above the station is not feasible, then the DDF allows for whatever office floor area lost to be accounted for elsewhere on the VTA block in order to meet the City of San José’s FAR 4 commercial use requirement. As shown at the end of Chapter 4, the test fit massing is flexible and can be adjusted, then re-evaluated to balance the various guidelines and criteria for TOD.

7.2 Access, Egress, and Services

Shear walls for the nine story TOD building that carry down through the basement level of the station have been studied, and the ground floor plan of the station has been adjusted so that the entrance and service cores for the TOD building can be accommodated at the north end of the station, including vertical transportation to a second floor office lobby space.

One of the key elements of an underground station is ventilation, and there are a number of chillers and service ducts that also need to be integrated into the TOD building. These elements have been designed and positioned to have minimal impact on the TOD building by locating them on the level directly above the BART station ; they do not carry through the rest of the structure . However, there will need to be service access with an accompanying easement to this equipment for routine maintenance and future replacement by BART.

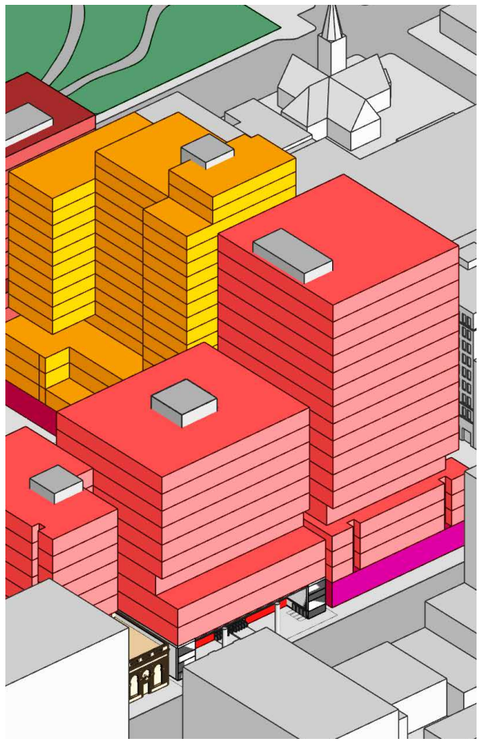


Fig. 7-01 Nine Story TOD Massing above BART Station

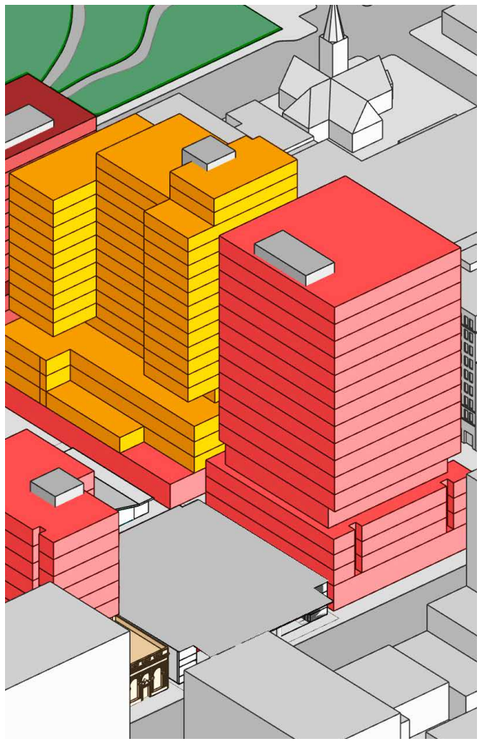


Fig. 7-02 BART Station with no TOD Massing

Fig. 7-03 Nine Story TOD Elevation

7 Integration of Station Design with TOD

7.3 Plaza Features

The depth of the basement level below the plaza, which contains back-of-house spaces to serve the BART station, has been sized to allow for planting and landscaping on the public plaza above. Parking or other TOD facilities cannot be located beneath the back-of-house spaces.

There are some back-of-house components that will likely need to surface at the plaza level, including an emergency egress staircase and a ventilation shaft. The DDF envisions that these elements be integrated into a pavilion building in the plaza, which would also house a café or restaurant as well as public restrooms to further activate the plaza and station area.

7.4 Parking, Emergency and Service Access to the Station

The BART station also requires a few vehicular parking stalls for BART staff, as well as spaces for a range of bicycle parking options, as space for parking does not exist in the underground BART station. Vehicular parking stalls for BART staff (approximately four to six stalls) need to be integrated into the overall TOD parking solution strategy, which could include options that utilize space on adjacent city streets, or within a TOD basement parking garage. Bicycle parking requirements, as shown on figure 7-04, show the approximate number of bicycle parking spaces that will need to be provided for the station. Prior to TOD being built on the VTA Block, bicycle parking will be located within the block in a temporary location. Subsequently, bicycle parking could be housed in a nearby retail space leased by BART, as occurs at other BART stations, which could be one of the retail spaces facing onto the plaza. Once the TOD strategy is further developed and the schedule is known, a final location for bicycle parking will need to be coordinated between VTA, BART and the City of San José.

DDF and station requirements include the paseo to the north of the station that links Market and First streets. This paseo will be aproximately 40 feet wide in order to allow access for emergency vehicles and authorized service vehicles. Removable bollards would prevent unauthorized vehicles from accessing this paseo. The BSV Phase II station project will also need to coordinate their construction logistics so that the adjacent property owners all retain access to their property during construction in the same manner as their current access.

Note: Indicative space required for bicycle parking shown below. Actual position to be determined later.

Class I bicycle parking - Racks (64x4) = app. **250** (250req.)

Class II bicycle parking (13x7) = app. **100** (90req.)

Total = app. **350** (340req.)

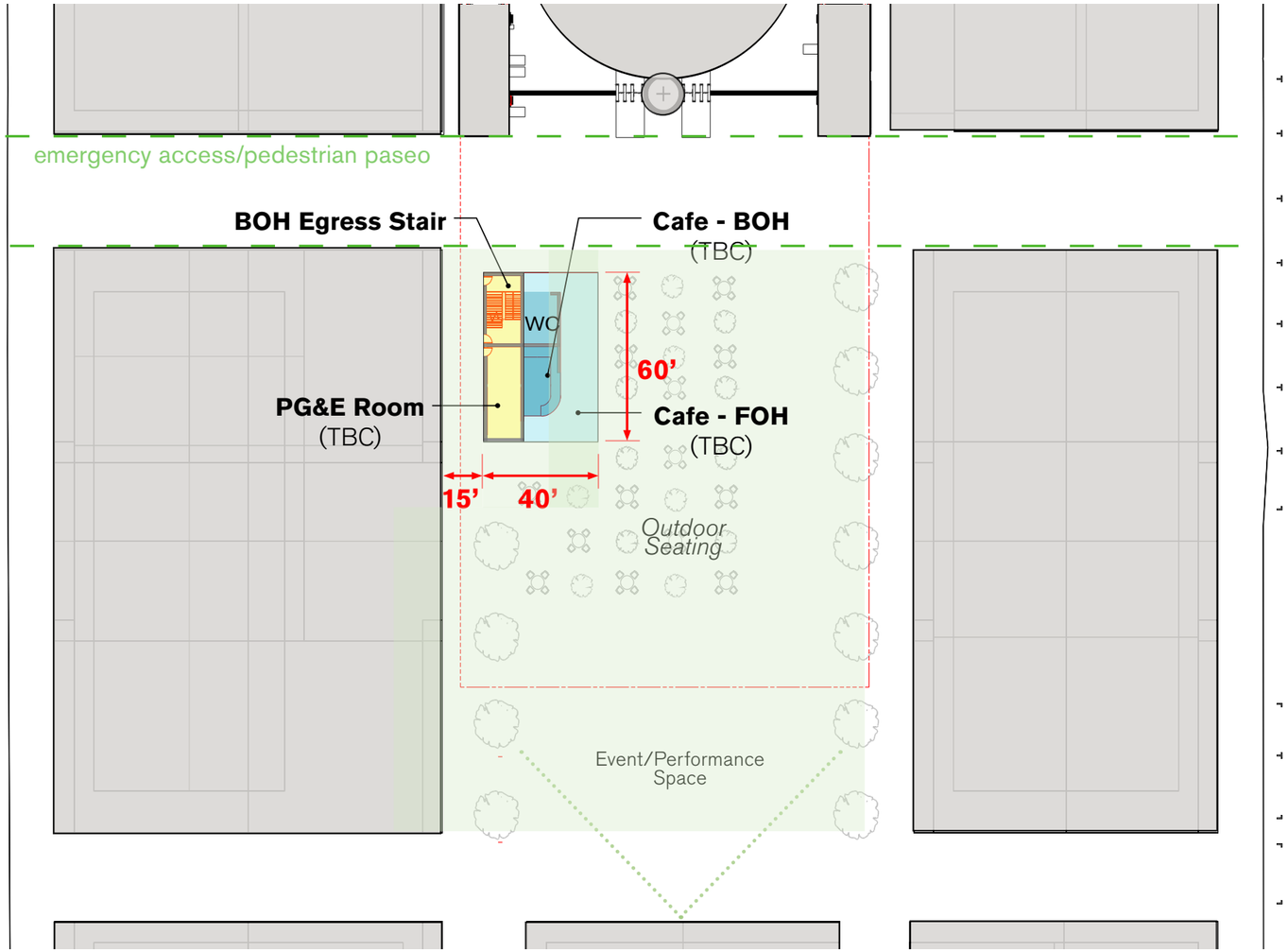


Fig. 7-04 Plaza Ground Floor Concept

Fig. 7-05 Artist's visualization of the VTA Block plaza

Plaza Pavilion Precedents

There are numerous examples of pavilion structures in squares or plazas that provide activation and programming for the plaza and the people in it, while also housing functional elements like restrooms and/or service risers. Examples include Union Square in New York (Fig 7-06,07,08) and the Quartermile plaza in Edinburgh, Scotland (Fig 7-09,10).

Fig. 7-06 Luna Park Cafe, Union Square, NYC

Fig. 7-07 Luna Park Cafe BOH, Union Square, NYC

Fig. 7-8 Luna Park Cafe BOH, Union Square, NYC

Fig. 7-9 Quarter Mile Plaza Scotland

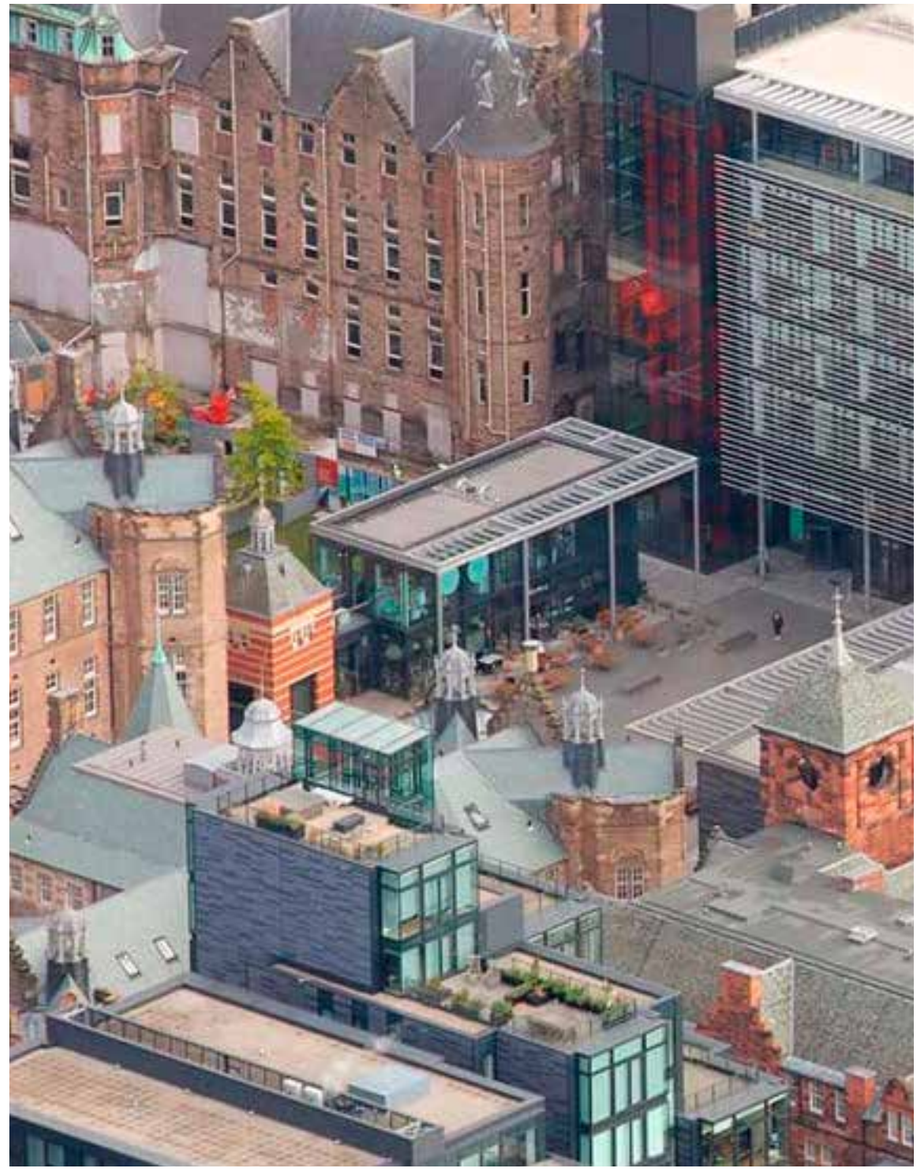


Fig. 7-10 Quarter Mile Plaza Scotland

7 Integration of Station Design with TOD

7.5 Ongoing Coordination

While work to advance development of the VTA Block will soon transition to the next phase with deeper coordination with developers and other development partners, design and engineering for the BART station will continue into late 2022. VTA Block development efforts will be coordinated with VTA BSV Phase II Project design implementation efforts. The design and coordination work that has been done to date is preliminary, and subsequent adjustments will likely be required. VTA will ensure its station construction and TOD teams coordinate their work in order to achieve the best possible outcome for a highly efficient station design and successful TOD.

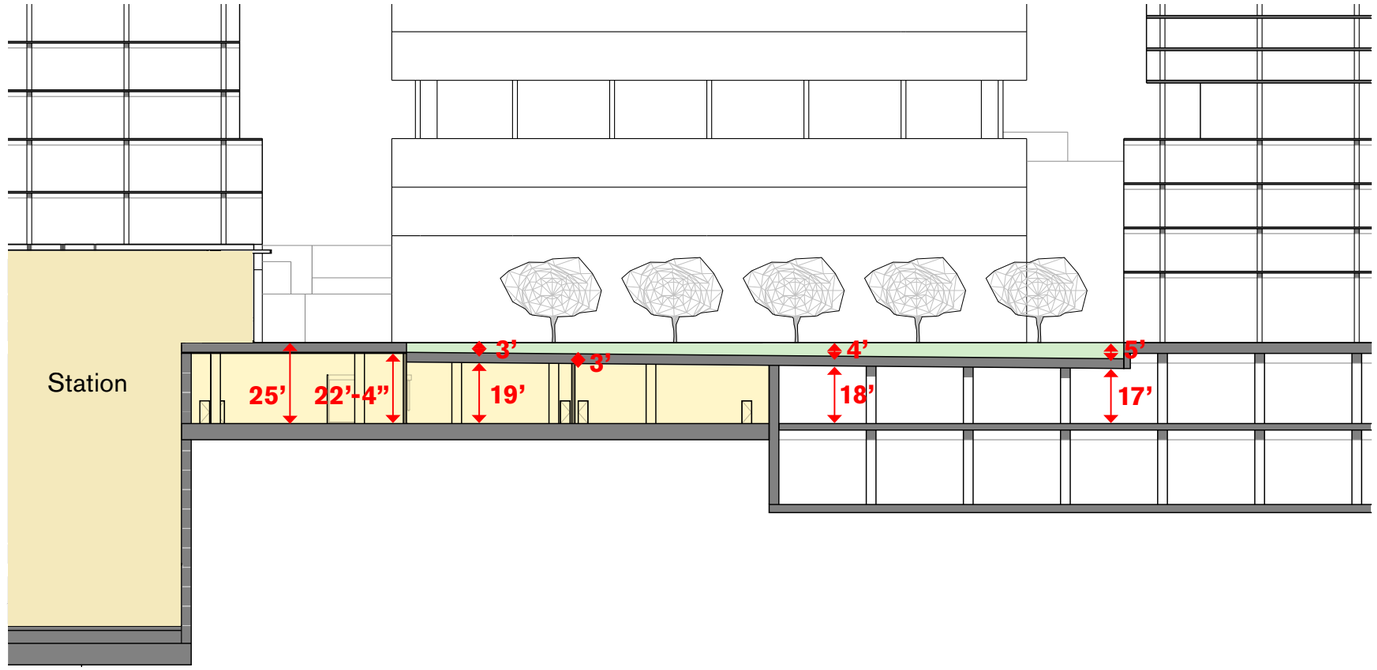


Fig. 7-11 Plaza Section

Looking Forward

8

The intention of the DDF is to provide a tool that serves as a starting point, informational resource, and guide for evaluating design proposals in the ongoing planning and development of the future VTA Block TOD. By initiating this process in parallel with initial coordination and preliminary design for the BART station, VTA seeks to ensure that the station structure will facilitate TOD around the station. The DDF also incorporates elements and requirements for the station into the future plaza and surrounding area, so that the two projects can support one another.

As VTA begins selection of a development partner(s) to take these concepts to the next level of refinement, the DDF document will be used to evaluate different proposals and determine which options best align with the design guidelines and goals of the DDF. How different proposals approach the DDF guidelines will inevitably vary from one proposal to the next, and this is what is desired—a variety of concepts and designs that will yield a better result than an overly rigid set of requirements and constraints. The DDF provides the criteria by which VTA can evaluate and select the most successful option. In this sense, the DDF is a critical document for all future partners to absorb and understand in the development of their design concepts.

Once VTA selects its development partner(s) for the VTA Block, the first next step will be preparation of a master development plan for the block that obtains and includes the approval of the other property owners of the block. The other principal property owners and VTA are aligned on the need for a shared master development plan to ensure the highest quality design and maximum developable area for each property owner. There are a number of potential strategies to accomplish this goal, ranging from a single joint-venture type approach to one that focuses on shared investment in jointly used facilities while allowing each owner to independently pursue its own projects.

Future Steps (cont.)

The master development plan will need to address a number of items that contribute to achievement of world-class TOD on the block, including but not limited to: shared parking; plaza design and operation; overall development program that meets city requirements and can evolve with market opportunities; building design; revised parcel map that is consistent with the development plan; the entity(ies) that will be responsible for design, funding, construction and operation of jointly used facilities; and phasing and implementation of the jointly used facilities as well as individual development projects.

VTA's intent for the future master development plan is for it to be developed with broad opportunities for public and stakeholder involvement. It will need to meet the objectives of VTA and the other property owners as well as be consistent with City of San José requirements. VTA will work with the city so that upon completion of environmental review and city approval of the master development plan, work can immediately commence on the first phase of buildings with the goal for construction to be well underway by the start of revenue service for BART Phase 2.

The 'dials' included earlier in the DDF set out VTA's key priorities for the block and will help VTA determine which schemes for the Block are preferred. Development options which adhere to the guidelines and goals of the DDF (i.e., contain active public spaces, programmed outdoor amenity spaces where possible, improve pedestrian connectivity, etc.) will be evaluated favorably compared to those which do not address these priorities. (see Fig 8.-01).

While the DDF informally references items such as City of San José requirements and design guidelines, FAA height restrictions, and other regulatory constraints, it is in no way comprehensive, and any future project will still need to undertake their own due diligence to validate any regulations or restrictions that may not have been addressed directly in the DDF.

Evaluation Criteria Key Points

- Quality of public space, presence of central plaza, and programing and activation of the ground floor
- Allowing daylight and limiting wind impacts to the public outdoor spaces, both summer and winter
- Walkability and pedestrian links to and from public transit, including mid-block connections
- Effective activation of the ground plane through different approaches to programming, day and night
- Provision of rooftop and podium-top outdoor amenity space
- Creation of views to green spaces from the towers by stepping massing, or other methods
- Integration of the podium concept into the design, including a solid material expression at the base
- Use of high-quality, sustainable materials
- Achieving approximately 8 FAR, with the inclusion of a mixed program of commercial, residential, and other potential uses, such as hotel, community center, or other. The mix should be based on market analysis and forecasts for future demand
- Meeting City requirement for 4 FAR* of commercial space
  (* this requirement will need to be discussed further with the City to understand how it applies to the block as a whole, as opposed to individual parcels)
- Showing sensitivity to the historic Building and Loan building, as well as further negotiations with the City to adhere to the intent of the St James Park Historic District

- Achieve sustainability goals for VTA Block TOD, which might include:
  - Net zero energy
  - Low carbon (or zero carbon) construction methods, such as cross-laminated timber structures)
  - Exceeding statutory environmental requirements, such as CalGreen and LEED
  - Centralizing utility services distribution and other efficiencies across the block
  - Use of natural ventilation and daylighting to reduce energy consumption
  - Use of green roofs or rainwater collection to avoid runoff and minimize impact on City infrastructure

- A creative approach to parking, which might include:
  - District parking approach that leverages existing off-site parking
  - Underground structured parking to avoid the ground floor level being dominated by vehicles.
  - Parking management systems to reduce footprint and excavation needed per parking stall.

- Alignment with VTA's Social Equity goals for housing at a range of affordability levels, and encourage local job creation and walkable communities.

Fig. 8-01 Evaluation Criteria Points

Fig. 8-02 Artistic Impression of BART TOD

8 Looking Forward

8.1 Phasing

The VTA Block TOD project will need to be phased and coordinated with the construction of the BART station. According to the most recent schedule estimates, the substantial completion of the BART station construction will occur at some point in 2028 (system integration, testing and inspection, and safety certification will occur beyond that time, before revenue service will begin; however TOD efforts could commence in parallel with this period). Based on the needs for staging areas during construction, it is unlikely that the site can be significantly opened up for work on TOD prior to that date. There is a possibility, depending on future work by VTA's design-build stations contractor, that some small portion of the site could be cleared and prepared for TOD development prior to 2028.

VTA will work closely with its development partners to plan out the phasing of future development work. If there is to be basement parking shared between different property owners, then any development agreements, property acquisitions or other negotiations will need to be resolved prior to any work on TOD projects commencing. The basement structure will impact the structure of the buildings above, so this work needs to be carefully coordinated as perhaps the first step of any future development. Work on the basement for the station facilities will occur significantly earlier than any TOD work.

The decision as to which portion of the site to develop first will need to be assessed once more of the station design and construction methods are known. Fig 8-04 shows different scenarios for how the site could be built-out in the future to highlight the flexibility that can be maintained for viable development plans. There are many different scenarios that could be developed based on a variety of priorities and dependencies.

BART Phase 2 Extension Timeline

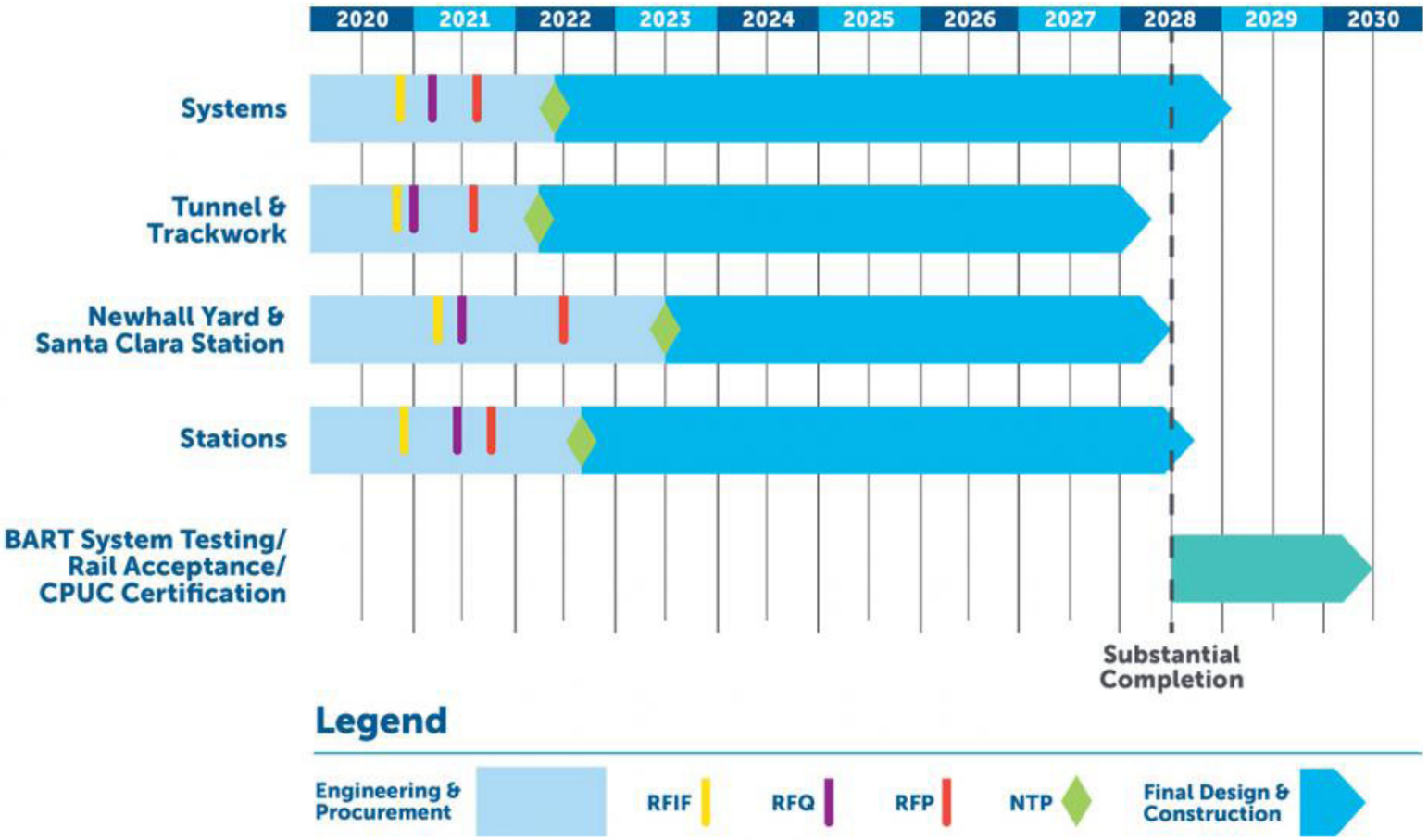
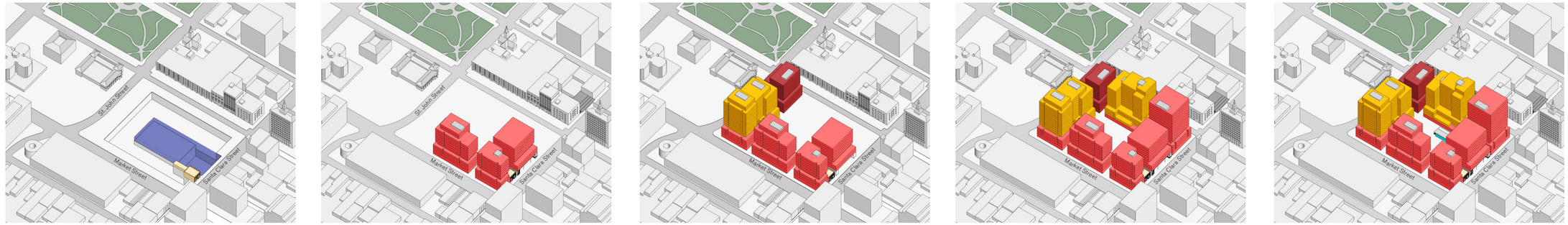


Fig. 8-03 BART Phase II Timeline

Directional-based Project Phasing
West to East



Station Completion | Station and Tower West | Tower North | Tower East | Plaza and Pavilion

2028 →

Program-based Project Phasing

Station Completion | Station and Commercial | Residential | Hotel | Plaza and Pavilion

2028 →

Fig. 8-04 Phasing Strategy Diagram

8 Looking Forward

8.2 The Post-Pandemic Era

Since DDF work began in late 2018, the world has changed due to the ongoing pandemic. However, many of the concepts and principles that are fundamental to the DDF have become even more critical as a result of the pandemic. For instance, the need for high-quality outdoor amenity spaces is even greater now that it was before. This priority applies not only to the large publicly accessible plaza at ground level, but also to the outdoor amenity spaces that are envisioned for the podium level and rooftops can take advantage of San José's mild climate and have outdoor spaces with expansive views in which to work, socialize, or relax in a safe environment. The terracing of the building mass to create additional outdoor spaces and views continue to be important for people's health and wellness.

Some of the other factors that support the DDF work will need to be reconsidered as the city emerges from current restrictions and life returns to an adjusted sense of normality. Plans will need to be updated and adapted to current market conditions and the program mix of hotel, commercial, and residential uses will need to be adjusted. The size of residential units may also be impacted by the way people choose to live and work in the future, and the demand for parking for both commercial and residential occupants may change. These trends and adjustments will be an ongoing process for a project of this scale and duration, and while the pandemic may shift those trends in a slightly different direction, the goals and priorities of the DDF remain as relevant now as they were two years ago. The approaches highlighted in the DDF, including a focus on sustainability and resilient design, will help prepare for other future pandemics that seem increasingly more likely. The concept of building high-quality, dense, mixed-use development adjacent to public transit connections continues to be a valuable long-term investment into a healthy and vibrant future for Downtown San José.

8.3 Conclusion

The process of creating the Design for Development Framework has involved periods of extensive research, outreach, coordination, and discussions with a variety of stakeholders and interested parties. VTA would like to thank everyone who engaged in this process and contributed to the guidelines and aspirations as envisioned in this document. As this project moves forward towards the next stage in its development, and the discussions and concepts become more concrete, we hope that the overarching vision as outlined in this framework document will remain relevant and help to shape a transformative and dynamic future for this significant site in the heart of Downtown San José.

Fig. 8-05 Artistic Impression of Rooftop Amenity Space

Acknowledgements

This document was prepared for VTA by Foster + Partners, under the supervision of the SVTC consultant team. IBI prepared the contents of Chapter 5 on Sustainability Approach to Development. Watry contributed content to Chapter 6 Flexible Approach to Parking. Kimley-Horn also provided feedback and facilitation of the DDF Stakeholder meetings. VTA staff across multiple divisions have also provided their input and feedback. We also want to acknowledge all of the participants in our stakeholder meetings, which included a range of representatives of Downtown businesses, residents, neighbors, San José City staff, and others. It has been a team effort, and we appreciate everyone's important contributions to making the DDF a success.

Selected Reference Documents

Bentemplein Water Square as a Case Study in Centralized Water Management

http://rdcrotterdam.com/projects/water-square-benthemplein/

City of San José's Contribution to California & Paris Agreement Goals
https://www.sanjoseca.gov/home/showpublisheddocument/32171/636705720690400000

City of San José Downtown Design Guidelines, 04/23/2019

https://www.sanjoseca.gov/home/showpublisheddocument/38781/637268875547770000

City of San José Downtown Future Vision link, 07/2019

https://www.sanjoseca.gov/home/showpublisheddocument/41983/637078723511330000

City of San José Wayfinding report, 11/2015

https://www.sjeconomy.com/home/showpublisheddocument/53649/637171189703000000

St James Historic District Guidelines, 06/1989

https://www.sanjoseca.gov/home/showpublisheddocument?id=15623

St James Park Future Plans, 03/04/2019

https://www.sanjoseca.gov/your-government/departments/parks-recreation-neighborhood-services/our-services-initiatives/st-james-park-revitalization

State of California Div of State Architect – Essential Facilities
Article 1 in Chapter 4 of the California Division of the State Architect (DSA) regulations on Structural Safety (DSA-SS), 11/19/2018

https://www.dgs.ca.gov/-/media/Divisions/BSC/03-Rulemaking/18MonthCodeAdoption/2018-Triennial-Cycle/2018-19-Commission-Meetings/January-2019-Approved-Standards/DSASSCC0318Part-4.pdf?la=en&hash=78E6D0FF8AE4F2915F174793CB5AB32345E9D4CF

VTA Affordable Housing Policy, 04/2016

https://www.vta.org/sites/default/files/2020-03/Transit-Oriented%20Development%20Policy%20%20-%20VTA%20Board%20Adopted%2012.05.2019%20Accessible%20%281%29.pdf

VTA BART Silicon Valley- Phase II Extension Project, Findings of Effects for Architectural Resources, prepared by JRP Historical Consulting

https://www.vta.org/sites/default/files/documents/TechRrpts_4d%2520Cultural_Preliminary%2520FOE%2520Architectural_feb20_2018.pdf

VTA - Downtown San José BART Station Area Playbook, 09/2019

https://www.vta.org/sites/default/files/2019-09/The%20Downtown%20San%20Jose%20Station%20Area%20Playbook%20-%20On-Screen.pdf

VTA - Downtown San José Station Community Working Group, ongoing

https://www.vta.org/projects/documents?project=1296

VTA - Sustainability Plan, 2020
https://www.vta.org/sites/default/files/2020-06/SustainabilityPlan2020_Accessible_0.pdf

VTA - Transit-Oriented Development Policy, 11/22/2019

https://www.vta.org/sites/default/files/2020-03/Transit-Oriented%20Development%20Policy%20%20-%20VTA%20Board%20Adopted%2012.05.2019%20Accessible%20%281%29.pdf