5M PROJECT/
DESIGN FOR DEVELOPMENT
JULY 2015 / V_7.2

FORESTCITY HEARST *corporation*

PROJECT SPONSOR
Forest City & Hearst Corporation

PROJECT TEAM
SITELAB urban studio – *Urban Design*

KPF – *Master Architect*
Tom Leader Studio – *Landscape Architecture*
BKF – *Civil Engineering*
Fehr & Peers – *Transportation*
Glumac – *Sustainability*
IPD - *Parking*

NOTES
V7.2 is a final draft copy updated with the Revised Project for review.

TABLE OF CONTENTS

FIGURE / TABLE LIST

SECTION I: 5M PROJECT VISION

01. VISION + GOALS

02. DESIGN FRAMEWORK

SECTION II: 5M STANDARDS + GUIDELINES

03. CONTEXT + LAND USE

04. OPEN SPACE + STREETSCAPE

05. BUILDING FORM + MASSING

06. ARCHITECTURAL DESIGN

07. CIRCULATION + TRANSPORTATION

08. ART + SIGNAGE

09. SYSTEMS + SUSTAINABILITY

DOCUMENT GUIDE

As a whole, the 5M Project Design for Development provides the vision, intent, and requirements for the future design of the project, however each element in the 5M Project Design for Development has a specific function.

Section I provides the overall project vision. It describes the project goals and framework in which those goals will be realized. Explanatory text provides overarching context and vision that is implemented through the standards and guidelines.

Section II provides the design standards and guidelines which, in addition to the related documents discussed below, regulate the project.

RELATED DOCUMENTS:

This Design for Development document is to be read and applied in conjunction with the Development Agreement for the 5M Project and the Fifth and Mission Special Use District ("Fifth and Mission SUD"). The Fifth and Mission SUD establishes particular controls that apply to the 5M Project in lieu of corresponding sections of the Planning Code. Unless otherwise noted, references herein to the Planning Code include the controls established under the Fifth and Mission SUD. This Design for Development document implements those controls with more detailed design standards and guidelines.

DOCUMENT GUIDE CONT.

Within Section II, the standards provide the critical foundation; they are the select components that are required and will ensure that 5M's core values and intent are not compromised. Additionally, as design process is iterative, changing, and complex by nature, the standards leave room for necessary architectural creativity and flexibility. This flexibility is structured, but not prescribed, by the guidelines that point to 5M's urban, informal, industrial, artistic, productive, and tactile character.

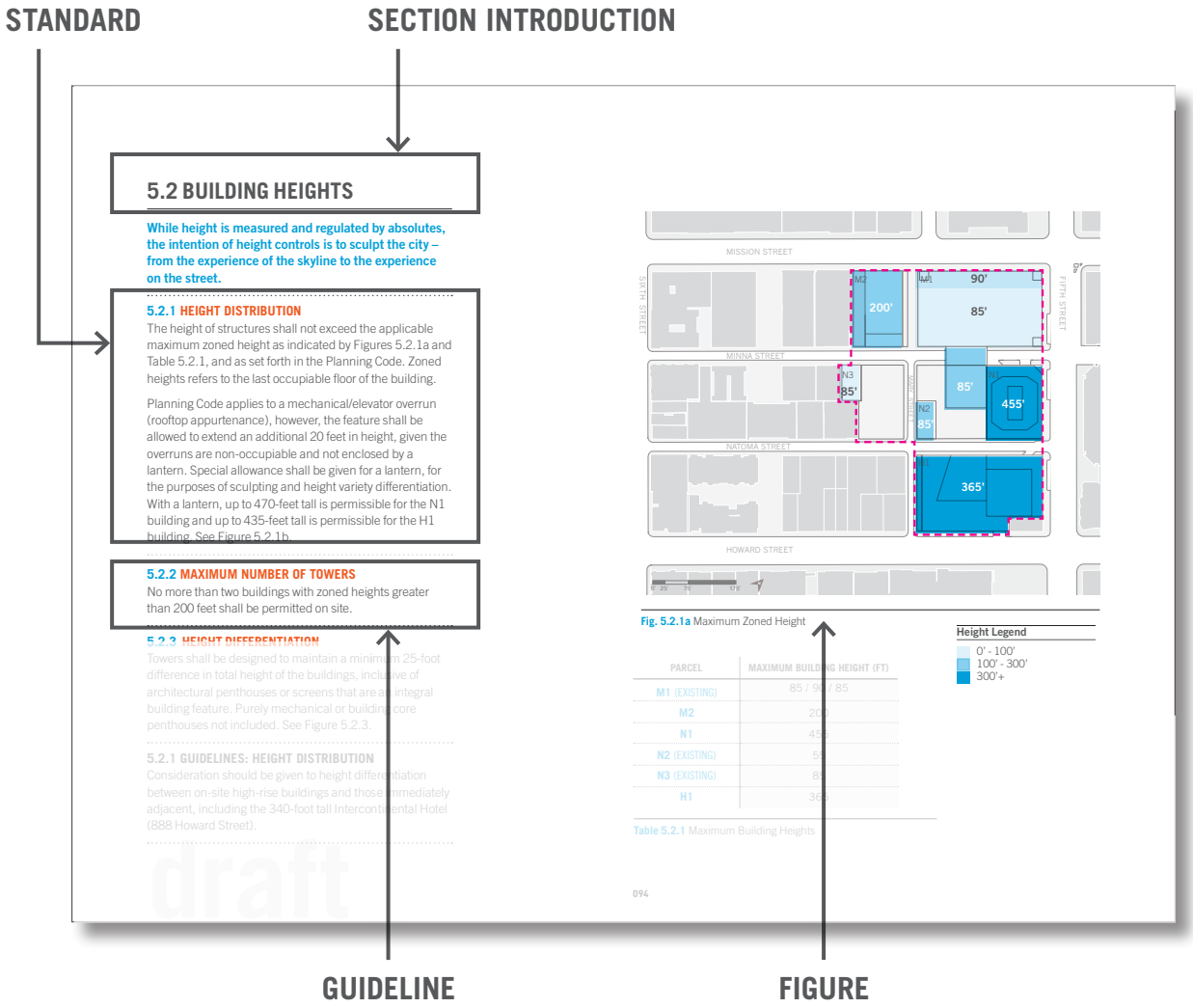
SECTION INTRODUCTIONS. Where included, introductory text provides an overview of the proceeding standards and guidelines but is not itself a standard or guideline.

STANDARDS. Numbered in blue and titled orange, these items are required.

GUIDELINES. Titled, numbered and in gray, these items correspond to associated standards when applicable, and while not required, provide guidance on the 5M intent.

FIGURES & TABLES. Numbered according to the corresponding section and/or standard, and as such are not continuously consecutive.

All references to the "District" are to the 5M site boundary as indicated in *Section 3.2 Land Use + Context: 5M Parcels.* All references to San Francisco Planning Code are abbreviated to "Planning Code" and include the controls established under the Fifth and Mission Special Use District unless otherwise noted.



Example Section II Page

SECTION I

5M PROJECT VISION

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Fig. 1.0 "5Ws" Art Installation at 5M

01.

VISION + GOALS

The 5M Project seeks to ensure that creativity and opportunity continue to emerge and thrive in the city. Through a unique approach to its design and operations, the project is envisioned as building a place that facilitates greater social and professional exchange—a connected urban platform.

The 5M Project sits on a four-acre site at the intersection of many different districts, including Downtown, Mid-Market, and SoMa. The project arrives as new ways of working are driving changes to the workplace itself. In response to these distinct influences, 5M has been designed with varied urban forms in mind, incorporating density in response to the site location and rich transit network, building in open space and an active ground floor for a mix of users, adding to the City's housing supply, integrating historic South of Market buildings, and accommodating a range of commercial tenant types.

1.1 5M PROJECT VISION AND GOALS

The 5M Project began in 2007 with research to understand the needs of 5M's many potential users. Through dozens of workshops and focus groups, community leaders and the users and designers of the rapidly changing workplace provided feedback that shaped 5M's programming and design. Neighbors were interested in long-lasting economic growth and programs to connect local community groups, as well as general safety and affordability. Office users said they wanted social spaces that support creativity, a variety of disciplines, and flexible environments.

The 5M Project endeavors to satisfy both sets of needs by providing a built environment that is attractive to a mix of organizations that work across a spectrum of areas, from arts to entrepreneurship to events. The project promotes partnerships with organizations working to engage the community, drawing neighbors and the greater public into their activities while providing substantial residential density as part of a fully mixed use project.

Responding to feedback from the community, in 2008-2009, 5M was established as a set of prototypes to bring life to the space while future development and construction was still pending. These early events and partners established the site as a home to placemaking organizations—a beginning for a new kind of shared district.

01. **DEVELOP A MIXED USE PROJECT**
Residential, commercial, and active ground floor uses all support each other.

02. **LEVERAGE THE SITE LOCATION**
The site's proximity to major regional and local public transit allows people to work and live near transit

03. **BUILD A VARIETY OF BUILDING SCALES**
Varied height and mass reflects the context and balances density with open space.

04. **PROVIDE LARGE FLEXIBLE COMMERCIAL FLOORPLATES**
Large floorplates accommodate horizontally-connected workplaces in demand by tech companies.

05. **DESIGN A CONTINUUM OF FLOORPLATE SIZES**
Different sized spaces accommodate beginning, mid-sized and mature office users.

06. **GENERATE NEW EMPLOYMENT OPPORTUNITIES**
New opportunities and job creation help to meet the City's Economic Strategy goals

07. **INCREASE HOUSING NEAR JOBS**
Sufficient housing density with a mix of unit types supports safety and local retail.

08. **STIMULATE A VIBRANT PUBLIC REALM**
Public spaces act as interactive gathering points for residents, commercial users, and the public, activated by events, retail, co-work and other interactive ground floor uses.

09. **ESTABLISH A PEDESTRIAN-ORIENTED SITE**
Well-design streets, alleys and public spaces per the City's Better Streets Plan encourage pedestrian activity

10. **RETAIN THE CHRONICLE, DEMPSTER, AND CAMELLINE BUILDINGS**
The Chronicle, Dempster Printing, and Camelline Buildings signal the history of the site and SoMA.

11. **MAXIMIZE SUSTAINABILITY EFFORTS**
Building on the inherent sustainability of this walkable site, building and user-level strategies can further reduce energy, water, and waste.

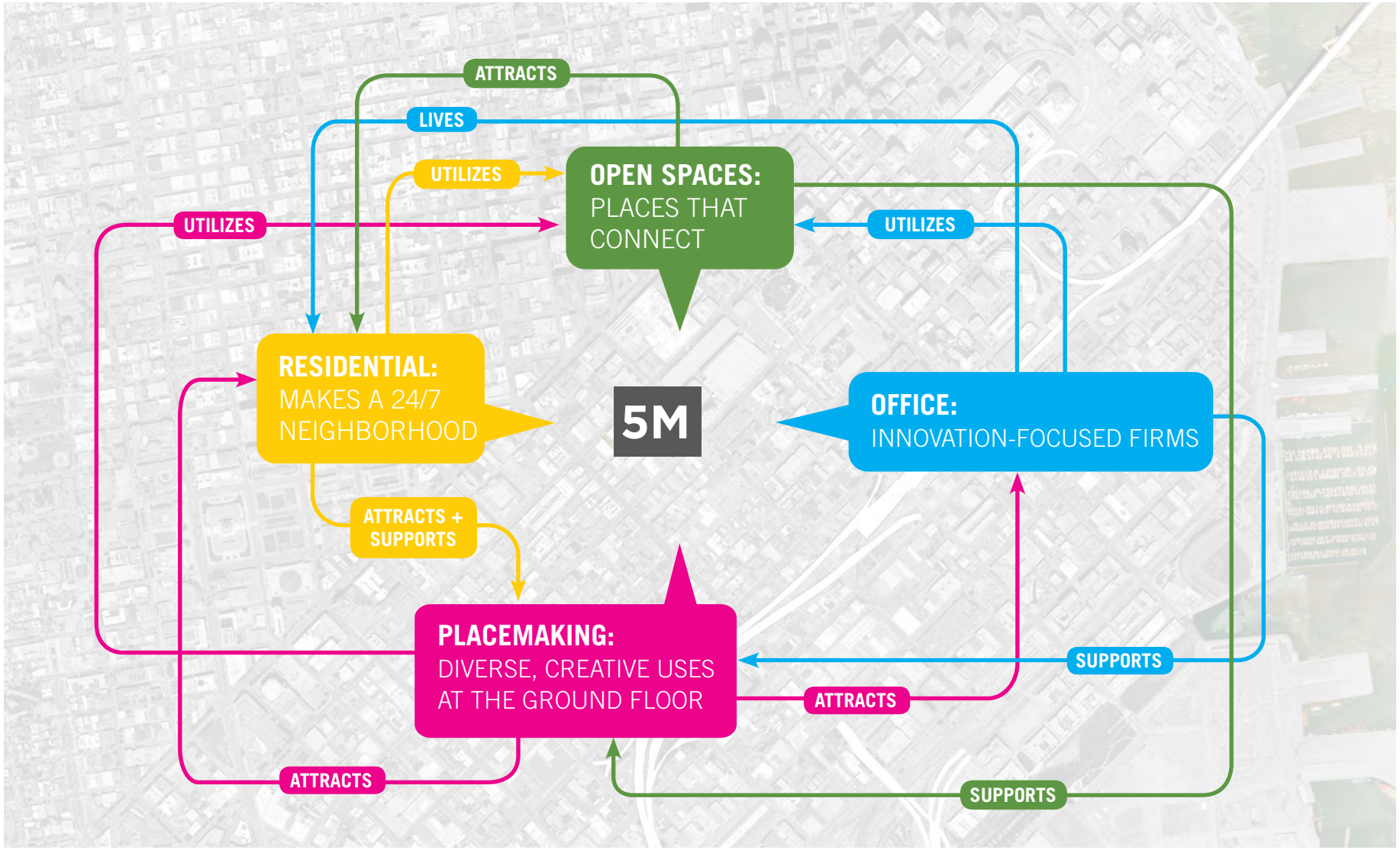


Fig. 1.1 5M Project Ecosystem

1.2 5M PROJECT OVERVIEW

The 5M Project creates density through varied urban forms that are inspired by the fabric of the city itself.

San Francisco is constantly evolving, in ways both fast and slow. The commercial downtown that exists today is an amalgam of different eras, each with a specific geographic focus, building typology, tenant and community profile to match. The 5M Project builds on the City's legacy of adaptiveness to introduce a new typology for urban density that combines highly diverse building types with an active and interconnected civic realm.

URBAN DENSITY

Density can be achieved two ways – building out or building up. The first approach, minimizing height while still maximizing density, creates a massive block of buildings with no room for public space, historic buildings, articulation or variation (Figure 1.2a). The second approach, maximizing height, would generate a similarly homogenous experience, everything either open space or tall building (exemplified by the mid-20th century "towers in the park" approach to city design, characterized by starkly contrasted tall buildings and open spaces). The 5M Project follows a hybrid approach, achieving density through a mix of scales, and interior and exterior spaces (Figure 1.2b). This basic massing is further articulated through carving and shaping the buildings to create views and variety on the skyline as well as pedestrian friendly, engaging spaces on the ground (Figure 1.2c).

The resulting plan holds the street walls of Mission, Fifth and Howard Streets, focusing height along the Fifth Street side facing the downtown core. The buildings step down and pull back at the interior, to create a new urban plaza at the intersection of multiple alleys that connect to the downtown context to the east and SoMa context to the west. The combination of new construction of varying scales with existing buildings creates a texture in keeping with the urban pattern of SoMa.

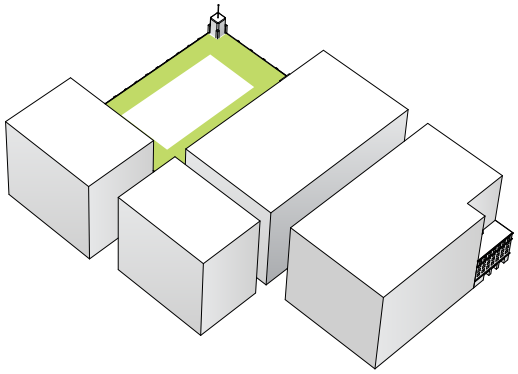


Fig.1.2a Density Without Height

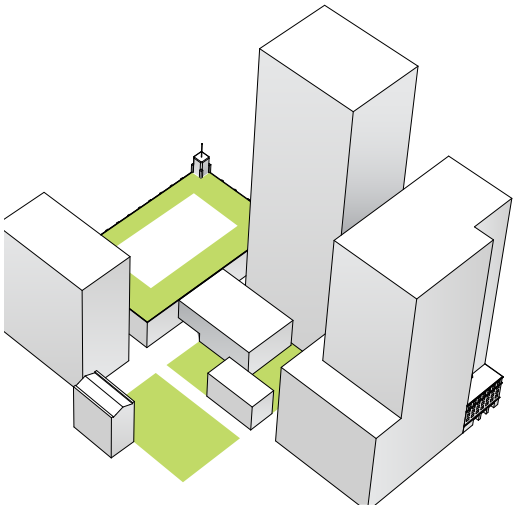


Fig. 1.2b Density With Height and Varied Massing

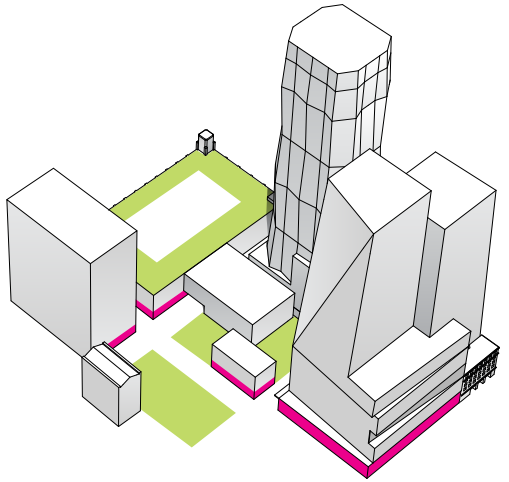


Fig. 1.2c Density With Articulated Massing

Fig. 1.2d Site Plan

SITE LOCATION

The proposed Fifth and Mission Project (the "5M Project" or Project), is a mixed-use project on an approximately 4-acre site in the southwest quadrant of Fifth and Mission Streets in Downtown San Francisco. It extends from the southern corner of Fifth and Mission Streets southeast along Fifth Street to Howard Street, and southwest along Mission Street and Howard Street to approximately the midblock.

The site's immediate proximity to existing density in Downtown, including major retail and commercial, and a network of transit lines, including the Bay Area Rapid Transit (BART) station, makes it an ideal location for density. It is among the most transit rich sites in the Bay Area. Major transit hubs in the vicinity include the Powell Street BART & MUNI Metro Station, located approximately 750 feet north of the project site. The MUNI Central Subway Project, which will extend along Fourth Street approximately 750 feet east of the project site, is under construction and anticipated for completion in 2019. MUNI, Golden Gate Transit and SamTrans routes are all either immediately adjacent or within a 5-minute walk.

LAND USES

The Project will include up to 1.72 million gross square feet (gsf) of new and existing uses including approximately 825,000 gsf of office use, 821,000 gsf of residential use, and 77,000 gsf of active ground floor retail/office/ cultural/educational uses. The project will provide approximately 58,000 square feet of open space as shown in Figure 1.2d.

EXISTING SITE

Four existing buildings will be demolished on the site to accomodate construction of three new buildings. Three buildings will be retained: the Chronicle Building at 901 Mission Street, constructed in 1924; the Dempster Printing Building at 447-449 Minna Street, constructed in 1907; and the Camelline Building at 430 Natoma Street/49 Mary Street, constructed in 1923. A fourth building, the Examiner Building at 110 Fifth Street, constructed in 1968, will be partially retained.

MASSING + BUILDING FORM

Buildings will range in height from approximately 50 feet to 470 feet, with a mix of existing and new construction and residential and commercial typologies. See Figure 1.2e for an illustration of the basic massing

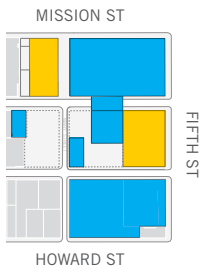
SITE CIRCULATION

The 5M Project will promote a pedestrian friendly streetscape through design improvements and minor changes in pedestrian circulation patterns on the site. The northern segment of Mary Street, between Mission and Minna Streets, will be closed to vehicular traffic and converted to a pedestrian alleyway. The project will also include 0.5 motor vehicle parking spaces per residential unit in up to three subterranean levels and Class 1 and Class 2 bicycle parking spaces in accordance with the Planning Code throughout the site.

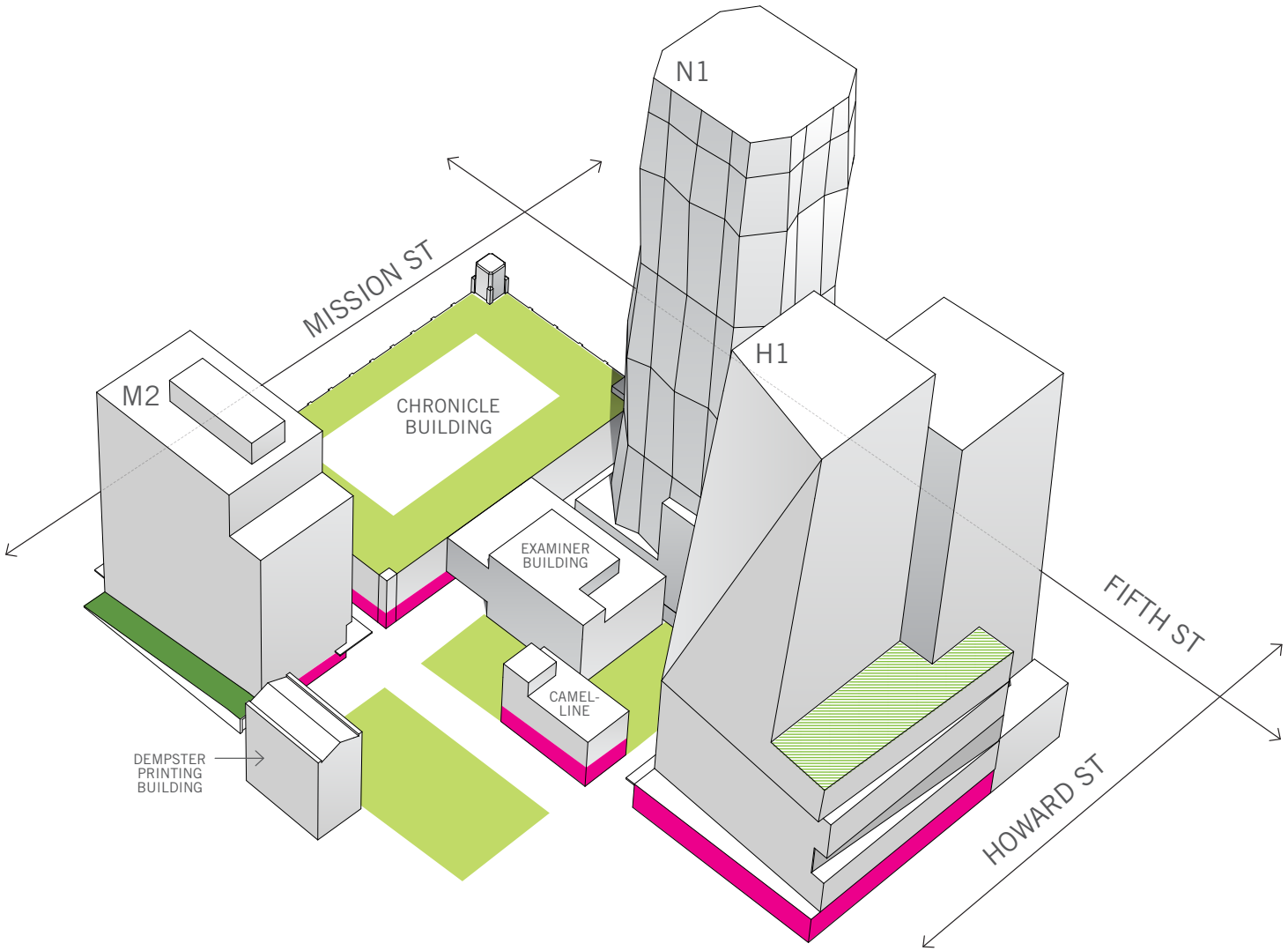
EXISTING BUILDINGS

The 5M site has been the home of the San Francisco Chronicle newspaper for over ninety years. During this time, the Chronicle property has been enlarged through periodic assembly of adjacent parcels and structures to reach its current state. To facilitate operation of an innovative Joint Operating Agreement between the two newspapers, the Examiner Building was constructed in 1968 immediately south of the Chronicle Building, and the two buildings were joined by a two-story structure spanning Minna Street.

The 5M Project Site is one of the largest potential downtown development sites in San Francisco, being approximately 4 acres in size, of which almost 50 percent is allocated to surface parking lots. The site is occupied by approximately 317,000 GSF of built space across eight buildings ranging from 3,000 GSF to almost 250,000 GSF in the 901 Mission / 110 5th Street Building complex. The Project site currently contains eight buildings of varying height, bulk, age and usage, and seven surface parking lots. The existing buildings include predominantly office and office-support uses. One building, the historic Dempster Printing Building, is vacant. No residential uses are currently located on the site. The Chronicle Building (901 Mission Street), part of the Examiner Building (110 Fifth Street), the Camelline Building (430 Natoma Street/49 Mary Street), and the Dempster Printing Building (447-449 Minna Street) are to be retained.



Note: Program references are informational only.



Massing Overview Legend

- Residential
- Office
- Active Ground Plane
- Public Open Space
- Private Open Space (N1 not shown)
- Optional Private Open Space

Fig. 1.2e Massing Overview

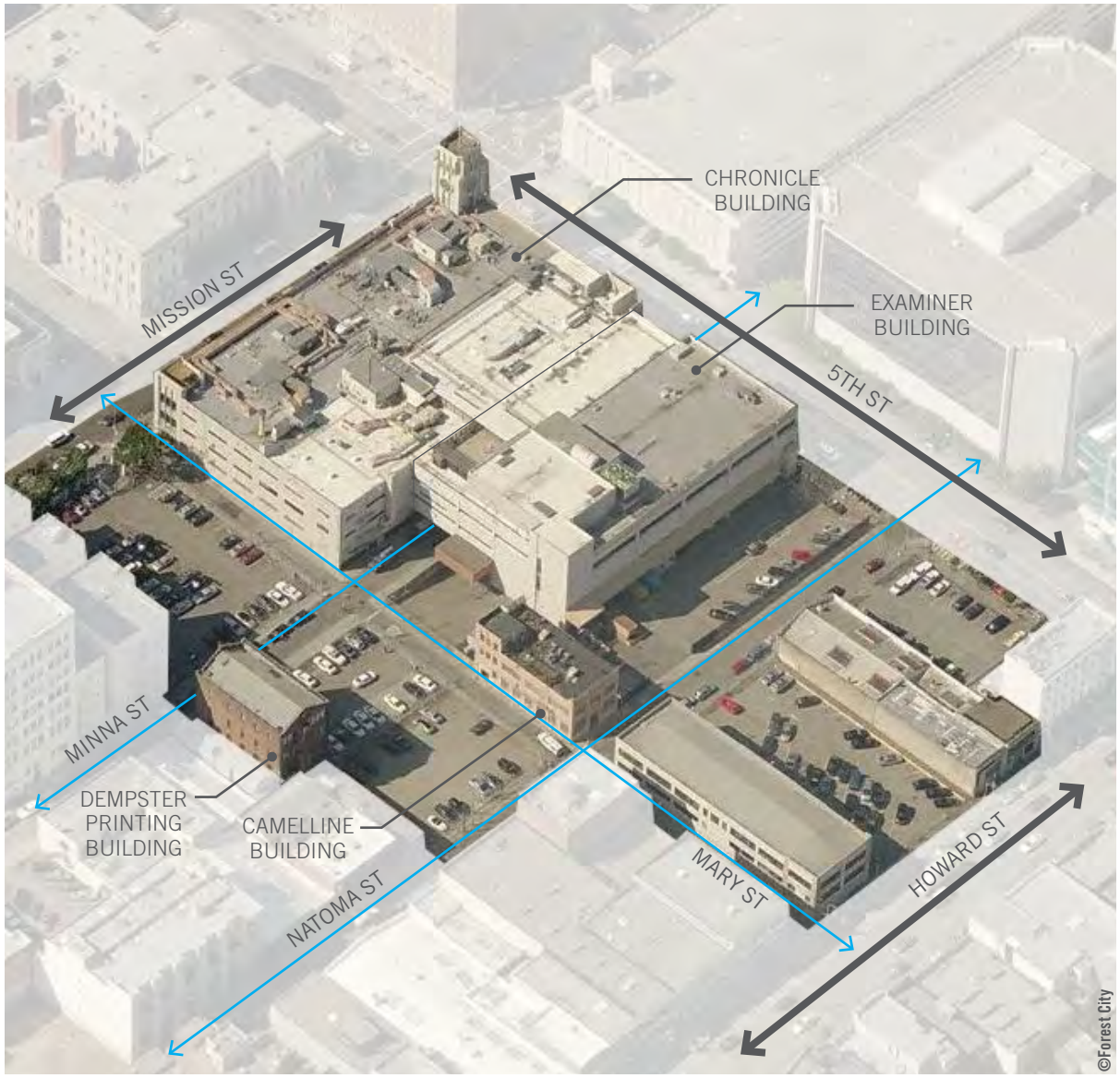


Fig. 1.2f Existing Site

Fig. 1.2g Chronicle Building

Fig. 1.2h Dempster Printing Building

Existing Demolition Plan Legend

- Buildings to be Retained
- Buildings to be Removed

Fig. 1.2i Preservation Plan

1.3 PLANNING CONTEXT

The four-acre site represents an important crossroads in San Francisco's urban fabric, located at a key intersection of the Union Square retail area, the Financial District, the mixed-use neighborhoods of South of Market, one block west of Yerba Buena Gardens and one block south of Hallidie Plaza.

The 5M District extends from the southern corner of Fifth and Mission Streets southeast along Fifth Street to Howard Street, and southwest along Mission Street and Howard Street to approximately the midblock.

At almost 4 acres, approximately half of which is surface parking, the site is one of the largest under-utilized sites in downtown San Francisco. The 5M Project represents one of the last major opportunities to design and build commercial and residential space near the Powell Station downtown — at densities that will have meaningful impacts for the City's' economy, urban fabric, community growth, and affordable/market rate housing needs. The 5M Project has the potential to house thousands of jobs on site geared towards the knowledge and innovation based sectors of San Francisco's economy that have the greatest long-term growth potential in the City. These sectors have also already proven to indirectly support large numbers of Production, Distribution, and Repair (PDR) related jobs.

TRANSIT-RICH LOCATION

5M is a nexus of transportation connectivity: Bart lines to East Bay/SFO (4 lines), Muni Metro (5 lines), Muni buses (countless lines, and both SamTrans and Golden Gate Transit), and the future Central Subway. See Figure 1.3a.

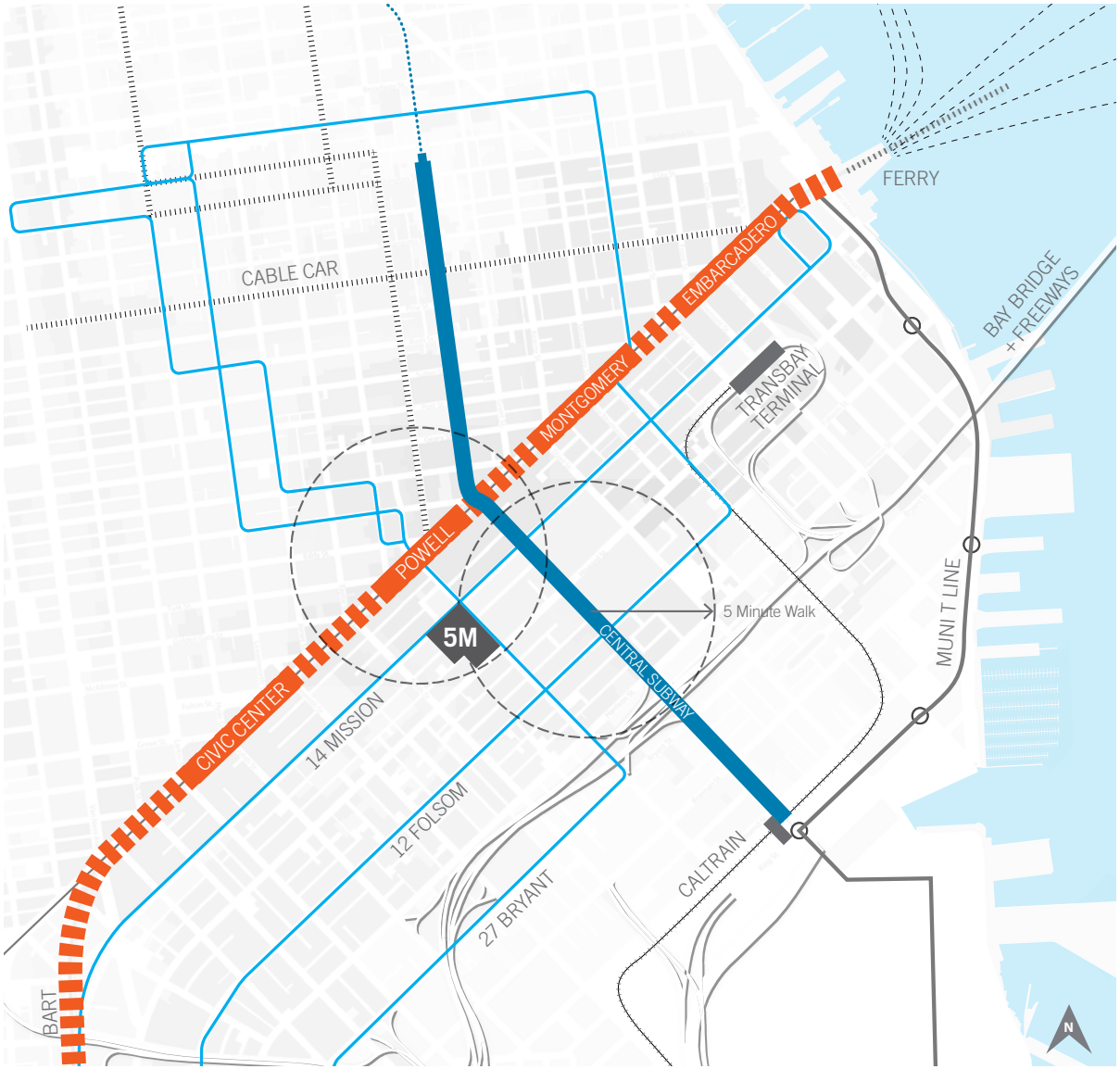


Fig. 1.3a Existing Context

PLANNING AREA CONTEXT

The 5M Project is an independent project that has its own development controls, within the context of the Downtown Area Plan and Downtown Commercial Districts. The 5M Project is also within the geographic boundaries of the proposed Central SoMa Plan, but the 5M Project is of a scale and intensity that requires a more tailored approach than can be provided at the level of the proposed Central SoMa Plan, as the proposed Plan acknowledges. 5M's planning process is more detailed and site-focused, and has produced land use controls and design standards and guidelines specific to the project area, taking into account the project's surrounding context at the intersection of Downtown and SoMa. Although the it is not subject to the controls of the proposed Central SoMa Plan, the 5M Project is generally compatible with the proposed goals of the proposed Plan, which include: supporting transit-oriented growth, shaping the area's urban form, maintaining the area's vibrant economic and physical diversity, and encouraging growth with an improved public realm.

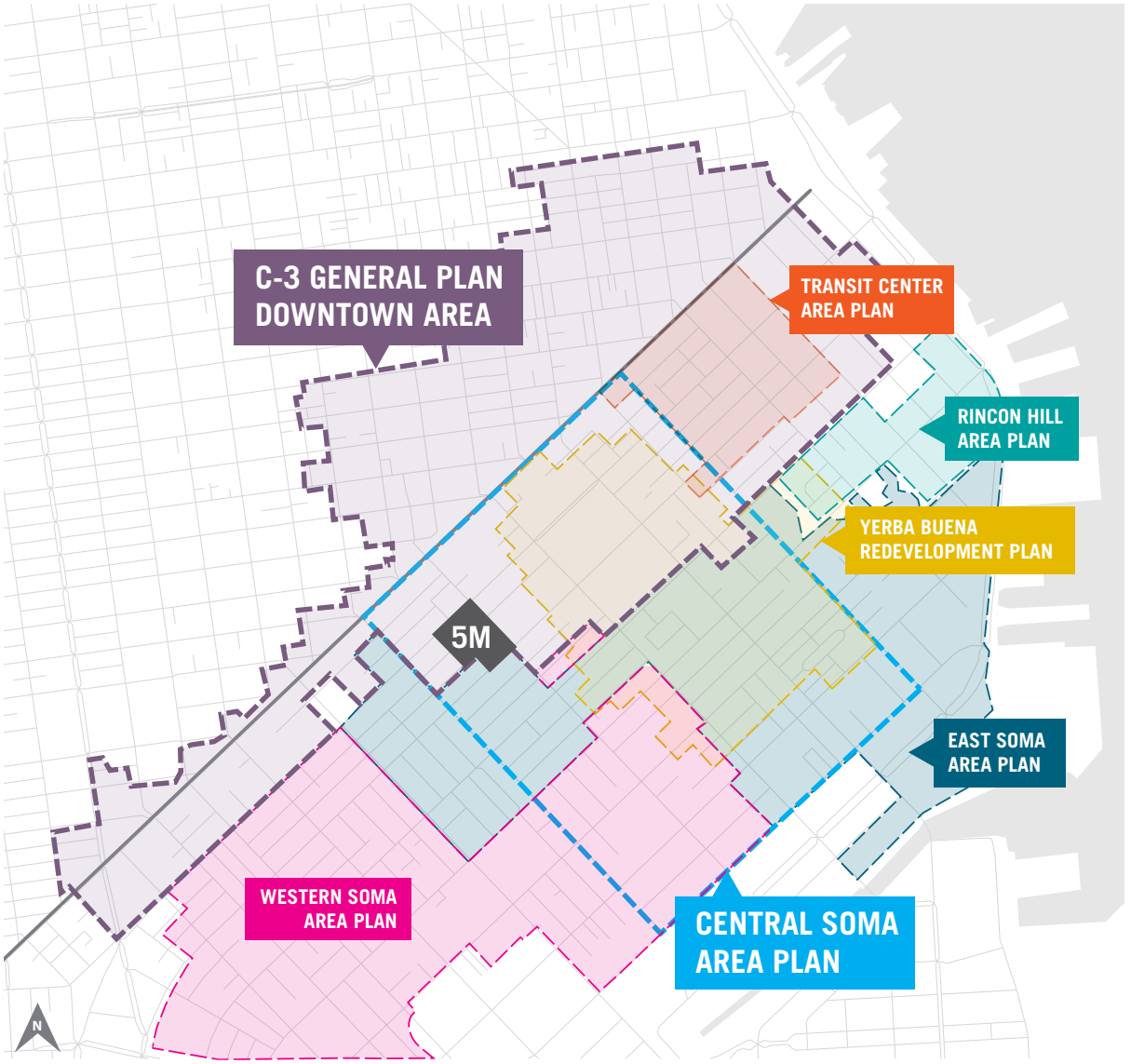


Fig. 1.3b Existing Area Plan Boundaries

SPECIAL USE DISTRICT (SUD) CONTEXT

Within the context of the Downtown Area Plan and Downtown Commercial (C-3) Districts, the Fifth and Mission Special Use District (SUD) establishes particular controls that apply to the 5M Project in lieu of corresponding sections of the Planning Code. The Planning Code allows Special Use Districts to provide specific standards for development within a defined geographic area where doing so would further the purposes of the Planning Code. Under the Planning Code, the C-3 District is a center for city, regional, national and international commerce, where office, residential, retail, entertainment and institutional uses are principally permitted uses. Consistent with the purposes, the 5M SUD provides development controls that reflect the opportunity of one of the last large, underutilized sites within the Downtown Area Plan, to facilitate an integrated mixed-use project with high-density office, residential retail and related uses, in close proximity to transit.

Fig. 1.3c Special Use Districts in the South of Market area (SoMa)

ZONING CONTEXT

The City's Planning Code and General Plan have long supported the basic principle of placing commercial and residential density near transit downtown. And though the precise forms of the City's urban typology must and will continue to evolve, 5M at its core is an expression of those very important urban planning principles.

The District is predominantly within the Downtown Plan area, with C-3 Support Zoning north of Natoma Street and Residential Service District (RSD) Mixed Use zoning South of Natoma Street. Proposed Zoning, shown in Figure 3.1c, introduces the rezoning of the District as unified zoning, entirely C-3-S.

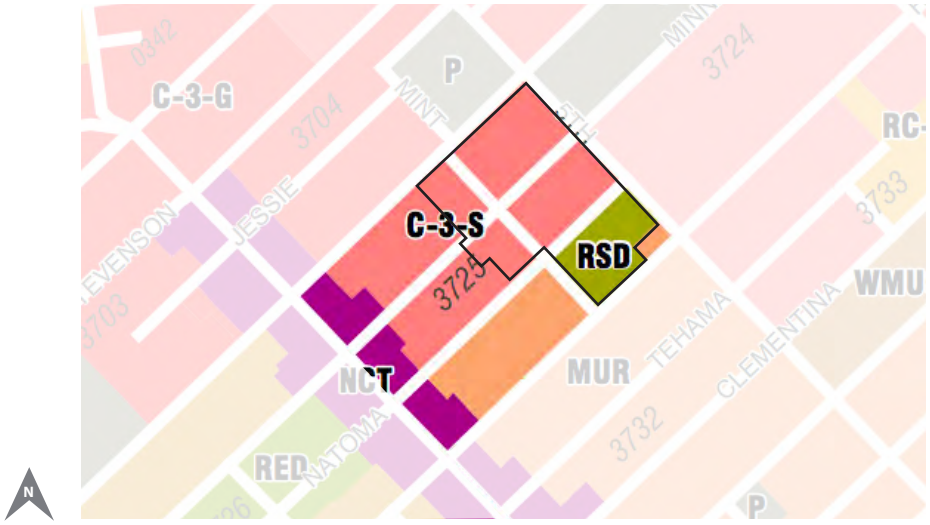


Fig. 1.3d Previous Zoning
(Source: San Francisco Planning Department, Zoning Map)

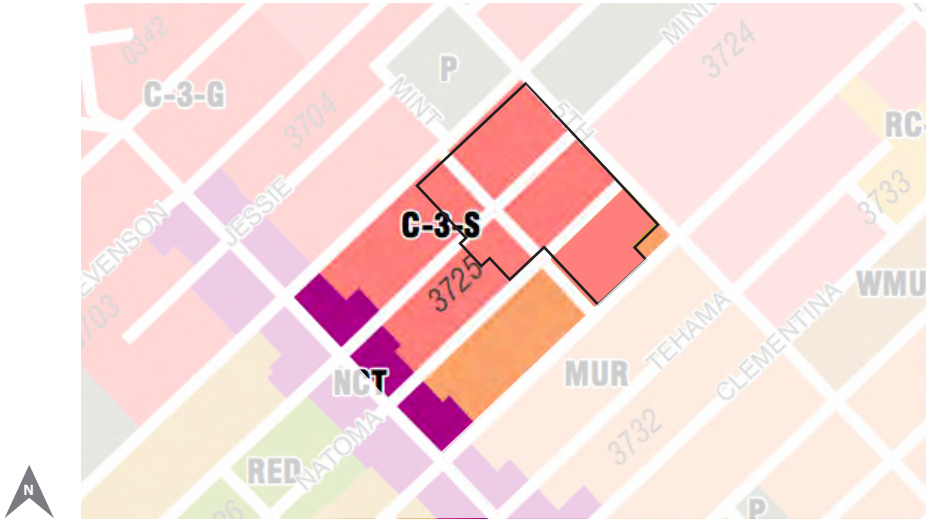


Fig. 1.3e Revised Zoning

1.4 SITE CONTEXT

At a larger scale, the 5M site exists at an intersection of multiple neighborhood cultures (Downtown, SoMa, Union Square and Civic Center) and serves as a link between the surrounding nodes of existing activity.

5M is adjacent to major retail activity, cultural museums, and local arts organizations, all of which support and serve a diverse set of community members and visitors. These activities are made accessible by a variety of transportation options—the public transit hub of BART and MUNI along Market Street, as well as bike lanes and parking garages.

At a smaller scale, the 5M site is situated near placemaking efforts on the ground, such as Mint Plaza, Annie Alley, and the Living Innovation Zone, that encourage a pedestrian-oriented network. Pedestrian circulation is critical at 5M because the streets and alleys are public spaces themselves–connecting surrounding neighborhoods and providing a platform for creativity and interaction.

5th Street

Jessie Square

Mint Plaza

UN Plaza

Fig. 1.4a Streets and Open Spaces near 5M

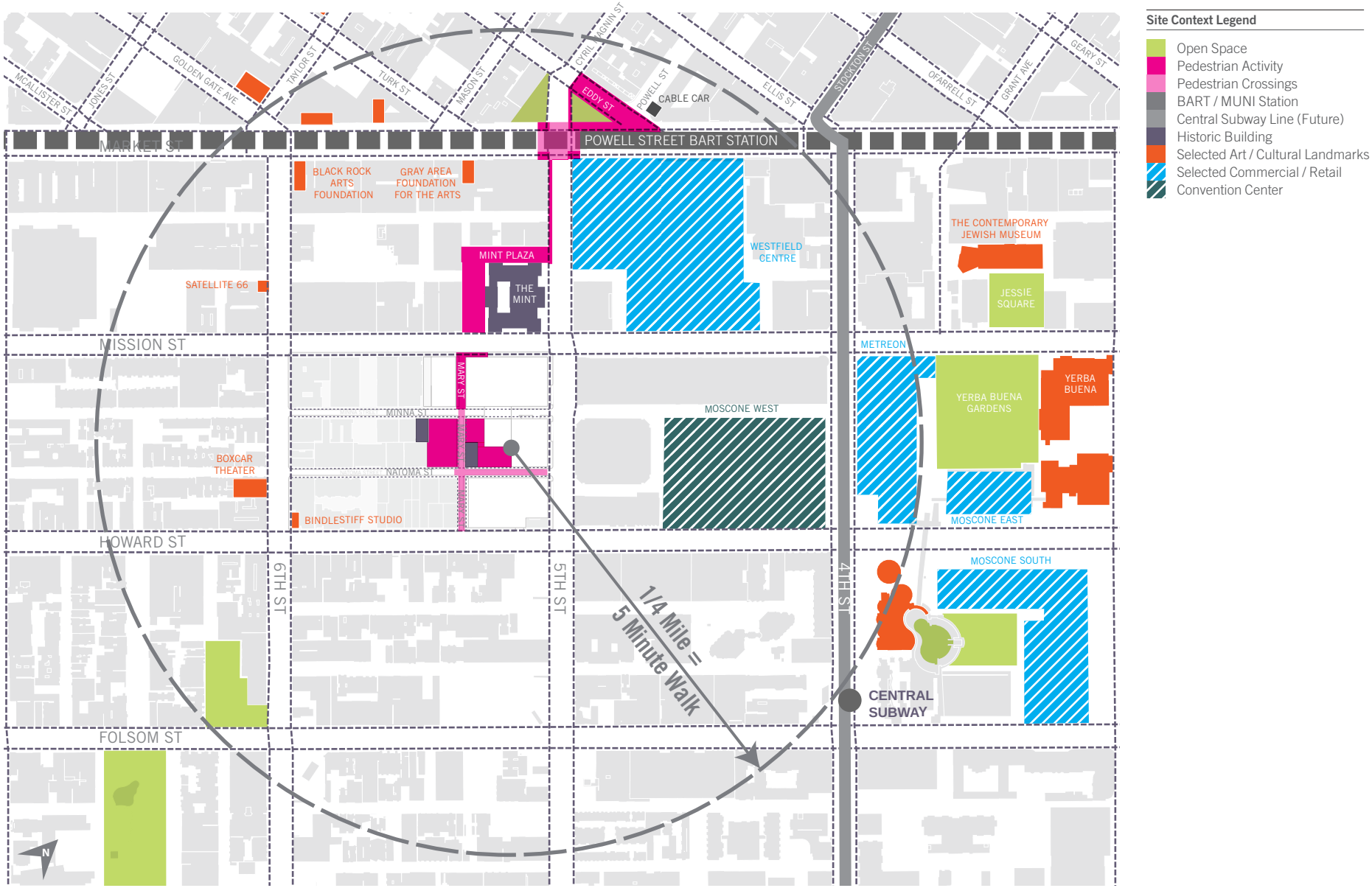


Fig. 1.4b Site Context: Open Spaces, Cultural Landmarks, Transit, Pedestrian Opportunities and Amenities within Walking Distance of 5M

1.5 SAN FRANCISCO URBAN TYPOLOGIES

Downtown San Francisco's built fabric has evolved over time, emerging from the convergence of transportation improvements, market conditions, building technology, planning policy and community desires.

Generation One: The first instance of commercial density in San Francisco began near the Ferry Terminal and lined Market Street with stately buildings, largely housing railroad and energy companies. Characterized by large floorplates, a strong streetwall, and ground floor retail, these buildings have found renewed relevance in the city today – adapted for small businesses as in the Flood Building or large technology companies.

Generation Two: The Post-War era brought the second generation of downtown development – modernist towers clustered North of Market Street in what is now the Financial District. While iconic in their architecture, these buildings were often anti-urban—pulled back from the street, with spacious lobbies in place of ground floor retail, and open spaces more as forecourts than usable public space.

Generation Three: The next era occurred as the 1985 Downtown Plan shifted commercial buildings toward more integration with the civic realm and a more sculpted presence on the skyline. The Downtown Plan, along with a backlash against high-rise buildings and the passage of Propositions K and M, introduced bulk controls, ground floor colonnades, and a shift in growth to the south to protect the historic buildings north of Market.

Building Typologies Legend

- Retail
- Open / Public Space
- Parking

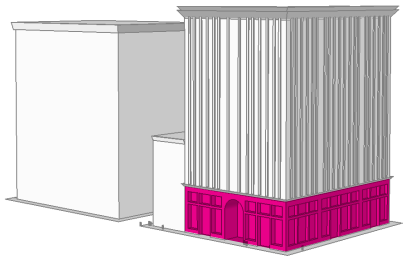


Fig. 1.5.1a Generation One. 1900-1930s Market Street

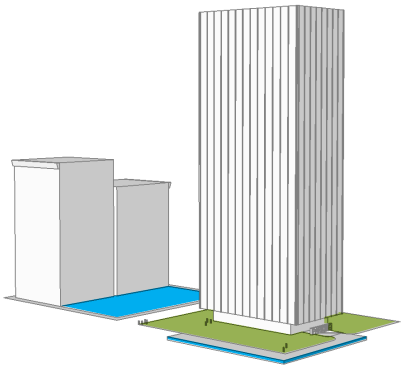
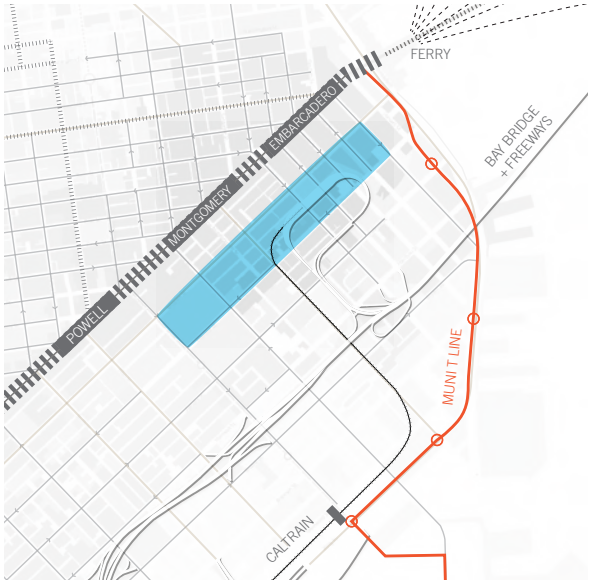
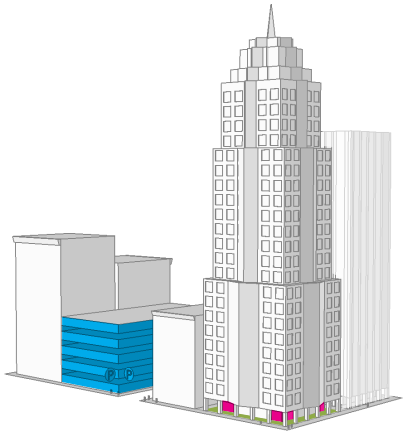
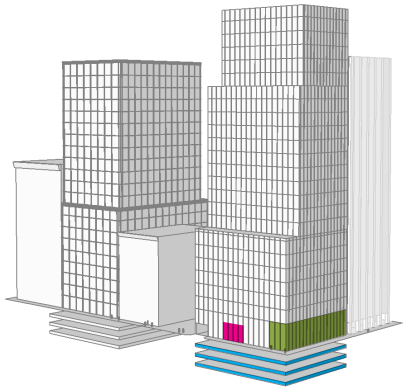


Fig. 1.5.1b Generation Two. 1950-1960s North of Market Street







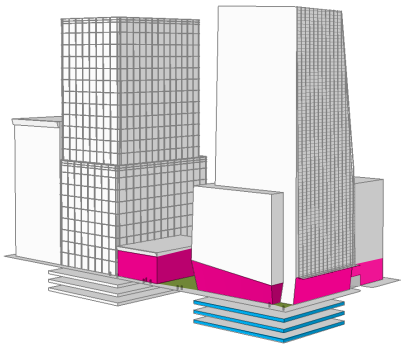


Fig. 1.5.1c Generation Three. 1970-1980s Downtown Plan

Fig. 1.5.1d Generation Four. 1990-2000s South of Market (East)

Fig. 1.5.1e Generation Five. 2010-2020s Opportunity Sites

1.5 SAN FRANCISCO URBAN TYPOLOGIES CONT.

Generation Four: Most recently, the fourth generation of buildings is underway, populating South of Market to the east with subtly modulated glass towers. These buildings combine the stepping and shaping of the early Downtown Plan buildings with floor to ceiling glass; they increasingly include retail ground floors and open spaces accessible from the street.

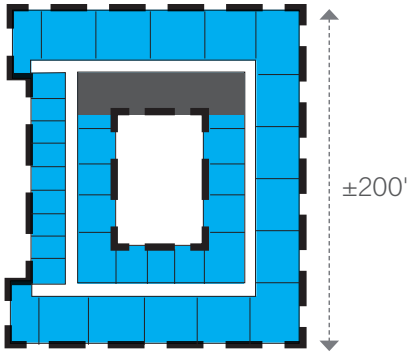
Generation Five: The next typology takes its cues from the Generation One legacy, particularly their approach to combining engagement at the street level with a strong streetwall and large floorplates. These early buildings have proved adaptable to evolving uses and user preferences over time, providing a model for a more sustainable building form that can evolve with the changing landscape of the city.

Generation Five responds to the shifting distribution of the City's density, as well as the need for flexibility. Each previous downtown node continues to draw its tenants, yet the emergent market points to new hubs of density outside of the traditional Financial District. These new locations build on the last remaining downtown station, Powell Street, with untapped transportation capacity,[1] available land at a suitable scale, and a foundation for a mix of uses, such as the 4th Street Corridor, Powell Street, and Civic Center.

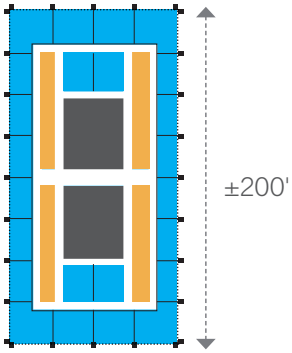
[1] SPUR Report "The Future Of Downtown San Francisco, January 21, 2009.

San Francisco Typologies Legend

- Enclosed (private office/conference)
- Open Work Area (typically workstations)
- Elevator/ Services Core



30,000 – 40,000 gsf/floor



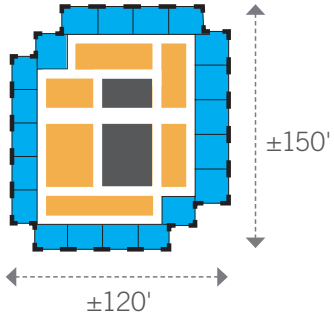
12,000 – 20,000 gsf/floor

Fig. 1.5.2a Generation One. Flood Building, 1904; Albert Pissis; Height: 160 ft. Floorplate: 40,000 gross sq. ft.

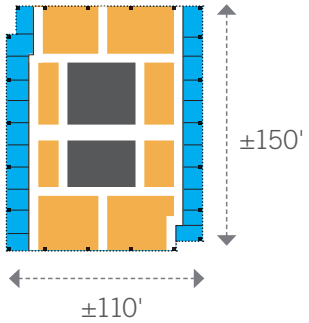
- Double-loaded corridors with private offices and suites.
- Lightwells for day light and ventilation.
- Large transportation & energy companies as anchor tenants.

Fig. 1.5.2b Generation Two. One Maritime Plaza, 1964; SOM; Height: 398 ft. Floorplate: 22,000 gross sq. ft.

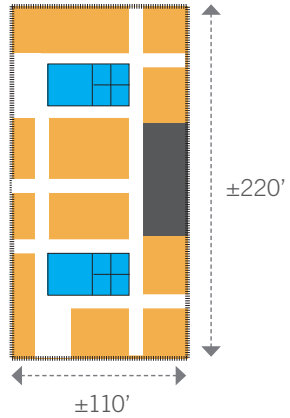
- Private office layout with assistants in workstations to interior.
- Center core with "donut" of circulation.
- Corporate headquarters & executive offices.



12,000 – 18,000 gsf/floor



12,000 – 16,000 gsf/floor



24,000 – 30,000 gsf/floor

Fig. 1.5.2c Generation Three. 100 1st Street, 1988; Heller Manus; Height: 447 ft. Floorplate: 16,000 gross sq. ft.

- Staggered floor plan increased views and corner offices.
- Rise of speculative offices; still focused on executive workforce.

Fig. 1.5.2d Generation Four. 555 Mission St., 1988; Heller Manus; Height: 447 ft. Floorplate: 16,000 gross sq. ft.

- Tenant demand for floor to ceiling glass.
- Floor plans reflect Gen. 3 but interior layouts include more open workspaces.

Fig. 1.5.2e Generation Five. Hudson Yards/N. Tower, 2017; KPF; Height: 1300 ft. Floorplate: 45,000 gross sq. ft.

- Variety of spaces over dedicated office suites with active ground plane
- Large floorplates & side core
- High degree of flexibility

1.5 SAN FRANCISCO URBAN TYPOLOGIES CONT.

The reuse, over the last decade, of former manufacturing and wholesale warehouses in the South of Market area (SoMa) demonstrates a new urban real estate demand: highly flexible, large floorplates that have character, both on the interior and in the surrounding context.

New high-growth companies and their employees have increasingly chosen to locate in the City, with the largest growth area occurring outside of the traditional Financial District. The combination of semi-industrial building stock and mix of uses like arts and light manufacturing have drawn tenants and residents to the South of Market area, particularly west of Second Street.

The popularity of SoMa's repurposed warehouses and wholesale marts has illuminated changes in the workplace: large floorplates providing flexible, horizontally contiguous spaces are outpacing the traditional central core towers of Generation Three and Four. The latter models arrived at their floorplate dimensions based on a layout of offices with workstations lining them (Figure 1.3k and 1.3l). Current market demands are shifting away from traditional central core towers of Generation Three and Four in favor of spaces that foster direct interaction, knowledge transfer, collaboration in a less hierarchical setting. These users are opting for workplaces that reduce private space, and private offices, in exchange for increases in meeting spaces, informal seating, and expanded circulation.

Reflective of this, converted warehouses in SoMa experienced low vacancies, while the financial district vacancy rates lagged behind. SoMa rents increased and in many cases now equal those of the Financial District.

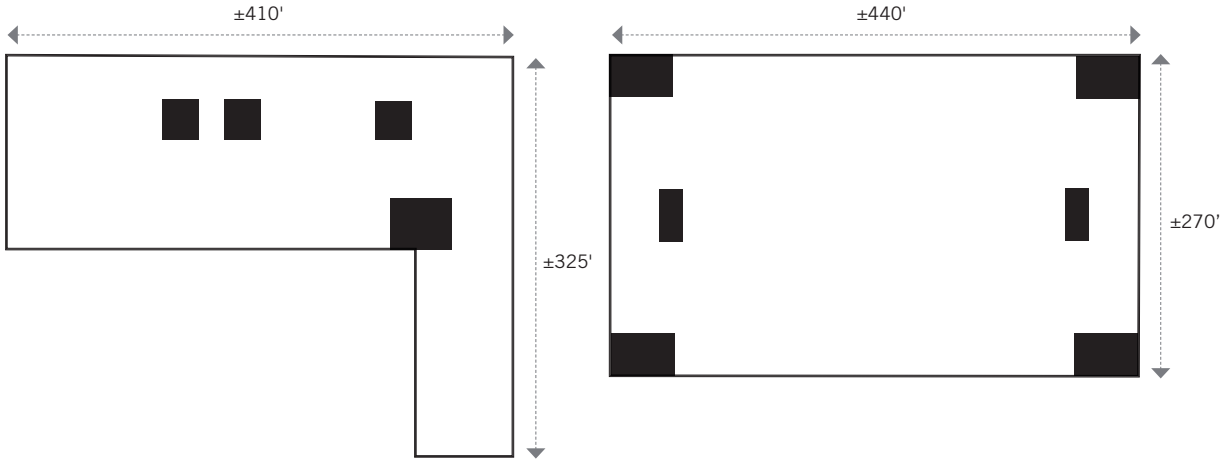


Fig. 1.5.3a Merchandise MART

- Tenants: Twitter
- Typical Floor: 76,000± SF
- Building Size: 730,000± SF

Fig. 1.5.3b Townsend Center

- Tenants: Zynga
- Typical Floor: 60-100,000± SF
- Building Size: 650,000± SF

1.6 GENERATION FIVE AT 5M

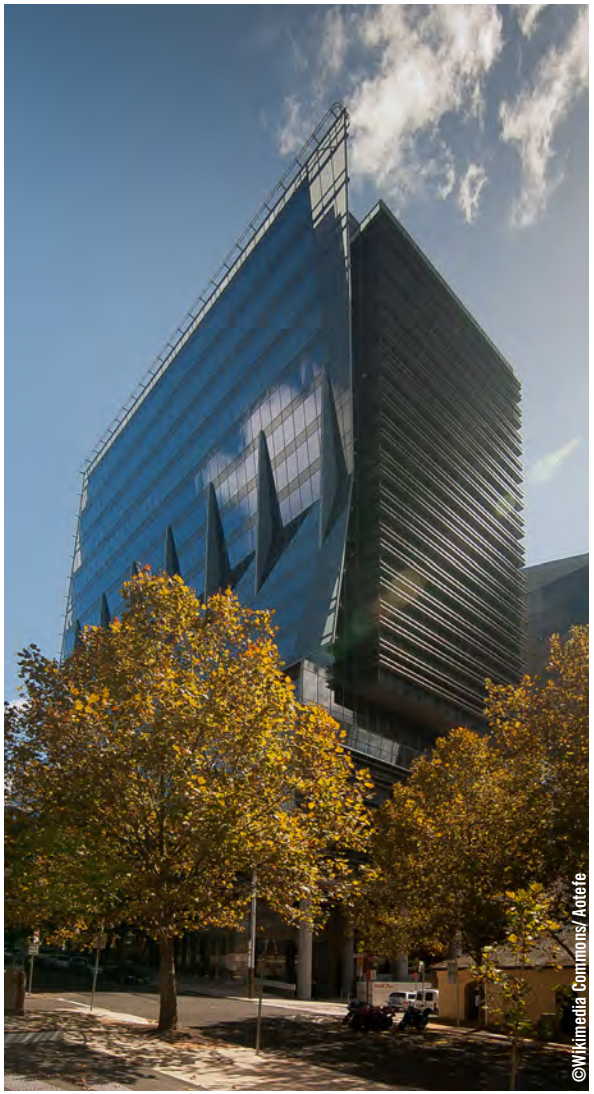
URBAN FORM PRECEDENTS

The new hybrid building type recalls the large floorplates and flexibility of both early 20th century Market Street and the reclaimed warehouses of SoMa. However, in Generation Five, this building type is expanded to serve two functions: as a high density model that supports sustainable growth and as a platform of integrated and diverse active spaces to create an engaged and urban building form and public realm. As a whole, it is designed as an urban ecosystem rather than a series of individual buildings.

No single precedent encapsulates Generation Five at 5M, however each example herein provides some aspect of the design including: large floorplates and side or off-set elevator cores to provide open, flexible collaborative workplaces; façade texture and detailing to relate the scale to the city; transparent and active streetwalls to connect with and support activity at the street.

One Jackson Square / New York, NY

Façade texture reflects urban context



Coca Cola Place / Sydney, Australia

Façade texture and detailing relates to the scale of the city

Northwest Corner Columbia University / New York, NY

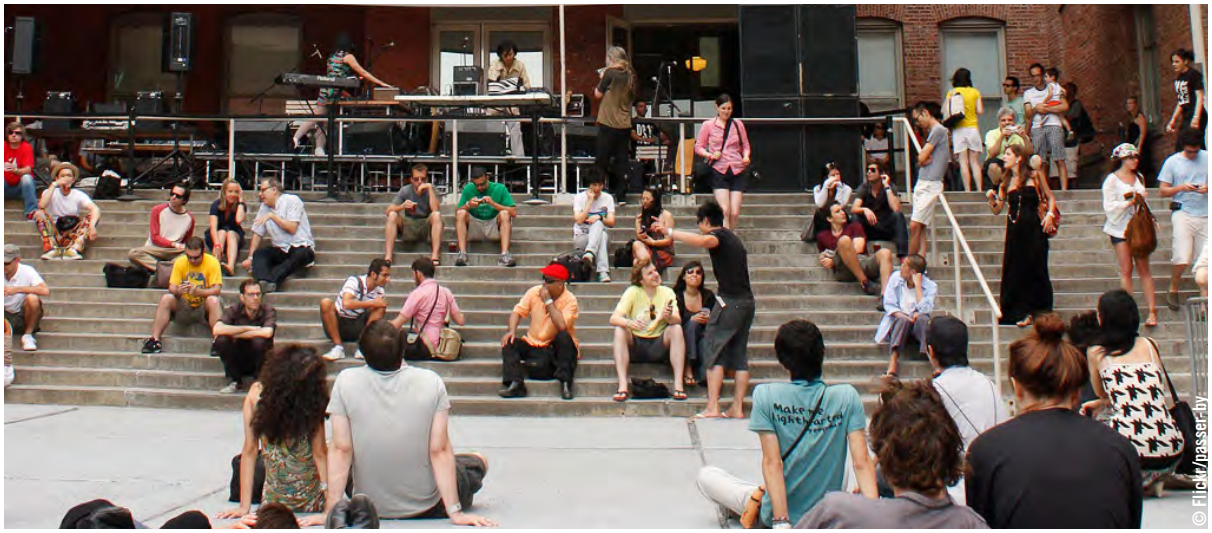
Transparent and active streetwalls support activity on the street

Fig. 1.6a Urban Form Precedents

PUBLIC REALM

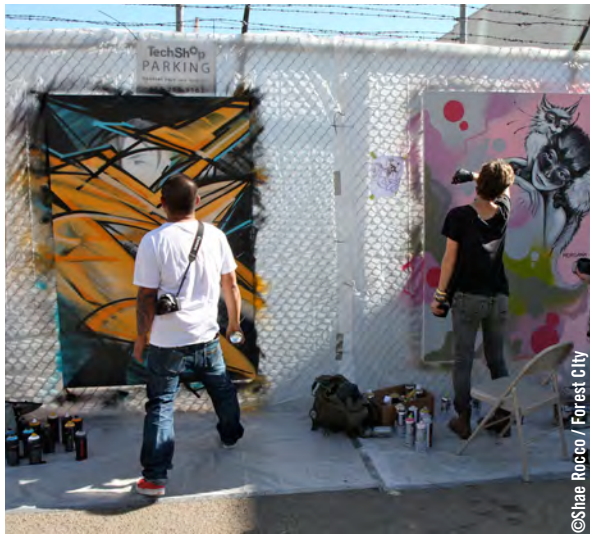
Critical to this urban ecosystem, the public realm is designed to serve as a platform for shared experiences, rather than separated open spaces dedicated to individual users or user groups (see 4.3 *Open Space & Streetscapes: Open Space Overview*). At 5M, open space that is generally provided privately for residential users will be a public shared amenity, increasing the public space provided by the project by roughly 22,000 square feet. The network of streets, alleys and open spaces are activated by uses from retail to co-work, art installations, civic and temporary events. The public realm and the residential and commercial uses complement and support one another.

The density of uses, achieved by combining large floorplates and building height, provides the critical mass and the foot-traffic to make the public realm viable, animated, and safe. The public realm, in turn, provides a place of connection and creativity, stitching together the existing neighborhoods and various on-site and nearby uses with new uses and users at 5M and into the fabric of the city.



PS 1 Pavilion 2009 / New York, NY

PS 1 Pavilion 2008 / New York, NY



Urban Prototyping Festival at 5M / San Francisco, CA

Fig. 1.6b Active Public Realm Precedents

PUBLIC REALM AT 5M

The public realm at 5M serves to bring together existing neighbors, creative communities, and new users. Starting in 2009, 5M has gathered local artists, non-profits, designers, makers, and tenants to host events, "make-a-thons," free concerts, lectures, symposia, and art installations to create a vibrant public life on the site from day one. As a part of the public realm, the open space is inviting, easily accessible and visible to pedestrians, utilizing design features such as signage.

Live Weekly Concerts at Off The Grid

"Inside Out" Installation

"5Ws at 5M" Participatory Art Installation

Soul Nubian Dance Performance

Fig. 1.6c Active Public Realm at 5M

Fig. 2.0 Linden Street, Hayes Valley Fair / San Francisco, CA

02.

DESIGN FRAMEWORK

2.1 URBAN DESIGN FRAMEWORK

The urban design for 5M is the design synthesis of the Project Vision and Goals, with three overarching concepts guiding the design:

INTERWOVEN PUBLIC REALM

A key component in the Generation Five urban typology, the 5M Project's public realm is intended for common use by residents, tenants, and the public. While the 5M Project's open space meets the City's requirements in terms of quantity, it is integrated as an overall District amenity, relating residential, commercial and public uses and users within a network of spaces, interior and exterior. The 5M Project design builds on the existing street grid of SoMa, contrasting the intimate, yet industrial character of interior alleys with the major thruways of Mission, Fifth, and Howard Streets. Mary Street provides a spine to the plan, creating a public realm out of the street. Mary Court spills out on both sides of Mary Street and is the heart of the site's public realm. It is connected to and visible from Mission and Howard Streets, drawing pedestrians through a newly activated and accessible urban network of open spaces, streets, and alleys. The design integrates the activity at 5M into the City and SoMa, consistent with the goals of the Better Streets Plan and Downtown Streetscape Plan.

ACTIVE GROUND PLANE

Cities are about people. The physical network of 5M is designed as a platform within which people can adopt, appropriate, and create. The 5M ground plane is an ecosystem of uses. The ground floor spaces—interior and exterior, public and private, streets and courtyards—spill into one another. The ground floor is designed to house a mix of uses: neighborhood-serving retail, local artisans, artists, makers, non-profits, entrepreneurs, cafes and restaurants with multiple points of entry and a high degree of transparency. Outside, fairs, food trucks, informal concerts, and evening films will populate a public environment that is alive and serves the wider neighborhood.

DIVERSITY OF BUILDING FORM

5M occupies the intersection of many forces: commercial downtown and East SoMa; retail, commercial, and residential uses; larger scale blocks and finer grain buildings. In its built form, 5M incorporates this mixture—through varied heights, building forms, and materials. The Chronicle Building solidly holds the Fifth and Mission corner and the historic Dempster Building recalls industrial SoMa at the western edge of the site. Height is increased on certain parcels to allow lower rise and open space on others, like the Chronicle Building and Mary Court, respectively. The massing locates the greatest height and density along the larger streets of Fifth and Howard, stepping down toward the center of the site.

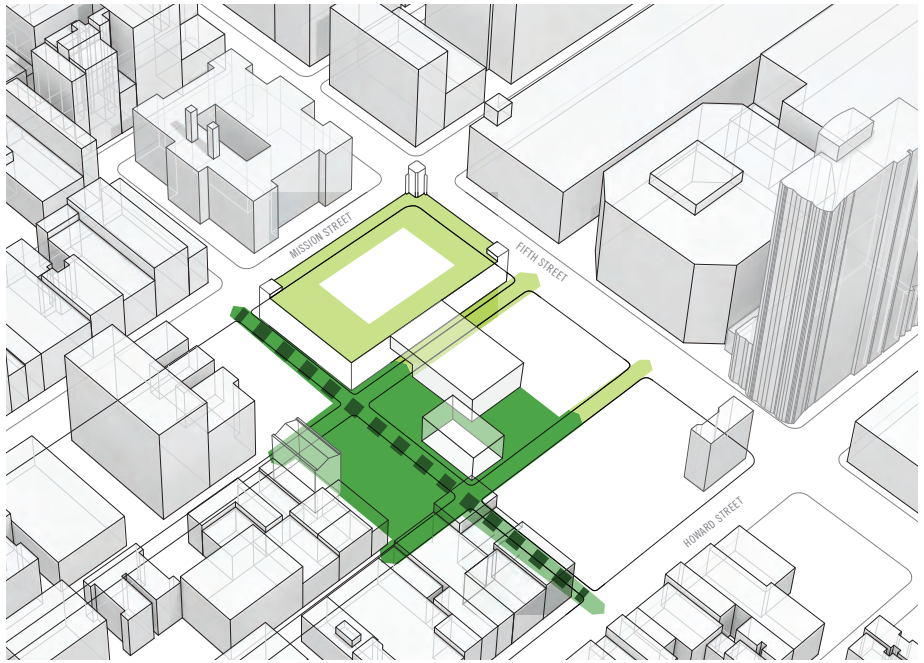


Fig. 2.1a Interwoven Public Realm

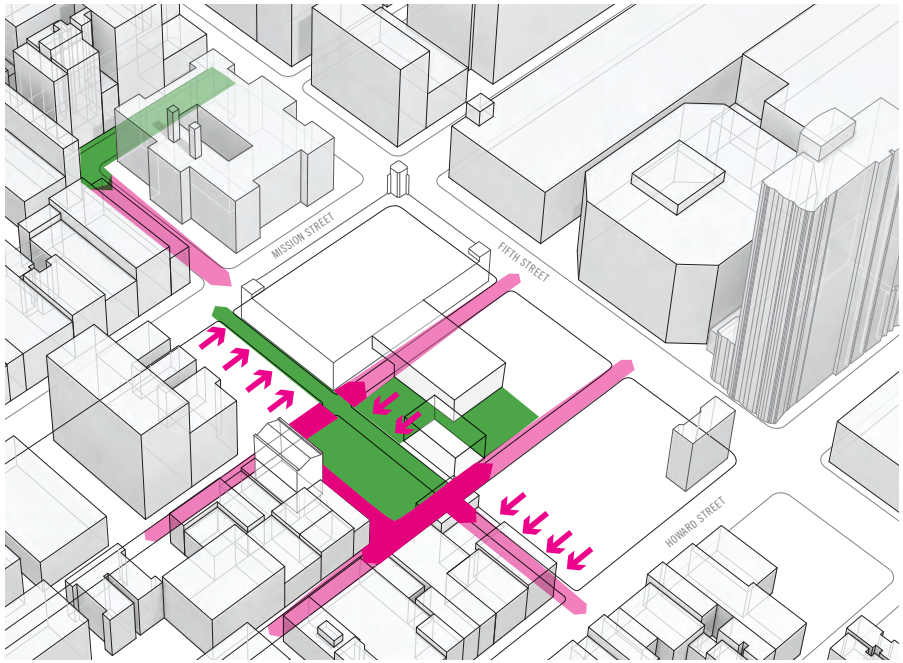


Fig. 2.1b Active Ground Plane

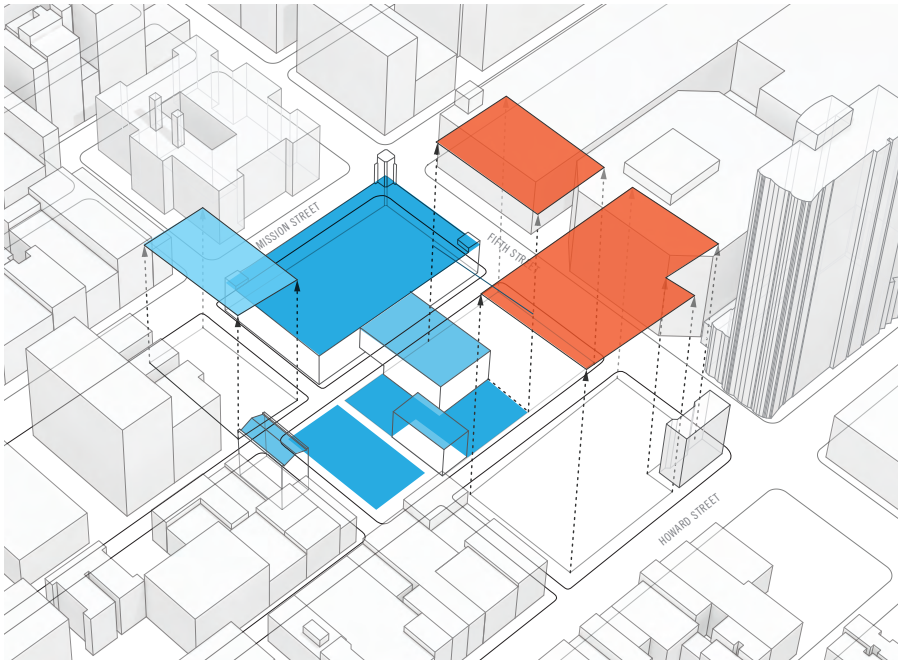


Fig. 2.1c Diversity of Building Form

Heights from 300' - 470'
Heights from 100' - 300'
Heights from 0' - 100'

2.2 HISTORIC FRAMEWORK

The Chronicle Building, Dempster Printing Building, and Camelline Building will remain important cultural resources. With public spaces and cultural programming, 5M envisions a regeneration of the site that celebrates the Chronicle Building and the newspaper's legacy as a source of information, inquiry and curiosity.

The long history of the San Francisco Chronicle newspaper and the growth of the city around what was once a predominantly industrial area has resulted in four acres that have not developed in tandem with their context.

THE CHRONICLE BUILDING (901–933 MISSION STREET) VISION

Over the years the Chronicle Building has been stripped of the majority of its Gothic Revival ornament and substantially remodeled on the interior, such that it is not architecturally eligible as a registered historic resource. Nevertheless, it has a cultural and physical significance at the intersection of 5th and Mission Streets, in dialogue with the historic Old Mint building, and marking the corner with the clock tower. This cultural legacy and a diversity of building character is an important part of the city and 5M. Retaining the building and its prominence on the site requires foregoing over a quarter of the site for development, which otherwise would have capacity for substantial area and height (in place of or on top of the existing building). The value of the existing building, as part of the urban fabric in SoMa as well as a marker of the history and evolution of the Chronicle newspaper, is a fundamental design driver, leading to locating height and density around and in connection to the Chronicle Building. The resulting renovation will provide an opportunity to increase the transparency and connectivity of the Chronicle building – including a public rooftop and a new public elevator and stair to the rooftop– while maintaining the integrity of the main façades along Mission and 5th streets.

THE EXAMINER BUILDING (110 FIFTH STREET) VISION

The 5M Project will retain a portion of the Examiner Building, added in 1968, as well as a portion of its connection over Minna Street to the Chronicle Building. With partial demolition, a new facade will be added where the building is severed and the building will undergo an interior renovation. An existing second- and third-floor extension over Minna Street connects the Examiner Building with the Chronicle Building while still allowing traffic to pass under the building (located on an air rights parcel and addressed as 425 Minna Street). This extension will also be partially retained on site.

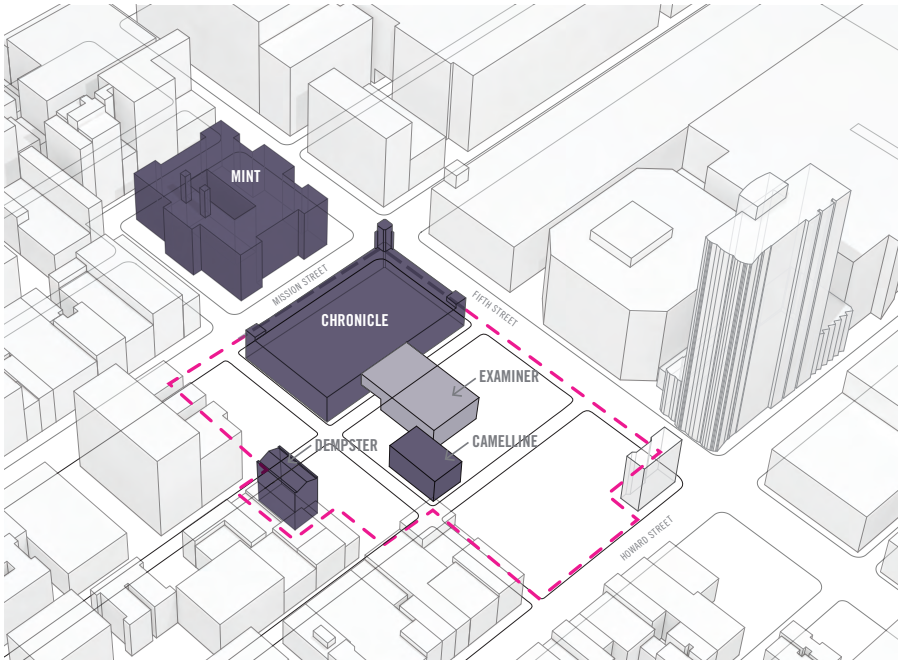


Fig. 2.2a Historic Context

Legend

- Historic Resource
- Existing Building (partial)
- 5M District boundary

THE CAMELLINE BUILDING (430 NATOMA STREET / 49 MARY STREET) VISION

Constructed as a light industrial building and converted into a print shop, the building exemplifies the commercial and industrial development of the SoMa area following the 1906 Earthquake and Fire. The building's form and ornamentation is characteristic of1920s industrial architecture, with a primary south-facing facade, shaped parapet, and a relief sign reading "Camelline". While the building has undergone some alternations to the interior and entrances, its form and ornamentation is largely intact and it retains a high degree of integrity of design, materials, and workmanship. It continues to be occupied as offices and no major renovation is required for use. The Camelline building will help connect the 5M site to its surrounding industrial character and add to the immediate site's diversity in scale, form, and architecture. The building's location within the 5M site, directly on Mary Street and between the site's open spaces, will place it at the center of activity as a vital part of the active ground plane.

THE DEMPSTER PRINTING BUILDING (447–449 MINNA STREET) VISION

Historic 447-449 Minna Street, an early twentieth century industrial style four-story brick building, is significant under California Register Criterion 1 as an especially early building associated with the commercial and industrial development of the SoMa area following the 1906 Earthquake and Fire. It is also important for its association with the printing industry, an industry of primary importance in San Francisco in the early twentieth century. The Dempster Printing building is also significant under California Register Criterion 3 as a distinctive example of unreinforced masonry construction and early-twneiether-century loft architecture in the SoMa area. The Dempster Printing building will be rehabilitated according to the Secretary of the Interior's Standards for Rehabilitation, remaining on site as historic resource that retains a high degree of integrity of location, setting, association, and feeling as a post-quake loft building. On the 5M site, the Dempster Printing Building will anchor the low-rise texture of the area and supporting the pedestrian focused alleyways that intersect around the core public space at Mary Court.

Fig. 2.2b Dempster Printing Building / San Francisco, CA

2.3 PUBLIC REALM OVERVIEW

An urban ecosystem of open space, streets, alleys, temporary events, arts and retail, the public realm at 5M is where diverse networks intersect and connect. The 5M public realm meets and reinterprets downtown open space requirements to provide open space as a shared public amenity.

PUBLIC REALM VISION

This "Generation Five" public realm is most importantly a space of intersections that is designed for people to bring it to life. The design of the public spaces prioritizes flexibility and appropriation– either passively by workers on lunch break or actively by artists staging a performance.

Three key public spaces—Mary Court West/East, the Chronicle Rooftop, and North Mary Street—serve as gathering points within the larger public realm that includes pedestrian-oriented interior streets. Physical markers, such as art installations, street trees, and green walls would punctuate this network of spaces, providing a creative, flexible gathering space for performances, lunch breaks, after-school play and day-dreaming.

MARY COURT WEST

Mary Court West is the heart of 5M's public realm. This public plaza provides a large area of passive open space on the ground plane and will be the focus of outdoor activity on a day-to-day basis, as well as for a wide range of special events.

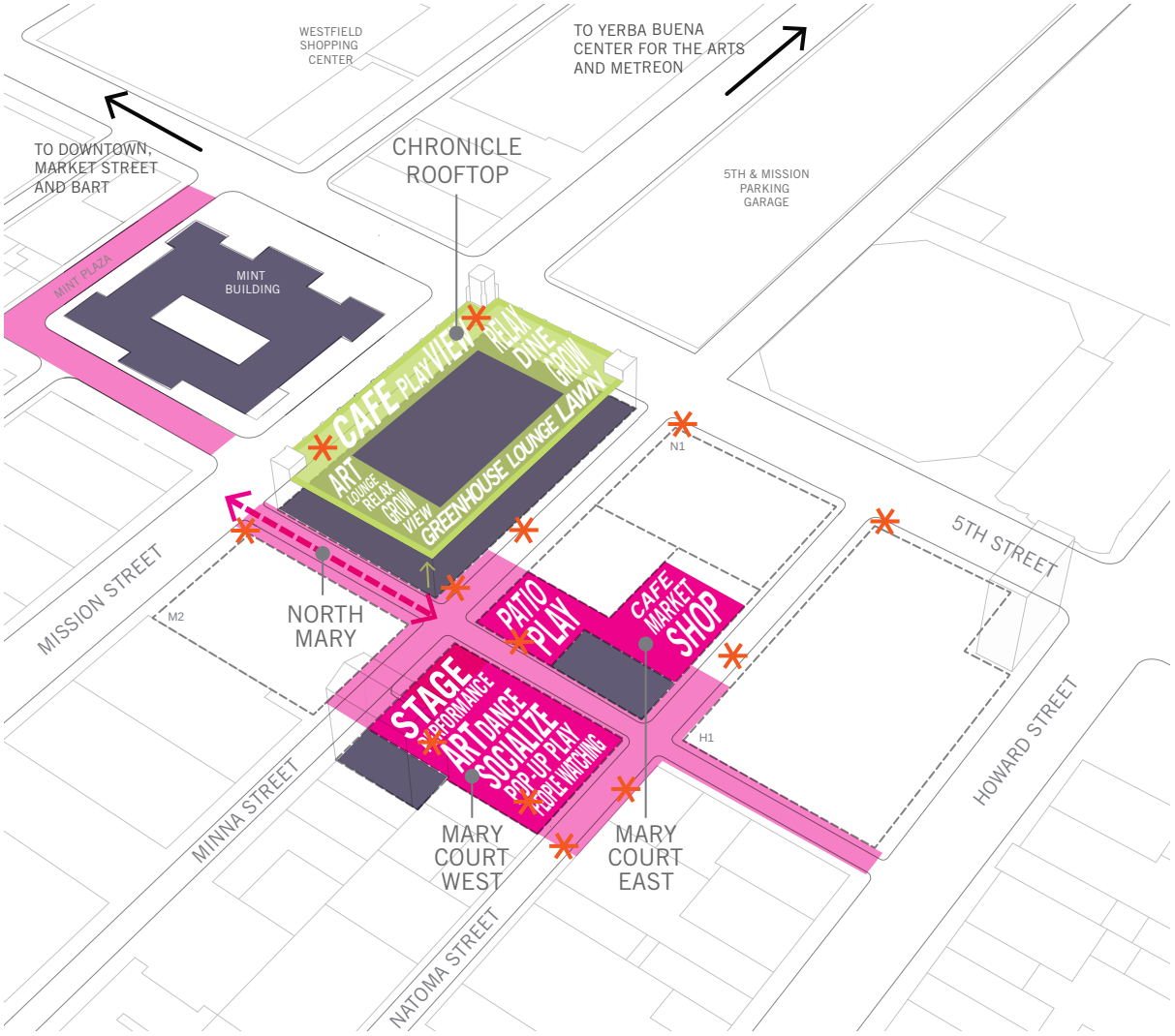


Fig. 2.3a Public Realm Vision

Public Realm and Streetscapes Legend

- Public Open Space
- Pedestrian-oriented streetscapes
- Pedestrian-only alley
- Rooftop Open Space
- Historic Building
- Art Feature

MARY COURT EAST

Mary Court East spills out over Central Mary Street from Mary Court West and is envisioned as a place of active programmed spaces, such as a climbing wall and a market. Because the open space is sandwiched between existing buildings, the Examiner Building and Camelline Building, interior and exterior connections will be heavily encouraged.

CHRONICLE ROOFTOP

The open space on the roof of the retained Chronicle building is envisioned as a new type of civic open space—an exciting perch above the City's streets that is welcoming and host to an area of respite as well as diverse daytime and nighttime activities. A new public elevator and access stair will connect pedestrians to this elevated public space.

NORTH MARY ALLEY

North Mary Alley will be closed to traffic in order to create an active and artistic pedestrian connector linking Mary Court to Mission Street and beyond, including Mint Plaza. Enlivened by retail and restaurants, outdoor dining and shopping will be highlighted activities.

Fig. 2.3b Ground Plane Programming Scenario

Ground Plane Program Legend

- Lobby
- Public Space
- Retail
- Food Retail (ex. Market, Restaurant, Stalls, etc)
- Art / Community
- Active Office (ex. Co-Work Center)

INTERIOR STREETS AND ALLEYS

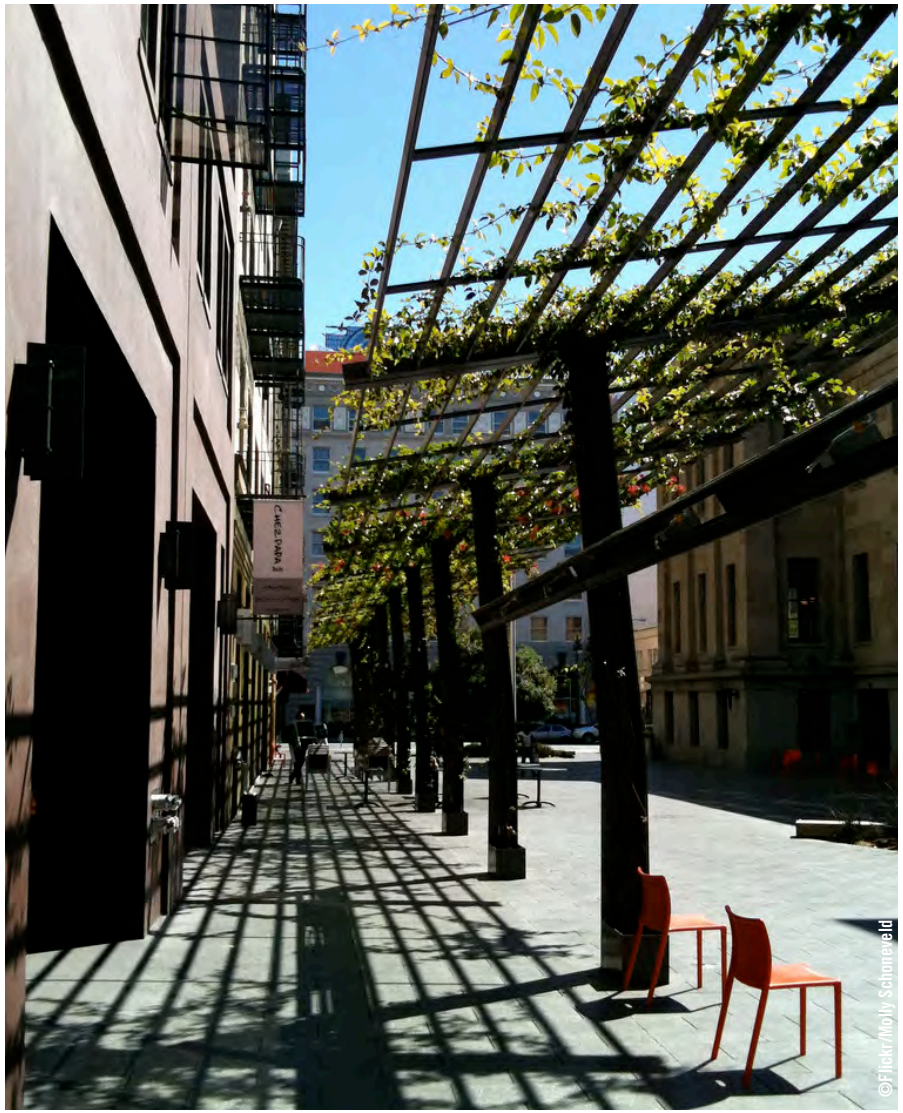
In contrast to the existing site, which in recent decades had few passers-by, the streets and alley ways of 5M draw pedestrians into and through the site at an intimate scale that contrasts with the main thruways of SoMa.

Mary, Minna, and Natoma Streets cut through the site to provide opportunities for criss-crossing circulation, including interior retail and entries feeding into and out of Mary Court. They will balance loading, services, and parking with pedestrian-focused design elements, such as parklets, to expand the experience of the sidewalks.

PERIMETER STREETS

An essential premise of the 5M public realm follows the San Francisco Better Streets Plan's goals to (1) maximize streets that serve as public space (2) enhance public safety and accessibility (3) promote the ecological potential of streets, and (4) improve public health by encouraging physical activity through livable streets. The 5M Project adds a focus on creativity and site-specific art within the public space, promoting participation and collaboration from all users- from office tenants and companies to neighbors, retailers, artists and residents.

Circumscribing the site, Mission Street, Howard Street, and Fifth Street will be enhanced with street trees, as well as strategically located art and site sculptures.



Trellises and seating for pedestrian only streetscape
Mint Plaza / San Francisco, CA

Fig. 2.3c Pedestrian-only Alley (Paseo)

STREETSCAPES AND PARKLETS

5M proposes temporary streetscape improvements, such as parklets, along all interior streets (Minna, Natoma, Mary) with selected locations for street trees and artwork. Streetscape improvements can offer amenities to enhance the pedestrian experience, which may include comfortable seating, attractive plantings, display of public art, and additional bicycle parking.

The 5M District provides the opportunity for a variety of parklets ranging in design and function. Figure 2.3d illustrates the basic typologies that can be further modified to relate to the use of the adjacent ground level space (e.g., café vs. art gallery). Some parklets may provide a visual, greening amenity while others may be designed to encourage more active use.

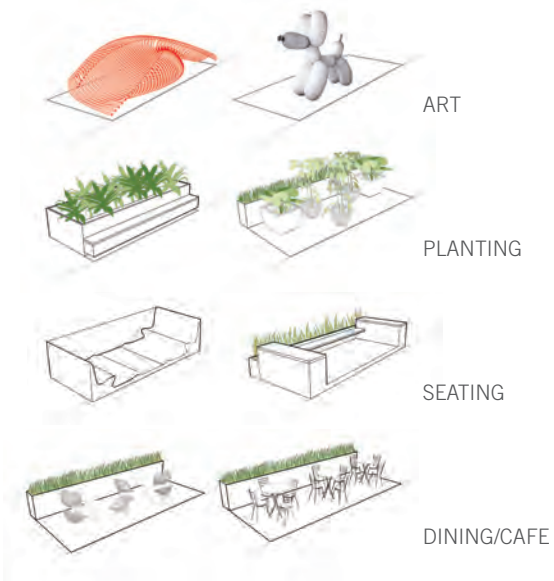


Fig. 2.3d 5M Permitted Parklet Types

Parklet has bike rack and seating area
Four Barrel Coffee parklet / San Francisco, CA

Parklet has motorcycle spaces and seating area
Darwin Café parklet / San Francisco, CA

Fig. 2.3e Public Parklet Precedents

2.4 MASSING OVERVIEW

5M creates a diversity of building heights and forms to embrace the immediate urban fabric as well as protect and contribute to key San Francisco views. Density of office and residential space is provided while maintaining area for open space and responding to environmental conditions.

MASSING VISION

5M builds on the City and State's policy of focusing growth and a mix of uses in walking distance to major transit nodes. Matching those policies with the market demand for large floorplates and varied workspaces, as well as residential uses, requires an innovative approach to building form, in order to integrate this new model into the City's urban fabric and urban policies. This new model combined with site specific strategies responding to view corrdiors, wind conditions, and historic preservation gave rise to the overal site approach and massing.

San Francisco is known for views that transect the City. The *Urban Design Element of the City's General Plan* emphasizes these views as a critical component of the City's pattern and legibility. Among these views, Powell Street south to Potrero Hill (from California Street) was a particularly important driver in 5M's urban design, as the street grid shift that occurs south of Market Street causes the Powell Street view to directly cross the 5M site as shown in Figures 2.4a and 2.4b. In order to provide an open view of the sky and distant hills, 5M has limited the M2 building to under 220 feet (Figure 2.4b).

Wind conditions in the area further encourage building heights to step up increasingly from Mission to Howard Street (See Figure 2.4c).

The 5M Project retains the low-rise Chronicle, Examiner, Dempster Printing, and Camelline buildings. As a result, density must be focused on the remaining parcels. To create the desired public realm, the project carves out a public open space at the center of the site. The new office and residential area is then achieved through locating height on the two remaining perimeter streets, Fifth and Howard. For massing overview, see Figure 2.4d. The resulting massing is a unique solution to the convergence of the city and site conditions and the project goals.

Massing Strategy Legend

- No Height / No Building
- Least Height
- Less Height
- Most Height

Fig. 2.4a San Francisco View Corridors (selected)

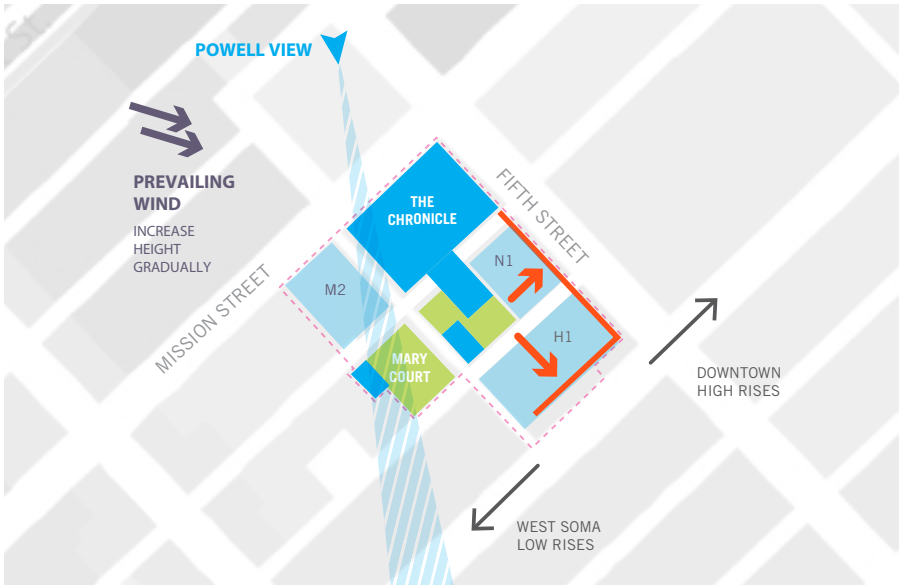


Fig. 2.4b Massing Strategy: Site Response

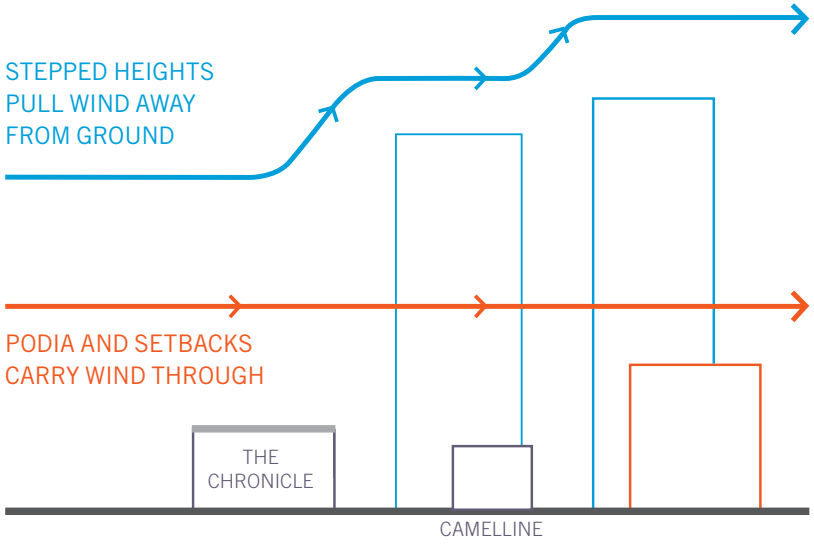


Fig. 2.4c Massing Strategy: Wind

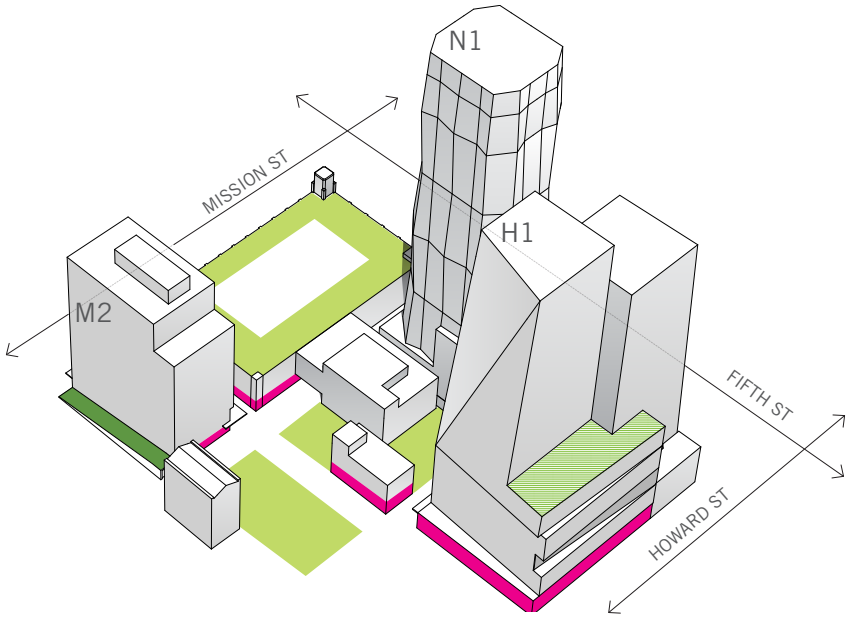


Fig. 2.4d Massing Overview

2.5 ARCHITECTURAL DESIGN OVERVIEW

Building on the massing framework, 5M's architecture draws on the existing industrial design character of the SoMa fabric, the experiential and atmospheric qualities of the Bay Area, the contemporary technologies and materials that can enable great buildings.

ARCHITECTURAL DESIGN VISION

The vision for the buildings at 5M includes overarching design principles that advance a high-quality, diverse, dynamic, local, open, aesthetic, and sustainable project. The architectural design seeks to advance the project through the design of building form, façade systems, materials, color and detailing as embedded in the fabric of SoMa.

Design Principles:

- ➔ Take cues from the SoMa and city context—Integrate building treatments, materials, or features that reference the industrial qualities and textures of the immediate surroundings and SoMa.
- ➔ Design for a diverse but coordinated whole—5M building design should not identify the project as a closed campus or privatized zone. A cluster of complementary buildings—The 5M façade treatments, intensity/emphasis, materials, and colors are to be coordinated across the family of buildings.
- ➔ Use design to foster what is dynamic and local—Create active and engaging pedestrian edges that ensure visibility of the active uses within, create visual and architectural interest, as well as provide opportunities for artwork.
- ➔ Support the arts and collaborations—Create design opportunities for artworks on buildings and in open spaces.
- ➔ Pursue design as a part of holistic sustainability—Building treatment and materials respond to and enhance the project open spaces and environmental conditions.
- ➔ Associate and highlight through color—The buildings' palette includes the bright, light colors of downtown, as consistent with the San Francisco Urban Design Plan, punctuated with the brighter hues of San Francisco's environmental context.

Large entries and openings, graphic patterning, bright colors, and industrial fenestration relate to the South of Market Area.

Fig. 2.5a SoMa Context

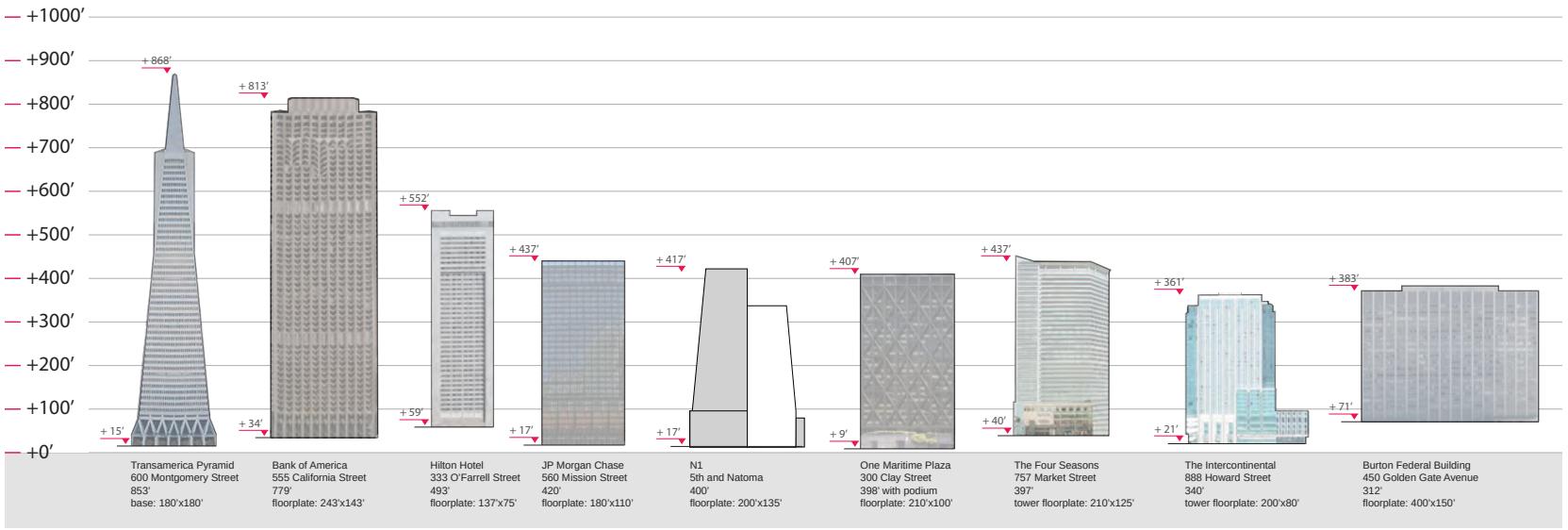


Fig. 2.5b Height in Context

PERCEIVING HEIGHT

Comparing familiar tall buildings in San Francisco shows height perception is strongly influenced by the City's topography—the street height of each building—as well as overall building form, color, and treatment. For example, the Hilton Hotel, though under 500 feet in building height, sits at an additional ~60-foot elevation due to its location on the very edge of Nob Hill. The Hilton Hotel is more prominent because it is situated by itself without other tall buildings.

Furthermore, the perception of tower mass is largely a function of the proportion of width to height. Towers with large floorplates nevertheless appear thinner to the eye when they are taller, due to the higher ratio of height to width. Modulation also plays a role in the perception of tower mass. Buildings with tapers, sculpting, and vertical shifts may also seem more slender, if the modulation still retains vertical continuity over the entire tower form and does not disrupt the height to width proportion. Building articulation and materiality further reduce the perception of mass. For further information on building skin, form, and materiality, refer to *Chapter 5: Building Form + Massing* and *Chapter 6: Architectural Design*.

2.6 CIRCULATION AND TRANSPORTATION OVERVIEW

The 5M Project is highly connected to commuter and local transit, with multiple transit routes within a five-minute walk. Planned bicycle lanes circumscribe two sides, and visitor parking is available immediately across Fifth Street at the Fifth and Mission Garage.

CIRCULATION AND TRANSPORTATION VISION

5M's circulation is organized to reduce vehicular traffic on the pedestrian-oriented alleyways of Mary Street and Natoma Street while avoiding parking queues on Fifth and Howard Streets. No parking spaces or loading entries are on important transit streets, Mission or Fifth Streets, though street side opportunities for loading and passenger drop off are retained.

The San Francisco Bicycle Plan proposes a Class 2 bicycle lane along Howard Street and Class 3 along Fifth Street. Off-street bicycle parking (Class 1) will be provided, with additional street bicycle parking (Class 2) throughout, generally in the manner described in *Section 4.10 Open Space + Streetscape: Site Furnishings*. Design features will reflect the Better Streets Plan to encourage walking and biking, while minimizing conflicts between pedestrians, cyclists, and vehicles.

5M adapts the site's alleyways to a place of intersection and events. Traditionally, alleys have served as the places to hide loading, parking entries, and garbage collection. At the ground plane, the 5M Project prioritizes the human scale, yet integrates the functional aspects of the buildings as part of the industrial context. Vehicular circulation and loading controls will seek to limit the conflicts on the interior streets, focusing loading and services off-street and on Minna Street.

MUNI stop on Market Street median / San Francisco, CA

Separated Bike Lane / Vancouver, Canada

Fig. 2.6 Circulation and Transportation Precedents

2.7 SUSTAINABILITY OVERVIEW

Given its cultural uses, social programs, economic model and environmental setting, the 5M Project is poised to lead a more holistic approach to sustainability. The foundation is its location at the heart of the City—where an abundance of transit meets a mix of jobs and housing.

SUSTAINABILITY VISION

The 5M Project leverages the inherent sustainability of urban environments. Its location is complemented by the extensive and diverse set of uses that combines jobs, retail, art, culture, facilities, and open space. The addition of jobs, housing, and retail on site should reduce the vehicle miles traveled by its users and residents. Design elements will encourage and facilitate bicycles, walking, and transit as modes of travel.

The 5M Project seeks to minimize energy usage of the construction process, the building and site systems, and the future tenant usage and operations. Water conservation and management strategies will range from low-flow fixtures, to permeable pavement and drought resistant plantings, to rain-harvesting and water treatment. Additionally, the project will provide strategies to minimize waste, utilize local and sustainable materials, and provide a building that in construction and operation is ecologically and socially sustainable. See *Chapter 9: Sustainability + Systems*.

The project will comply with all applicable state and local green building requirements and support the goals set forth by state and local bodies to achieve the maximum feasible amount of environmental responsibility.

Permeable paving, planters, and drought resistant planting can contribute to rain-harvesting, ground water recharge, and reduce heat-island effect. Valencia Street / San Francisco, CA

Vertical garden is a city greening strategy that contributes to urban air quality, reduces urban heat island effect, and provides habitat for local ecologies. 560 Mission Street Plaza / San Francisco, CA

Fig. 2.7 Sustainability Strategy Precedents

SECTION II

5M STANDARDS + GUIDELINES

This Design for Development document is to be read and applied in conjunction with the Development Agreement for the 5M Project and the Fifth and Mission Special Use District ("Fifth and Mission SUD"). The Fifth and Mission SUD establishes particular controls that apply to the 5M Project in lieu of corresponding sections of the Planning Code. Unless otherwise noted, references herein to the Planning Code include the controls established under the Fifth and Mission SUD. This Design for Development document implements those controls with more detailed design standards and guidelines.

As with the Planning Code and Fifth and Mission SUD, other projects with less total area than shown in the examples herein, are permitted provided they otherwise comply with the Planning Code and following Standards.

Fig. 3.0 5th Street -- View South / San Francisco, CA

03.

CONTEXT + LAND USE

3.1 PREVIOUS SITE CONDITIONS

The 5M Project consists of twenty-two parcels on approximately four acres in the northeastern half of Block 3725, bounded by Fifth, Sixth, Mission and Howard Streets. Three internal streets – Mary, Minna and Natoma Streets – divide the Project site as shown in Figure 3.1. The 5M Project will merge and re-subdivide these parcels.

Previous Site Parcel Legend

- Previous Lot Boundaries
- Site boundary

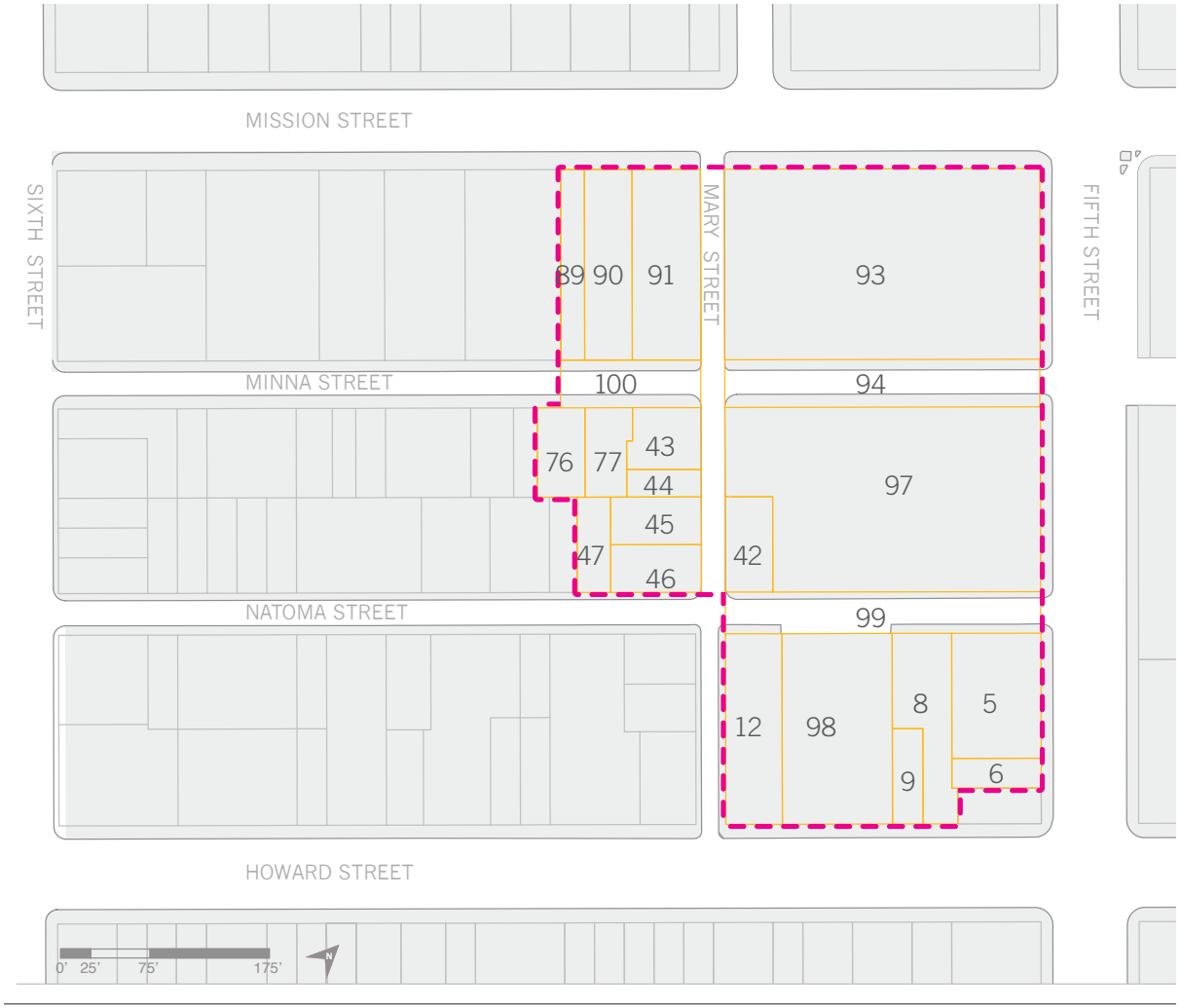


Fig. 3.1 Previous Parcel Plan (per San Francisco Assessors Map)

LOT NO.	STREET ADDRESS OF PROJECT	CROSS STREETS	BLOCK / LOT	LOT AREA (SQ FT)	ZONING DISTRICT
5	172 Fifth St	Natoma St & 5th St	3725-005	7,871	RSD
6	190 Fifth St	Howard St & 5th St	3725-006	1,873	RSD
8	910 Howard St (Zihn Building)	Howard St & 5th St	3725-008	6,089	RSD
9	912 Howard St	Howard St & 5th St	3725-009	2,056	RSD
12	924-926 Howard St	Mary St & Natoma St	3725-012	7,596	RSD
42	430 Natoma St (Camelline Building)	Mary St & Natoma St	3725-042	3,197	C-3-S
43	435-439 Minna St	Minna St & Mary St	3725-043	3,105	C-3-S
44	44 Mary St	Minna St & Mary St	3725-044	1,437	C-3-S
45	50 Mary St	Minna St & Mary St	3725-045	3,044	C-3-S
46	432-438 Natoma St	Minna St & Mary St	3725-046	3,044	C-3-S
47	440 Natoma St	Minna St & Mary St	3725-047	2,253	C-3-S
76	447-449 Minna St (Dempster Printing Building)	Minna St & Mary St	3725-076	2,996	C-3-S
77	441-445 Minna St	Minna St & Mary St	3725-077	2,761	C-3-S
89	947-949 Mission St	Mission St & Mary St	3725-089	3,200	C-3-S
90	941-945 Mission St	Mission St & Mary St	3725-090	6,400	C-3-S
91	939 Mission St	Mission St & Mary St	3725-091	9,200	C-3-S
93	901-933 Mission St (Chronicle Building)	Mission St & 5th St	3725-093	42,396	C-3-S
94	425-433 Minna St (Air Rights)	Minna St & 5th St	3725-094	10,598	C-3-S
97	110 Fifth St	Minna St & 5th St	3725-097	37,871	C-3-S
98	914-918 Howard St	Natoma St & 5th St	3725-098	14,797	RSD
99	Natoma St (Air Rights)	Natoma St & 5th St	3725-099	10,800	C-3-S
100	Minna St (Air Rights)	Minna St & Mary St	3725-100	2,490	C-3-S

Table. 3.1 Previous Parcels (per San Francisco Assessors Map)

3.2 5M PARCELS

The fragmented parcels that accumulated through the site's history are proposed to be consolidated without interrupting the grain of streets and alleys typical of SoMa.

3.2.1 REVISED PARCEL PLAN

Figure 3.2 and Table 3.2 identify the surface parcelization plan for the project, which may be revised in accordance with applicable City health and safety (e.g., Building and Fire Code) requirements. For pre-existing parcelization plan see Figure 3.1.[1]

[1] *Air space and subterranean parcels are not reflected in this figure.*

NO.	ORIGINAL LOT #	STREET ADDRESS OF PROJECT	CROSS STREETS	BLOCK	APPROX. LOT AREA (SQ FT)*	ZONING
93	93	Chronicle Building, 901-933 Mission St	Mission St & 5th St	3725-	42,400	C-3-S
M2	89, 90, 91	Mission St	Mission St & Mary St	3725-	18,800	C-3-S
N1	97*	Minna St & Fifth St	5th St & Natoma St	3725-	18,130	C-3-S
97	97*	Partial Examiner Building, 110 Fifth St	Minna St	3725-	7,990	C-3-S
94	94*	Partial Examiner Bridge, Minna St	Minna St	3725-	3,200	C-3-S
MC1	97*	Mary Court East	Mary St & Minna St	3725-	6,790	C-3-S
MC2	97*	Mary Court East	Mary St & Natoma St	3725-	4,830	C-3-S
42	42	Camelline Building, 430 Natoma St	Natoma St & Mary St	3725-	3,200	C-3-S
MC3	43, 44, 45, 46, 47, 77	Mary Court West	Natoma St & Mary St	3725-	14,610	C-3-5
76	76	Dempster Building, 447-449 Minna St	Minna St & Mary St	3725-	3,000	C-3-5
H1	5, 6, 8, 9, 98, 12	Natoma St	Howard St & 5th St	3725-	40,300	C-3-S

Table 3.2 Revised Parcels

*Parcel Subdivided
NOTE: Numbers rounded to nearest 10
White rows indicate unchanged existing parcels.

Parcel Plan Legend

- XX Existing Parcel
- XX Proposed Parcel
- Existing Lot Boundaries
- Proposed Lot Boundaries
- Site boundary

Fig. 3.2 Revised Parcel Plan

3.3 5M LAND USE

The 5M Project is a multi-phased development with a ground level and elevated public open space of redesigned pedestrian-friendly internal streets, and a total of approximately up to 1.85 million square feet of mixed use development.

Predominant land uses, as shown in Figure 3.3, are paired with active ground floor uses. Active ground floor uses range from retail to non-traditional office uses that operate in transparent, fenestrated street frontages. For additional detail and standards, refer to *Section 7.1 Circulation + Transportation: Circulation Overview* and *Section 5.3 Building Form + Massing: Base and Streetwall.*

Proposed Land Use Legend

- Residential
- Commercial
- Open Space
- Site boundary

Fig. 3.3 Predominant Land Use

3.5 5M LAND USE CONT.

The proposed land uses for 5M are similar to existing land uses in the surrounding C-3 and SoMa Districts. The Predominant Land Use Plan (Figure 3.5) identifies the predominant uses for each parcel. Table 3.5 provides more detailed information as to the estimated gross areas for predominant and secondary uses for each parcel. For more information on the Active Ground Floor, refer to *Section 5.5 Building Form + Massing: Ground Floor.*

Pre-existing zoning and reallocation of development rights permit increased density on the site, however the proposed project as reflected in the development program rearranges amount and location of density, down-zoning some parcels and up-zoning others.

Areas provided in Table 3.3 are rounded; final allowable areas set by 5M EIR.

BUILDING	PREDOMINANT USES	ACTIVE GROUND FLOOR	OFFICE	RESIDENTIAL	TOTAL
CHRONICLE BUILDING + EXAMINER (AND BRIDGE)	Office	---	219,100	--	**219,100**
M2	Residential	13,500	--	250,800	**264,300**
N1	Residential	15,100	--	570,500	**585,600**
CAMELLINE BUILDING	Office	--	9,600	--	**9,600**
DEMPSTER PRINTING BUILDING	Office	--	12,000	--	**12,000**
H1	Office	48,400	584,900	--	**633,300**
TOTAL		**77,000**	**825,600**	**821,300**	**1,723,900**

Table. 3.3 Land Use Program

Fig. 4.0 Off the Grid on Minna Street at 5M / San Francisco, CA

04.

OPEN SPACE + STREETSCAPE

4.1 PUBLIC REALM OVERVIEW

Three key public spaces—Mary Court, the Chronicle Rooftop, and North Mary Street—serve as gathering points within the larger public realm. The spaces operate as a network, punctuated by art installations, street trees, and green walls, providing a creative, flexible space for performances, lunch breaks, after-school play, and day-dreaming.

Of the open spaces within the 5M site, two spaces serve as key public open spaces: Mary Court, at the heart of 5M's public realm, serves as an urban room that spills out of and into adjacent active frontages and shared streets. Mary Court is divided by Central Mary Street, into a more passive open space area (Mary Court West) and more active open space area (Mary Cour East). Both are capable of hosting public events and performances, paired with circulation to support and expand the space as needed. The second key public open space, connected but separate from the ground plane activity, an occupiable roof above the Chronicle building is designed as a reprieve from the urban mix. As an elevated open space, the rooftop has views down Mission and Fifth Streets. The Chronicle Rooftop will be a privately owned and managed public open space.

Streets and alleys are linked to create a network of civic spaces and pathways that reinforce one another as well as the SoMa context. Streets and alleys function as public open space, especially North Mary Street. The streetscape design for the District will include selected street improvements to perimeter Mission, Howard, and 5th Streets, connecting the public realm and activity of the interior to these streets and to the wider neighborhood.

Streetscapes Legend

- Pedestrian-Only
- Historic Building
- Interior Streetscape
- Perimeter Streetscape
- Site Boundary

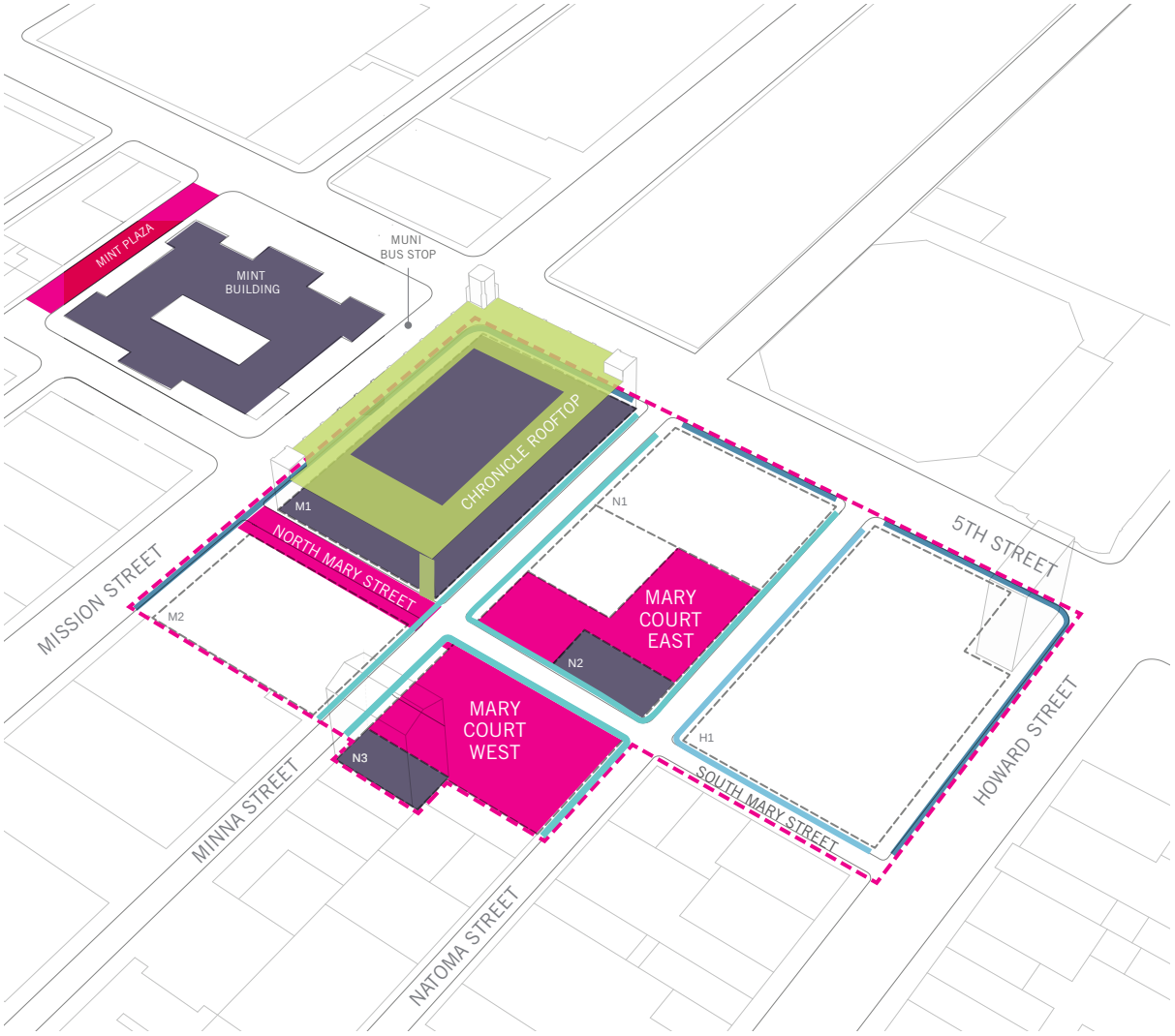


Fig. 4.1 Streetscape Areas (within the Public Realm)

4.2 ACTIVE GROUND PLANE

The design of the ground plane should prioritize connectivity – providing paths of circulation through exterior open space as well as interior activated spaces. Active uses and permeable edges are critical, allowing uses to extend into the exterior public space and interior circulation space. Transparency to retail as well as active offices, arts, and other uses provides opportunities for visual engagement even without any physical access.

The sample plan shown in Figure 4.2 describes one possible scenario of the ground plane with circulation paths and active, varied uses. Refer to Figure 5.5.5 in *Section 5.5 Building Form + Massing: Ground Floor* for specific locations of entries.

Fig. 4.2 Ground Plane Uses – Sample Plan

Ground Plane Program Legend

- Lobby
- Public Space
- Retail
- Food Retail (ex. Market, Restaurant, Stalls, etc)
- Art / Community
- Active Office (ex. Co-Work Space)
- Building Core and Services

4.3 OPEN SPACE OVERVIEW

5M carries the Generation Five urban typology forward by providing open space as a shared amenity for residential or office users as well as the larger neighborhood.

4.3.1 GENERATION FIVE OPEN SPACE

Given the communal and cross-activated nature of the Generation Five public realm, the requirements for commercial open space may be satisfied by any publicly accessible open space located within the District. Similarly, the requirements for common residential open space may be satisfied by open space provided for the use of the public or commercial tenants, in accordance with Section 4.3.2 Usable Open Space - Residential.

4.3.2 USABLE OPEN SPACE – RESIDENTIAL

Total square footage of required residential open space (herein Usable Open Space) shall be provided for each dwelling unit according to Planning Code. On a District wide basis, at least 15 percent of all required open space shall be exclusively for residential use and be located on buildings containing residential uses, or at ground level immediately adjacent to and directly accessible from buildings containing residential uses. Private residential open space may be provided on up to 10 percent slope.

4.3.3 PRIVATELY OWNED PUBLIC OPEN SPACE (POPOS) – COMMERCIAL

Total square footage of commercial open space (i.e. Privately Owned Public Open Space or POPOS) shall be provided according to Planning Code.

4.3.4 OPEN SPACE LOCATION

Usable Open Space and POPOS may be provided throughout the 5M District rather than on a specific lot.

A minimum of 50 percent of the required commercial open space (POPOS) shall be provided at grade.

Upper level open spaces are opportunities for planting and seating, as well as unique perspectives on the City and adjacent buildings.

Highline / New York, NY

Open air markets, fairs, concerts, arts/fabrication festivals, and informal play, are typical opportunities (among others) for at-grade open spaces.

Ferry Building Plaza / San Francisco, CA

Fig. 4.3.1 Generation Five Open Space Examples

OPEN SPACE	SIZE (SQ. FT.)	REQUIREMENT FULFILLED	
		COMMERCIAL (POPOS)	RESIDENTIAL (USABLE OPEN SPACE)
PUBLIC OPEN SPACE	**49,000**		
CHRONICLE ROOFTOP	23,000		X
MARY COURT EAST (MC1+MC2)	14,600	X (partial)	X (partial)
MARY COURT WEST (MC3)	11,400	X	
PRIVATE OPEN SPACE	**5,900**		
M2 TERRACE	3,600		X
N1 PRIVATE OPEN SPACE	2,300		X
H1 TERRACE	*OPTIONAL, NOT INCLUDED*		
ADDITIONAL PUBLIC OPEN SPACE / PEDESTRIAN ENHANCEMENTS	**3,200**		
N. MARY ST PEDESTRIAN IMPROVEMENT (ROW NOT INCLUDED)	1,600	X	
S. MARY ST PEDESTRIAN IMPROVEMENT	1,600	X	
TOTAL GSF	**~58,100**	**~50,600**	**~28,900**

Table 4.3.1 Estimated Open Space Scenario (upon full completion)

Fig. 4.3.4 Open Space Typologies and Locations

Open Space Typologies Legend

- Privately Owned Public Open Space
- Pedestrian-only Alley / Paseo
- Public Open Space - rooftop
- Private (Residential Only) Open Space
- Private Open Space (optional H1 terrace)
- Pedestrian Enhancement

4.4 MARY COURT

Mary Court is planned as a highly versatile, active, urban open space that will serve the needs of the 5M tenants and residents as well as the neighboring SoMa communities and the greater City.

Complementing the nearby Yerba Buena Gardens and the proposed Chronicle Rooftop, which provide green respites within the city, Mary Court is a platform for creativity and interaction. Primarily hardscaped with flexible structures, the space is intended to facilitate a range of informal and formal activities, including:

- play space for kids (and adults),
- dance performances,
- plays and live music,
- interactive art installations,
- art exhibitions,
- general seating and people watching,
- café and/or temporary retail kiosks,
- program containers and pods,
- food trucks, and
- festivals and weekend markets.

An overhead canopy structure is also envisioned, in select locations, to provide an armature for lighting and space heating elements, sculpture and public art, as well as recreational play elements. The canopy will provide users with additional shelter and protection from the wind and rain.

Creative play sculpture / Santa Monica, CA

Flexible open space with movable seating supports multiple types of activities and events; the canopy provides shelter and an armature for open space infrastructure

Mint Plaza / San Francisco, CA

Fig. 4.4.1a Mary Court Program Precedents

4.4 MARY COURT CONT.

4.4.1 PROGRAM ZONES

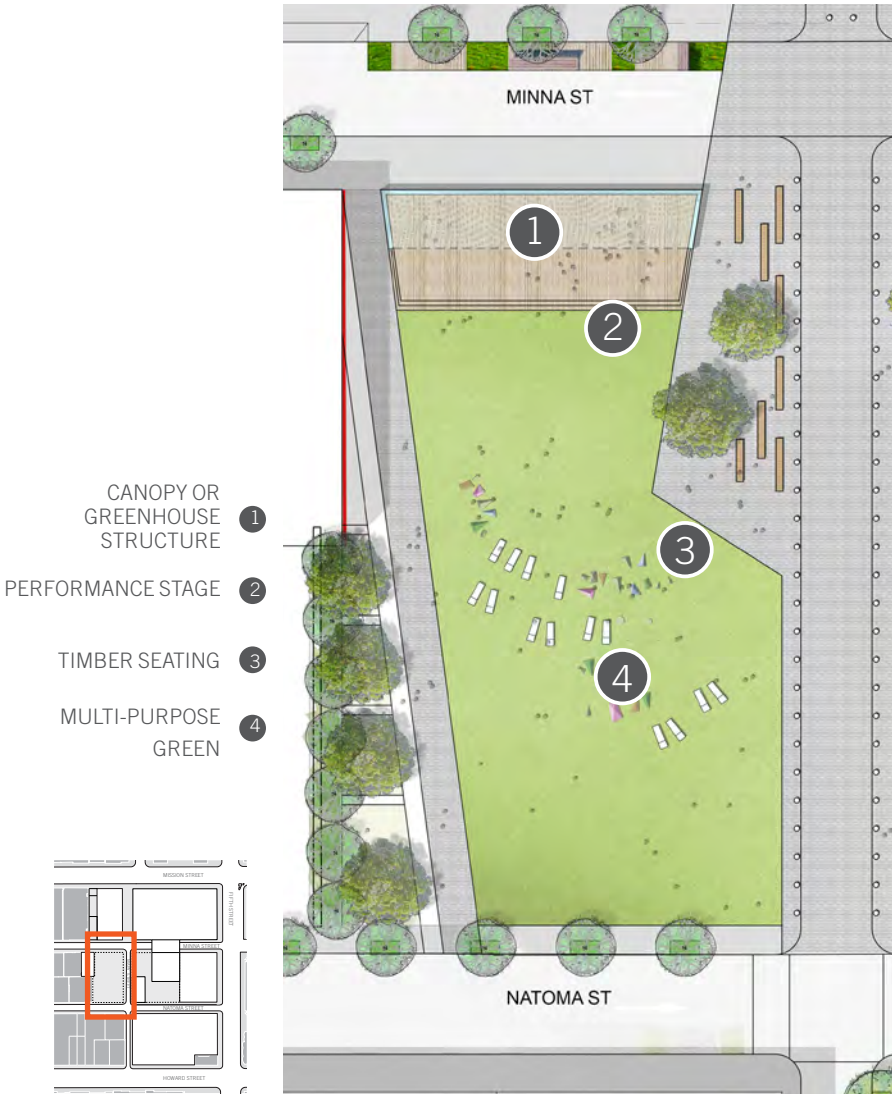
Public usable open space shall provide opportunities for informal and formal activities, both passive and active, to invite people of different generations, cultures, and pastimes in the space. Mary Court West and Mary Court East both shall allow usage of the space in its entirety for large events as well as subzones for smaller concurrent events. Zones shall be differentiated by programming, site furnishings, and/or material treatments.

4.4.2 MAXIMUM NON-OCCUPIABLE AREA

Within the proposed ground level open space, no more than 5 percent of usable public open space area shall have non-occupiable architectural, landscape, or structural elements at grade. Examples of non-occupiable elements include: utility/storage enclosures, structural posts, or planters that do not serve as seating or an occupiable function.

4.4.2 GUIDELINES: MAXIMUM NON-OCCUPIABLE AREA

Fenced-off and non-occupiable green spaces are discouraged.



NOTE: Required square footage of open space to be provided excluding footprint of temporary enclosures, if any.

Fig. 4.4.1b Mary Court West – Example Illustrative Plan

NOTE: Required square footage of open space to be provided excluding footprint of temporary enclosures, if any.

Fig. 4.4.1c Mary Court East– Example Illustrative Plan

4.4.4 OVERHEAD STRUCTURES

Overhead structures in open spaces, such as trellises, canopies, trusses, latticework, theater grids, and scaffolding, shall be permitted within public usable open space. Such structures shall occupy a maximum of 30 percent of the total area of public usable open space and shall maintain a minimum of 50 percent open to the sky, measured as a percent of the horizontal area of the structure. Overhead structures, where horizontal, shall have a minimum clearance of 15 feet and a maximum average thickness of 18 inches. See Figure 4.4.4.

4.4.4 GUIDELINES: OVERHEAD STRUCTURES

Overhead structures are encouraged to be greater than 50 percent open to the sky.

Overhead structures should promote programmability, supporting a flexible platform for art, lighting, screening, furniture, play, utilities, and ephemeral components and installations.

4.4.5 MARY COURT ENCLOSURES

Enclosures are structures that circumscribe a space on all sides, which may or may not include a roof. Enclosures in Mary Court shall support the creative nature and operability of the public open space. Spaces permanently dedicated to retail or non-public uses shall not be counted as open space. See Figure 4.4.5.

4.4.5 GUIDELINES: MARY COURT ENCLOSURES

Transparency: Enclosures should prioritize transparency, with opaque and screened areas used for utilities, storage, and facilities needing privacy.

Industrial Character: Enclosures should support the activation of the public realm and advance the contemporary, innovative, urban, or industrial qualities of the project. Enclosures are encouraged to also serve as frameworks for art intervention, public contribution, or natural ecologies.

Enclosures should embed enticing uses and programmatic features within them that draw and hold public attention and participation.

4.4.6 GUIDELINES: MAXIMUM PUBLIC SPACE ENCLOSURE

Enclosed spaces may be provided as part of the public open space, provided they are maintained as open to the public during business hours at a minimum and no more than 10 percent of the public space site area is enclosed.

Fig. 4.4.4 Overhead Structure Examples

Living Innovation Zone / San Francisco, CA

Center Pompidou Metz / Metz, France

Proxy SF / San Francisco, CA

Fig. 4.4.5 Mary Court Enclosure Examples

4.5 CHRONICLE ROOFTOP

The roofscape atop the retained Chronicle Building is envisioned as a new civic open space—an exciting perch above the City's streets, host to a wide range of daytime and nighttime activities.

The privately-owned public open space rooftop space may include retail or activating use, and an enclosure to house mechanical equipment. Program areas and elements envisioned for the public rooftop may include:

- Green softscape areas
- Public Greenhouses
- Urban agriculture
- Water features
- Cafe and/or food kiosk
- Wood Deck

City Hall / Toronto, Ontario

Rosendals Trädgårdscafé / Stockholm, Sweden

Fig. 4.5.1a Chronicle Rooftop Inspiration

4.5.1 PROGRAM ZONES

Public usable open space shall provide opportunities for informal and formal activities, passive and active, to invite people of different generations, cultures, and pastimes into the space. The Chronicle Rooftop shall include zones within the larger whole to allow use of the whole space for large events or in parts for smaller activities and events. Zones shall be differentiated by programming, site furnishings, and/or material treatments.

4.5.2 ROOFTOP ACCESS

Public access shall be provided to the rooftop open space by a public elevator. The public elevator shall be directly accessible from the street. The elevator, or signage to it, shall be visible from Mission Street.

4.5.3 GUIDELINES: MAXIMUM PUBLIC SPACE ENCLOSURE (ROOFTOP)

Enclosed spaces may be provided as part of the public open space, provided that they are maintained as open to the public during business hours at minimum and no more than 10 percent of the ground area is enclosed. Enclosed spaces are defined as occupiable spaces circumscribed on all sides, and may include public greenhouses or winter garden spaces.

4.5.4 GUIDELINES: CHRONICLE EXTERIOR CHARACTER

The design of the Chronicle Rooftop, in particular any additions or enclosures, should respect and celebrate the integral elements of the building, such as the clock tower, and the bay structure. See *Section 6.7.2 Architectural Design: Existing Structures: Chronicle Upper Level Setbacks*.

For more information on Roof Guidelines see *Section 6.6.1 Architectural Design: Roofs and Utilities: Roof System*.

4.5.5 GUIDELINES: SOCIAL GREENHOUSES

The Social Greenhouses are envisioned as flexible spaces with comfortable lounge seating. The greenhouses can also be used more conventionally to grow things. They should be configured to help buffer the prevailing winds. At night, they may be lit, acting as subtle beacons to passersby and announcing the rooftop as a beckoning new public space. The Farm is envisioned as an urban agriculture demonstration garden growing fresh produce for local restaurants.

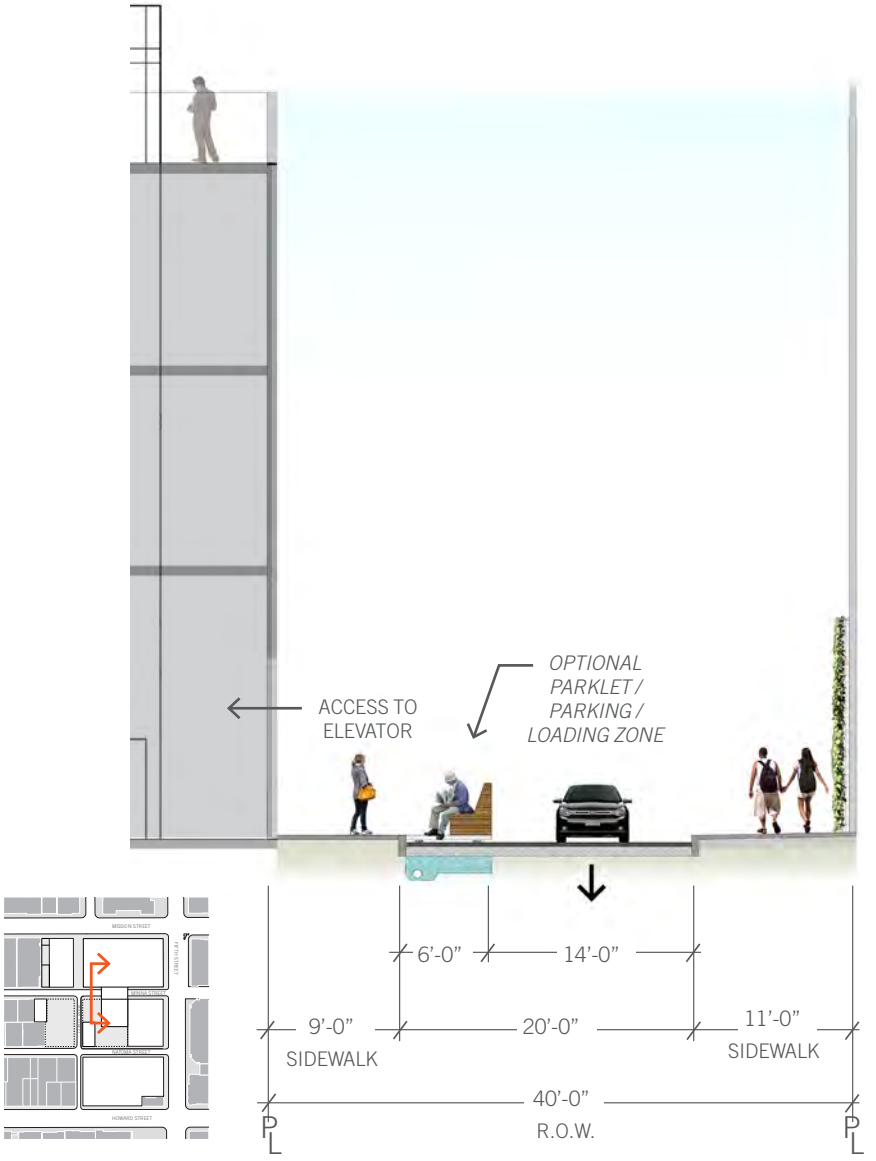
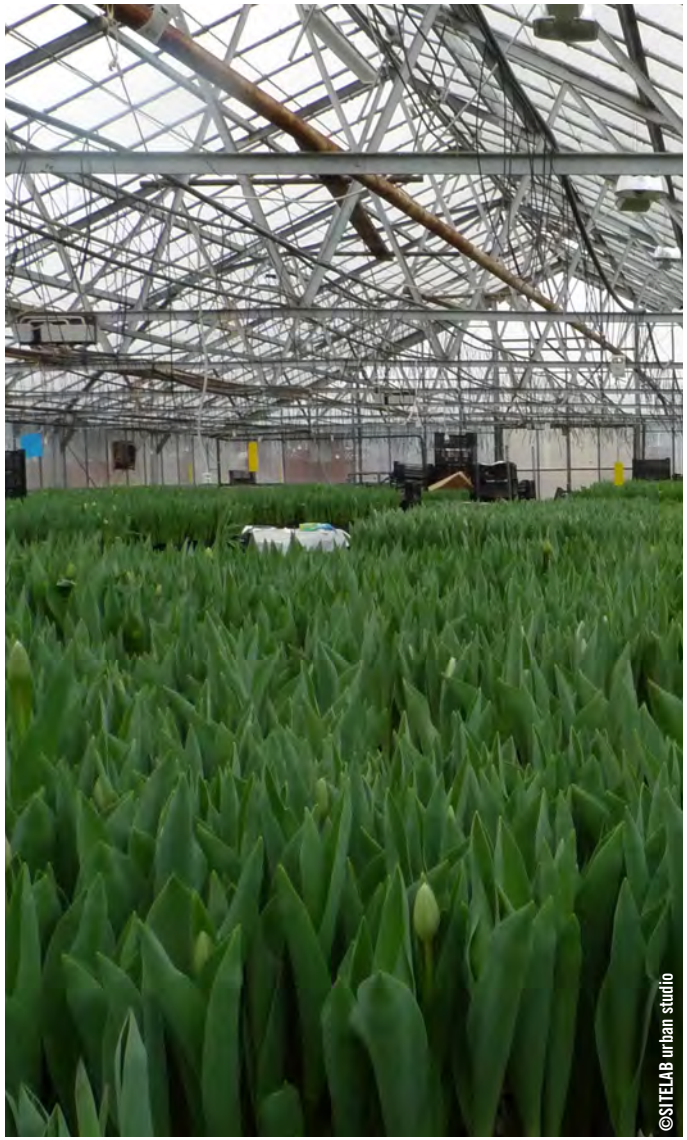


Fig. 4.5.2 Section: Elevator Access to Rooftop (at Minna/Mary Street)



Stanley Park / Westfield, MA

Fig. 4.5.5 Social Greenhouse Example

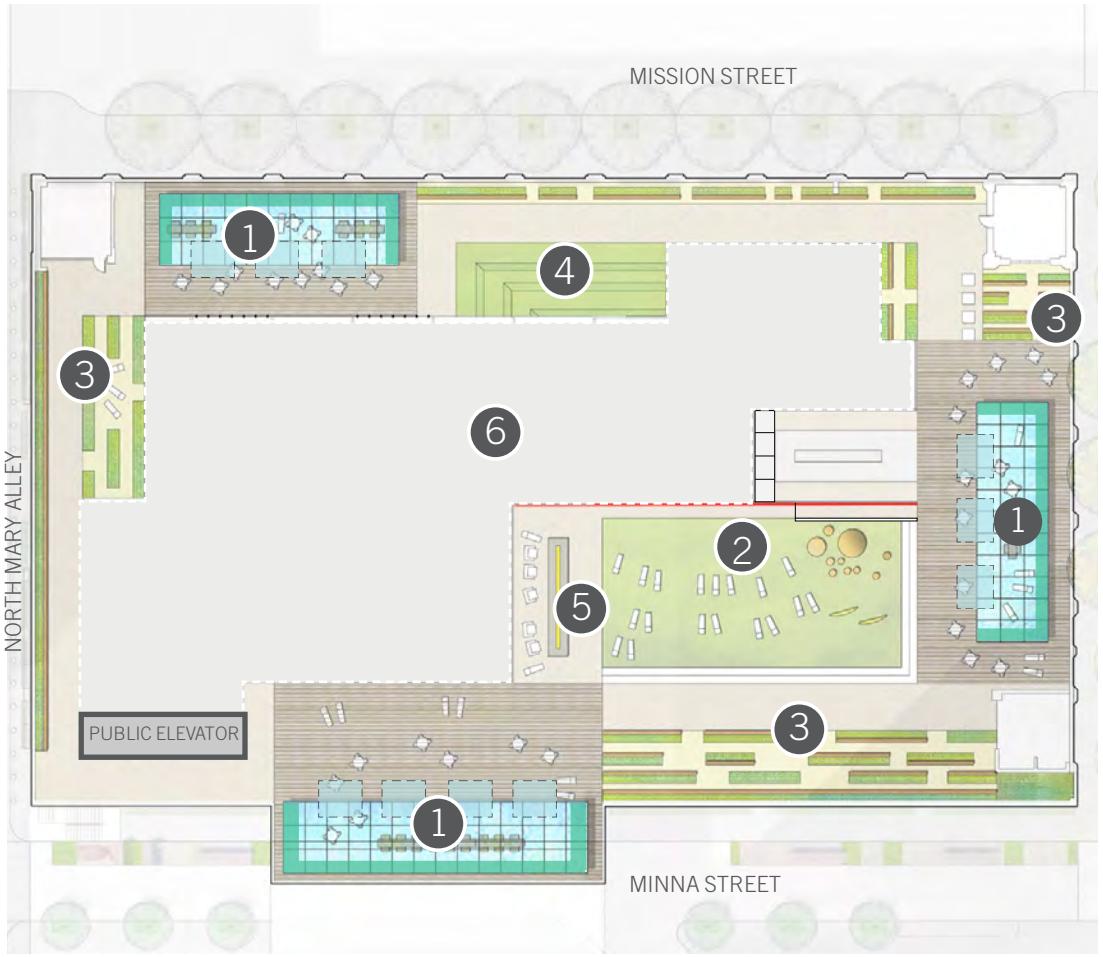


Fig. 4.5.1b Chronicle Rooftop - Example Illustrative Plan

1. PUBLIC GREENHOUSES
2. SYNTHETIC TURF WITH RADIANT HEAT
3. FARM
4. LOUNGING LAWN
5. FIRE BENCH
6. ZONE OF MECHANICAL

4.6 WIND AND SUN

The cool microclimate of San Francisco presents challenges for creating usable outdoor spaces that are comfortable – particularly in the summer months when the wind-driven fog layer drifts in and out across the City on a near daily basis. Protection from the prevailing winds and access to the sun are design considerations for public spaces at 5M.

4.6.1 WIND BAFFLING

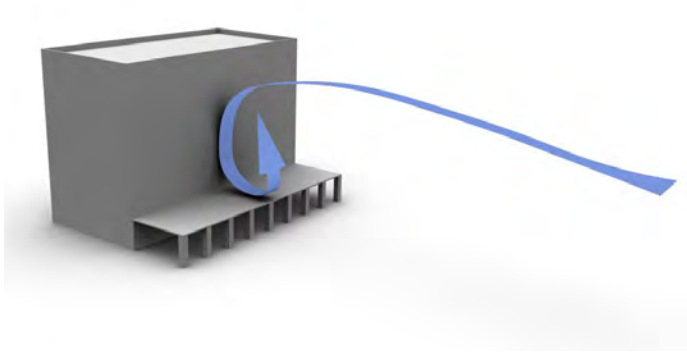
The architecture and landscape shall incorporate strategies and elements to provide comfort in the public realm. Any design elements related to wind mitigation shall be incorporated as part of the overall landscape or architecture, or as an art feature. Figure 4.6.1b shows priority areas where wind baffling measures may be most effective.

4.6.1 GUIDELINES: WIND CONDITIONS

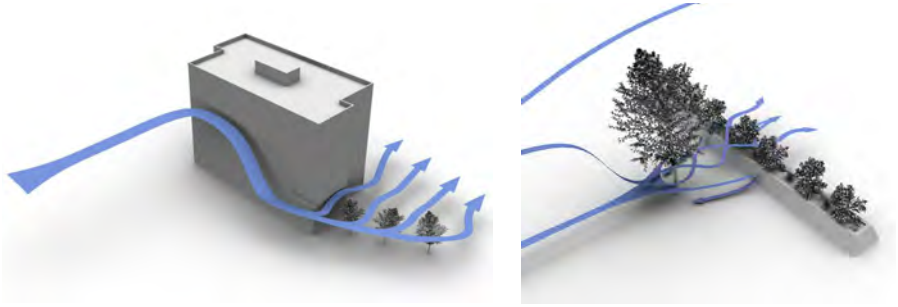
Elements to break or diffuse the current of the wind may include scaffolding and canopies, fabric structures, strategic positioning of landscape planting, architectural elements from upper level setbacks to façade articulations, and similar wind-baffling treatments and features.

4.6.2 GUIDELINES: SOLAR ACCESS

Open spaces should recognize opportunities for spaces of sun and warmth, and wherever feasible include strategies to increase and extend the hours of comfort and use, including outdoor heating and lighting.



Canopy/ Colonnade



Landscaping

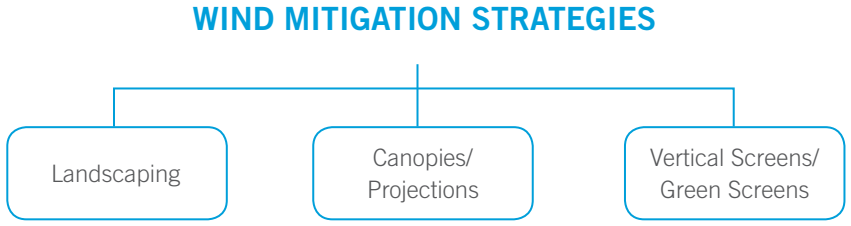


Fig. 4.6.1a Wind Mitigation Strategies

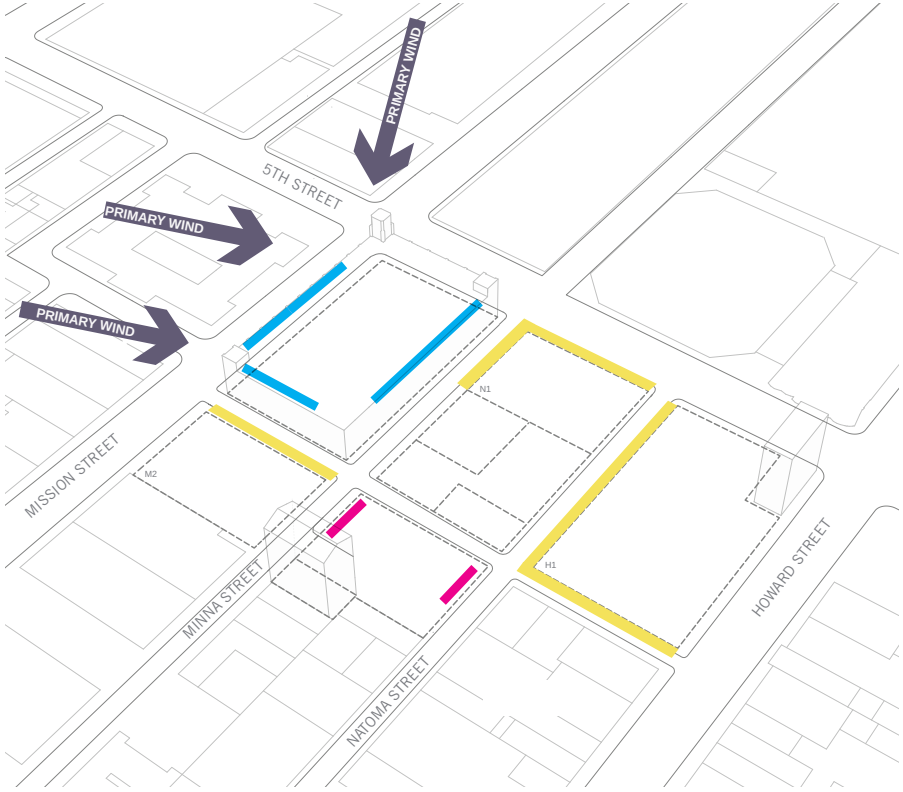


Fig. 4.6.1b Priority Areas for Wind Baffling Measures

Wind Priority Areas Legend

- Wind Feature (Ground)
- Wind Feature (Rooftop)
- Wind Feature (Overhead)

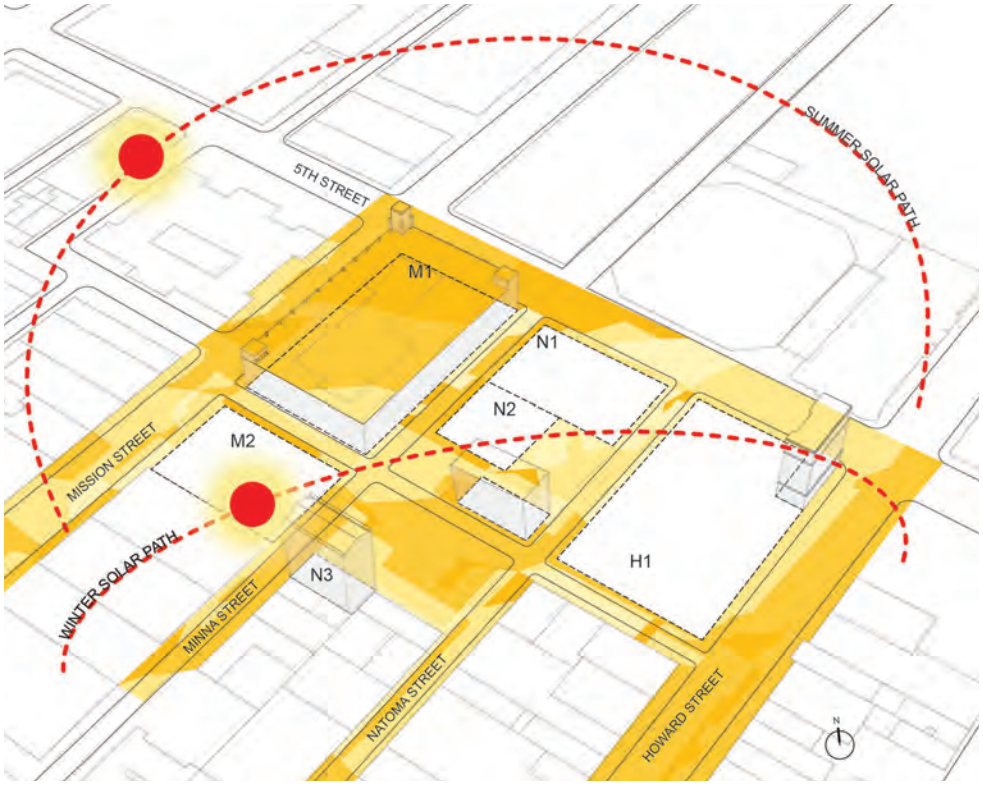


Fig. 4.6.2 Existing Site Orientation and Solar Access

Sun Access Legend

MORE SUN

LESS SUN

4.7 STREETS AND ALLEYS

The streets and alleys at 5M range from serving pedestrians to managing loading and garbage collection. In all cases, the urban pedestrian experience is a key consideration in the formal and operational design of each streetscape.

STREET TYPES

Paseo: Paseos are pedestrian-only alleys that prioritize the street's use as pedestrian space. The paseo within the District is North Mary.

Shared Public Way: Shared public ways are public rights-of-way designed for pedestrian use that also permit vehicles and bicycles to share the space. The shared public ways within the District are Central Mary and South Mary.

Interior Streets: Interior streets, while still pedestrian-oriented, must accommodate increased levels of vehicular and loading activity within the District. The interior streets within the District are Minna, Natoma, and Mary.

Perimeter Streets: Perimeter streets connect the activity of the interior to these streets and to the wider neighborhood. The three perimeter streets within the District are Mission, Fifth and Howard.

Find additional information on street type designations in the San Francisco Better Streets Plan.

4.7.1 SIDEWALK WIDTHS

All streets and alleys within the District shall provide the minimum sidewalk widths identified in Table 4.7.1. See Figures 4.7.1b for specific street and sidewalk widths.

	STREET OR ALLEY	BSP STREET TYPE*	BORDERING STREETS	EXISTING WIDTH (N/S, E/W)	REQUIRED MIN. WIDTH	PROPOSED WIDTH (N/S, E/W)
A	MISSION	Downtown commercial		- / 15'	10'*	Existing
B	5TH[1]	Downtown commercial	Mission & Howard	- / 10'	10'*	**- / 18'**
C	HOWARD	Mixed-Use		11'-6" / -	12'	**12' / -**
1	NORTH MARY	Paseo	Mission & Minna	-	6'**	N/A (Pedestrian only alley)
2	CENTRAL MARY	Alley (Shared Public Way)	Minna & Natoma	5' / 5'	9'	Existing **/ 10'**
3	SOUTH MARY	Alley (Shared Public Way)	Natoma & Howard	- / 6"	6'**	Existing
4	MINNA	Alley	5th & Mary	9' / 11'	6'	Existing
5	NATOMA[2]	Alley	5th & Mary	6' / 7'-6"	6'	**8' / 8'**

Table 4.7.1 Sidewalk Widths

*Per San Francisco Street Types Map (v. 7, 5/15/2012), per Better Streets Plan, SFPD and Downtown Streetscape Plan

**Does not include building setback

[1] One loading area of 8' x 60' permitted within sidewalk width per block.

[2] Sidewalks may narrow as needed for trucks to exit H1 onto 5th Street.

4.7.2 PEDESTRIAN-ONLY ALLEY (PASEO)

Pedestrian-only alleys shall provide amenities, including seating, landscaping, pedestrian lighting, retail displays, café access, and opportunities for temporary kiosks and/or food and retail trucks. See *Section 4.8 North Mary Street*.

4.7.3 SHARED PUBLIC WAY

Streets designated as shared public ways shall prioritize pedestrian usage by including design elements like special paving, shallow curbs, landscaping, and street furnishing. Shared public ways shall also accommodate vehicles and loading at reduced speeds. As per the requirements of ADA, the vehicular path of travel shall be physically demarcated for people with visual impairments.

4.7.3 GUIDELINES: SHARED PUBLIC WAY

Design should encourage reduced speeds without impeding circulation and access. Interior streets should feel safe and comfortable and integrate parking or loading access into the overall District streetscape design. Examples include, but are not limited to, raised traffic table, chicanes, etc.

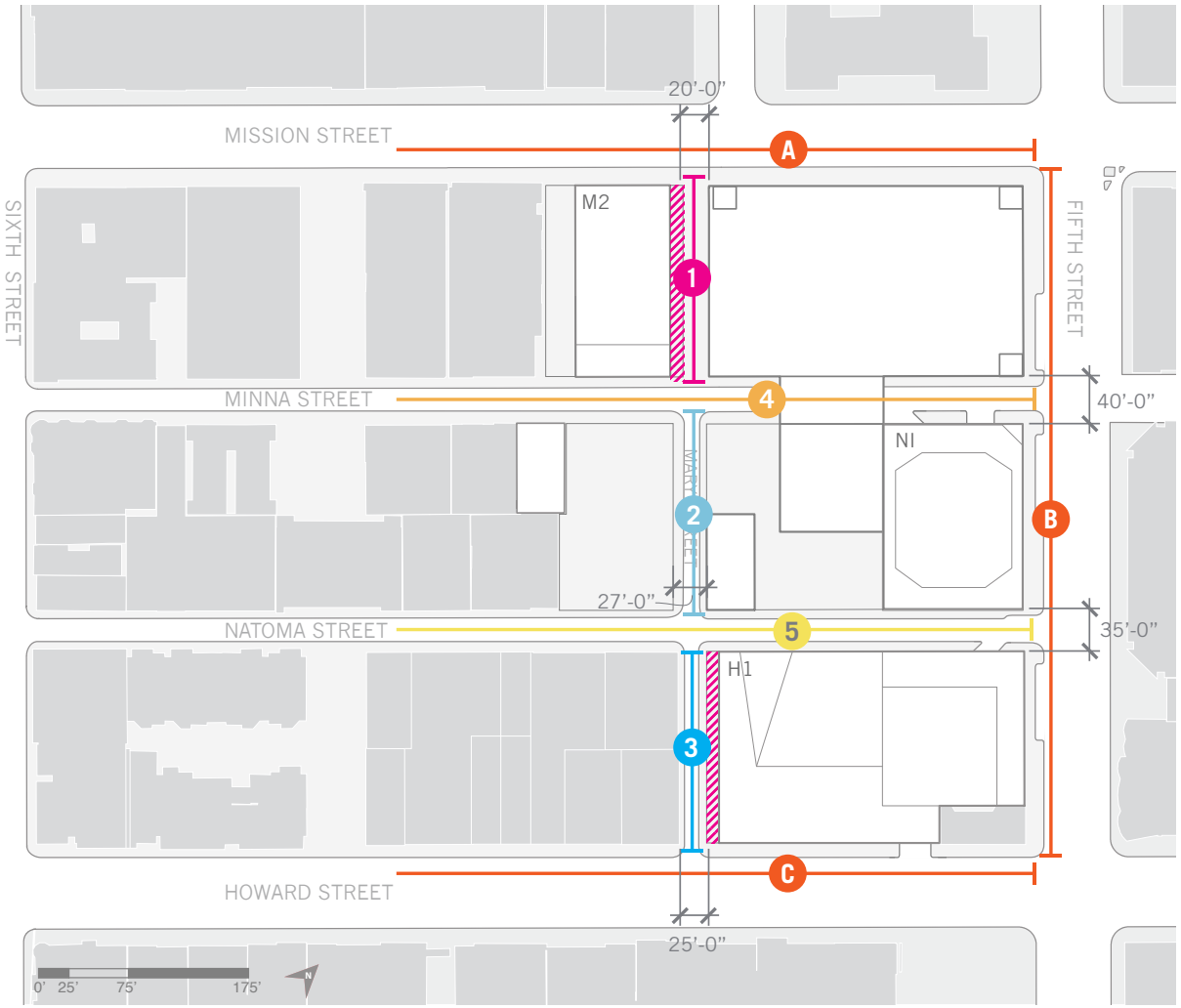
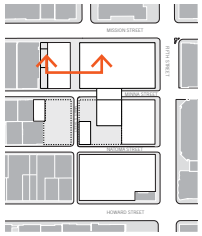


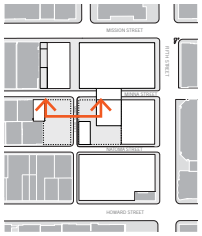
Fig. 4.7.1a Street Types

Street Types Legend

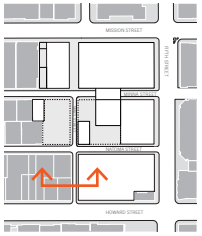
Building setback area



North Mary

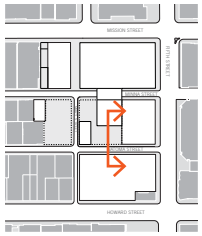


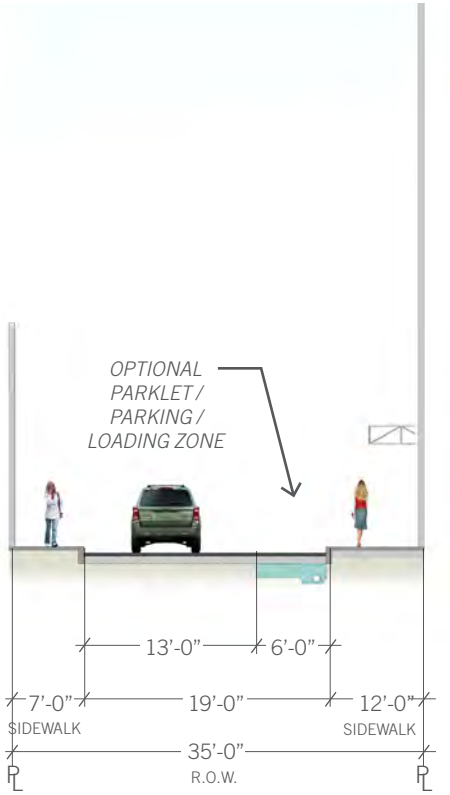
Central Mary



South Mary (Existing)

Fig. 4.7.1b Street Sections





Natoma Street

Fig. 4.7.1b Street Sections cont'd

Rue du Tresor / Québec, Canada

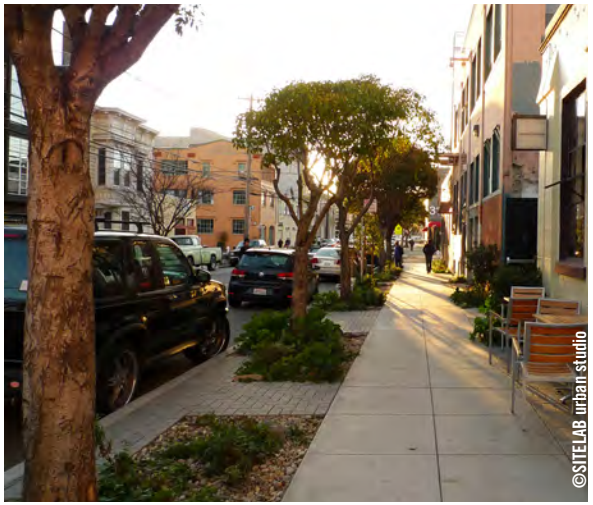
Fig. 4.7.2 Paseo Example

Linden Street / San Francisco, CA

Fig. 4.7.3 Shared Public Way Example

Raised Crosswalk at Palouk / Prague-Strašnice, Czech Republic

Fig. 4.7.4 Interior Street Example



20th Street / San Francisco, CA

Fig. 4.7.5 Perimeter Street Example

4.8 NORTH MARY STREET

As a pedestrian-only street, the North Mary paseo shall be closed to traffic to create a vibrant pedestrian connector linking Mary Court to Mission Street and Mint Plaza, activated by retail, restaurants, outdoor dining and shopping.

4.8.1 GROUND FLOOR ACTIVATION

The storefronts and façade of the M2 building shall include transparency and active uses per *Section 5.5 Building Form + Massing: Ground Floor*. At least three entrances shall be located within the recommended café zone along North Mary Street.

4.8.1 GUIDELINES: GROUND FLOOR ACTIVATION

Site furnishings and removable elements, such as art and temporary seating, are encouraged within the right-of-way to activate space. The access and entrance to the Chronicle building's public rooftop (elevator lobby and potential exterior stair) should be located near the intersection of Mary Alley and Minna Street, fire code permitting. See *Section 4.5.2 Chronicle Rooftop: Rooftop Access*.

4.8.2 CAFE ZONE

The inclusion of a "café zone" on Minna Street along the M2 frontage is encouraged.

4.8.3 GUIDELINES: CANOPIES AND PROJECTIONS

Within the open space, an overhead canopy structure or other localized installation is recommended to span the café zone for shelter from the wind and rain while also providing an armature for lighting, signage and space heating elements.

The Chronicle building façade fronting the street lacks transparency, but should be enlivened with art, pop-up retail kiosks and green screen or green wall landscape enhancements. For detailed standards, refer to *Section 6.5 Architectural Design: Projections.*

4.8.4 GUIDELINES: LIGHTING AND ART

The alley space should be lit with pedestrian scale lighting – simple light poles, bollard lights or lighting integrated into the café zone overhead canopy structure.

Artwork or surfaces available for art installation should be integrated into the alley design.

4.8.5 GUIDELINES: RAISED CROSSWALKS

For the purpose of traffic calming, the use of raised crosswalks / speed tables is encouraged in the vicinity of Mary Court at the North Mary/Minna and the South Mary/Natoma intersections. Raised crosswalks may be unit pavers, colored or imprinted asphalt or concrete with integral color, special pattern and texture.

Etched concrete / San Francisco, CA

Painted concrete

Street Painting #5 / Vercorin, Switzerland

Fig. 4.8.4 Art: Decorative Alley Design

4.9 SITE FURNISHINGS

Site and street furnishings in the public realm are intended to complement the adjacent architecture and add vitality, comfort and pedestrian amenity.

4.9.1 SITE FURNISHINGS PALETTE

Site furnishings include café seating, lounge seating, benches, bike racks and receptacles. Benches should be a mix of social and/or individual types. Moveable seating and tables shall comply with DPW permit requirements. All permanent furnishings shall be high-quality and durable.

4.9.2 SEATING

Provide a variety of seating opportunities for all users. Seating shall be provided at North Mary Alley, Mary Court, at the Chronicle Rooftop.

4.9.3 RECEPTACLES

Multi-bin trash/recycling/compost receptacles shall be provided at street corners, at bus stops and adjacent to restaurant/retail uses, with a minimum of one per intersection. Provide simple, functional bins of durable metal construction with clear labeling.

4.9.2 GUIDELINES: SEATING

Benches and seating should be oriented to create social spaces. The use of simple, modern, colorful, playful furnishing designs is encouraged. Café seating should be located at restaurants and markets (eg. along M2 frontage of North Mary Alley). Lounge seating should be strategically placed at Mary Court and Chronicle Rooftop for afternoon sun. Fixed seat walls/benches integrated with open space and parklets, where provided.

4.9.4 GUIDELINES: BIKE RACKS

Class 2 Bike racks provided per *Section 7.2 Circulation + Transportation: Bicycle Storage and Support* are encouraged to be located in site furnishing zones. Simple functional bike racks (stainless steel inverted-U or ring style) should be cohesively designed with street furniture. Bicycle Parking location requirements, shall be provided per *Section 7.2 Circulation + Transportation: Bicycle Storage and Support.* Bike parking is encouraged to be provided at plaza areas, building entries, adjacent to bus stops, and on bulb-out/curb extensions where parked bicycles will not block pedestrian throughway. Bike racks are to be integrated with parklets, where provided.

4.9.5 GUIDELINES: AMENITIES

In café zones, Mary Court, and Chronicle Rooftop, outdoor or overhead heaters are encouraged to extend comfort and utility of the spaces into the evening.

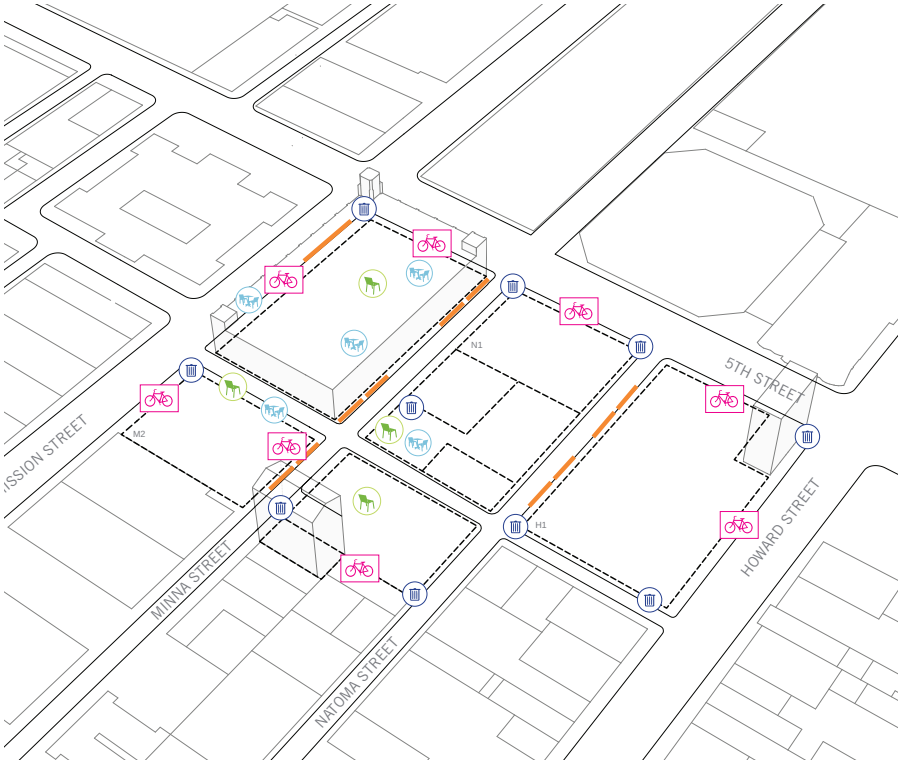


Fig. 4.9.1 Site Furnishings Palette and Zones (all locations are approximate)

Consistent linear layout without back, two-way facing

Grouped seating with backs, one-way facing outward

Seating with back, one-way facing

Fig. 4.9.2 Seating Examples

Fig. 4.9.4 Bike Rack Examples

4.10 PAVING MATERIALS

Paving materials used in the public realm should reinforce the concept of 5M as a unique extension of the urban fabric and promote site sustainability.

4.10.1 GUIDELINES: PAVING MATERIALS PALETTE

The materials recommended for streetscape and plaza paving are common hardscape materials, utilitarian in nature– scored concrete, enhanced asphalt and precast concrete or asphalt unit pavers. The use of enhanced color and textural finishes is recommended to provide these common materials with an upgraded architectural expression that will lend distinction to the 5M project. The use of standard hot-rolled asphalt paving is prohibited. Paving materials and systems should maximize stormwater infiltration and minimize surface runoff.

4.10.2 GUIDELINES: PERIMETER STREET SIDEWALKS

For public sidewalks adjacent to the building faces on perimeter streets, the City's DPW standard 3' x 3' grid of scored cast-in-place concrete should be used for paving (or other applicable DPW standard paving). The courtesy strips adjacent to the curb including the street tree planting zone, should use dark gray precast concrete unit pavers. These pavers, placed on an aggregate base (consistent with the details developed by the City's DPW) should create a permeable pavement zone.

Standard sidewalk paving in the furnishings zone adjacent to the curb should be dark grey permeable unit pavers, either precast concrete or stone.

For paving on public sidewalks along perimeter streets, a charcoal grey integral color is recommended with silicon carbide or similar top-dressing to provide a silicon carbide sparkle finish, consistent with the sidewalks of the nearby SoMa convention center and Yerba Buena arts district.

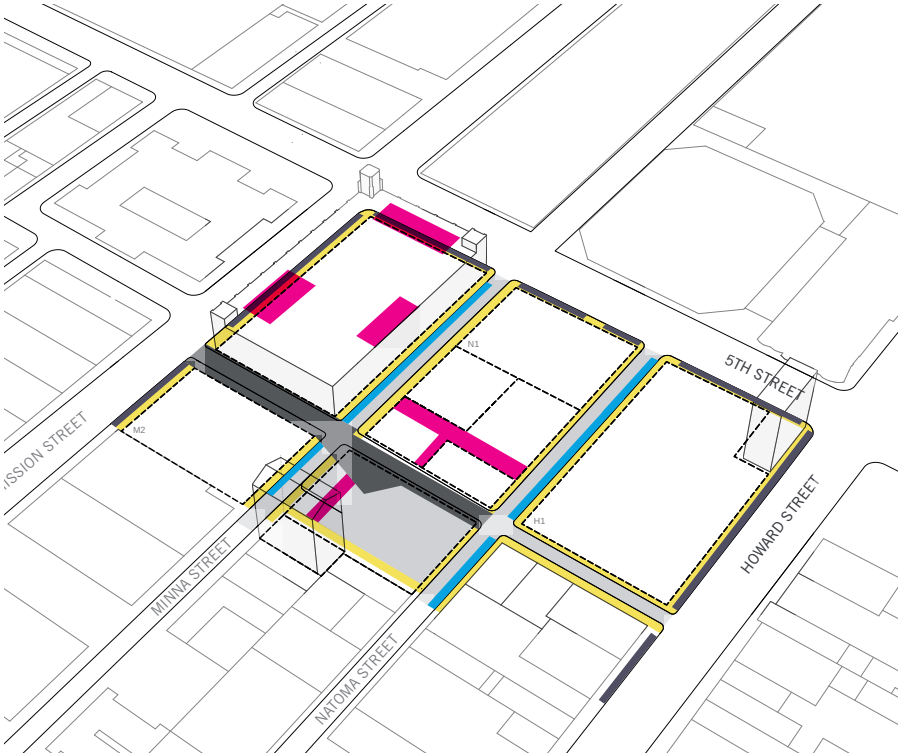


Fig. 4.10.1 Recommended Paving Materials Palette

Recommended Paving Materials Legend

- Sidewalks with enhanced finishes
- Enhanced Asphalt Unit Pavers (etched, stamped, pigmented)
- Permeable Asphalt
- Permeable Pavers (pre-cast concrete)
- Permeable Pavers at Sidewalks (pre-cast concrete)
- Wood Decking

4.10.4 PEDESTRIAN-ONLY AREAS

The dedicated pedestrian plaza areas at Mary Court and North Mary Alley are areas where enhanced finishes and more expressive treatments for asphalt or concrete paving are required. The paving materials, finishes and colors shall be coordinated at both locations.

4.10.3 GUIDELINES: INTERIOR STREET SIDEWALKS

Standard sidewalk paving should be scored concrete with City Standard 3' x 3' scoring pattern. Sidewalk paving should also include special treatments such as charcoal gray integral color and special finishes or unit pavers.

For the interior street paving vehicular travel lanes, permeable asphalt is recommended. For the parallel parking lanes and areas under parklets (7-foot to 8-foot width), gray precast concrete permeable unit pavers are recommended. The alley streets should be pitched to drain to these parking / parklet strip infiltration zones.

4.10.4 GUIDELINES: PEDESTRIAN-ONLY AREAS

For North Mary Alley and Mary Court, asphalt unit pavers combined with accents of stamped, etched or pigmented asphalt or with accents of stamped, etched, sandblasted or pigmented concrete, or permeable concrete unit pavers are recommended. Painted treatments of asphalt are also encouraged.

The color palette is recommended to be in the dark- to medium-gray range, with limited use of color accents other than those featured in an integrated art installation, such as a painted surface design.

Cast-in-Place Concrete

Permeable Paver Street Furnishings Zone

Fig. 4.10.2 Perimeter Street Sidewalks

Permeable Paving

Fig. 4.10.3 Interior Street Sidewalks

4.10.5 CHRONICLE ROOFTOP

The Chronicle Rooftop's primary public access circulation areas shall be paved with durable, high quality materials that differentiate it from ground plane materials. Ground plane hardscape materials such as concrete and pavers are discouraged. If children's playground areas are proposed, a code-compliant safety surfacing, such as resilient rubber or wood fiber paving, shall be provided.

4.10.5 GUIDELINES: CHRONICLE ROOFTOP

Non-vegetative rooftop areas are encouraged to be paved with lightweight wood decking, certified sustainably-grown ipe or machiche hardwood, unfinished, to allow natural weathering. Other acceptable materials include hardiplank or equivalent. In secondary circulation areas, such as the urban farm or edible garden program area, -ornamental gravel is recommended. At raised planter areas, durable edging materials, such as steel or aluminum header, precast concrete or stone, are recommended.

Wood Decking

Gravel

Fig. 4.10.5 Chronicle Rooftop Area Examples

4.10.6 CURB AND GUTTER

Standard curbs and gutters shall be concrete per City Standard. However, shallow curbs or defining movement zones with flush paving bands or bollards is permitted.

4.10.6 GUIDELINES: CURB AND GUTTER

In certain areas, curb and gutters may include special features such as integral color and special finishes, or the use of stone/granite.

4.10.7 GUIDELINES: DECORATIVE PAVING

The ground plane should be enhanced with special paving materials and finishes -- such as asphalt unit pavers, artistically etched asphalt, stone unit pavers or concrete unit pavers.

4.10.8 GUIDELINES: PERMEABLE PAVING

The use of permeable paving is encouraged in parking lanes and in areas that may be used for parklets.

Asphalt Unit Pavers

Stamped Asphalt

Etched Concrete

Port Seton

Fig. 4.10.7 Decorative Paving Examples

4.11 PLANT MATERIALS

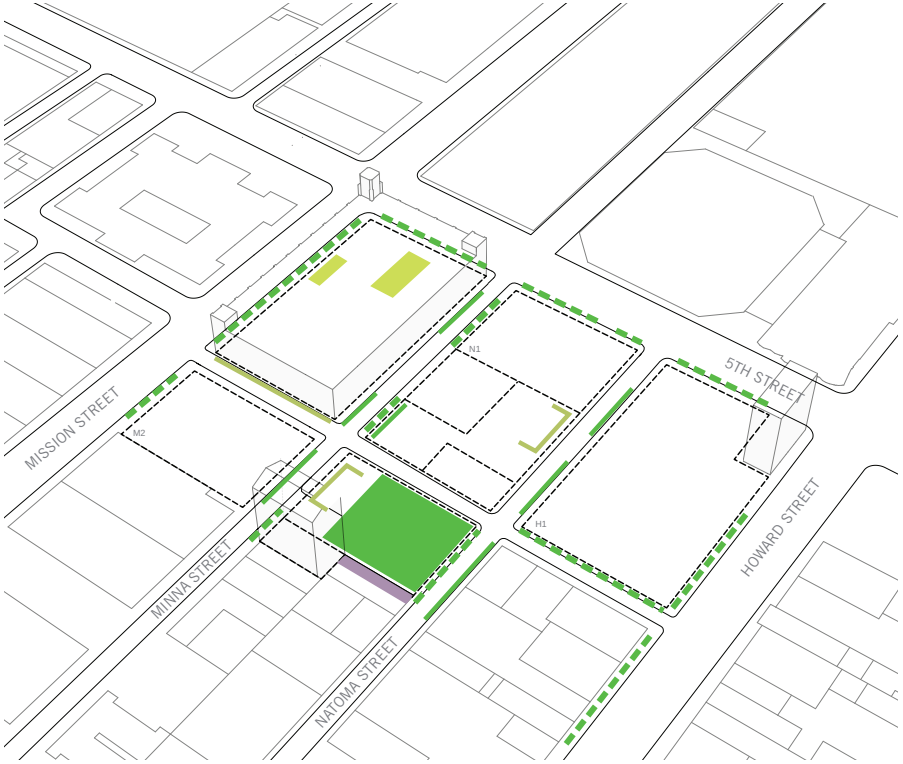
Planting improvements within the public realm of 5M are intended to reinforce the urban character of the plazas, streets and alleyways. Plantings provide both visual amenity and environmental benefit. Plant material selection should emphasize strong plant forms, tolerance of wind and other site conditions, low water use and low maintenance, as well as the bio-filtration of stormwater runoff.

4.11.1 STREET TREES

Tree size at planting shall be 36" box size, minimum. See Figure 4.11.1a and 4.11.1b for street tree location requirements.

At intersections, trees and plants shall not obscure visibility to crosswalks, traffic signals, signs or street lights. Street tree setbacks at intersections shall be 25 feet minimum from the crosswalk on the approach side and 5 feet minimum from the crosswalk on the far side, consistent with SFDPW Director's Order 169.946.

To ensure optimal tree growth, tree wells shall be a minimum of 4 feet wide by 6 feet long by 4 feet deep. In addition, the use of an equivalent volume of structural soil under adjacent paving to improve tree growth is encouraged. Tree wells should have understory plants a maximum of 24 inches tall. Where heavy foot traffic or maintenance is a concern, tree wells may be paved with unit pavers or ornamental gravel and must be compliant with City approvals.



Greening Opportunity Zones Legend

- Green Screen
- Planter
- Green Roof
- Multi-Purpose Green
- Street Tree
- Bio-Filtration Planter

Fig. 4.11.1a Greening Opportunity Zones - Illustrative Example

Fig. 4.11.1b Street Sections

4.11.2 PERIMETER STREET TREES

A single row of street trees shall be planted in the site furnishing zone (as shown in Figure 4.9.1) along each perimeter street. The tree spacing shall not be greater than 30 feet on center. To introduce an element of play and creativity, sculptures may be interspersed with street trees at a maximum of one per block.

4.11.3 INTERIOR STREET TREES

Due to the narrow sidewalk conditions, street trees are not required on Natoma or Mary Streets. A minimum of 4 street trees shall be provided on both sides of Minna Street within the district.

4.11.1 GUIDELINES: STREET TREES

The list of tree species recommended as street trees are adapted to tough urban conditions and tolerant of wind. Tree species should be selected and scaled to the unique sidewalk dimensions of each street – larger growing species used on Mission and Howard Streets, and smaller growing species used on Fifth Street. The right-of-way and sidewalk conditions of the interior alley streets preclude the use street trees on these streets. For Minna, Natoma and Mary, a greening strategy employing the use of space-efficient green screens, green walls and/or planted parklets is recommended. The liberal use of green screens, green walls and parklets is encouraged.

A list of plants recommended as suitable for use within the District can be found in Figures 4.11.2b , 4.11.4, 4.11.5, 4.11.7. Most of these plants are also recommended by the City DPW's Department of Urban Forestry and Friends of the Urban Forest.

4.11.4 GUIDELINES: PARKLET PLANTS

Plant materials recommended for use in parklet planters, where provided, represent a mix of plants with strong architectural forms, locally-adapted Mediterranean climate plants, succulents from various arid climates and native California plants noted for their interesting form, flower, and/or foliage. See *Section 2.3 Design Framework: Public Realm Overview* for additional information on parklets.

4.11.5 GUIDELINES: GREENWALLS / GREEN SCREENS

Plant materials recommended for use on green walls, green panels and green screens are a mix of evergreen and flowering climbing vines, succulents and ferns, selected to offer a variety of contrasting plant colors and textures.

4.11.6 GUIDELINES: GREEN ROOF

Plant materials recommended for use on the Chronicle Rooftop are drought-tolerant turfgrass for the tilted lawn panel and a variety of edible produce plants in raised planters for the urban farm/edible garden area.

4.11.7 GUIDELINES: BIO-FILTRATION PLANTINGS

Bio-filtration of stormwater is an important function for any landscape planting area that receives runoff. Plants suggested for bio-filtration areas as required under the Project's Stormwater Control Plan, would generally be ornamental grasses, rushes and sedges— species tolerant of intermittent flooding during the rainy season and dryer conditions the rest of the year.

Sweetgum
(*Liquidambar styraciflua)*

Autumn Gold Maidenhair Tree
(*Ginkgo Biloba)*

Allee Chinese Elm
(*Ulmus parvifolia 'Emer II')*

London Plane Tree var.
(*Platanus acerifolia 'Columbia'*)

Fruitless Olive (*Olea europea 'Swan Hill'*)

Fig. 4.11.2a Street Trees

4.11 PLANT MATERIALS CONT.

The following trees are adapted to tough urban conditions, are tolerant of wind and are recommended for San Francisco's streets by the SF DPW's Urban Forestry Division and the Friends of the Urban Forest. The larger growing species are recommended for Mission and Howard streets while the smaller species are recommended for the narrower sidewalk conditions of Fifth Street.

SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME
Arbutus x 'Marina'	Marina Strawberry Tree	*Pittosporum undulatum*	Victorian Box
Ginkgo biloba 'Autumn Gold'	Autumn Gold Maidenhair Tree	*Platanus acerifolia 'Bloodgood'*	London Plane Tree var.
Ginkgo biloba 'Princeton Sentry'	Columnar Maidenhair Tree	*Platanus acerifolia 'Columbia*	London Plane Tree var.
Liquidambar styraciflua	Sweetgum Tree	*Pyrus calleryana 'Chanticleer'*	Chanticleer Flowering Pear
Liquidambar styra. 'Rotundiloba'	Fruitless Sweetgum	*Tristaniopsis laurina 'Elegant'*	Water Gum var.
Lophostemon confertus	Brisbane Box	*Ulmus parvifolia 'Emer II'*	Allee Chinese Elm
Olea europea 'Swan Hill'	Fruitless Olive		

Fig. 4.11.2b Street Trees

The following plant palette represents a mix of Mediterranean plants, succulents from various arid climates, and native California plants noted for their form, flower, and/or foliage. These plants are well-adapted to local San Francisco microclimates and most are recommended for sidewalk landscaping by the SF DPW's Urban Forestry division.

SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME
Achillea hybrids	Yarrow	*Fragaria chiloensis*	Sand Strawberry
Aeonium arboreum	Aeonium	*Helleborus orientalis*	Lenten Rose
Agave attenuata 'Nova'	Foxtail Agave	*Heuchera maxima var.*	Island Alum Root
Anigozanthos hybrids	Kangaroo Paw	*Iris douglasii var.*	Pacific Coast Hybrid Iris
Calamagrotis nutkaenis	Pacific Reed Grass	*Lavandula var.*	Lavender
Chondropetalum tectorum	Cape Rush	*Limonium perezii*	Sea Lavender
Clivia miniata hybrids	Clivia- Yellow Hybrids	*Miscanthus 'Morning Light'*	Silver Grass
Coleonema pulchrum	Pink Breath of Heaven	*Nasella tenuissima*	Mexican Feather Grass
Correa 'Dusky Bells'	Australian Fuchsia	*Nepeta x faassenii*	Ornamental catmint
Cycas revoluta	Sago Palm	*Ophiopogon japonicus*	Mondo Grass
Dicksonia antartica	Tasmanian Tree Fern	*Phormium tenax hybrids*	New Zealand Flax (dwarf varieties)
Dietes bicolor	Fortnight Lily	*Polystichum munitum*	Western Sword Fern
Echeveria agavoides	Hens and Chicks	*Rhamnus californica 'Seaview'*	Coffeeberry
Eschscholzia californica	California Poppy	*Rosmarinus officianalis var.*	Rosemary
Equisetum hyemale	Horsetail	*Salvia gregii*	Autumn Sage
Erigeron karvinskianus	Santa Barbara Daisy	*Tibouchina urvilleana*	Princess Flower
Euphorbia characias wulfenii	Euphorbia var.	*Tulbagia violacea 'Silver Lace'*	Society Garlic
Festuca glauca 'Siskiyou Blue'	Blue Fescue var.		

Fig. 4.11.4 Parklet Plants

4.11 PLANT MATERIALS CONT.

The following plant palette represents a mix of flowering and evergreen vines, succulents and ferns.

SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME
Bougainvillea 'San Diego Red'	Bougainvillea var.	*Parthenocissus tricuspidata*	Boston Ivy
Clytostoma callistegiodes	Violet Trumpet Vine	*Passiflora var.*	Passion Vine
Ficus pumila	Creeping Fig	*Solanum jasminoides*	Potato Vine
Hardenbergia violacea	Happy Wanderer Lilac Vine	*Trachelospermum jasminoides*	Star Jasmine
Hedera helix 'Needlepoint'	Needlepoint Ivy		Fern varieties
Jasminium polyanthum	Pink Jasmine		Succulent varieties

Fig. 4.11.5 Greenwalls/Green Screens

The following plant palette represents those that best utilize material in filtration beds to treat wastewater.

SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME	COMMON NAME
Baumea rubiginosa	Striped Rush	*Juncus leseurii*	Common Rush
Carex tumulicola	Berkeley Sedge	*Juncus patens*	California Grey Rush
Chondropetalum tectorum	Cape Rush	*Nasella pulchra*	Purple Needlegrass
Fragaria chiloensis	Sand Strawberry	*Muhlenbergia rigens*	Deergrass
Juncus effusus	Pacific Rush		

Fig. 4.11.7 Bio-filtration Plantings

4.12 PRIVATE OPEN SPACE

4.12.1 GUIDELINES: COMMERCIAL PRIVATE OPEN SPACE

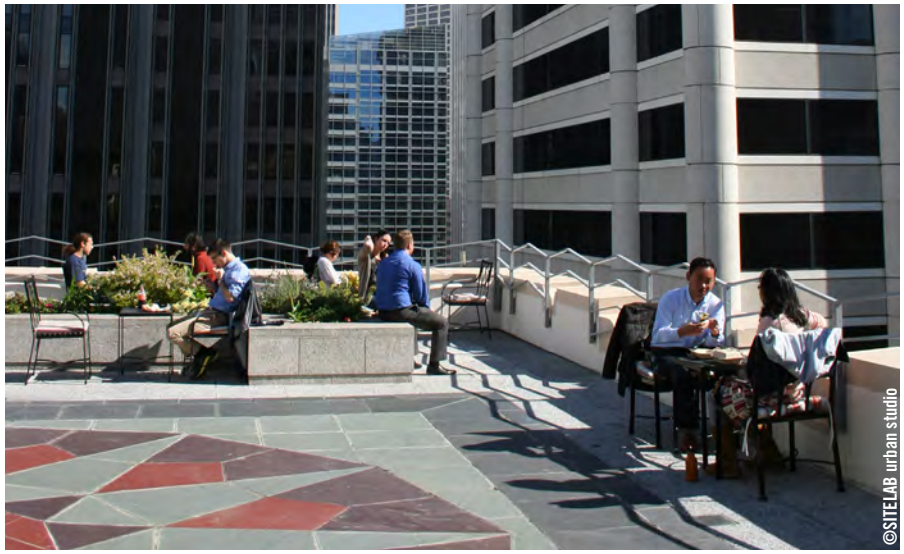
Open Space Distribution: Upper level terraces are encouraged, and encouraged to spatially relate to at-grade public open space, for example looking out over Mary Court East.

Flexibility: Private open space for commercial uses should have multi-use/multi-scaled spaces. Open spaces should provide opportunities for the individual worker to seek a moment of respite as well as ample space for congregating at larger-scale events. Programming that complements, but does not compete with, at-grade open space is encouraged in order to maximize the unique activity in the public realm.

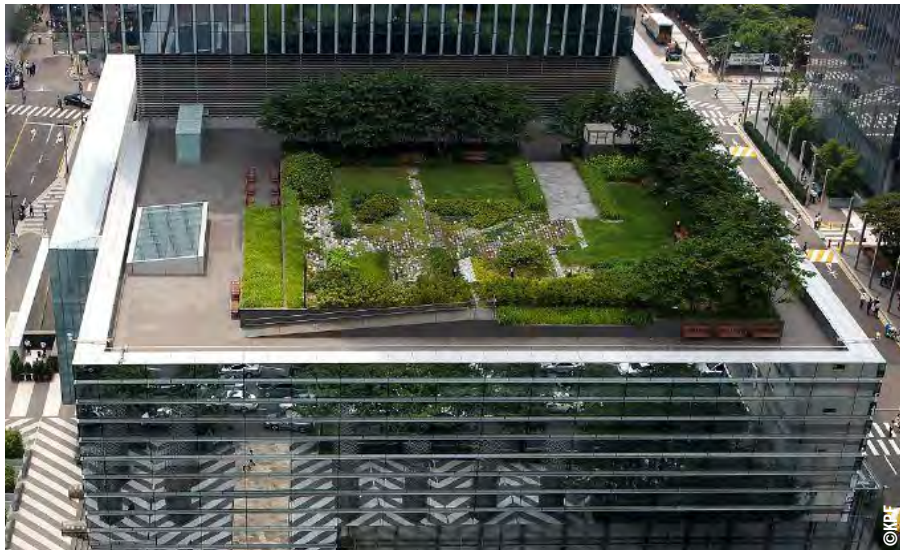
Character: Private open space for commercial use should advance the contemporary, innovative, urban, or industrial qualities of the project. Design and materials are encouraged to be flexible, collaborative, operable, and industrial, as potential frameworks for art intervention, contribution, or plantings.

Plantings: Drought-tolerant species are encouraged.

Refer to *Section 4.3.3 Open Space Overview: Privately Owned Public Open Space (POPOS) - Commercial* for more information.



Rooftop Garden, Sansome Street / San Francisco, CA



Samsung Terrace

Fig. 4.12.1 Private Open Space for Commercial Uses

4.12.2 GUIDELINES: RESIDENTIAL PRIVATE OPEN SPACE

Open Space Distribution: Private open space for residential uses are permitted at-grade, above access ramps, at upper levels, and rooftops. Upper level and rooftop open spaces are encouraged to spatially relate to at-grade public open space, for example looking out over Mary Court.

Flexibility: Private open space for residential uses should provide opportunities for repose, reading, art, gardening, farming, gathering, picnics, outdoor dining, parties, fitness and informal play. Areas of sun, shade, and light enclosure are encouraged to advance day and night usability throughout the seasons. Programming that complements, but does compete with, at-grade open space is encouraged, to maximize the unique activity in the public realm.

Character: Private open space for residential use should advance the contemporary, creative, urban, or personal qualities of the project. Design and materials are encouraged to be flexible, collaborative, operable, and industrial, as potential frameworks for art intervention, contribution, or plantings.

Plantings: Drought-tolerant species are encouraged.

Refer to *Section 4.3.2 Open Space Overview: Usable Open Space - Residential* for more information.

Roof garden / London, UK

Terrace SFMOMA / San Francisco, CA

Fig. 4.12.2 Residential Private Open Space

Fig. 5.0 Chronicle Clocktower / San Francisco, CA

05.

BUILDING FORM + MASSING

5.1 OVERALL BUILDING MASSING

Within a singular massing, a building has many components. At 5M, each building expresses each of these components within a singularly cohesive massing.

5.1.1 OVERALL MASSING

Each building shall express its components, illustrated in Figure 5.1.1a, and relationship to context, while maintaining a cohesive overall massing. Specific information in *Section 6.1 Architectural Design: District-Wide Building Treatment.*

➔ **GROUND FLOOR.** The ground floor, or first floor, has specific design requirements in order to relate to the pedestrian and street. See *Section 5.5 Ground Floor.*

➔ **BASE.** The base refers to the lower portion of the building where bulk controls do not apply. Base height, at which lower tower bulk controls begin, is regulated by floor plate controls; see *Section 5.4 Bulk Controls*. Base height is expressed as the Streetwall.

➔ **STREETWALL.** The Base is visually expressed as the Streetwall. The Streetwall is the experience of the building along the street. The two key elements of the Streetwall are Frontage (how the building Base meets the sidewalk or property line) and Height (how the Base height is experienced on the street), per Figure 5.1.1b. The Streetwall height is often a portion of the full building height. The Streetwall can be established through upper level building setbacks, massing shifts, or changes in facade treatment between the base of the building and the upper body of the building. See *Section 5.3 Base and Streetwall.*

➔ **TOWER COMPLETION.** Tower completion is the uppermost portion, or top 10 percent, of a high-rise building inclusive of lantern where applicable. See also *Section 5.3.9 Tower Completion* and *Section 5.2.1 Height Distribution.*

➔ **LANTERN.** An architectural element that extends the height of the building in a sculptural manner and screens rooftop appurtenances without providing added occupiable area. A lantern may extend from the building facades, thereby matching the footprint of the occupiable roof, and/or may taper or be set within the occupiable roof. For standards related to lanterns, see *Section 5.2.1 Height Distribution.*

➔ **OCCUPIABLE HEIGHT.** Occupiable height indicates the height at the top of the last occupiable floor.

➔ **HEIGHT OF STRUCTURE.** The height of the structure indicates the total height of the building inclusive of any appurtenances, lanterns, or other elements.

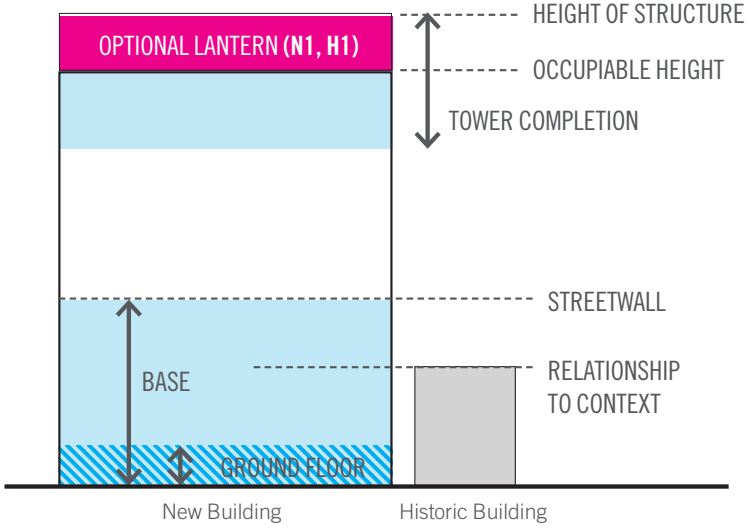


Fig. 5.1.1a Overall Massing Components

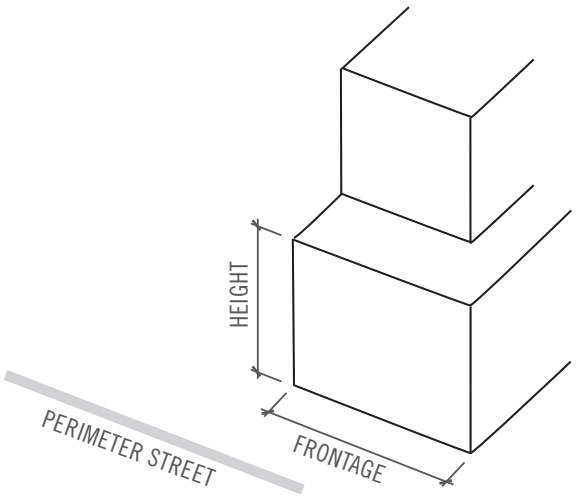


Fig. 5.1.1b Streetwall Components (see *Section 5.3 Streetwall* for specific information)

5.1.2 RELATIONSHIP TO HISTORIC CONTEXT

The design shall respond to the immediately adjacent historic buildings, which may or may not align with the broader context and Streetwall height. A relationship to historic context, illustrated in Figure 5.1.2, can be achieved using various design strategies, including shifts in articulation through change in color, material, pattern of articulation, or module, or by a volumetric shift. Specific zones requiring these design strategies are identified per building in *Section 6.2 Architectural Design: Mid-Rise Residential Tower (M2), Section 6.3 Architectural Design: High-Rise Residential Tower (N1), Section 6.4 Architectural Design: Commercial Tower (H1).*

Base of building aligns with existing structure
NYC College of Nursing / New York, NY

Subtle base façade articulation with material and color change
Example M2 building at 5M / San Francisco, CA

Fig. 5.1.2 Relationship to Historic Context

5.2 BUILDING HEIGHTS

While height is measured and regulated by absolutes, the intention of height controls is to sculpt the city – from the experience of the skyline to the experience on the street.

5.2.1 HEIGHT DISTRIBUTION

Buildings shall not exceed the applicable maximum occupiable height as indicated by Figures 5.2.1a and Table 5.2.1, and as set forth in the Planning Code. Occupiable heights refer to the top of the last occupiable floor of the building.

Per Planning Code, mechanical/elevator overruns and rooftop appurtenances are permitted above the occupiable height limit.Such features are permitted to extend a maximum of 20 additional feet in height, provided that the overruns are non-occupiable. For the purpose of sculpting the skyline, creating height differentiation, and managing larger mechanical/elevator overruns, the N1 and H1 buildings shall be permitted a lantern structure up to the maximum height of structure for each building: 470-feet maximum for the N1 building and 395-feet maximum for the H1 building. See Figure 5.2.1b.

5.2.2 MAXIMUM NUMBER OF TOWERS

No more than two buildings with occupiable heights greater than 200 feet shall be permitted on site.

5.2.3 HEIGHT DIFFERENTIATION

Towers shall be designed to maintain a minimum 25-foot difference in total height of the buildings, inclusive of architectural penthouses or screens that are an integral building feature. Purely mechanical or building core penthouses not included. See Figure 5.2.3.

5.2.1 GUIDELINES: HEIGHT DISTRIBUTION

Consideration should be given to height differentiation between on-site high-rise buildings and those immediately adjacent, including the 340-foot tall Intercontinental Hotel (888 Howard Street).

Height Legend

- 0' - 100'
- 100' - 300'
- 300'+

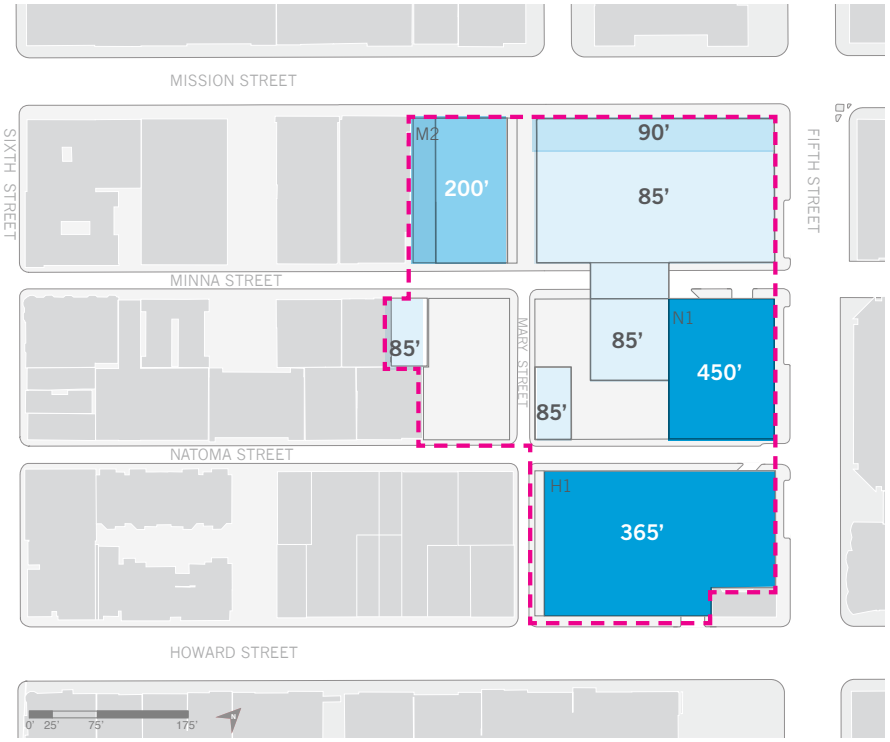


Fig. 5.2.1a Maximum Occupiable Heights

PARCEL	MAXIMUM OCCUPIABLE HEIGHT (ft)	MAXIMUM HEIGHT OF STRUCTURE (ft)
CHRONICLE + EXAMINER	85 / 90 / 85	90
M2	200	220
N1	450	470
CAMELLINE	85	85
DEMPSTER PRINTING	85	85
H1	365	395

Table 5.2.1 Maximum Building Heights

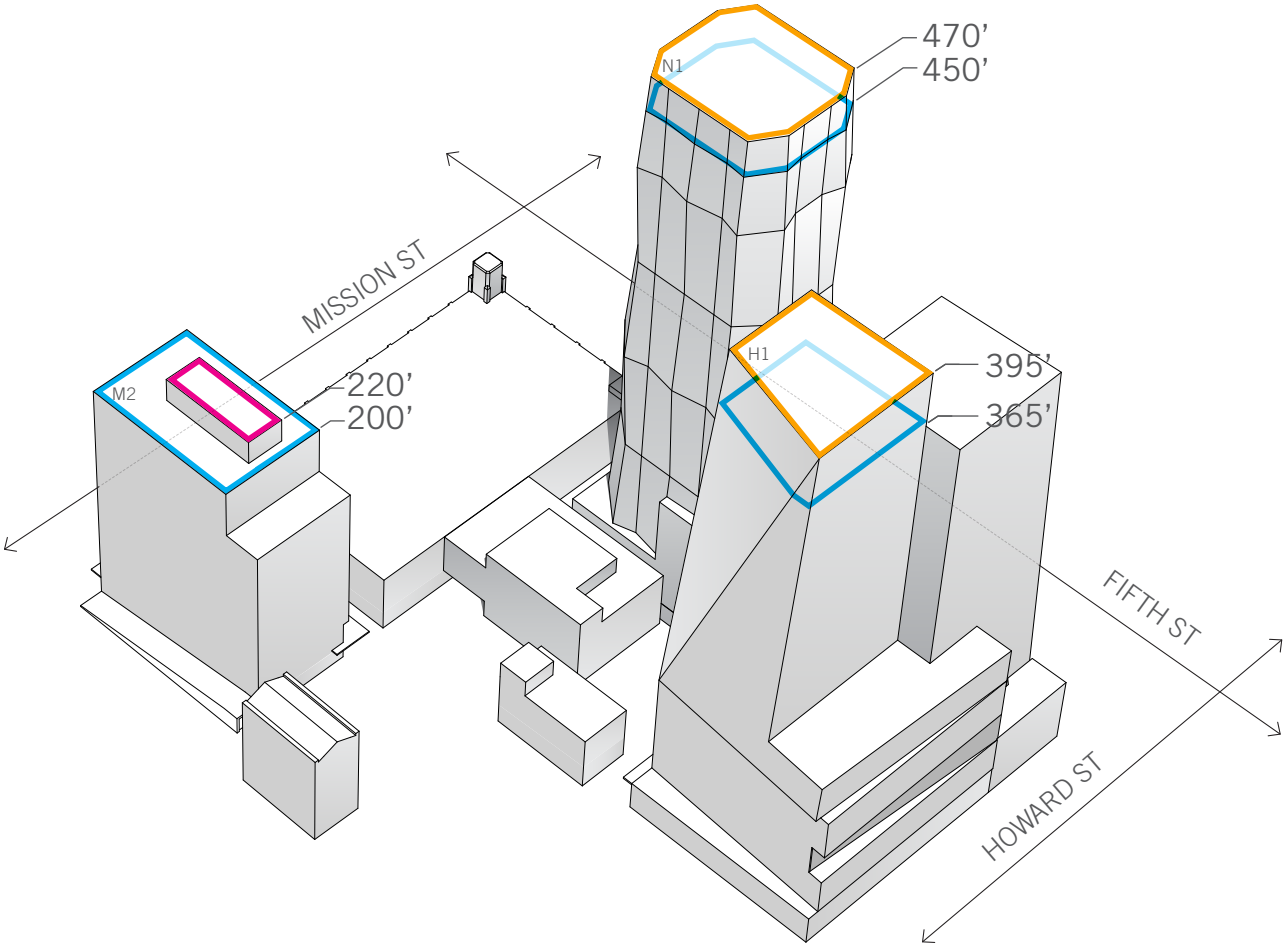
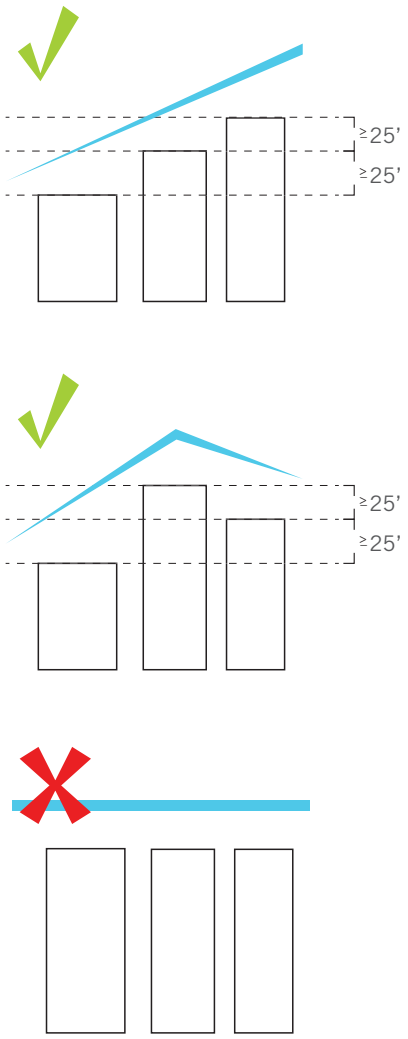


Fig. 5.2.1b Maximum Building Heights (New Construction)

Height Legend

- Occupiable height
- Mechanical/elevator overrun height
- Lantern height



Variety of building heights to maintain visual interest as well as cohesion

Fig. 5.2.3 Height Differentiation

5.3 BASE AND STREETWALL

The massing of the Building Base and its expression through Streetwall Height reinforce the urban context, as experienced on at the pedestrian level. For definitions of Base and Streetwall, see *Section 5.1.1 Overall Building Massing*.

5.3.1 BASE HEIGHTS

Maximum base heights shall conform to requirements shown in Table 5.3.1.

5.3.2 NEW CONSTRUCTION STREETWALL HEIGHT

The streetwall shall be articulated at the base height per Table 5.3.1, using upper level setbacks, cornice lines, recesses in the façade, material change, or other integral design element visible from the street. See *Section 6.7.2 Architectural Design: Existing Structures: Chronicle Upper Level Setbacks*.

PARCEL	MAXIMUM BASE HEIGHT (ft)	ALLOWABLE DEVIATION ABOVE MAXIMUM
M2	103	10%
N1	103	10%
H1	145	0%

Table 5.3.1 Maximum Base Heights

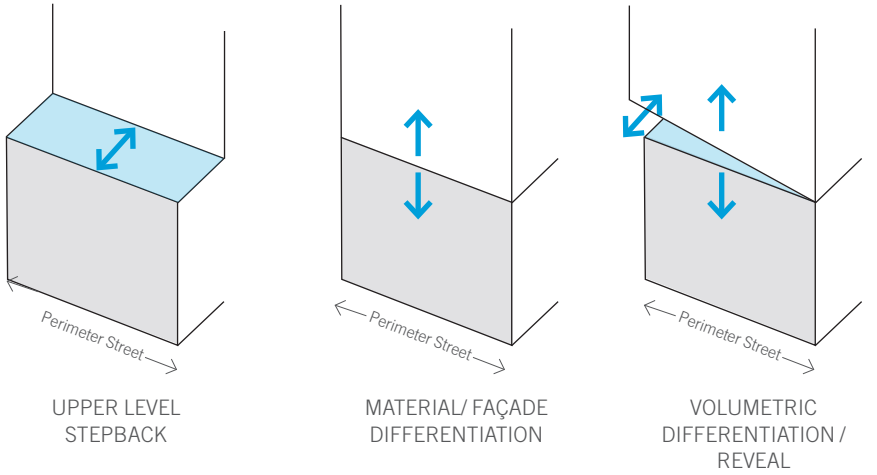


Fig. 5.3.2 Streetwall Articulation: Perimeter Streets

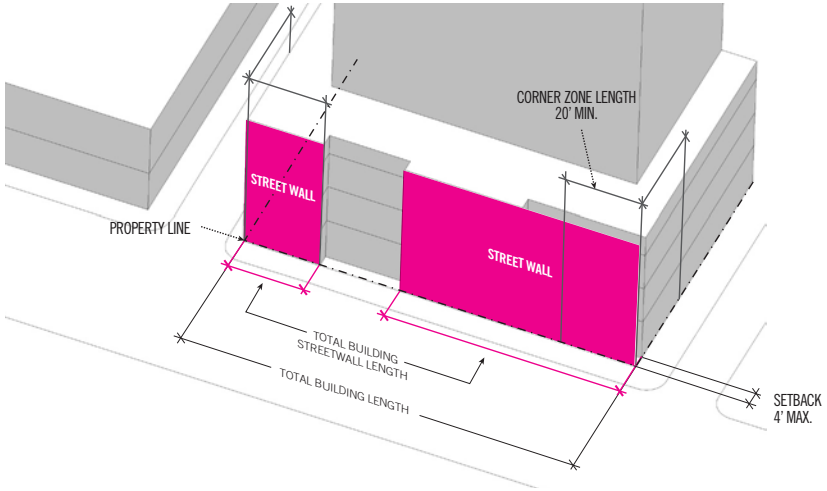


Fig. 5.3.4 Streetwall and Building Setbacks

5.3.3 STREETWALL LENGTH

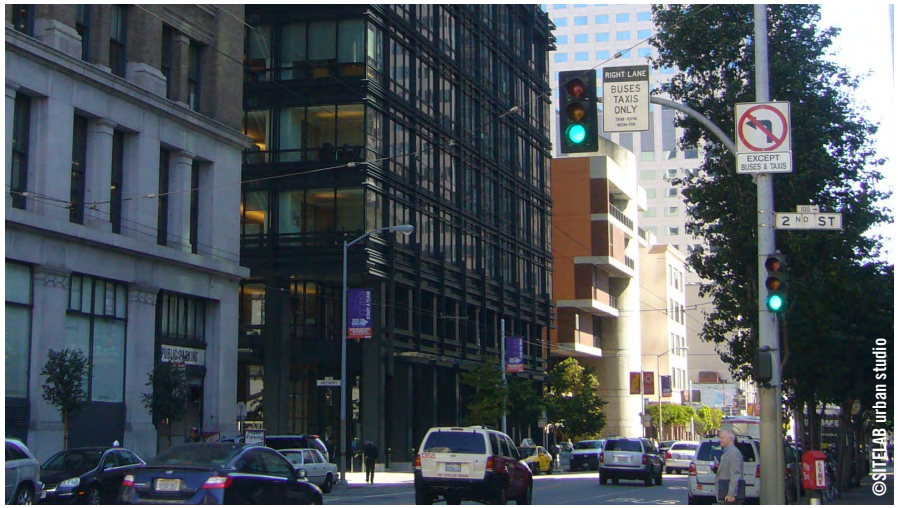
A minimum 60 percent of block length frontage is required for streetwalls on Mission Street, Fifth Street, and Howard Street and shall extend to the Streetwall Height per Figure 5.3.4. Measurements are based on linear street to street dimensions, as measured at ground level. For more detail on entries, see *Section 5.5 Ground Floor*.

5.3.4 BUILDING SETBACKS

The existing Chronicle building creates an important pre-existing streetwall at the property line, reinforced by smaller buildings adjacent to the site on Fifth and Howard Streets. New buildings shall maintain the continuity of this streetwall. Setbacks on Mission, Fifth, and Howard Streets shall not exceed 4 feet from property line, as shown in Figure 5.3.4. No building setbacks are required within the project site.

5.3.5 STREETWALL CORNERS

In order to create the strong building corners that are typically found in downtown, a 100 percent streetwall for a minimum of 20 feet, in plan, from the corner of the building and a minimum of 50 feet high is required within corner zones, as shown in Figure 5.3.4. Exceptions are permitted for rounded or chamfered corners necessary to manage wind conditions at the ground level.



Streetwall articulation through introducing stepback in massing

Breaking the building volume creates perceivable streetwall

Fig. 5.3.3 Streetwall Examples

5.4 BULK CONTROLS

Seen together, high-rise buildings at 5M should create a well-crafted urban form that positively contributes to the overall experience of the San Francisco skyline.

5.4.1 BULK CONTROLS

Parcels indicated as "X" and "S" shall comply with the applicable Planning Code bulk controls as reflected in Figure 5.4.1. Permitted exceptions are identified for parcels zoned as 365-X, defined by *Section 5.4.2*.

5.4.2 365-X TOWER CONTROLS

The 5th Generation commercial tower, described in *Section 1.6 5M Project Vision: Generation Five at 5M*, must do two things: (1) Create large, connected interior floorplates to respond to growing market demand and (2) Contribute to the evolving urban form of San Francisco's skyline.

To meet both goals, the following bulk standards balance interior expansiveness with controls to break down the perception of bulk on the skyline by creating a two-tower form.

The following standards shall regulate parcels zoned 365-X:

➔ **TWO-TOWER FLOORPLATES.** Above the base, the building shall be designed to be perceived as two towers, connected internally. Each of the expressed towers shall comply with Table 5.4.2. The Minimum Offset must be maintained on both sides where the two "expressed" floorplates meet.

➔ **TWO-TOWER HEIGHT DIFFERENCE.** The two-tower building shall maintain a minimum height difference of 40 feet between expressed towers, measured as the difference of each expressed tower's total height inclusive of architectural elements. See Figure 5.4.2a.

➔ **TWO-TOWER REVEAL.** On the South side facing Howard, where the two volumes of the building meet, the buildings shall include a vertical recess/reveal of a minimum dimension of 8 feet by 10 feet in plan. See Figure 5.4.2a.

➔ **TWO-TOWER DIFFERENTIATION.** The two volumes within the two-tower building shall have different architectural treatments, differentiated through the use of either material, color, vertical articulation elements or spacing. See Figure 5.4.2a. For more information, refer to *Section 6.4 Architectural Design: Commercial Tower (H1)*.

Methodology for determining lower tower heights follows the Bulk Limits per Table 5.4.2 .

Fig. 5.4.1 Maximum Occupiable Height and Bulk Zones

Height and Bulk Legend

- X-District per Planning Code
- 365-X per Section 5.4.2
- S-District per Planning Code

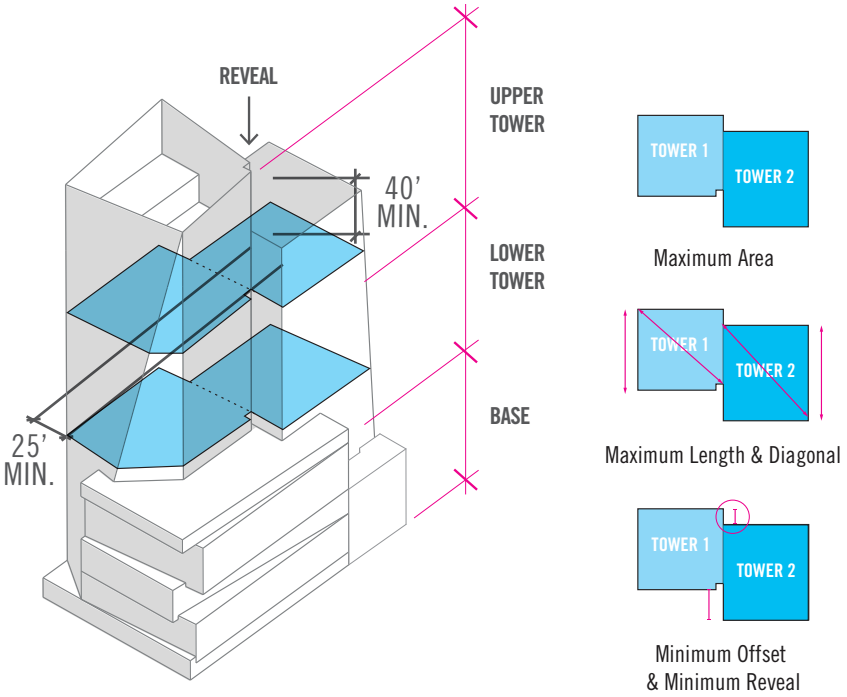


Fig. 5.4.2a Two-Tower Control Dimensions

BUILDING ELEMENT	MAX. LENGTH PER TOWER (FT)	MAX. DIAGONAL PER TOWER (FT)	MAX. AVG. FLOOR AREA (GSF)	MAX. FLOOR AREA (GSF) (TOWERS 1+2)	MIN. DIMENSION PER OFFSET (FT)	TOTAL OFFSET (FT) (OFFSET 1+2)
LOWER TOWER (each)	135	190	17,000	22,000	25	60
UPPER TOWER (each)	120	160	12,000	22,000	25	60

Table 5.4.2 Two-Tower Control Dimensions

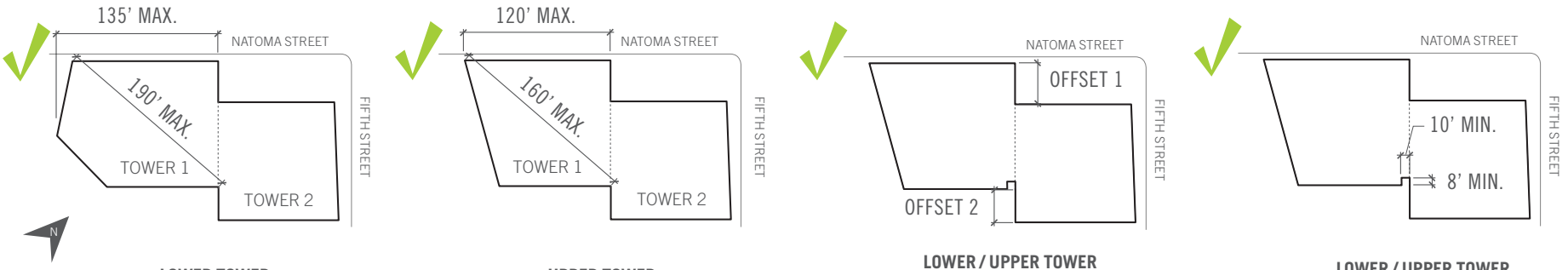


Fig. 5.4.2b Two-Tower Floorplate Examples

5.4.3 TOWER SEPARATION

Tower Separation provides space for views between tall buildings in areas of density. Towers are subject to the following standards:

➔ **MINIMUM SEPARATION.** No less than 75 feet distance shall be between subject buildings above 145 feet per Figure 5.4.3a. Permitted exceptions: Two buildings may reduce this distance to (a) a minimum separation of 55 feet between two single points in plan of a building facade and (b) a minimum separation of 65 feet between a single point in plan and a building face. Figure 5.4.4b illustrates these exceptions.

➔ **FIFTH STREET SEPARATION.** No less than 100 feet clear between subject buildings at Fifth Street property line.

➔ **AVERAGE SEPARATION.** No less than 75 feet average distance between subject buildings measured at 10 foot intervals (in plan) along the two most prominent facades.

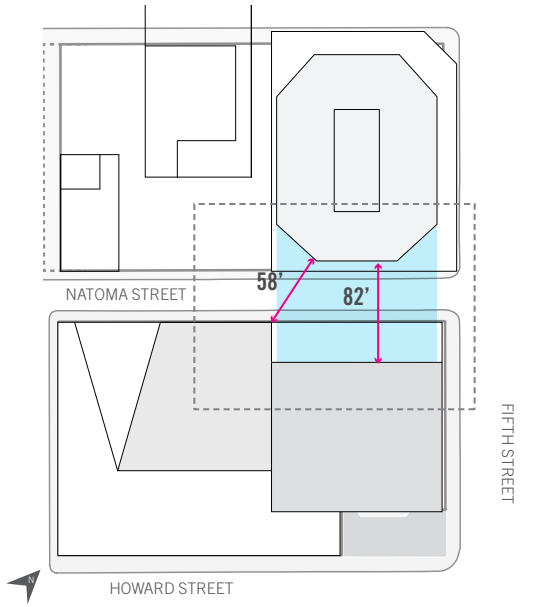


Fig. 5.4.3a Tower Separation Scenario

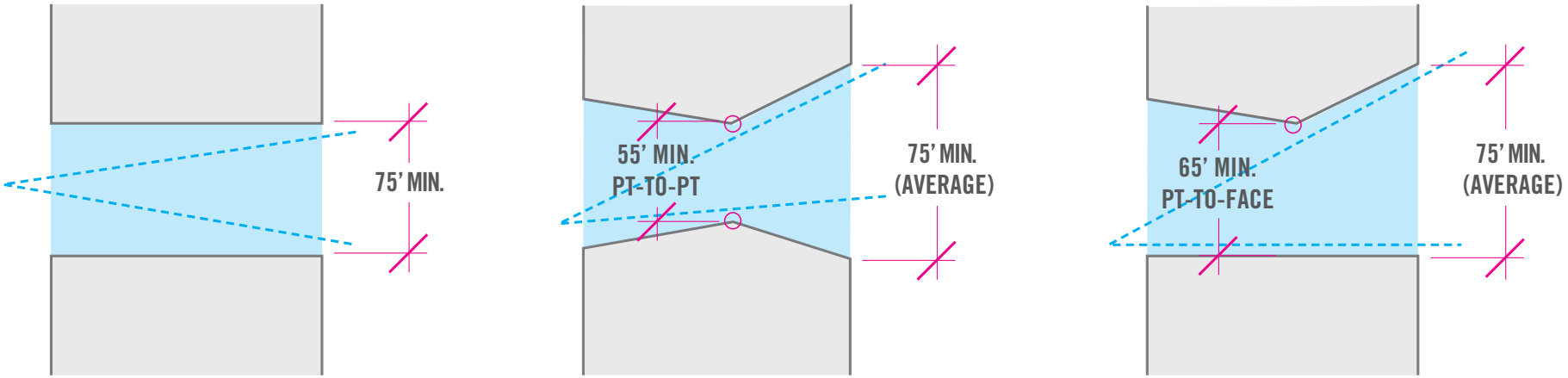


Fig. 5.4.3b Tower Separation Requirements (plan view)

5.4.4 TOWER COMPLETION

Every new high-rise building adds to the San Francisco skyline. As such, the upper portions of a tower must be carefully designed in the context of nearby tall buildings, distant views, and relationship to the sky. The effect shall be to create a harmonious and compelling addition to the San Francisco skyline.

The upper 10 percent of any high-rise building shall not be explicitly delineated from the body of the tower as a "cap" to the building. Upper portion treatments that extend the vertical expression of the overall building may include a change of the module of articulation to provide a sense of dissolving form or an extension of articulation beyond the solid mass of the tower. See Figures 5.4.4a and 5.4.4b.

5.4.4 GUIDELINES: TOWER COMPLETION

The towers should express a continuity of the overall building skin, to emphasize verticality. Subtle differentiation of façade articulation in the tower completion zone is encouraged to fade or blend the building with the sky, while still masking rooftop structures, equipment, or utilities.

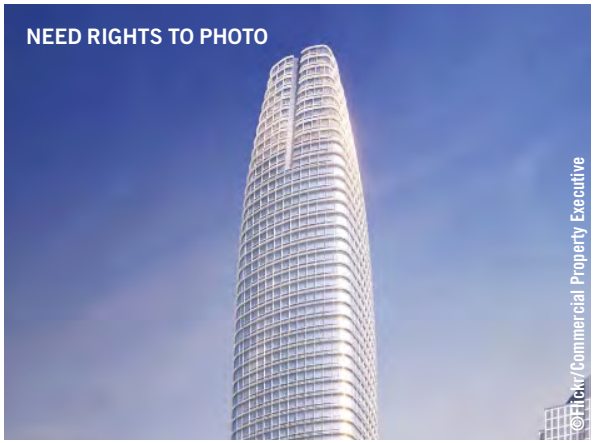
Strategies to create the appearance of narrowing or dissolving may include the tapering or faceting of the tower form, the addition of a lantern or permeable architectural element above the last occupiable floor, or sloping the parapet or lantern upper edge.

5.4.5 GUIDELINES: BUILDING CORES

Elevator cores should be incorporated into the overall architectural form of the building – either as a unique but contributory element to the overall massing or incorporated within the massing and consistent with overall architectural treatment.

Wheelock Square / Shanghai
Extended façade face

Hudson Yards / New York, NY
Narrowing tower form



Transbay Tower / San Francisco
Dissolving articulation

Fig. 5.4.4a Tower Completion Strategy Types

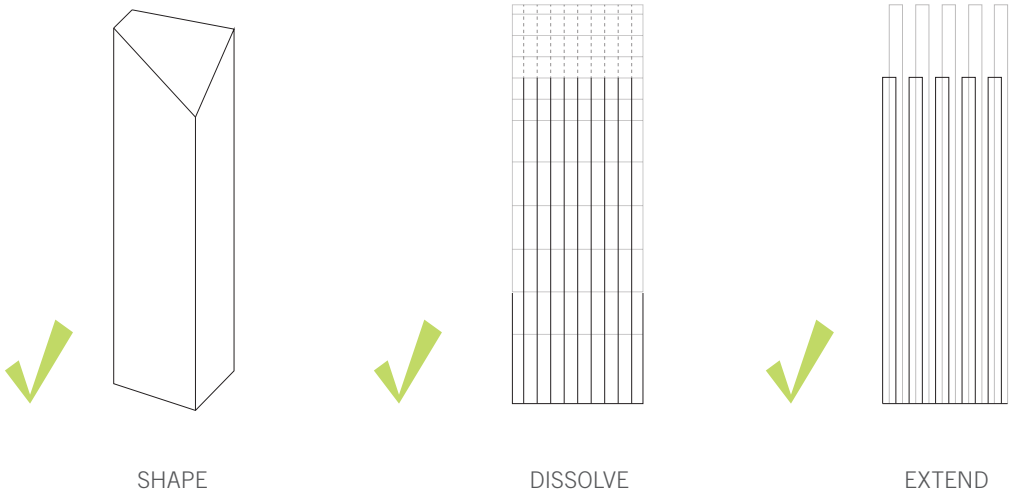


Fig. 5.4.4b Tower Completion Strategy Examples

5.5 GROUND FLOOR

The 5M Project is anchored by an active ground plane made rich by an expanded set of permitted active uses, a focus on transparency, creative storefronts, and connected interior and exterior spaces that utilize the intersecting streets.

5.5.1 ACTIVE GROUND FLOOR USES

➔ **PERMITTED USES** In addition to ground floor uses otherwise permitted within the C-3-S District, any retail, office, education or cultural use is also permitted at the ground floor level facing a major street (Fifth, Mission or Howard Streets) if: (i) the use does not require non-transparent walls facing the street, and (ii) no less than 60 percent of the linear street-facing frontages of each such use shall be fenestrated with a minimum of 70 percent transparency, and (iii) for office uses, internal partitions shall be set back from street frontages at least 20 feet from street-facing windows. The areas of glazing which count toward the transparency requirement must be unobstructed by solid window coverings, window signs, or other features or characteristics that impede visibility from the public realm into the interior of the ground floor of the building. See permissible examples in Figure 5.5.1b. Examples of active ground floor uses include, but are not limited to: locally serving retail and services; community rooms and kitchens; recreational and arts facilities, collaborative workspaces, workshops, education, markets, cafes, and restaurants.

➔ **MINIMUM ACTIVE GROUND FLOOR** For new construction in the District, at least 70 percent of the linear frontage in the Primary Active Frontage Zone, as illustrated in Figure 5.5.1a, shall contain a permitted active ground floor use. At least 50 percent of the linear frontage in the Secondary Active Frontage Zone shall contain a permitted active ground floor use.

➔ **PRIORITY RETAIL** Except as provided in the 5M SUD, at least 25 percent of the linear frontage of the ground floor shall contain "active commercial uses" as defined by Section 145.4(c), excluding frontage dedicated to parking and loading access, building egress, and mechanical and core systems. The active commercial uses required by this section shall be provided within the first 25 feet of building depth.

Fig. 5.5.1a Active Frontages

Active Frontages Legend

- Primary Active Frontage Zones
- Secondary Active Frontage Zones

Folsom Street / San Francisco, CA

SF Jazz Center / San Francisco, CA

300 Ivy Street / San Francisco, CA

Signage incorporated into glass facades that maintain overall transparency

Market Street / San Francisco, CA

Fig. 5.5.1b Active Ground Floor

5.5.2 GROUND FLOOR MODULATION

New construction buildings, with facade lengths greater than 100 feet along a side, shall use modulation and facade articulation, such as a bay structure or division of storefronts, to create a finer grain streetwall.

5.5.3 GROUND FLOOR HEIGHTS

Ground level floors shall have a minimum floor-to-floor height of 15 feet.

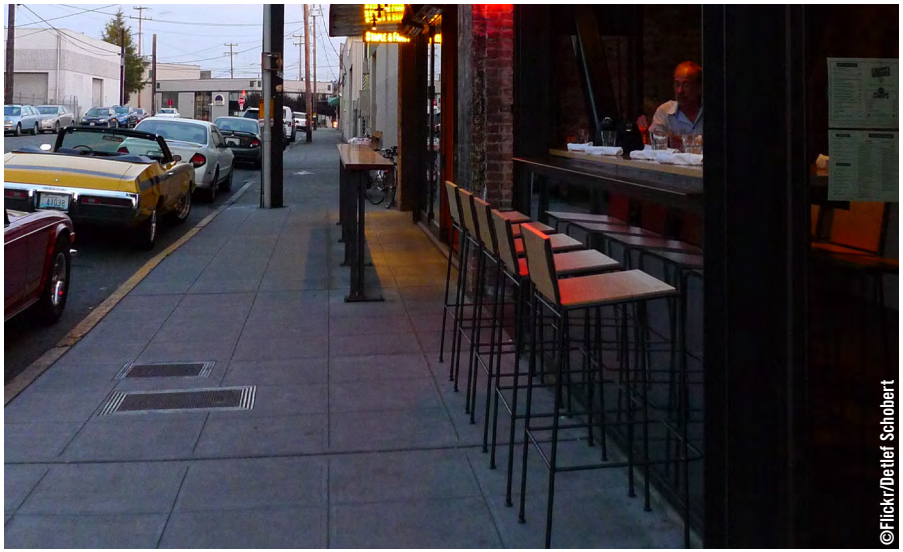
5.5.4 GROUND FLOOR ARTICULATION

To establish a pedestrian-focused environment and engaging street frontage, the ground floor of buildings shall have a differentiated architectural expression. This may include, but is not limited to, architectural elements such as increased transparency, projections denoting entries, shifts in color and scale of modulation, and increased material depth and texture of facade elements. See Figure 5.5.4.

5.5.4 GUIDELINES: GROUND FLOOR ARTICULATION

The pedestrian level is encouraged to embed seating and opportunities for art in pedestrian areas.

Embedded Seating: Hayes Street / San Francisco, CA



Embedded Seating: The Walrus and Carpenter / Seattle, WA

Fig. 5.5.4 Ground Floor Articulation

5.5.5 BUILDING ENTRIES

For new construction, a minimum of two entries (active ground floor or building entrances) shall be provided on each building face, except along Minna Street. All active ground floor entrances within new construction buildings shall meet the sidewalk at grade; raised or sunken entryways are prohibited. For additional standards, within café zones, such as M2 along North Mary Street, see *Section 4.8.1 Open Space + Streetscape: North Mary Street: Ground Floor Activation.*

Entries shall not recess beyond that permitted in *Section 5.3.3 Streetwall Length;* examples of permissible and non-permissible entries shown in *Section 5.5.7 Openings and Entries* and *Section 5.5.8 Interiors and Lobbies.*

5.5.5 GUIDELINES: BUILDING ENTRIES

Primary building entries should be located within a range of 30 feet of the locations indicated in Figure 5.5.5 to activate adjacent streets and open spaces.

Lobbies are encouraged to be public and/or programmed spaces. Areas separated for private building uses should be set back and minimized to maximize public access.

5.5.6 GUIDELINES: PEDESTRIAN CIRCULATION

The pedestrian network should be accessible, inviting, and connect to the circulation outside of the site, as in Figure 4.2 Ground Plane Uses. More than spaces of passage, the circulation should encourage moments of pause and intersection with design elements (ex. seating, ledges, artwork) without conflicting with other vehicular, bicycle, or loading circulation.

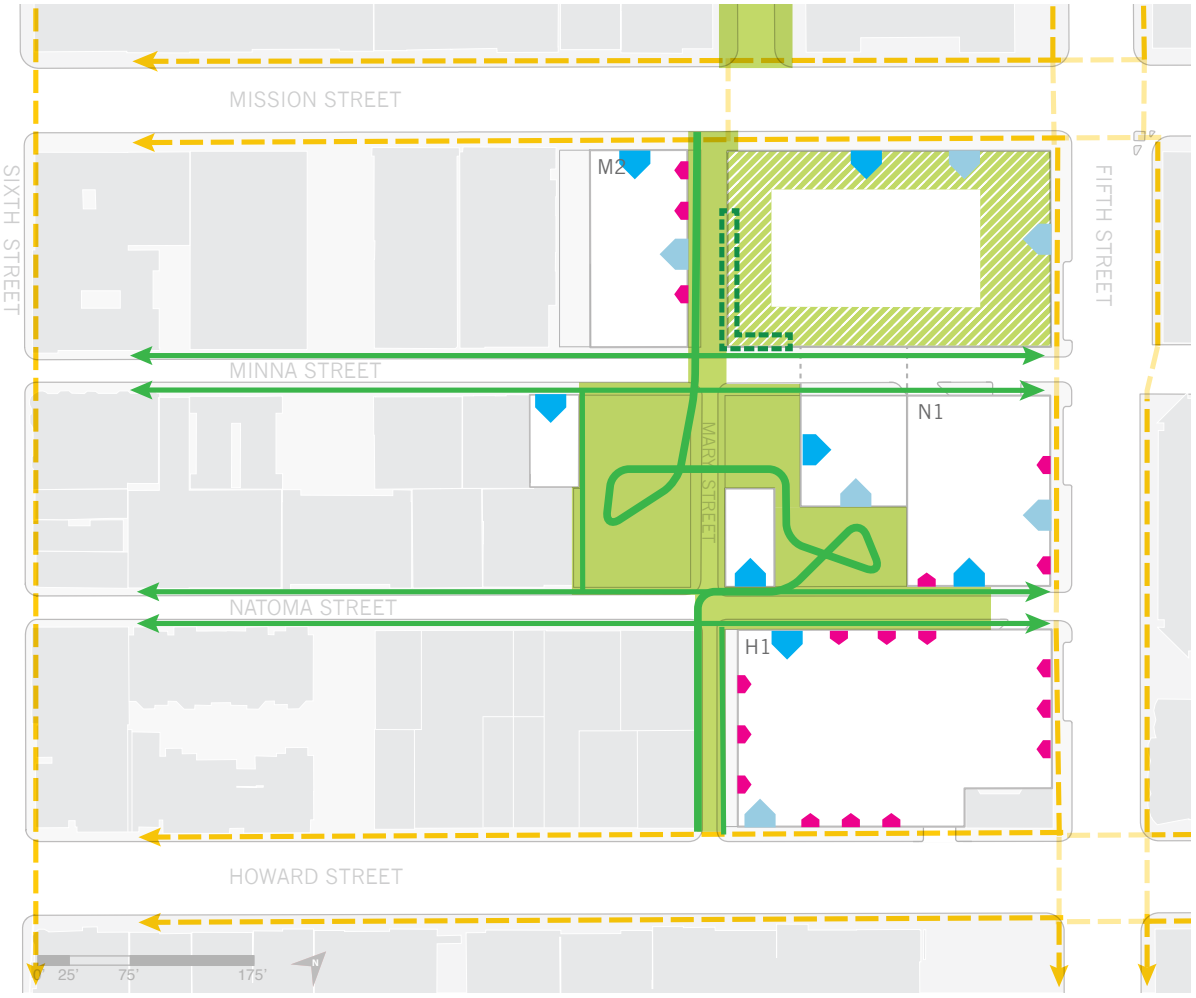


Fig. 5.5.5 Pedestrian Circulation and Sample Building Entries Plan

Pedestrian Circulation Legend

- Major Streets (at sidewalk)
- Major Streets (at crosswalk)
- Alley Circulation
- Open Space (ground/rooftop)
- Recommended Building Entrance (Primary)
- Recommended Building Entrance (Secondary)
- Public Rooftop Entrance Zone
- Active Ground Floor Entrance

5.5.7 PEDESTRIAN OPENINGS AND ENTRIES

Maximum inset depth for openings and entries shall be no more than 3 feet from the dominant façade plane. Openings/entries wider than 8 feet are permitted to have maximum inset depth of up to 5 feet from the dominant façade plane. Compliant and non-compliant scenarios shown in Figure 5.5.7a.

5.5.7 GUIDELINES: PEDESTRIAN OPENINGS AND ENTRIES

Seamless Openings: Openings are encouraged to be coplanar with, or minimally setback from, façades. Larger openings, greater than 6 feet wide x 8 feet tall, are encouraged to support a more seamless relationship between inside and outside.

Openings should have contemporary, innovative, and industrial qualities. Industrial-style doors such as roll-up doors, sliding doors, hangar doors, canopy hangar doors, and four-fold doors are encouraged. Large doors are encouraged to be paired with standard openings, either separate or combined, to promote flexibility and address changing use, climate, and light conditions. See Figure 5.5.7b.

5.5.8 GUIDELINES: INTERIORS AND LOBBIES

Interior entries to active ground floor uses from interior lobby areas should not replace active ground floor entries that open directly to the public realm (provided the uses are located at the building perimeter). See Figure 5.5.8.

Design Integration: Interior layouts, design strategies, and materials are encouraged to combine multiple uses (i.e. office and fabrication areas or cafe and bike storage).

Private Access: Lobbies are encouraged to have any secure, private access areas located toward building interiors in order to enable public/semi-private areas or small retail uses closer to their exteriors. Refer to *Section 5.5.7 Pedestrian Openings and Entries* for related standards.

Interior Permeability: For new construction, private areas of lobbies are encouraged to have visual transparency with adjacent active ground plane uses, subject to fire and building code requirements. Solid door types will not count towards meeting the transparency percentage requirements. Interior walls between active ground floor uses and/or lobbies are encouraged to design for physical and/or visual permeability, such as additional interior entries, glazing, or transparency, between separate users. Such interior design strategies should increase physical and visual communication among distinct spaces, and allow greater passage of daylight through the ground floor.

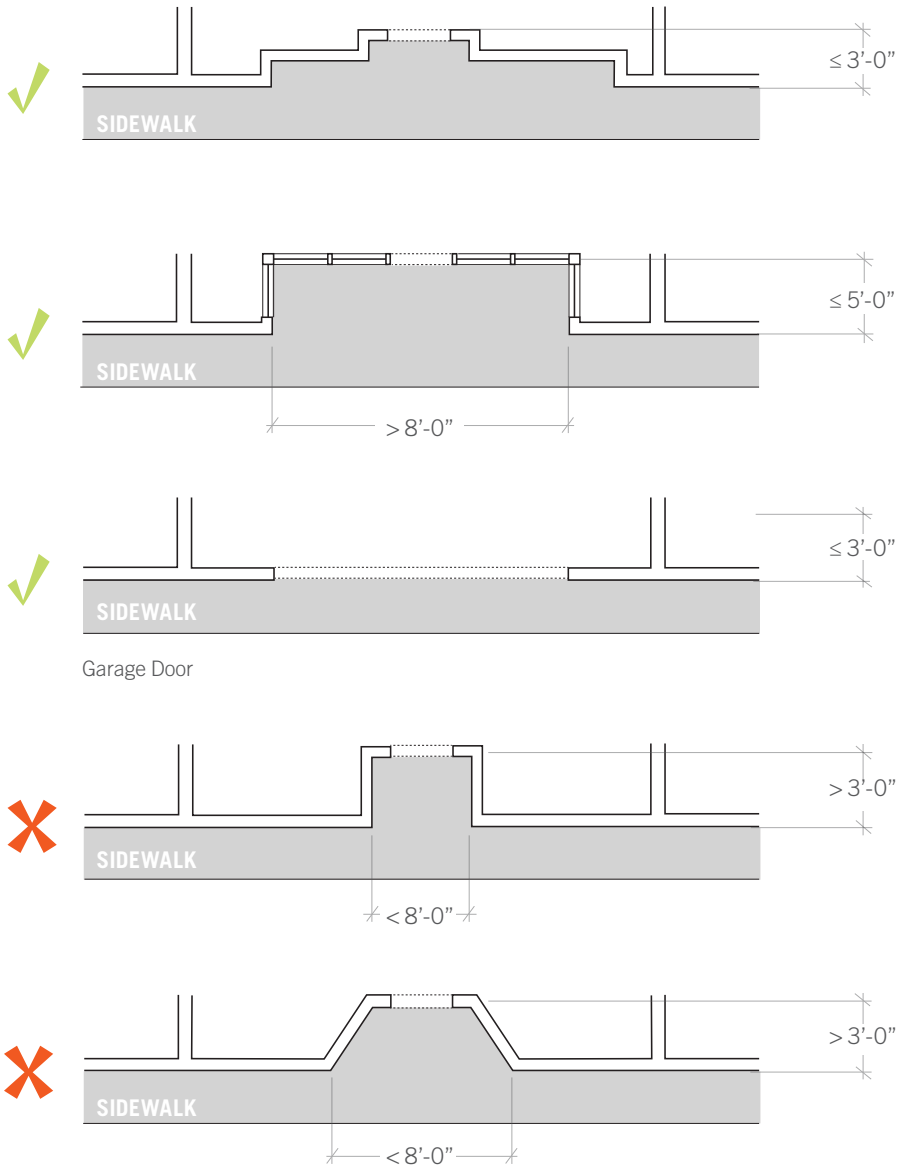


Fig. 5.5.7a Setback Scenarios

Pivoting Wall Panels
Storefront for Art and Architecture / New York, NY

Garage Door Retail Spaces
Blue Bottle Coffee / San Francisco, CA

Fold-up Doors
Wyckoff Exchange / Brooklyn, NY

Fig. 5.5.7b Openings and Entries: Contemporary and Industrial Quality

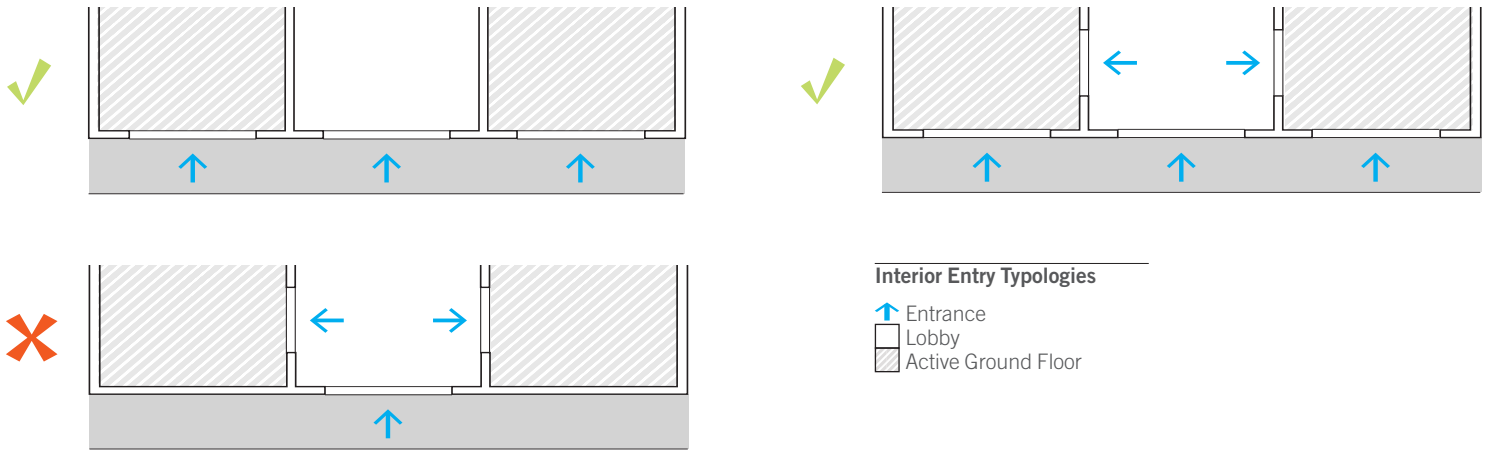


Fig. 5.5.8 Interiors and Lobbies: Interior Entry Plan Scenarios

Fig. 6.0 Architectural Detail / Santa Monica, CA

06.

ARCHITECTURAL DESIGN

6.1 DISTRICT-WIDE BUILDING TREATMENT

Building treatment should respond to the context, creatively reinterpreting the San Francisco and SoMa architectural tradition, with consideration to environmental performance, proportional elegance, and identity on the skyline.

6.1.1 OVERALL BUILDING ARTICULATION

The articulation for all buildings in the district shall be read cohesively. Building articulation within the district shall express the existing SoMa context, including texture, materiality, colors, and relationships to existing surrounding building heights and relate to the massing components defined in *Section 5.1.1 Building Form + Massing: Overall Building Massing*.

6.1.2 OVERALL COLOR AND MATERIALITY

Use of synthetic stucco, such as Dryvit, is not permitted.

6.1.3 GLASS

Glass shall not have a shading coefficient beyond what is needed for energy performance. MEP consultant should advise on criteria for glass-shading coefficients.

6.1.1 GUIDELINES: OVERALL BUILDING ARTICULATION

Façade character: Façades should have modulation and articulation to create visual interest and contemporary architectural character. For taller buildings, dominant vertical articulation is preferred, see *Sections 6.3 High-Rise Residential Tower (N1)* and *6.5 High-Rise Commercial Tower (H1)*.

All buildings are encouraged to respond to surrounding features, such as building heights, streetwalls, and material character. Existing buildings on the site and adjacent—the Chronicle, Dempster Printing Building and 198 5th Street—provide datums and materiality cues that the project buildings should integrate.

Environmental façades: Façades with southern and western exposure are encouraged to include passive solar shading devices, including louvers, sun shades, brise soleil, double skins, and fins, to balance solar access with heat gain control. Building façades are encouraged to include wind-baffling measures where necessary to address wind conditions at the ground level. Façades that enhance internal daylighting are encouraged.

Transparency: A balance of transparency and façade articulation is encouraged. Art installations, graphic patterning, or material textures are encouraged for façade articulation on opaque areas, such as building cores and service areas.

6.1.2 GUIDELINES: OVERALL COLOR AND MATERIALITY

Building façade materials should advance the contemporary, innovative, industrial qualities of the project. Materials and colors should take into account adjacent historic structures in order to be distinct from, but compatible with those structures. Materials should be related to the façade strategy and express a clear hierarchy; single buildings may use many different materials intentionally to support massing, reduce bulk perception, or enable sustainable practices.

The use of color for building treatments is permitted to advance the project's dynamic spaces. Color is encouraged to relate to industrial SoMa and San Francisco's context of natural elements, such as ocean water or rust. The colors of the entire district should express an overall balance of warm and cool colors, and avoid colors appearing as identical across buildings. The colors should also promote the bright colors described in the San Francisco Urban Design Element. See Figure 6.1.2 Guidelines for a district-wide color palette. For information specific to each building, see *Sections 6.4 - 6.7*.

Structure/façade systems should use quality, durable materials, including pre-cast or cast-in-place concrete, steel, aluminum, copper, wood, wood-laminated beams, masonry panels, terra cotta panels, ceramic panels, and glass. Roof materials should minimize heat-island effect. To prevent glare, large uninterrupted expanses of highly-reflective materials, such as shiny polished metal cladding, should be avoided.

6.1.3 GUIDELINES: GLASS

Energy performance may be achieved through glass shading or glass performance, or both.

Colored glass is encouraged for decorative features such as louvers, fins, or other façade treatments not related to view or enclosure. The quality and color of glass should be considered in coordination within the site context and color palette.

Fig. 6.1.2 District Color Palette Examples

6.2 MID-RISE RESIDENTIAL TOWER (M2)

The M2 residential building is a key point of transition from the downtown context to Western SoMa, and as such, should emphasize the qualities of both areas with a focus on the human scale. The building should express a finer grain, through the texture and rhythm of the architectural treatment.

6.2.1 VOLUMETRIC DIFFERENTIATION

The building volume shall be a single volume or stacked set of volumes divided horizontally. Volumetric differentiation within this building is permitted per the range in Figure 6.2.1, and shall maintain compliance with the Height and Bulk requirements per Chapter 5. For more information see *Section 6.1.1 Overall Building Articulation*.

6.2.2 FAÇADE ARTICULATION

The facade articulation shall express a fine grain, through pattern and/or texture. The façade treatment shall be primarily vertical in orientation, either continuous building-height vertical elements or a rhythm of vertical elements, within the range illustrated in Figure 6.2.2b.

6.2.3 RELATIONSHIP TO HISTORIC CONTEXT

Building design shall relate to the Chronicle Building and Mint Mall (953 Mission Street) per Figure 6.2.3. Refer to *Section 5.1.2 Building Form + Massing: Overall Building Massing: Relationship to Historic Context*.

6.2.2 GUIDELINES: FAÇADE ARTICULATION

The building volume should read as cohesive whole. Vertical articulation using wider linear panels that express solidity and texture are encouraged, such as brick, textured concrete panels, or similar material, recommended at 6" to 3'-0" in width. These elements should express the inherent qualities of the material, such as the texture of terra cotta or the perforation of metal, in order to create dimensionality and visual interest.

6.2.4 GUIDELINES: COLOR AND MATERIALITY

The building should use colors related to natural and local materials, such as soil, sand, stone, or rust. The overall building color palette should appear complementary and cohesive and take into account adjacent historic buildings.

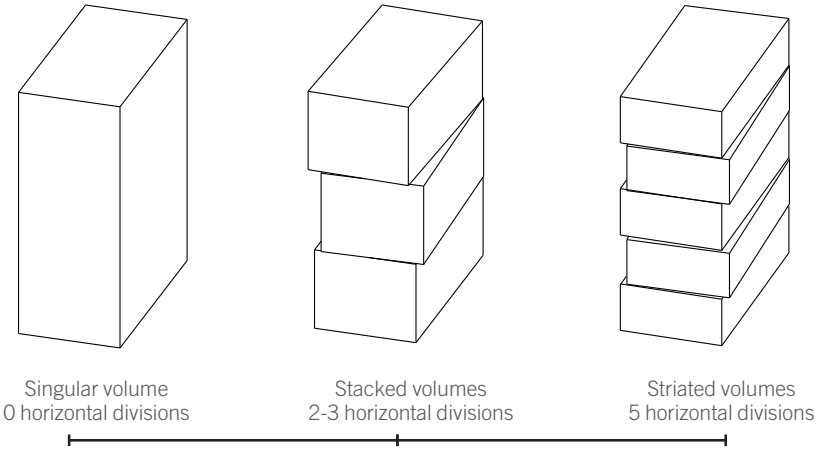


Fig. 6.2.1 M2 Volumetric Differentiation: Examples of the range

Parkway Gate / Manchester, UK

5M M2 Building Studies

Fig. 6.2.2a M2 Façade Articulation: Examples of fine grain treatment

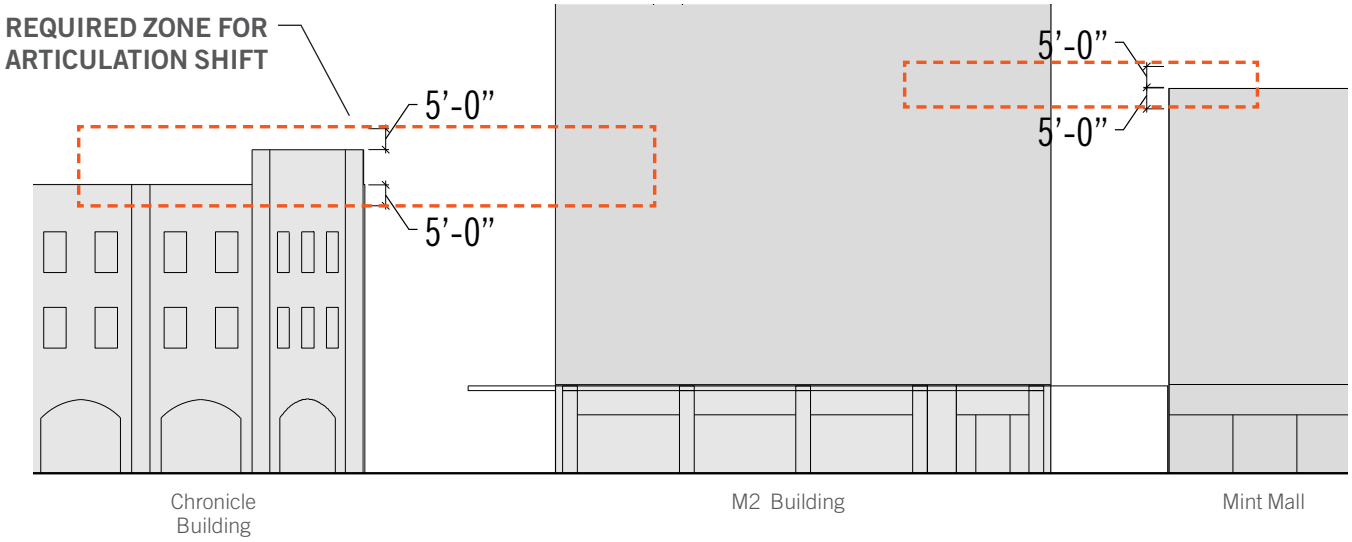


Fig. 6.2.3 M2 Relationship to Historic Context

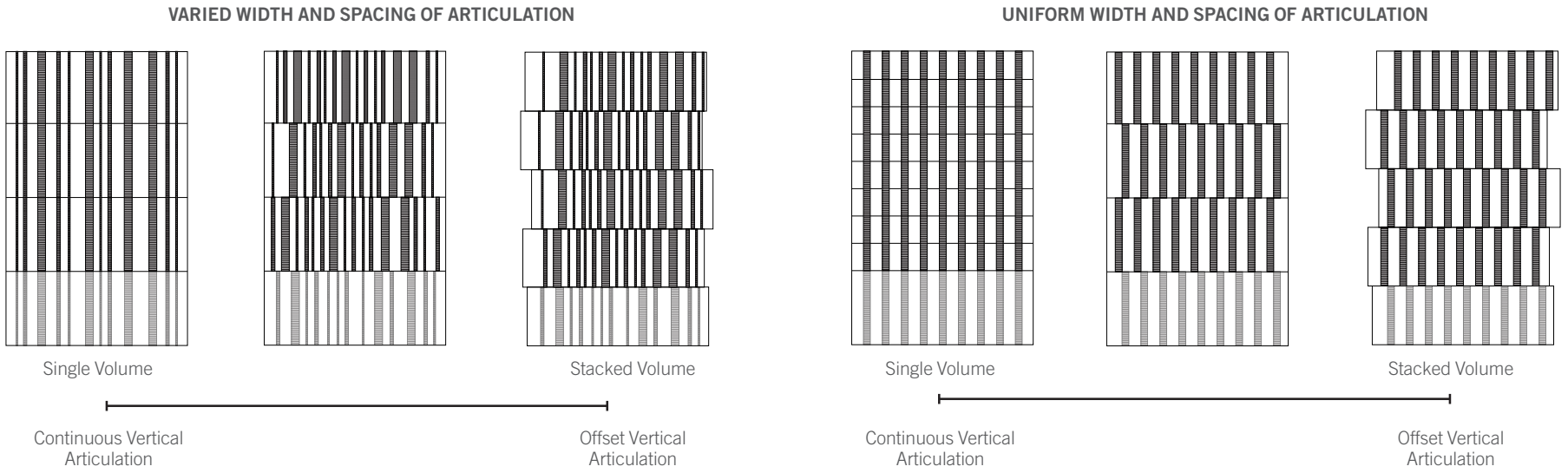


Fig. 6.2.2b M2 Façade Articulation: Examples of the range

6.3 HIGH-RISE RESIDENTIAL TOWER (N1)

The N1 building is designed with efficient residential floorplates with a strongly integrated base that reinforces the streetwall.

6.3.1 VOLUMETRIC DIFFERENTIATION

N1 shall be expressed as a single vertical volume or two complementary interlocked volumes. If a single volume, the building shall include modulation per Figure 6.3.1. The modulation shall appear continuous and consistent on the volume with curvilinear or faceted moves.

The base shall be designed to read as a volume separate from the tower, to relate to the scale of the streetwall. The volume of the base shall be read as solid and heavy, contrasted with the volume of the tower.

6.3.2 FAÇADE ARTICULATION

The tower volumes shall express a more residential scale. The façade shall emphasize a fine grain pattern that relates to the scale of one to two floor heights (approximately 10 feet to 20 feet).

6.3.3 RELATIONSHIP TO HISTORIC CONTEXT

Building shall relate to the Chronicle building per Figure 6.3.3. Refer to *Section 5.1.6 Building Form + Massing: Overall Building Massing: Relationship to Historic Context.*

6.3.2 GUIDELINES: FAÇADE ARTICULATION

At the building base, the facade should relate to SoMa texture and materiality, and the pedestrian scale, as illustrated in Figure 6.5.2b. A distinctive building base, contrasted with the lightness of the tower, is encouraged.

If tower is made up of two different volumes, no modulation is required, as illustrated in Figure 6.3.1.

6.3.4 GUIDELINES: COLOR AND MATERIALITY

Differentiation of the tower and base with color is encouraged. The building should use a predominately neutral, light color palette on the tower portion. The palette should relate to the color of the Chronicle building but not replicate its exact color.The overall building color palette should appear complementary and cohesive and take into account adjacent historic buildings.

Heavy, natural materials, such as brick, masonry, and wood, are encouraged for the base portion.

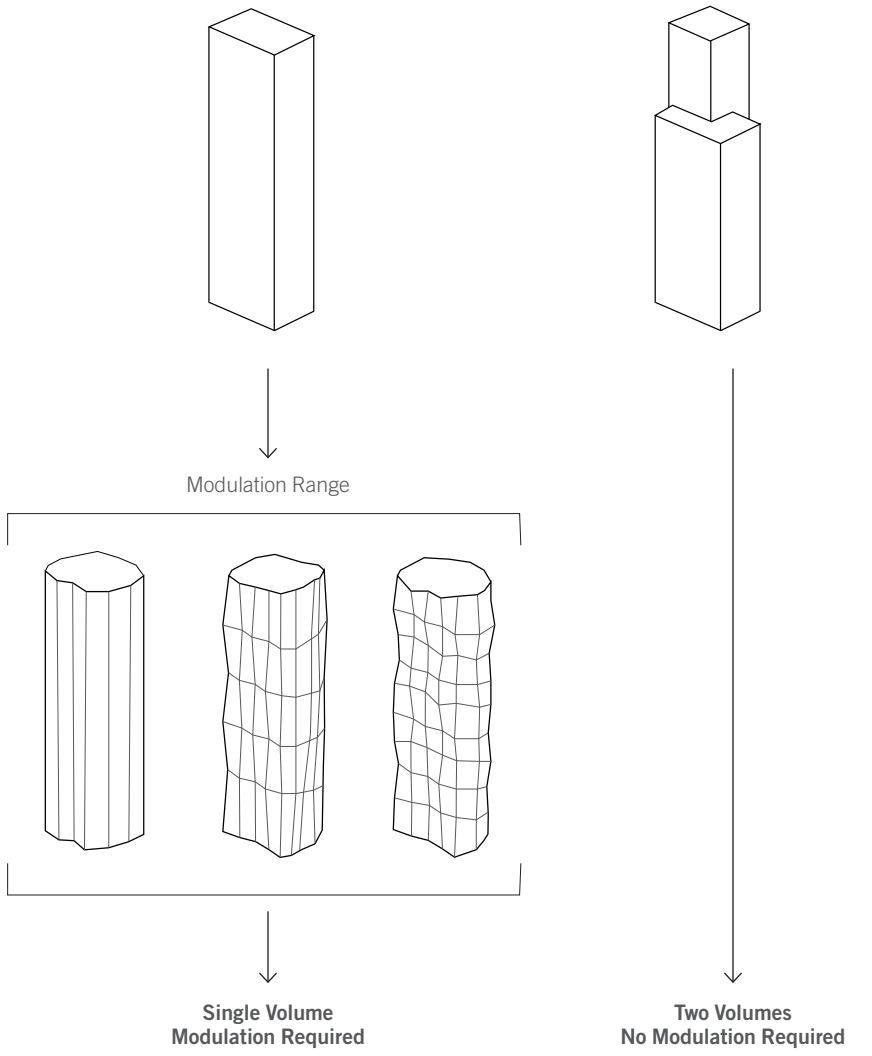
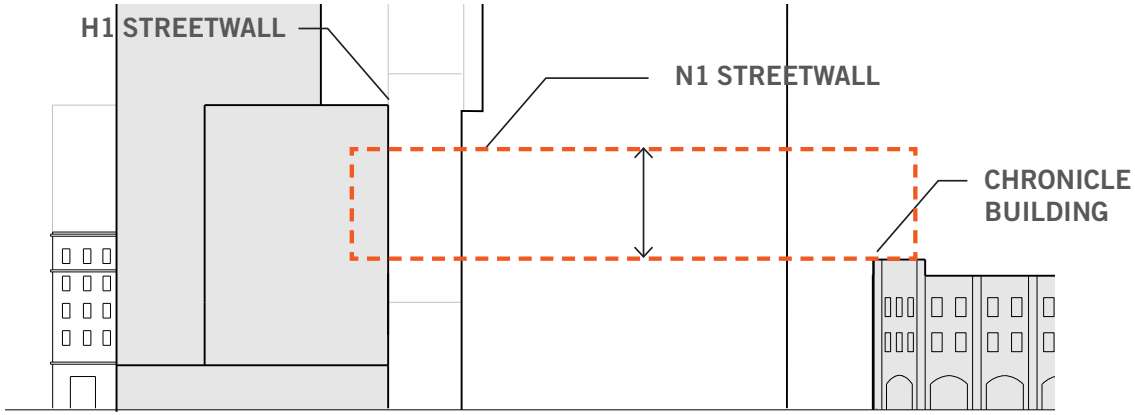


Fig. 6.3.1 N1 Volumetric Differentiation: Example of Modulation



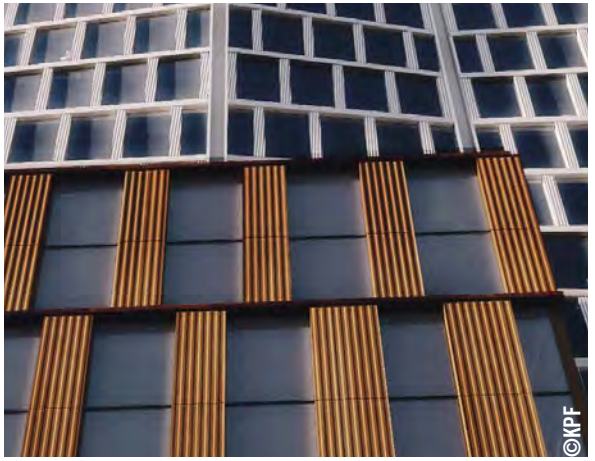
N1 streetwall height transitions between the H1 base height and the Chronicle building

Fig. 6.3.3 N1 Relationship to Context

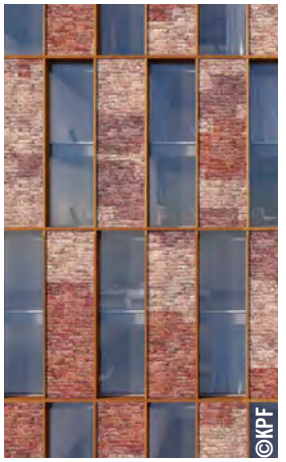
Single floorplate pattern

Double floorplate pattern

Fig. 6.3.2a N1 Façade Articulation: Tower Treatment



Paneled Wood



Stacked Stone

Patterned Brick

Fig. 6.3.2b N1 Façade Articulation: Base Treatment

6.4 HIGH-RISE COMMERCIAL TOWER (H1)

The H1 building should be designed to relate to both the San Francisco skyline and the local context. On the skyline, H1 should be perceived as two complementary towers. At the street, a strong streetwall and pedestrian level transparency and activity connect it to the SoMa surroundings.

6.4.1 VOLUMETRIC DIFFERENTIATION

The H1 building shall be comprised of three of distinct volumes: the base and the two complementary towers. These volumes shall be different but related as interlocking, and complementary architectural expressions. For additional detail on bulk controls, see *Section 5.4 Building Form + Massing: Bulk Controls.*

6.4.2 FAÇADE ARTICULATION: TWO-TOWERS

The complementary towers shall be different in either type of articulation or color. The distinction between the forms should be visually legible from both afar, at a city skyline view, and near, at a street level view. For more information, refer to *Section 5.4.2 Building Form + Massing: Bulk Controls: 365-X Commercial Tower Controls.*

At least one tower shall express a vertical articulation with features such as fins, louvers, a rainscreen, or similar. For this tower, both the articulation element and the space between the articulation elements shall be a ratio of at least 1:2 (width:height) and shall express a predominantly vertical façade rhythm. See Figure 6.4.2b.

6.4.3 FAÇADE ARTICULATION: BASE

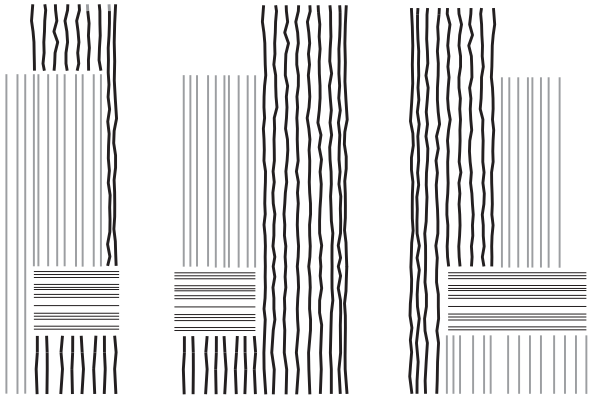
The base shall display a horizontal expression on at least 1/3 of its total façade, to contrast the vertical façade design of the towers and respond to the street.

6.4.4 RELATIONSHIP TO HISTORIC CONTEXT

The architectural design shall reference the existing 198 Fifth Street building height. This articulation shall occur anywhere within a 10-foot zone, 5 feet above and below the existing 198 Fifth Street building height, per Figure 6.4.4. Refer to *Section 5.1.2 Building Form + Massing: Overall Building Massing: Relationship to Historic Context.*

6.4.5 GUIDELINES: COLOR AND MATERIALITY

Predominant color palettes should visually distinguish the two tower volumes from one another. The two towers should express different color palettes which include warm, cool, or neutral. The overall building color palette should appear complementary and cohesive and take into account adjacent historic buildings.



"Wrapping" of pattern and color moves from the vertical to horizontal massing

Fig. 6.4.1 H1 Volumetric Differentiation: Pattern and Color

Brandhorst Museum / Munich, Germany

Songdo / Incheon, South Korea

Fig. 6.4.2a H1 Façade Articulation Examples

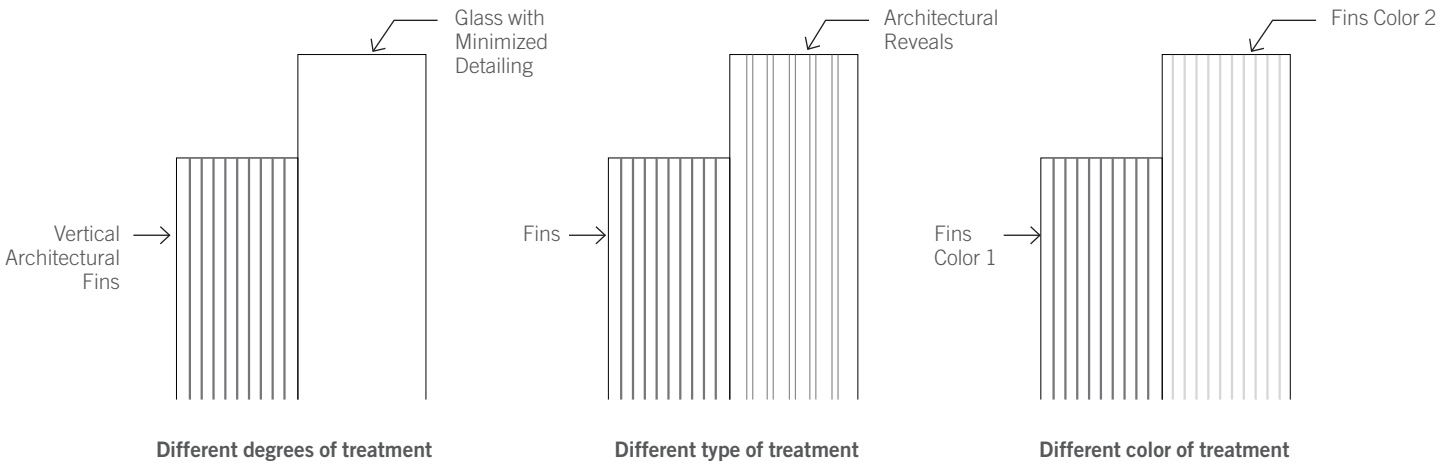


Fig. 6.4.2c H1 Façade Articulation: Treatment Examples

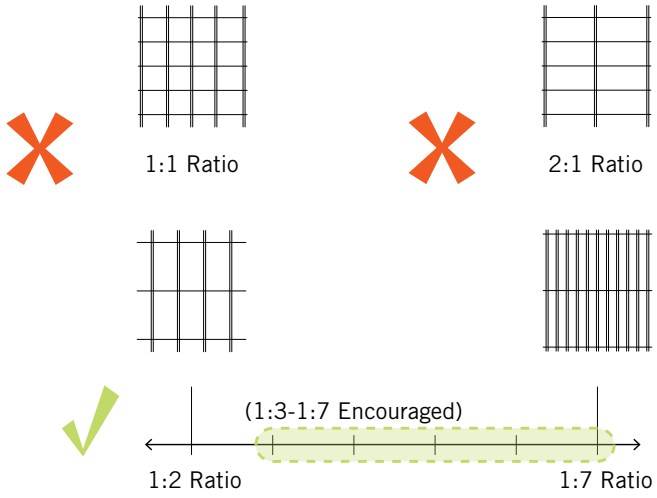


Fig. 6.4.2b H1 Façade Articulation: Vertical Façade Proportions

Fig. 6.4.4 H1 Relationship to Historic Context

6.5 PROJECTIONS

Projections, such as balconies and façade systems, enhance design, improve the articulation of building form and mass, and contribute to environmental conditions within and around the buildings.

6.5.1 ENCROACHMENTS

Encroachments, on the ground or immediately overhead, project into the right-of-way or public open spaces.

➔ **BUILDING CANOPIES.** Canopies necessary to address wind hazards or improve pedestrian comfort shall provide at least 10 feet vertical clearance from sidewalk grade, shall have no more than 25 linear feet of continuous surface area that is opaque, and shall have a maximum depth of 15 feet. See Figure 6.5.1a and Figure 6.5.1b.

➔ **OPEN SPACE CANOPIES AND OBSTRUCTIONS.** Open space canopies shall comply with *Section 4.4.4 Open Space + Streetscape: Mary Court: Overhead Structures.*

Mission Street / San Francisco, CA

Old Navy / San Francisco, CA

Fig. 6.5.1a Encroachments: Canopy Examples

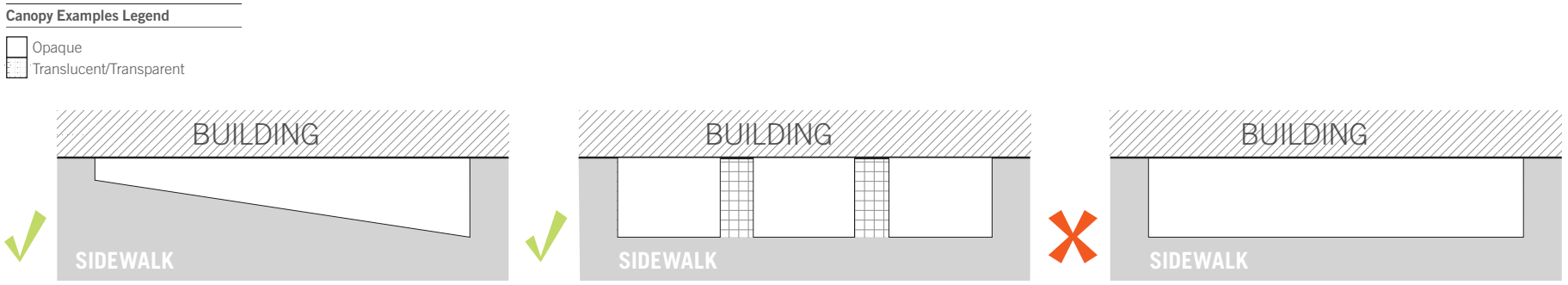
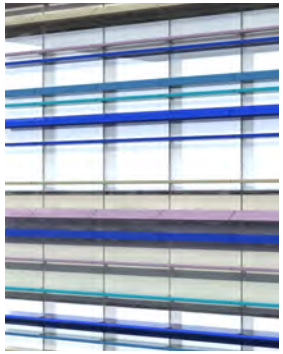
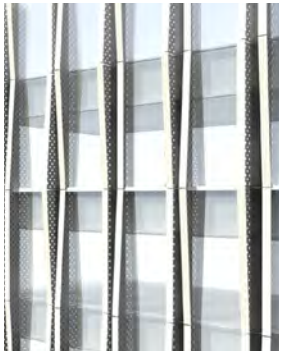


Fig. 6.5.1b Encroachments: Canopy Plan Scenarios

Mint Plaza / San Francisco, CA



Horizontal



Vertical

Vertical

Fig. 6.5.3 Non-occupiable Projection Examples

6.5.3 NON-OCCUPIABLE PROJECTIONS

Non-occupiable projections are architectural features that extend from building enclosure across property line and do not increase the floor area of the building, including façade system components, scrims, ribs, fins, louvers, and similar (canopies excluded). Non-occupiable projections shall have a minimum clearance of 15 feet from sidewalk grade and shall extend the following maximum distances over the block line into the street/open space, subject to coordination with City agencies.

➔ **HORIZONTAL PROJECTIONS.** Horizontal architectural features, such as decorative louvers, shall not extend more than 6 inches over the lot line and not exceed more 6 inches in height per feature. For information on awnings or canopies, see *Section 6.6.1*.

➔ **VERTICAL PROJECTIONS.** Vertical architectural features, such as decorative fins, shall not extend more than 18 inches over the lot line and not exceed more than 18 inches in width per feature. Vertical projections may extend to building height.

See Figure 6.5.3 for illustrations of horizontal and vertical projections.

6.5.1 GUIDELINES: ENCROACHMENTS

Design and Materiality: Encroachments should support the activation of the public realm through their design and materials. The design should relate to the flexible, collaborative, operable, and industrial context of the project, keeping in mind their potential use as frameworks for art intervention, public contribution, or planting.

6.5.3 GUIDELINES: NON-OCCUPIABLE PROJECTIONS

Non-occupiable projections are encouraged to contribute to the articulation and modulation of building form and mass. A series or pattern of architectural elements is preferred, rather than singular elements. Such projections are encouraged to respond to SoMa's industrial context, advance environmental performance, or improve environmental conditions related to noise, view, wind, daylighting, or shadow.

6.6 ROOFS AND UTILITIES

Roofs are important visual elements in creating successful buildings; they are "5th façades" visible from other buildings and elevated vantage points.

6.6.1 ROOF SYSTEM

For all new construction, mechanical equipment enclosures, elevator enclosures, exit stair enclosures, and other rooftop elements shall not detract from the overall composition and expression of the building. Rooftop equipment shall be grouped as much as possible and screened or treated to minimize visual impact, through localized mechanical enclosures or building scale lanterns, for example.

6.6.3 UTILITIES AND SERVICE AREAS

Utilities and service areas shall be enclosed within buildings, lantern structures, screens, or mechanical enclosures.

6.6.1 GUIDELINES: ROOF SYSTEM

Renovated buildings are encouraged to follow the standard for new construction buildings.

Roof components visible from street level, especially mechanical equipment, ventilation exhausts, and other Heating, Ventilation and Air Conditioning (HVAC) components, should be designed as integral to the building design. Screens and/or vertical architectural features should mask visibility of mechanical systems. Roofs are encouraged to provide usable open space or sustainable design strategies. Roof design is encouraged to incorporate passive and active sustainable design strategies, including green roofs. Roof systems and techniques that enhance internal daylighting are encouraged. For more information, see *Chapter 9: Sustainability + Systems*.

6.6.2 GUIDELINES: ROOF LINE VARIATION

The multiple buildings within the 5M Project should create variety in roof expression related to roof form, shaping, structure, angle, or overall treatment. Refer to *Section 5.4.4 Building Form + Massing: Bulk Controls: Tower Completion*.

6.6.3 GUIDELINES: UTILITIES AND SERVICE AREAS

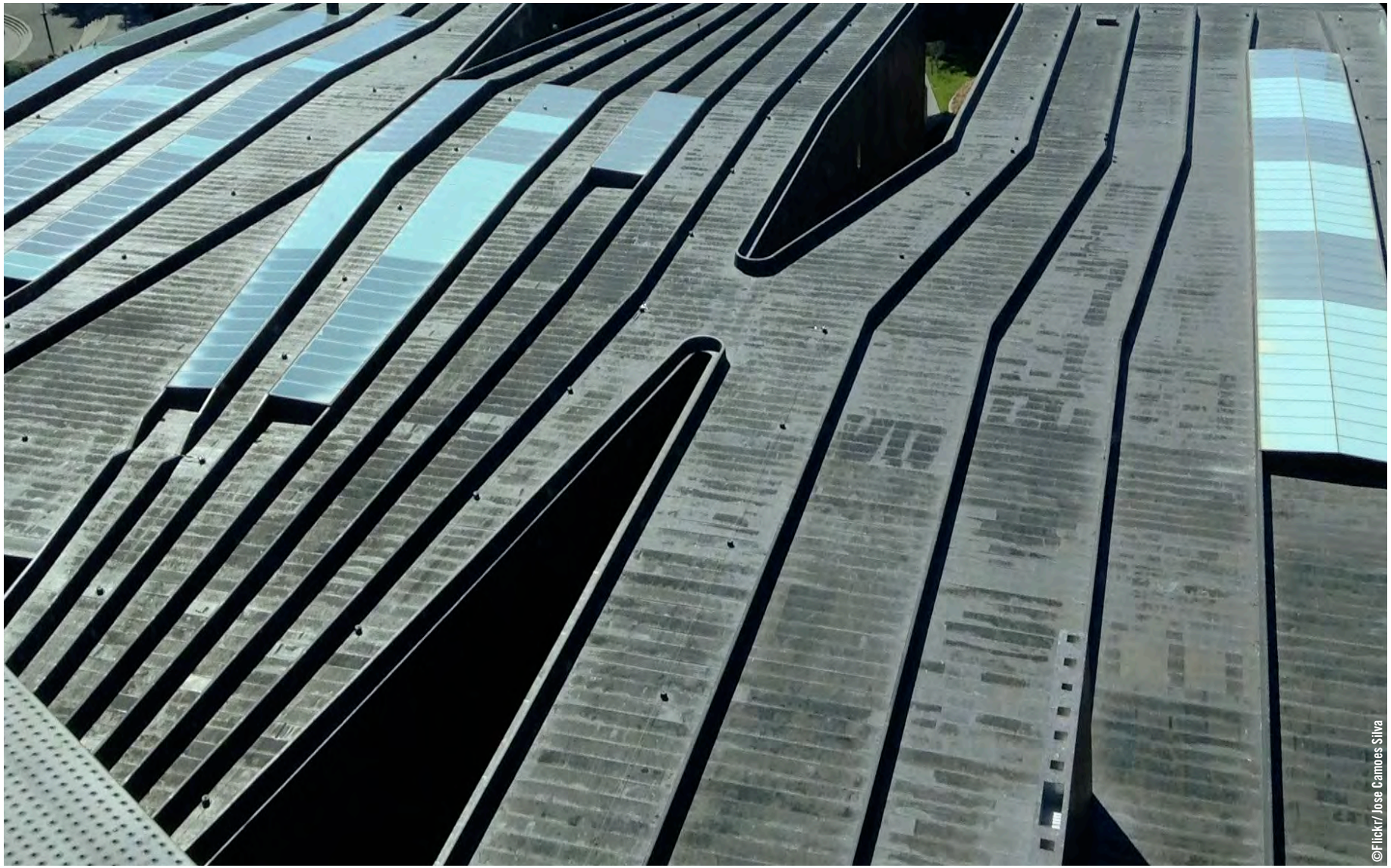
Frontages and enclosures for service, storage, utilities, utility vaults, panels, and mechanical systems should be minimized and/or integrated into the overall building articulation and treatment and provide continuity and visual interest at street level.

Space for ducts, exhaust pipes and other appurtenances with commercial uses adjacent to public open spaces should be minimized and/or integrated into the building.

Roof Systems that Enhance Internal Daylighting
Alexandria Library / Alexandria, Egypt

Roof Mechanical Cohesive to Overall Building Design
ICA / Boston, MA

Fig. 6.6.1 Roof as 5th Façade



DeYoung Museum / San Francisco, CA

Fig. 6.6.1 Roof as 5th Façade, cont.

6.7 EXISTING STRUCTURES

This section provides a framework for considering how the Secretary of the Interior's Standards for Rehabilitation would apply in the 5M project site. The actual standards would be reviewed and applied at a more detailed level once a reuse plan is developed for each building and in all cases prevail over the guidelines in the event of an inconsistency.

6.7.1 EXISTING STRUCTURES

Three existing structures, the Chronicle, Dempster and Camelline buildings, will be retained according to the Secretary's Standards. A portion of the Examiner Building will also be retained. The level of intervention or renovation permitted for each facade is identified in Figure 6.7.1a.

Low-level intervention ,which is appropriate for primary façades, shall include rehabilitation and refinishing of exterior facades that maintain the character-defining features of the structures without visible permanent alteration. For secondary facades, addition of temporary elements, clearly distinguished from historic elements, is permitted, such as movie screens or canvases for artwork.

Moderate-level intervention allows items permitted under low-level interventions, plus installation of new openings for windows or doors while retaining the predominant character of the existing facade.

High-level intervention includes items permitted under low- and moderate-level intervention, plus the removal and replacement of an existing facade.

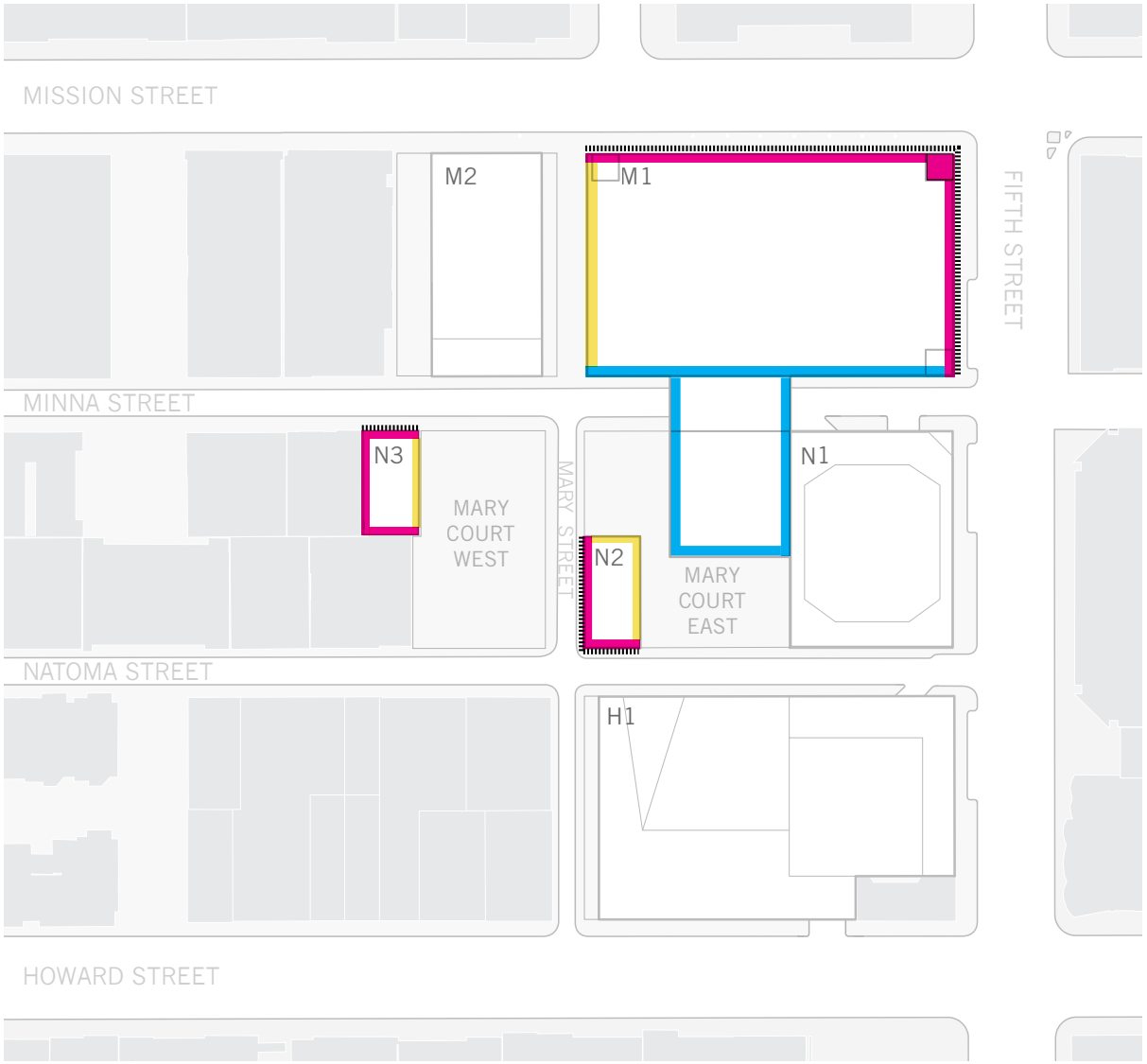


Fig. 6.7.1a Existing Structures Interventions

➔ **CHRONICLE BUILDING (901 MISSION STREET).** The Chronicle building shall be recognized as an existing, important asset for the City and 5M.

➔ **DEMPSTER BUILDING (447 MINNA STREET).** As a registered historic structure, the Dempster building shall be retained and rehabilitation shall comply with the Secretary of the Interior's Standards.

➔ **CAMELLINE BUILDING (430 NATOMA STREET).** The Camelline building shall be retained and rehabilitation shall comply with the Secretary of the Interior's Standards. In each case, the scope of features subject to the Secretary of the Interior's Standards and the process for review is set forth in mitigation measures identified through the environmental review process.

6.7.1 GUIDELINES: EXISTING STRUCTURES

➔ **CHRONICLE BUILDING (901 MISSION STREET).** The Fifth and Mission Street building façades should be maintained without major visual or aesthetic changes. Renovations and interventions are permitted on the Mary Street façade, especially for increased transparency, entries, elevator/stair accessibility, building treatment, wayfinding, and street activation, to emphasize the public nature of the building. Renovations, interventions, and additions are also permitted for the Minna Street façade. The Minna Street façade design, with the demolition of a portion of the Examiner building, may also include additional entries to the building and retail-oriented street level frontages. The new facade should be distinct from the Chronicle building, to clearly delinate the new from the old.

Interventions and building additions are encouraged for the Chronicle roof, for the purposes of public open space, public open space access, active arts/retail uses, and stormwater/sustainable design strategies. Interventions and additions to the Chronicle roof should consider the prominence of the clock tower as viewed from below. Interventions and additions to the Chronicle roof are permitted to be visible above the parapet walls and should be designed to enhance the character of the Chronicle as a beacon for the 5M site.

➔ **THE EXAMINER BUILDING (110 FIFTH STREET).** The Examiner building creates an opportunity to retain and adapt an existing building to serve the site and the open space. The loading bays may be repurposed as retail or other activating use. A partial demolition allows for a new facade. The new facade where visible should be coordinated with any new facade or intervention on the Minna Street side of the Chronicle Building, but is not required to match it. The new facade should be distinct from the existing structure -- either through materiality, detail, scale of modulation, or other architectural strategy to distinguish the new from the old.

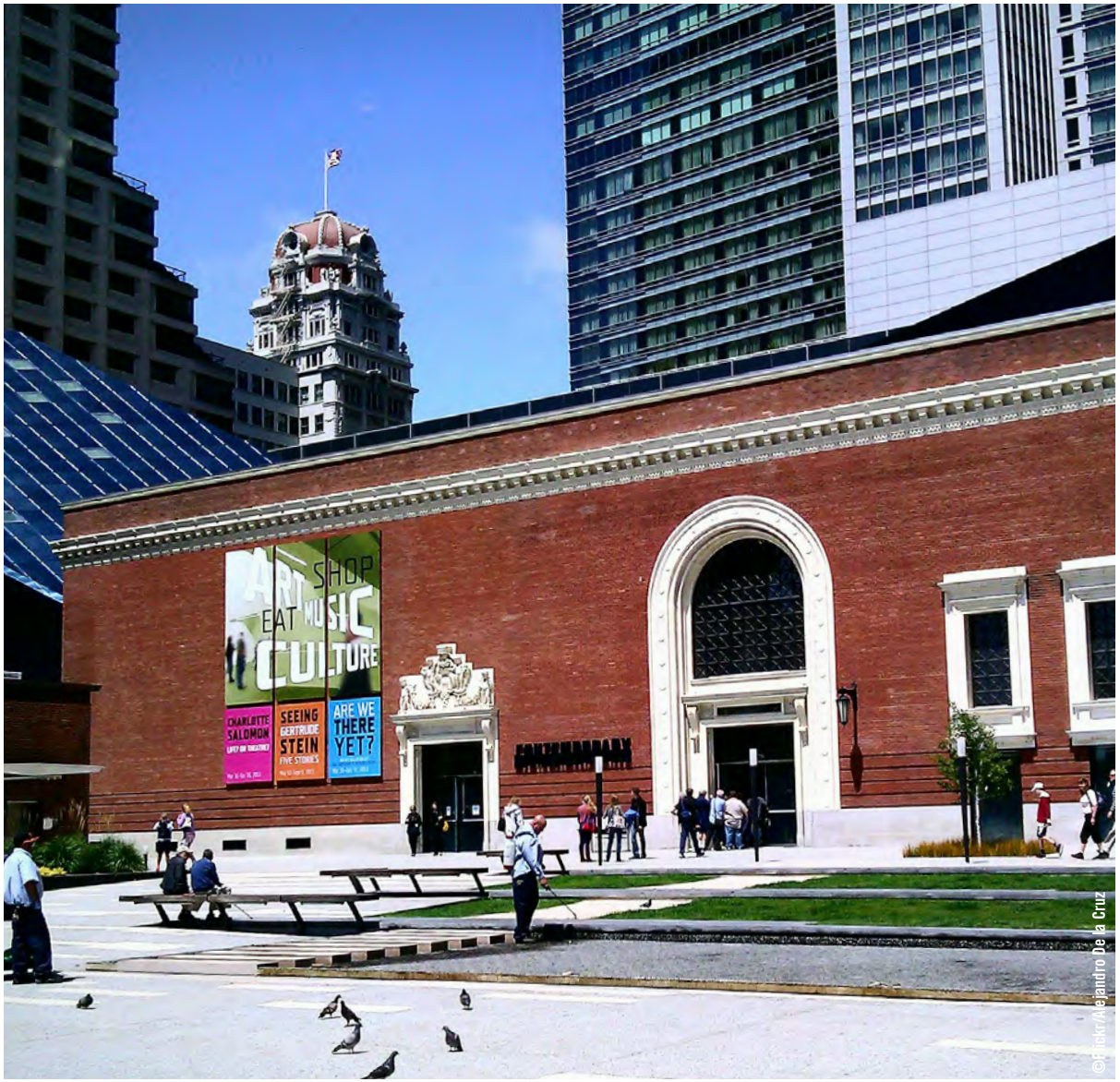
➔ **THE CAMELLINE BUILDING (430 NATOMA STREET / 49 MARY STREET).** The rehabilitation of the secondary facades of the Camelline building should prioritize building treatments, transparency levels, material selection, and temporary elements that relate the building to, and serve to enhance, its surrounding public open space.

➔ **DEMPSTER BUILDING (447 MINNA STREET).** The rehabilitation of the secondary facades of the Dempster, building should prioritize building treatments, transparency levels, and material selection that enhance the creative, accessible, multi-functional intent of the building and its close proximity to Mary Court.

Central Saint Martin's / London, UK

Tate Modern / London, UK

Former opaque brick façades incorporate modern interventions, such as glass window and door punch-outs, to create a new public building faces.



Contemporary Jewish Museum / San Francisco, CA

Fig. 6.7.1b Existing Structures: Adaptive Reuse

6.7.2 CHRONICLE UPPER LEVEL SETBACKS

The Chronicle Building's visual presence on the corner of Fifth and Mission Streets shall be maintained, without substantial change, as viewed from sidewalks across Fifth and Mission Streets within the same block.

6.7.2 GUIDELINES: CHRONICLE UPPER LEVEL SETBACKS

Per Figure 6.7.2, public components, such as greenhouses, may be permitted to be visible above the parapet, provided that they are part of a public function and are designed to enhance the presence of the Chronicle Building. In addition to the public function, the components should demonstrate a level of transparency in order to promote its program as public and connected to the ground floor. In contrast, enclosures to house mechanical equipment, exterior elevator and/or stairway overruns, storage, or otherwise blank, structures shall be set back from the Fifth Street and Mission Street façades such that they are not visible from the opposite sidewalk.

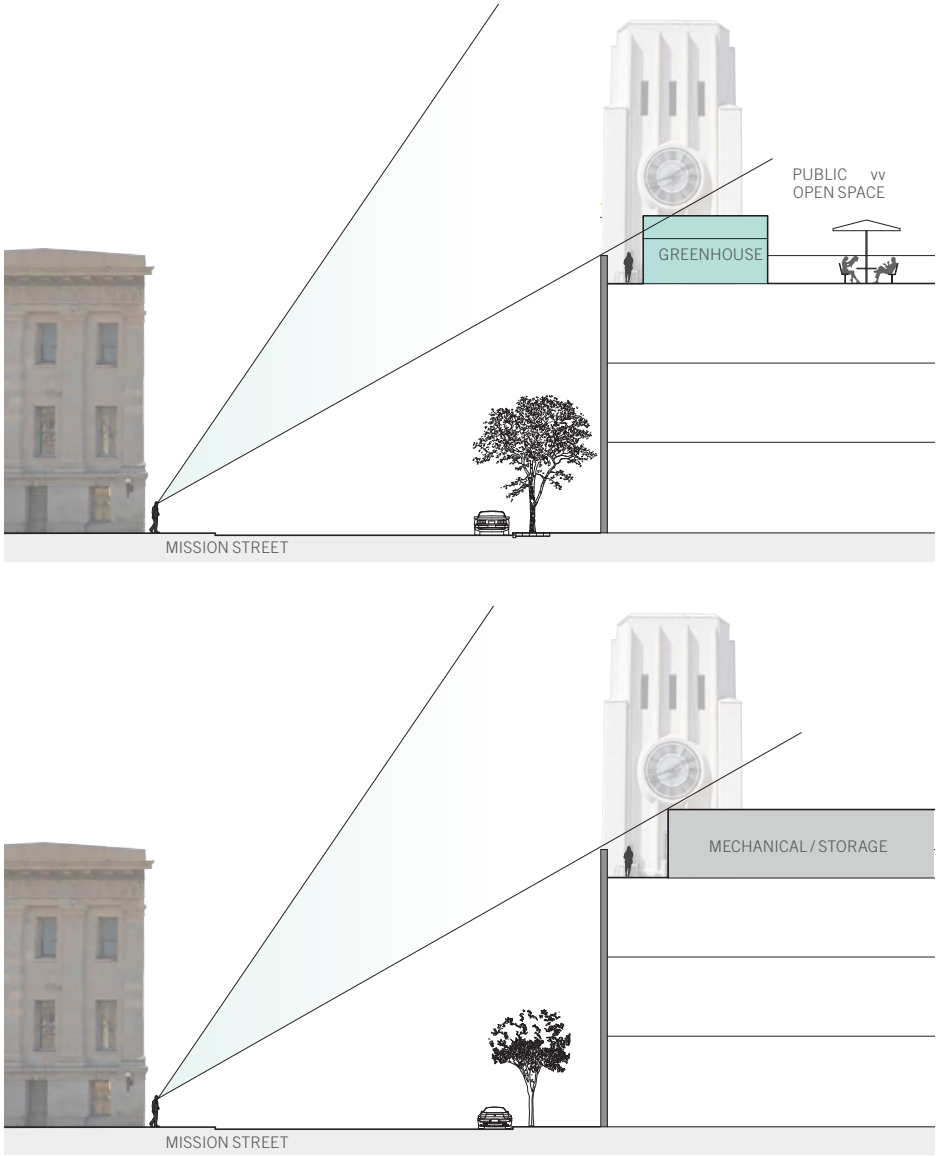


Fig. 6.7.2 Chronicle Building Upper Level Setbacks

Fig. 7.0 5th Street at Mission Street / San Francisco, CA

07.

CIRCULATION + TRANSPORTATION

Pedestrian Circulation Legend

- Open Space
- Pedestrian Activity
- BART / MUNI Station
- BART / MUNI Line
- Central Subway Line
- Street Directions
- Public Parking Entry
- Private Parking Entry
- Site Boundary
- Bus Route
- Bike Route

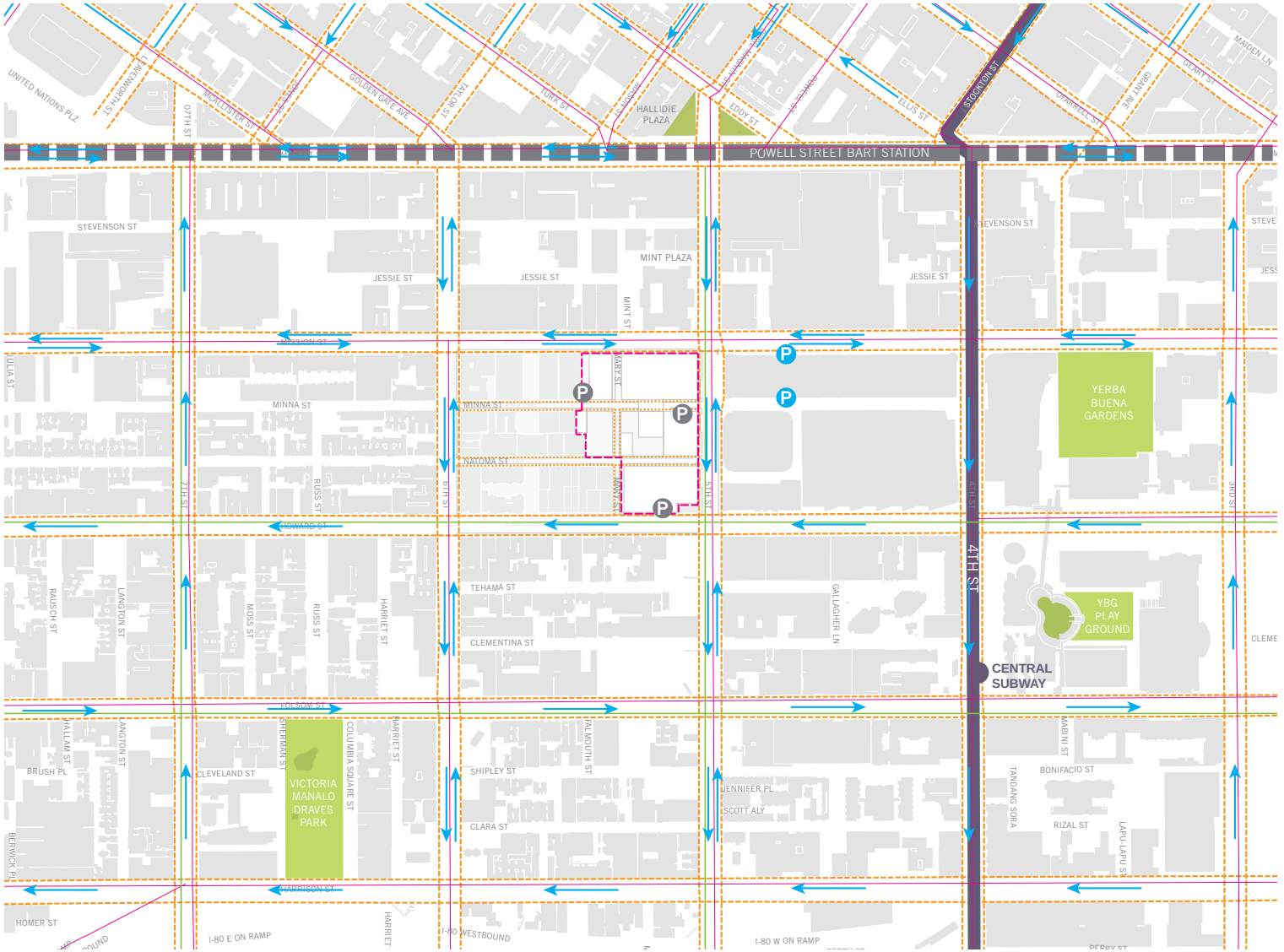


Fig. 7.1.1 Circulation Context

7.1 CIRCULATION OVERVIEW

The 5M Project site is highly connected to commuter and local transit, with multiple underground and on-grade transit routes within a five-minute walk. Planned bicycle lanes circumscribe two sides and visitor parking is available immediately across Fifth Street at the Fifth and Mission garage.

The site design moves cars off the streets as quickly as possible, with circulation organized to reduce traffic on the pedestrian oriented alleyways while balancing the need for services and loading off of the main thru-ways. Design features encourage walking and biking, while minimizing conflicts between pedestrians, cyclists, and vehicles where they inevitably cross.

ALLEYWAYS. The alleyways are designed as a network of pedestrian oriented passages through an active, multi-functioning site. Design treatments reflect a range in function from pedestrian-only public space to access points for loading and service.

BICYCLES. Bicycles are an essential mode of travel to the site. To encourage this, ample bicycle storage and showers and lockers are provided, as well as an opportunity for a bike repair shop or related retail.

CARS. Subterranean basement parking replaces the existing 12 parcels of surface parking. The below-grade parking provides efficiencies and consolidate entry ramps to 3 locations across the site.

LOADING. Service delivery vehicles will be directed below grade. Freight loading will be provided off-street, through an off-street drive -through between Howard and Natoma Streets and on off-street bays on Minna Street.

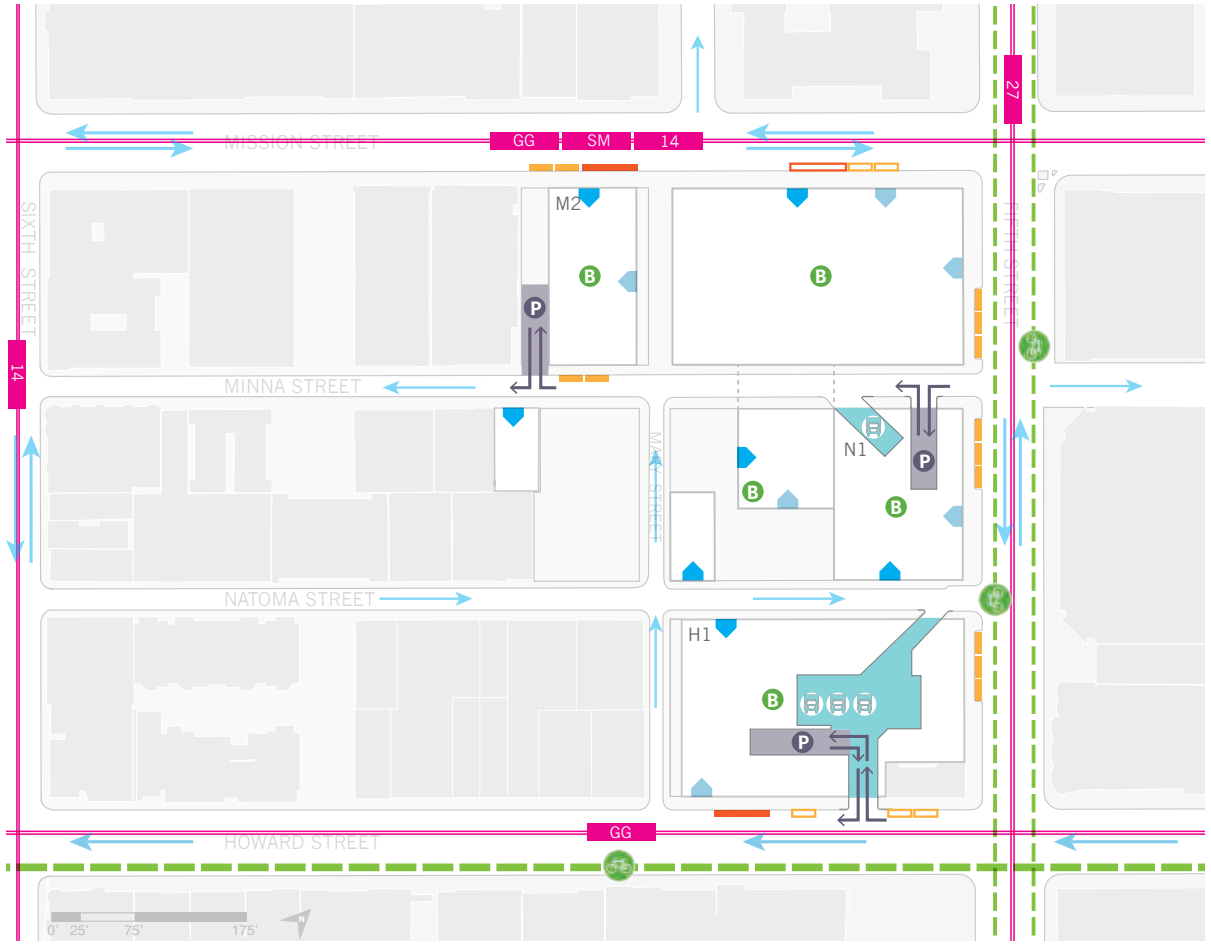


Fig. 7.1.2 Ground Level Circulation Plan

Site Circulation Legend

- 14 Bus Routes
- Bicycle Routes
- B Off-Street Bicycle Parking
- P Private Parking Access
- Off Street Loading
- Vehicular Flow
- Primary Entry
- Secondary Entry
- Passenger Loading Only (Existing)
- Passenger Loading Only (Proposed)
- Metered Commercial Loading (Existing)
- Metered Commercial Loading (Proposed)

7.2 BICYCLE STORAGE AND SUPPORT

The City has set a goal to increase the bicycle mode share to 10 percent of all trips by 2018 *(source: SFMTA Bicycle Strategy)***. In order to meet this goal, bicycle circulation and parking needs to be safe, convenient, and enjoyable. Early tenants of existing buildings at 5M have already demonstrated the demand for bicycle parking.**

7.2.1 BICYCLE PARKING ACCESS

Class 1 (off-street) bicycle parking shall be accessible from the street, either through building entries or through a key card controlled door or gate adjacent to parking entries.

7.2.2 CLASS 1 BICYCLE PARKING LOCATION

Class 1 (off-street) bicycle parking shall be made convenient and easily accessible from the street. Class 1 bicycle parking for residential uses shall be located in the first basement level or above, including the ground floor, amenity levels, or in-unit. Non-residential Class 1 bicycle parking may be consolidated within the District and shall be located on the ground floor or on the first basement level. Bicycle parking shall have clear signage, visible from the street or upon entry to each building, and from parking locations to building circulation.

7.2.3 CLASS 2 BICYCLE PARKING LOCATION

Class 2 (on-street) bicycle parking shall be accessible from public rights-of-way. It shall be located in areas of high visibility to avoid theft and situated to avoid damage from passing vehicles. Where bicycle parking is not located within clear view on approach to the building entry, a sign shall be provided at entry to indicate location of parking. Class 2 bicycle parking may be consolidated, but shall be provided within 150 feet of each "primary" building entrance.

7.2.4 BICYCLE SUPPORT

Shower Facilities and lockers required of any building within the District may be provided anywhere within the District, so long as facilities are provided in the amount required by Planning Code Section 155.4, and are distributed within two or more buildings throughout the District. Such facilities shall be available free of charge to commercial tenants and employees of all buildings within the District.

Simple designs provide easily accessed and secure storage

Fig. 7.2.3 On-Street Bicycle Racks

7.3 CAR PARKING AND CAR SHARE

5M provides parking consistent with the Planning Code. Since the nearby Fifth and Mission Garage is accessible to visitors, parking is only provided for employees and tenants; no additional parking is provided for visitors to retail, arts, cultural and educations uses. District parking is private for the use of residents and on-site workers.

7.3.1 PARKING LOCATION: PRIVATE CARS & CAR SHARE

Parking for private cars and car share may be located in shared subterranean facilities within the District, as illustrated in Figures 7.3.1a and 7.3.1b. Car share parking shall be provided within subterranean facilities and have shared access with general car parking.

7.3.2 INTERIM PHASE PARKING

Existing accessory surface parking lots not removed in Phase 1 of the project may continue to be used as such without further authorization.

7.3.3 PARKING CAPACITY

Parking shall be provided at a maximum 0.5 spaces per residential unit at a maximum of 7 percent of gross square feet for commercial space.

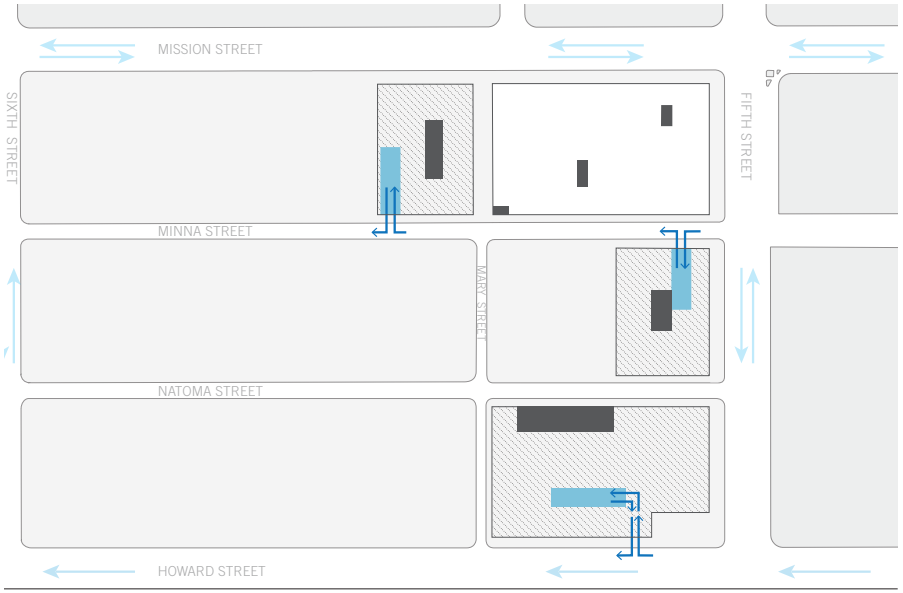


Fig. 7.3.1a Vehicular Parking: Lower Level 1 Sample Plan Diagram

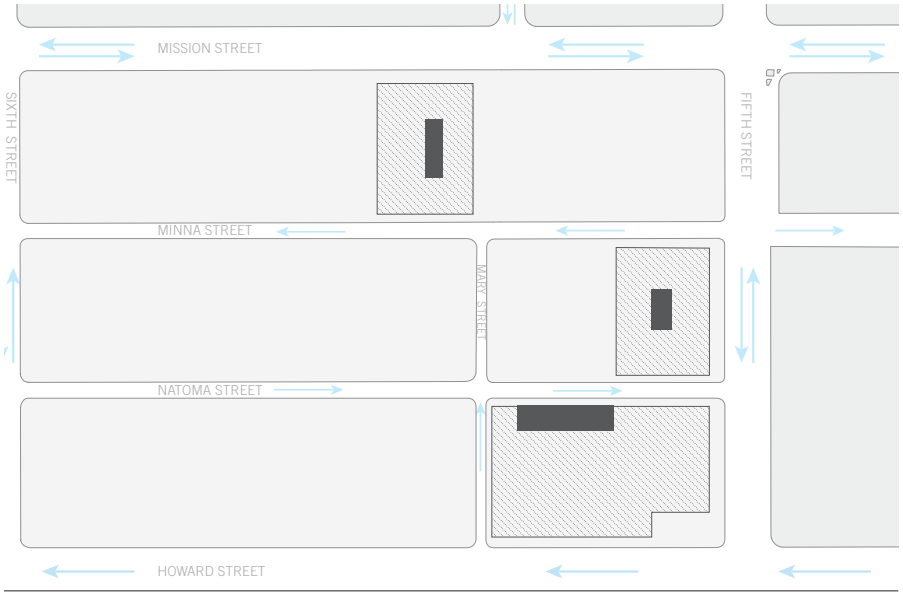


Fig. 7.3.1b Vehicular Parking: Lower Level 2-3 Sample Plan Diagram

Parking Legend

- Car Parking
- Ramp From Street Level
- Building Core Locations

7.3.4 PARKING AND LOADING ACCESS

Priorities for parking entry locations are illustrated in Figure 7.3.1a. No direct building entrances to parking or off-street loading areas shall be permitted on Mission Street or Fifth Street. Entrances, curb cuts and façade openings for off-street parking and loading areas within the District may be no more than 27 feet wide (if the driveway includes a five-foot wide bicycle lane), otherwise no more than 22 feet, except that one entrance (with associated curb cut and façade opening) of up to 30 feet shall be permitted for an off-street combined automobile parking and freight loading entrance/exit from Howard Street and one entrance (with associated curb cuts and façade openings) of up to 25 feet shall be permitted for off-street freight loading egress onto Minna Street, as illustrated in Table 7.3.4.

7.3.5 PARKING EGRESS SIGHTLINES

In order to reduce the possibility of conflicts at driveways, sight triangles shall be provided at all egress points such that vision within the triangle is not obstructed by objects or walls, per Figure 7.3.5. These triangles shall be 10 feet wide, parallel to the street, and 10 feet wide perpendicular to the street, with a minimum clearance of 15 feet. This provides pedestrians walking along the face of the building and vehicles exiting the site sufficient distance to see and react to one another such that buzzers, lights, or other pedestrian warning devices are not required.

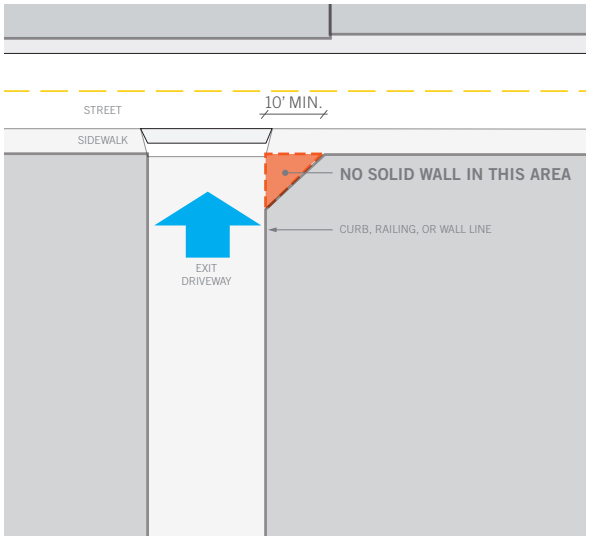


Fig. 7.3.5 Parking Egress Sightlines

STREET	PARKING ACCESS (FT)	OFF-STREET LOADING (FT)	COMBINED PARKING/LOADING (FT.)
MISSION STREET	none permitted	none permitted	none permitted
FIFTH STREET	none permitted	none permitted	none permitted
HOWARD STREET	22	15	30
MINNA STREET	27	22	n/a
MARY STREET	none permitted	none permitted	none permitted
NATOMA STREET	none permitted	25	n/a

Table 7.3.4 Maximum Curb Cuts (width)

7.3.6 DRIVEWAY AND GARAGE ENTRIES

In order to provide safe, efficient flow of vehicles and minimize wait times and queuing of cars beyond the property line, parking driveways shall comply with the following standards, as illustrated in Figure 7.3.6:

➔ **GARAGE DOOR.** The garage door shall be a secure, motorized door located at the property line. The garage door shall remain open during times of peak parking traffic. At off-peak times, the garage door shall be opened via the electronic control method of access.

➔ **METHOD OF ACCESS.** The garage door (during off-peak hours) and the parking access control shall be opened via remote electronic device, such as AVI.

➔ **DRIVEWAY ENTRY TRANSITION STRIP.** The flat area of the driveway between the driveway ramp and the property line shall be at least 8 feet in length with a 3 percent maximum slope, so that outbound/uphill driveway vehicles have a clear view of pedestrians prior to crossing the property line.

➔ **DRIVEWAY RAMP.** The driveway ramp shall not exceed a 20 percent slope, but 15 percent or less is preferred.

➔ **TRANSITION STRIPS.** Transitions strips shall be located before and after the driveway ramp, to avoid abrupt slope changes that can damage cars. The transition strip at the ramp base shall be a minimum of 10 feet in length with a slope equal to half of the difference between the two slopes it transitions between. The top transition strip adjacent to the driveway entry transition strip shall be a minimum of 8 feet in length with a slope equal to half of the difference between the two slopes it transitions between. For example, if the entry slope is 2 percent , and the driveway ramp is 12 percent, then the transition slope shall be 12 percent - 2 percent divided in half, or 5 percent.

➔ **PARKING ACCESS CONTROL.** Access to the parking garage shall be controlled by a drop down arm or secure gate located a minimum of 80 feet from the property line. The slope at the parking gate shall be 3 percent maximum. A separate keyed / key control door shall be provided for bike access.

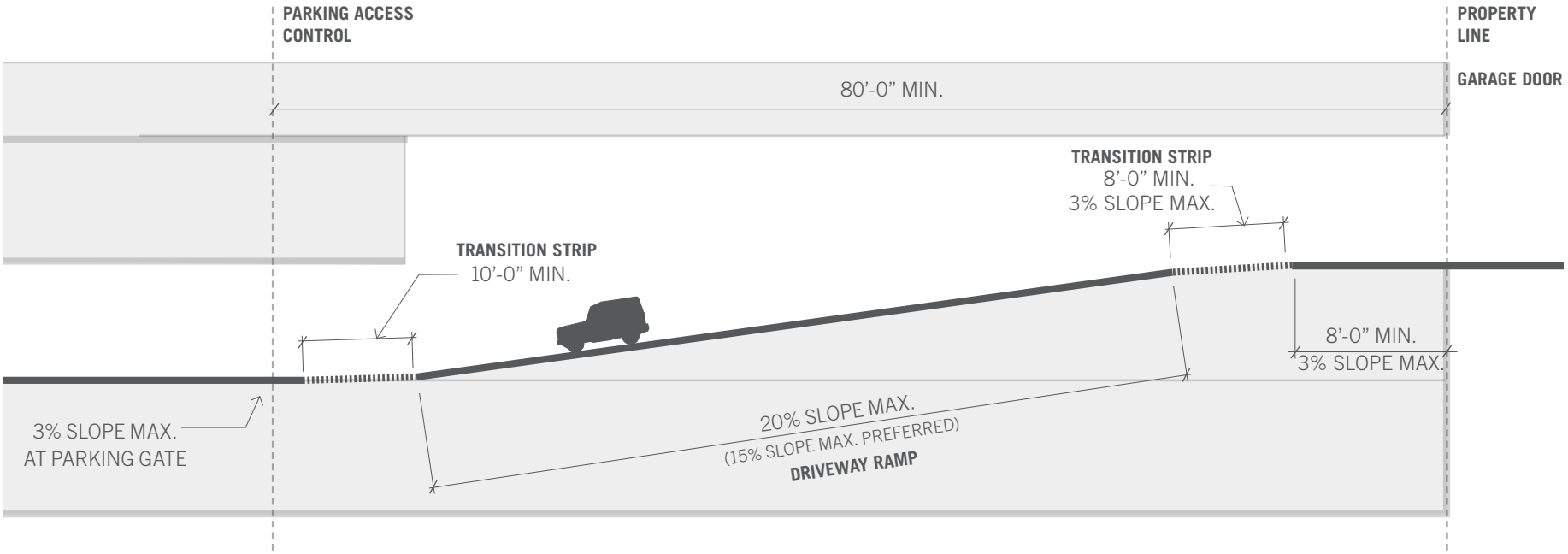


Fig. 7.3.6 Parking Entry Standards

7.4 LOADING AND SERVICES

To balance the pedestrian realm with the necessities of loading and servicing each building, loading is split with service delivery vehicles located below grade and freight loading at grade. Pedestrians, vehicles and bicycles will share these streets–making it critical that the layout and design of the on-grade loading be integrated into the building architecture and streetscape design in a manner that resonates with the culture of SoMa's streets and alleys.

7.4.1 LOADING SPACES

Three options for loading shall be provided in the minimum quantities listed in Table 7.4.1:

➔ **SERVICE DELIVERY LOADING.** Space for parking and servicing of service delivery vehicles shall be provided within the first subterranean level of the basement parking. Recommended locations for service delivery loading are identified in Figure 7.4.3. Service delivery spaces shall be a minimum of 8 feet by 20 feet with 7-foot vertical clearance.

➔ **OFF-STREET FREIGHT LOADING.** Space for parking and servicing of freight vehicles shall be provided off-street, within the building parcel to be served, or within a 200-foot radius thereof. Recommended locations for off-street freight loading are identified in Figure 7.4.3.

➔ **ON-STREET LOADING.** Curb-side loading zones shall be provided, as needed, in the locations designated in Figure 7.4.3.

[1] Percentages based on City and County of San Francisco, Transportation Impact Analysis Guidelines for Environmental Review, October 2002; Table H.

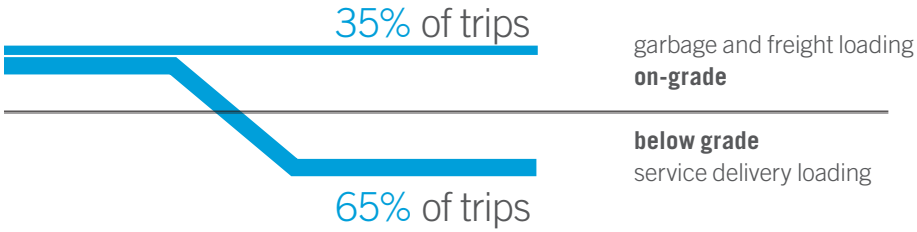


Fig. 7.4.1 Split Loading Strategy.[1]

BUILDING	SERVICE DELIVERY	OFF-STREET FREIGHT	ON-STREET FREIGHT
CHRONICLE + EXAMINER	-	-	2
M2	-	-	2
N1		1	1
CAMELLINE	-	-	-
DEMPSTER PRINTING	-	-	-
H1	6	3	2
TOTAL	**8**	**5**	**8**

Table 7.4.1 Minimum Loading Requirements (spaces per building)

7.4.2 DISTRICT LOADING

Off-street loading spaces provided within the District shall be permitted to serve any building in the District.

7.4.3 LOADING ACCESS

Service delivery vehicles shall access the subterranean level through the car parking access ramps. Access to off-street loading bays shall be located off of Howard Street and Minna Street as illustrated in Figure 7.4.3. Loading access shall consolidate and minimize curb cuts and shall not exceed the maximums in Table 7.4.1. Entrances and facade openings shall comply with *Section 7.3.4 Parking and Loading*. On-grade loading access shall be subject to *Section 7.5 Design and Public Impact*.

Fig. 7.4.3 Loading: Ground Level

Loading Legend

- Bus Stop
- Passenger Loading Only (Existing)
- Passenger Loading Only (Proposed)
- Metered Commercial Loading (Existing)
- Metered Commercial Loading (Proposed)
- Ground Level Parking
- Garbage and Recycling Area
- Freight Loading Area
- Service Delivery Vehicles
- Freight Delivery Vehicles

7.5 DESIGN AND PUBLIC IMPACT

The 5M Project design optimizes service, parking and loading functions and integrates them into the overall design strategy.

7.5.1 TRAFFIC CALMING

Streets used for both circulation and for parking and loading shall include traffic calming measures to reduce speeds and preserve the pedestrian character of the District. For more information, refer to *Chapter 4: Open Space + Streetscape*.

7.5.2 VISUAL IMPACT - PARKING

Parking design elements visible from the street shall be integrated into overall architectural treatment/materiality of the building.

7.5.3 PARKING, LOADING AND SERVICE ENTRIES

Parking, loading, and service entries shall include either opaque or translucent garage door panels to avoid large service openings on the street. See Figure 7.5.3.

7.5.2 GUIDELINES: VISUAL IMPACT - PARKING

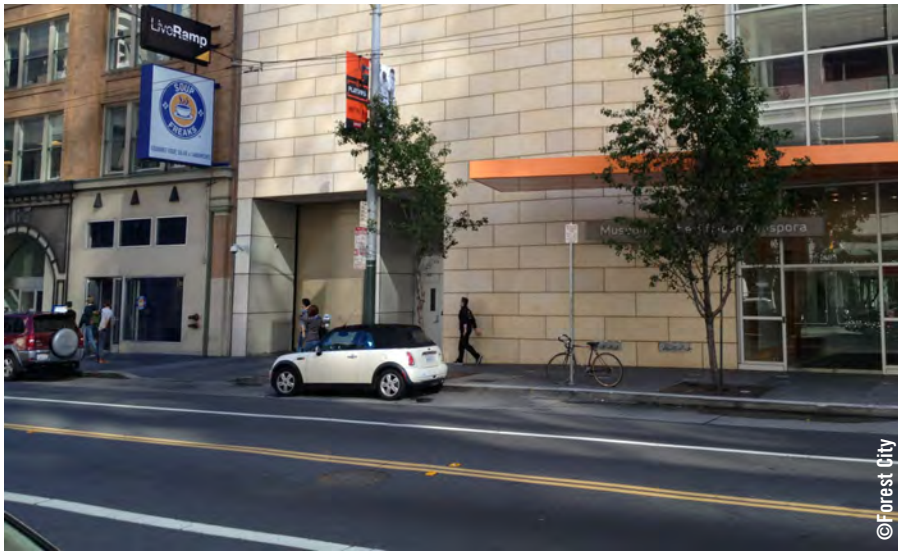
Mechanical vents and utilities related to parking should minimize visual and noise impacts on public streets as much as possible.

7.5.3 GUIDELINES: PARKING, LOADING AND SERVICE ENTRIES

Portions of the garage visible from the public realm should reflect the same architectural character employed throughout the rest of the building. Blank, undifferentiated walls (ex. solid stucco or concrete) should be avoided.

7.5.4 GUIDELINES: EXIT DOORS AND ALCOVES

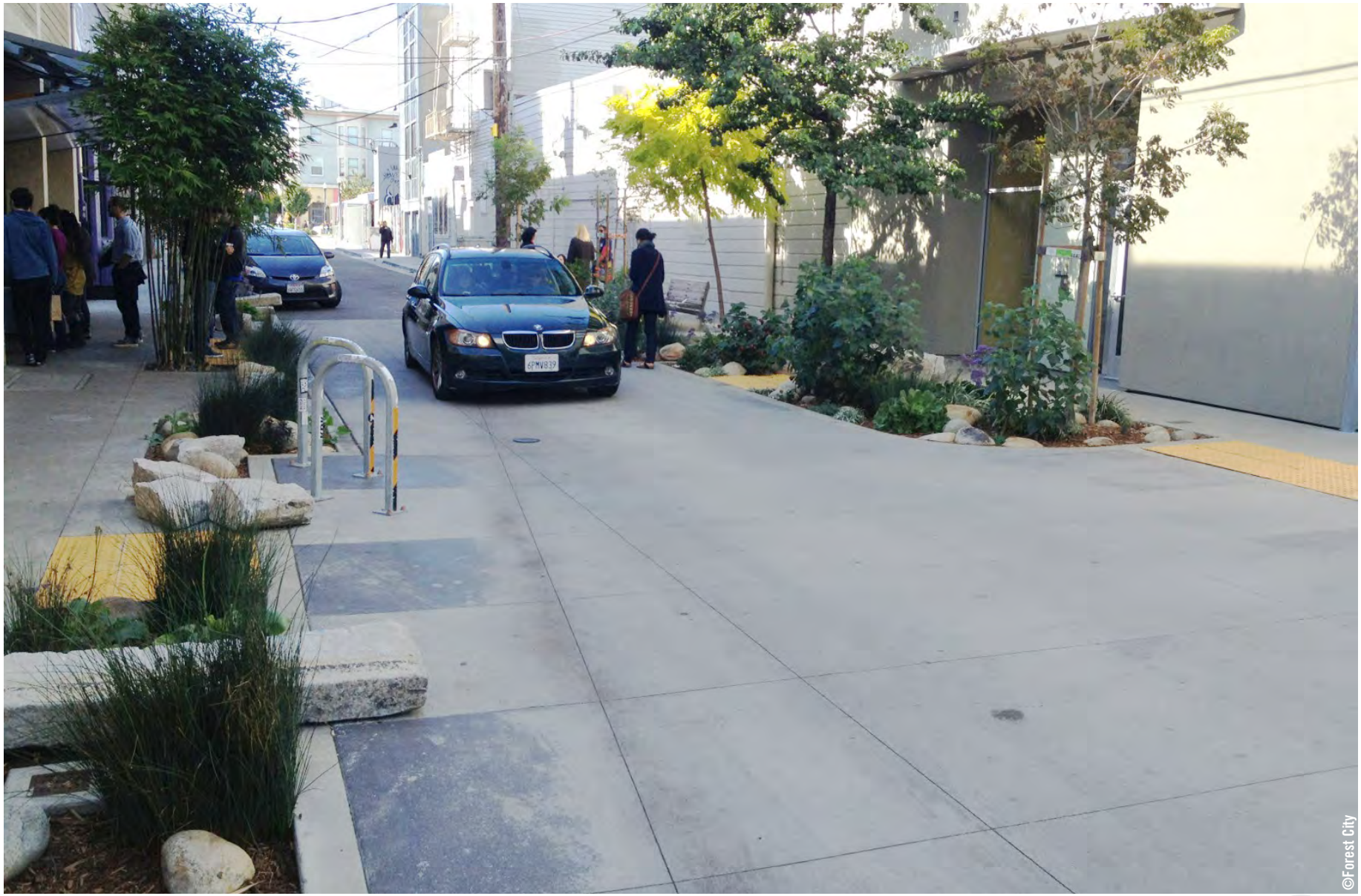
Pedestrian exit door alcoves adjacent to the sidewalk are discouraged unless integrated with active spaces, such as primary entrances or non-residential community uses.



Museum of African Diaspora / San Francisco, CA

560 Mission / San Francisco, CA

Fig. 7.5.3 Loading Design Precedents



Linden Alley / San Francisco, CA

Fig. 8.0 Art Installation at Dolores Park / San Francisco, CA

08.

ART + SIGNAGE

8.1 PUBLIC ART

Thoughtful programming of the District's public realm open spaces helps to maximize public use. Programming may include providing original interactive experiences, engaging children and families, promoting health and exercise, showcasing local food and cuisine, staging performances, festivals and exhibits. Art – including markers, sculpture, screens, projections, murals, lighting, and elaboration of the wall and ground plane surfaces – is an integral and identifiable hallmark of the 5M Project.

8.1.1 PUBLIC ART

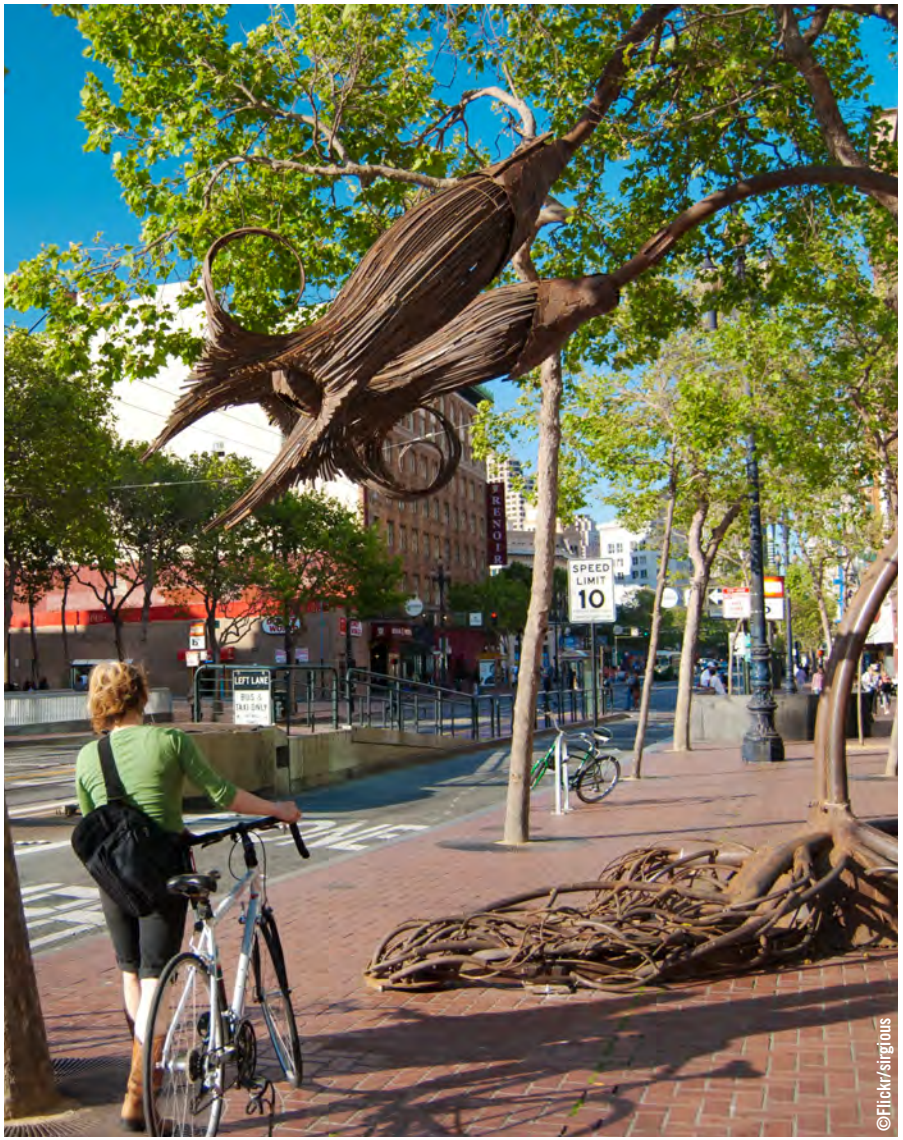
Public art installations shall be integrated into the design of the public realm and may be located within the usable public open spaces, pedestrian alleys (in accordance with *Section 4.7 Open Space + Streetscape: Streets and Alleys*) and within the "furnishing zone" of the perimeter streets and alleys, where they do not interfere with pedestrian circulation. Public art may include, but is not limited to, murals, sculptures, and video displays.

8.1.1 GUIDELINES: PUBLIC ART

Art installations should prioritize interaction and engagement with pedestrians of all ages. Art that invites play, re-presents the environment, provides thoughtful information, and creates opportunities for participation are all encouraged.

8.1.2 GUIDELINES: PUBLIC PERFORMANCES & EVENTS

Include play structures – either explicitly for children or sculpture that engages adults and children alike. Provide space and infrastructure to allow food trucks, concerts, performance art, and temporary kiosks or venders to set up on site.



Valiant Flower by Karen Cusolito / San Francisco, CA

Eleven Heavy Things by Miranda July / Venice Biennale

Crown Fountain / Chicago

The Bakken Museum/ Minneapolis

Fig. 8.1.1 Public Art Examples

8.2 SITE LIGHTING

5M provides a hierarchy of lighting types and levels that illuminate streets and open spaces with clear, inviting, and comfortable visibility at night.

8.2.1 GENERAL LIGHTING

Size, height, placement, and frequency of light fixtures shall relate to and prioritize pesdestrians and cyclists on interior streets and alleys. See Figure 8.2.1. High pressure sodium lights are not permitted.

8.2.2 STREET LIGHTING

On perimeter streets, locate street light poles in the site furnishing zone. Light levels shall be sufficient to ensure pedestrian and vehicular safety. To the extent feasible, lamps shall utilize high-efficiency technology such as LED to minimize energy consumption, but in any event would be consistent with City and SFPUC standards.

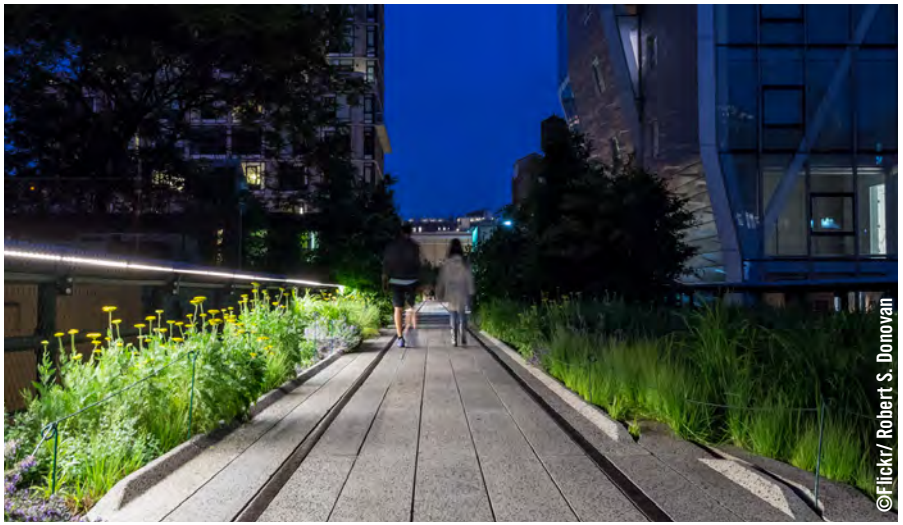
8.2.1 GUIDELINES: GENERAL LIGHTING

Lighting should be provided at the lowest levels which are in accordance with the Illumination Engineering Society of North America (IESNA) lighting guidelines and applicable codes. Light levels should limit night sky pollution.

Lighting should enhance public facilities and businesses and encourage their use at night. Light fixtures should be considered platforms for bringing programming and events outside. Sidewalks should have embedded, grated trenches to run conduit. Fixtures should embed additional conduit, pathways, and outlets for temporary lighting, internet, audio/visual and other installations.

8.2.3 GUIDELINES: ACCENT LIGHTING

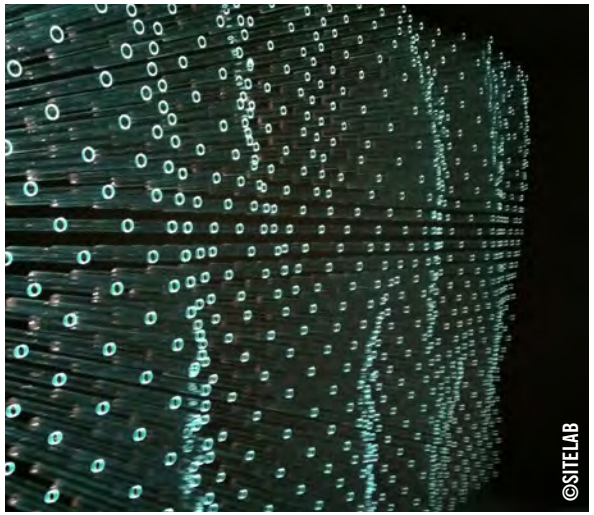
Accent lighting at focal points, art pieces, pavilions, and design features are encouraged. Accent lighting should incorporate opportunities for art, public art, technology, and collaborative interventions such as light sculptures, illuminated art signage, projection/ cinema. Mood lighting for trees, paths, or gathering areas is encouraged. Mood lighting should consider indirect illumination and small, distributed, low-wattage hanging/chain lamps. See Figure 8.2.3.



Open Space Pathway Lighting – downlighting integrated in railing

Informal Pathway Lighting – flexible hanging lights

Fig. 8.2.1 General Lighting: Mood and Pathway Lighting



Light Art

Illuminated Text

Projection Lighting

Integrated Accent Lighting

Fig. 8.2.3 Accent Lighting: Art interventions and indirect sources

8.3 SITE SIGNAGE AND WAYFINDING

8.3.1 WAYFINDING SIGNAGE

Wayfinding signage is permitted in the district. Permanent wayfinding signage shall be designed to limit separation from the surrounding neighborhood.

8.3.1 GUIDELINES: WAYFINDING SIGNAGE

Wayfinding signage for vehicular parking access should be balanced with pedestrian realm. Wayfinding signage is permitted for interior public facilities, rooftop open space and facilities, ADA assistance, alternative access routes, and bicycle facilities.

8.3.2 GUIDELINES: COMMERCIAL SIGNAGE

Signage for ground plane uses is encouraged to take cues from SoMa and support the flexible and creative character of 5M, such as small blade signs, chalk boards, split-flap displays, window signs, projection, wall murals, and sidewalk stencils. Continuation of the SoMa trend in building wall signage/displays as well as maintenance and incorporation of existing wall signage are both encouraged.

Commercial signage that is temporary, mutable, and artistic is preferred. Such signage should be accomplished through collaboration with local designers, artists, tenants, or neighborhood stakeholders. Building, Wall, and Window signage incorporating projection, kinetics, new technology, mural arts, and illumination are preferred for these commercial-artist collaborations.

To signal and encourage evening activity that is essential to a safe and vibrant community, artistic signage using projection, neon, and LEDs are encouraged.

8.3.3 GUIDELINES: SIGNAGE FOR ROOFTOP ACCESS

Signage and wayfinding elements signaling the location and pathway to the Chronicle rooftop is encouraged to be creative and attention-getting.

Anchor & Hope, Commonwealth / San Francisco, CA

Fig. 8.3.1 Wayfinding Signage Examples

Dekalb Market / New York, NY, Juice Bar / San Francisco, CA

Fig. 8.3.2 Commercial Signage Examples

8.4 BUILDING-RELATED SIGNAGE

Signage at 5M is designed to express and emphasize the variety and specific character of each entity. As an important tool, signage provides an engaging and legible exterior to the activities within. To promote the interactive atmosphere of the 5M Project and relate the interior uses and tenants to the exterior activities and public realm, signage at 5M should be considered a creative element, incorporating opportunities for art and community.

8.4.1 SIGNAGE DESIGN

Signage for individual facilities, businesses, and entities shall emphasize their individual and independent character. Signage shall not be designed as uniform or repetitive throughout buildings in the District to avoid the appearance of a closed campus environment. The intent of blade signs to have a narrower depth than height or width, shall be maintained.

Fig. 8.4.1 Ground Floor Signage Examples

Fig. 9.0 Green Rooftop / Toronto, Canada

09.

SYSTEMS + SUSTAINABILITY

NOTE: Chapter 9 reflects Code requirements as of 2013 and will be updated to reflect Code requirements at time of approvals.

9.1 APPROACH AND PRACTICES

Sustainability is woven into the fabric of the 5M Project. Encompassing community, economy, and environment, the project engages the City's social, entrepreneurial, and natural resources. From public open space to stormwater and sun, the project creates a complete and interconnected neighborhood for the current community and future generations.

COMMITMENT TO SUSTAINABILITY

The 5M Project sustainability approach steps back to consider the big picture, treating the community, the environment, and the economy as collective, mutually-supportive assets. A central idea within this big move is to position the project in terms of abundance—identifying, leveraging, and enhancing the plentiful resources within the site, program, and climate.

The 5M Project, in terms of its prime location near significant transit, robust social and community development program, and balanced financial model, already represents a holistically sustainable ecosystem. In this section, the abundance approach is applied to natural resources—detailing the design systems and strategies for environmental sustainability.

As a cluster of blocks, the entire site area has more resources to draw from than a single building. Abundant environmental assets at the 5M Project include transit, open space, sun, and stormwater.

➔ **TRANSIT** The site's proximity to a major transit node and dense SoMa neighborhood context results in many trips by foot, bike, and bus, with many less by car.

➔ **OPEN SPACE** Mary Court, the Chronicle Rooftop, the pedestrian streets, network of alleys, as well as upper roof terraces of buildings create large open areas for many users and a multiplicity of activities.

➔ **SUN** During the dry season, large building surfaces and rooftops point to potential solar energy harvesting, daylighting, and passive heating.

➔ **STORMWATER** During the wet season, large impervious surface areas (at-grade and rooftop) create the potential to harvest and treat stormwater flows.

5M SUSTAINABLE PRACTICES

This sustainability effort seeks to maintain the following general practices identified below throughout the entire project life:[1]

- Recycle underutilized, auto-dominated land.
- Bring a wide range of diverse, inclusive, active uses close together.
- Provide amenities that support transit use and non-vehicular modes.
- Locate density near multiple mass transit systems.
- Incorporate bicycle parking, facilities, and pedestrian/bicycle-oriented street design.
- Optimize solar access through site design and building massing.
- Minimize wind impacts through site design, building massing, shaping and treatments.
- Integrate stormwater management into site and building design.
- Incorporate green building systems, materials, and technologies in site and building design.
- Design for energy efficiency and conservation at every design phase from site considerations to building exterior and interior engineering and architectural design elements.

Fig. 9.1 Public Parklet / San Francisco, CA

9.2 POLICY OVERVIEW

The 5M Project pursues the latest thinking in sustainable design, leveraging the opportunity of the site scale and the latest technology and practices available at the time of construction.

LOCAL SUSTAINABILITY POLICIES

5M sustainability goals stem from the following policies:

- **STATE ASSEMBLY BILL 32 (AB32) CALIFORNIA'S GLOBAL WARMING SOLUTIONS ACT, 2006.** AB-32 requires the State to reduce greenhouse gas (GHG) emissions to 1990 levels by the year 2020. An executive order further requires an 80% reduction below 1990 levels by 2050. The vast majority of these reductions come from efficienct buildings and equipment.

- **SF CITY / COUNTY DEPARTMENT OF BUILDING INSPECTION GREEN BUILDING CODE AB-093, JULY 2012.** Building on AB-32, AB-093 requires project submittals, approved construction documents, and completed projects to conform to the Green Building code requirements of Chapter 13C of the San Francisco Building Code. AB-093 requires LEED certification for most new buildings and alterations.

- **STATE CALGREEN CODE, 2011.** CALGreen requires all public and private projects in California to meet the State's green building code, known as CALGreen (Chapter 11 of Title 24 building code). CALGreen requires sustainability measures across a wide range of issues including alternative transportation, waste stream separation, water conservation, low-emitting materials, and many others.

- **SF CLIMATE ACTION PLAN, 2004.** The Climate Action Plan provides scientific information on the causes of climate change and projections of its impacts. In May 2008, the San Francisco Environment Code was amended (Ordinance Number 81-08) to establish specific greenhouse gas reduction targets: 25% below 1990 levels by 2017, 40% below 1990 levels by 2025, and 80% below 1990 levels by 2050.

- **SF BETTER STREETS PLAN, 2010.** These design guidelines for San Francisco's pedestrian realm seek to balance the needs of all street users, with a particular focus on pedestrians and streets as open space. The plan features street ecology, street greening , and on-site storm water management; resource efficient elements and materials; streets as green corridors and habitat connectors; and a healthy urban forest.

- **SF STORMWATER DESIGN GUIDELINES, 2010.** These guidelines (Ordinance No. 83-10) direct projects to comply with City, State, and federal mandates for water quality protection through stormwater management—as well as providing a tool for watershed restoration, habitat creation and city greening.

- **SF RECYCLED WATER ORDINANCES (ADOPTED 2001, AMENDED 2004).** The City and County of San Francisco has enacted the Reclaimed Water Use Ordinances (Ordinances 390-91, 391-91, and 393-94, Article 22, San Francisco Public Works Code) requiring all property owners to install dual-plumbing systems for recycled water use within designated use areas under specific project circumstances.

- **THE CENTRAL SOMA PROJECT.** The San Francisco Planning Department is advancing related changes to allowed land uses, building heights, and pedestrian improvements in the Central SoMa. The proposed EcoDistrict aligns energy, water, and waste infrastructure systems.

- **SAVINGS BY DESIGN.** Savings by Design is an energy efficiency incentive program offered by Pacific Gas & Electric (PG&E). For projects falling between 10% and 30% better than Title 24's energy code, PG&E offers a one-time financial incentive intended to defray the cost of purchasing efficient technologies.

- **SF STANDARDS FOR BIRD-SAFE BUILDINGS, SEPTEMBER 2011.** The San Francisco Planning Code (Ordinance Number 199-11) established standards for bird-safe buildings to help reduce injury and mortality in birds caused by certain types of new construction, replacement facades, and building features.

- **SF CONSTRUCTION & DEMOLITION DEBRIS, 2006.** San Francisco adopted an ordinance (No. 27-06) for a mandatory program to maximize the recycling of mixed construction and demolition debris. The 5M Project must divert at least 75% of construction debris and at least 65% of demolition debris from the landfill to a Registered Facility and create a Demolition Debris Recovery Plan (DDRP).

- **SF BUILDING A BRIGHT FUTURE - ENVIRONMENTAL PLAN, 2008.** The Environmental Plan outlines how the City plans to achieve its environmental targets relating to climate protection; renewable energy and energy efficiency; zero waste; clean transportation; green building and urban forest.

- **SF SUSTAINABILITY PLAN, 1996 (ADOPTED 1997).** The Sustainability Plan establishes sustainable development as a goal of municipal public policy and sets out broad objectives for a sustainable society.

Fig. 9.2 California Academy of Sciences Rooftop/ San Francisco, CA

9.3 SUSTAINABILITY STANDARDS AND GUIDELINES

San Francisco's sustainability policies form a high bar for requirements and baseline standards for the site and buildings at 5M.

This section identifies the key programs, requirements and standards for the buildings and open spaces at 5M, foregrounding the additional sustainability guidelines and aspirations recommended in the following section.

The 5M Sustainability Code Baseline Sustainability Standards Matrix (see Table 9.3.1) details the State and San Francisco City code requirements applicable to the 5M Project, embedding the following regulations:

➔ San Francisco Codes for Green Building, Environment, Planning, Building and Health

➔ San Francisco Bird-Safe Building Ordinance and Supplemental Design Standards

➔ San Francisco Construction & Demolition Debris Ordinance

➔ 5M Project Notice of Preparation of an Environmental Impact Report, Greenhouse Gas Checklist

9.3.1 BASELINE SUSTAINABILITY

The project shall fulfill the minimum requirements in the Sustainability Code Baseline Sustainability Standards Matrix related to energy, water, waste, transportation, materials, air quality, wildlife and site.

9.3.2 LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED) CERTIFICATION

Per San Francisco Green Building Code (AB-093), all new large commercial buildings and major renovations shall achieve a minimum certification of LEED Gold, 60 points. As required, all new large commercial buildings and major renovations shall achieve additional points required to meet LEED Gold. See Figure 9.3.2.

Per San Francisco Green Building Code (AB-093), all new high-rise residential buildings shall achieve a minimum certification of LEED Silver, 50 points. Per San Francisco Green Building Code (AB-093), all new large commercial buildings that displace a historic resource and require street demolition shall secure 10 LEED points more than the minimum threshold required for LEED Gold, a minimum of 70 points. As needed, major renovations to existing buildings, pursuant to SFGBC AB-093 will achieve a minimum certification of LEED Gold, 60 points.

Note: Fulfilled requirements from the Baseline Sustainability Standards Matrix are permitted to count toward LEED certification levels and points where applicable. Additional points required to achieve LEED certification levels are encouraged to prioritize the aspirational sustainability goals, particularly related to the reduction of greenhouse gas (GHG) emissions and the implementation of an EcoDistrict.

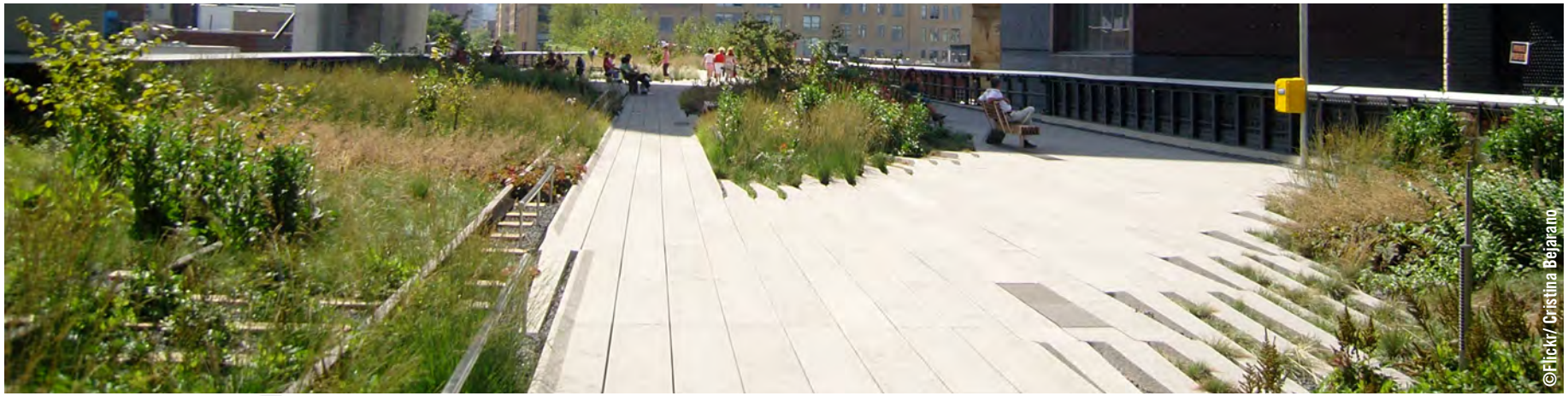


Fig. 9.3 The Highline / New York, NY

	CRITERIA	MINIMUM PERFORMANCE REQUIRED	SPECIFICATION SOURCE(S)	LEED TRACKING (CREDITS) COMPLIES	LEED TRACKING (CREDITS) CONTRIBUTES
ENERGY	ENERGY PERFORMANCE	For new construction of large commercial and residential buildings: Demonstrate at least a 15% energy reduction compared to 2008 California Energy Code, Title 24, Part 6 OR (for LEED) demonstrate at least 15% more compliance over ASHRAE 90.1 2007. For commercial and residential alterations: Comply with LEED EAp1.	SF GB Code Chapter 13C.5 SFO GHG Checklist SFO Building Code SFO Housing Code, Chp. 12	EAp1 EAc1 (3 pts)	-
	RENEWABLE ENERGY	Generate renewable energy on-site at least 1% of total annual energy cost (LEED EAc2) OR demonstrate an additional 10% energy use reduction (total of 25% compared to Title 24, Part 6 OR purchase Green-E certified renewable energy credits for 35% of total electricity use (LEED EAc6).	SF GB Code Chapter 13C.5 SFO GHG Checklist	EAc2 (1 pt) or EAc6 (2 pts)	EAc1 (1-19 pts)
	SITE LIGHTING	For new large commercial projects: Comply with lighting power requirements in CA Energy Code, CCR Part 6, which requires that lighting be contained within each source. No more than 0.01 horizontal lumen footcandles 15 feet beyond site, or meet LEED credit SSc8.	SF GB Code Chapter 13C.5 SFO GHG Checklist	SSc8 (1 pt if targeted)	EAc1 (1-19 pts)
WATER	COMMISSION-ING	For high-rise residential, large commercial buildings and alterations: meet LEED EAp1 Fundamental Commissioning. For large commercial buildings: also meet LEED EAc3 Enhanced Commissioning of Building Energy Systems.	SF GB Code Chapter 13C.5 SFO GHG Checklist	EAp1 / EAc3 (2 pts)	-
	PLUMBING FIXTURES	Meet LEED WEc3, 30% Water Use Reduction. For M-1: Meet LEED Prerequisite 20% savings below UPC/IPC 2006.	SF GB Code Chapter 13C.5	WEp1 / WEc3 (3 pts)	WEc2 (2 pts)
	METERING	For large commercial buildings: Provide submeters for spaces projected to consume more than 1,000 gal/day, or more than 100 gal/day if the building is over 50,000 SF.	SF GB Code Chapter 13C.5	-	EAc5 (3 pts)
WASTE	BUILDING RECYCLING	Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials.	SF Building Code 106A.3.3 and 13C.5.410.1	MRp1	
	CONSTRUCTION WASTE GENERATION	Construction Waste Management - 75% Diversion. Submit a Demolition Debris Recovery Plan where buildings will be fully demolished- requires at least a 65% diversion of demolition debris.	SF GB Code Chapter 13C.5 SFO Construction & Demolition Debris Ordinance SFO Environment Code, Chp. 14 SFO GHG Checklist	MRc2 (2 pts)	

Table 9.3.1 Sustainability Code Baseline Matrix

	CRITERIA	MINIMUM PERFORMANCE REQUIRED	SPECIFICATION SOURCE(S)	LEED TRACKING (CREDITS) COMPLIES	LEED TRACKING (CREDITS) CONTRIBUTES
	STORMWATER	Refer to Section 8.41 for stormwater requirements. SF Public Utilities Commission stormwater management requirements mandate the achievement of LEED SSc6.1 for stormwater rate and quantity management, all making LEED SSc6.2 Stormwater Quality easier to achieve.		SSc6.1 (1 pt) SSc6.2 (1 pt)	
TRANSPORTATION	**BICYCLE PARKING**	For large commercial buildings: Provide short-term and long-term bicycle parking for 5% of total motorized parking capacity each OR meet SF Planning Code Sec 155 (whichever is greater) OR meet LEED credit SSc4.2. For new/major renovations of commercial buildings: Provide shower and changing facilities. SF Planning Code 155.4: 10,000-20,000 GSF = 3 bicycle spaces 20,000-50,000 GSF = 6 bicycle spaces >50,000 GSF = 12 bicycle spaces Retail services: 25,000-50,000 GSF = 3 bicycle spaces 50,000-100,000 GSF = 6 bicycle spaces 100,000 GSF = 12 bicycle spaces For residential buildings over 50 dwelling units: Provide 25 Class 1 spaces plus one Class 2 space for every 4 dwelling units over 50.	SF GB Code Chp. 13C.5.106.4 SFO Planning Code 155.2 through 155.5 GHG Checklist	SSc4.2 (1 pt if the IEED option is pursued)	EAc1 (1-19 pts)
	ALTERNATIVE TRANSPORT	For large commercial buildings: Mark 8% of total parking stalls for low-emitting, fuel-efficient and carpool/van pool vehicles. For residential buildings: Provide 1 car-sharing space (50-200 units); 1 plus 1 space for every additional 200 dwelling units (201+ units)	SF GB Code Chapter 13C.5.106.5 SFO Planning Code 166 SFO GHG Checklist	-	SSc4.3 (3 pts) SSc4.4 (2 pts)
	TRANSPORT PROGRAMS	A portion of the project is within the C-3 District. New buildings above 100,000 GSF: Provide on-site Transportation Management Programs (TMP) and Transportation Brokerage Services (TBS) for the lifetime of the project.	SFO Planning Code, Section 163 SFO GHG Checklist	-	ID Point Possible
MATERIALS + AIR QUALITY	**REFRIGERANTS**	For large commercial buildings, meet LEED EAc4 Enhanced Refrigerant Management. Do not install equipment that contains CFC's or Halons.	SF GB Code Chapter 13C.5	EAp3 EAc4 (2 pts)	-
	INDOOR AIR QUALITY	For large commercial buildings, meet LEED IEQc3.1 Indoor Air Quality (IAQ) Management Plan, During Construction.	SF GB Code Chapter 13C.5	IEQc3.1 (1 pt)	IEQc3.2 (1 pt)
	LOW TOXIC FINISHES	Achieve LEED IEQ 4.1, 4.2, 4.3 and 4.4 Low Emitting Materials.	SF GB Code Chapter 13C.5	IEQc4 (4 pts)	-

Table 9.3.1 Sustainability Code Baseline Matrix cont.

	CRITERIA	MINIMUM PERFORMANCE REQUIRED	SPECIFICATION SOURCE(S)	LEED TRACKING (CREDITS) COMPLIES	LEED TRACKING (CREDITS) CONTRIBUTES
MATERIALS + INDOOR AIR QUALITY	VENTILATION FILTRATION & POLLUTANT CONTROL	For large commercial projects: Provide at least MERV-8 filters in regularly occupied spaces in mechanically ventilated buildings OR meet LEED credit IEQc5 (if the LEED option is pursued). Residential buildings are not located within an air quality hotspot and therefore do not require additional filtration above code.	SF GB Code Chp. 13C.5.106.4 SFO Health Code Article 38 SFO Building Code Chp. 1203.5	IEQc5 (1 pt if targeted)	-
	BUILDING ENTRANCES	For new large commercial buildings: Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings.	SF GB Code Chapter 13C.5.407.2.2	-	-
	ACOUSTICS	For large commercial projects: Ensure wall and roof-ceilings have an STC of 50, exterior windows STC of 30, and party walls and floor-ceilings STC of 40.	SF GB Code Chp. 13C.5	-	ID Point possible
WILDLIFE	BIRD-SAFE BUILDING	For all new buildings and additions to existing buildings, treat these building feature-related hazards: - Free-standing clear glass walls, skywalks, greenhouses on rooftops, and balconies that have unbroken glazed segments 24 SF and larger in size - Free-standing clear-glass landscape features or bus shelters - Glazed passageways/lobbies with clear sightlines through buliding broken only by glazing - Transparent building corners Requirements apply to: - 90% of glazing from grade up to 60 feet - 100% of building feature-related hazard Social considerations for historic buildings may apply.	SFO Bird-Safe Building Ordinance and Design Standards	-	ID Point possible
SITE	LOCATION	The project is located on a pre-developed site in the downtown core, and therefore will automatically earn LEED points related to site selection and development density.	LEED for New Construction & Major Renovations Rating System	SSc1 (1 pt) SSc2 (5 pts)	-
	TOTAL	TOTAL POSSIBLE BASELINE POINTS		30-31 PTS	14+ PTS

Table 9.3.1 Sustainability Code Baseline Matrix cont.

9.3.3 SUSTAINABILITY GUIDELINES

The 5M Project is encouraged to incorporate goals and implement strategies listed in the Sustainability Guidelines Matrix (see *Table 9.3.3*), where possible.

The Sustainability Guidelines Matrix details the relevant programs* that are guiding sustainability progress in buildings and neighborhoods:

➔ California Energy Code, Title 24, Part 6

➔ Leadership in Energy and Environmental Design (LEED)

➔ AIA Architecture 2030 Design Challenge

➔ Central SoMa EcoDistrict

*These programs are influenced by California's Global Warming Solutions Act (AB 32). State legislature passed Assembly Bill 32 (AB 32) California's Global Warming Solutions Act in 2006, which requires that the State reduce greenhouse gas (GHG) emissions to 1990 levels by the year 2020. A related executive order further requires an 80% reduction below 1990 levels by 2050. The State is planning for the vast majority of these reductions (26.3 million metric tons of GHG emissions) to come from energy efficiency improvements in buildings and equipment. Because AB 32 is managing emissions limits across the state, it directly drives green building code requirements at the local level and encourages more aggressive performance standards to be implemented.

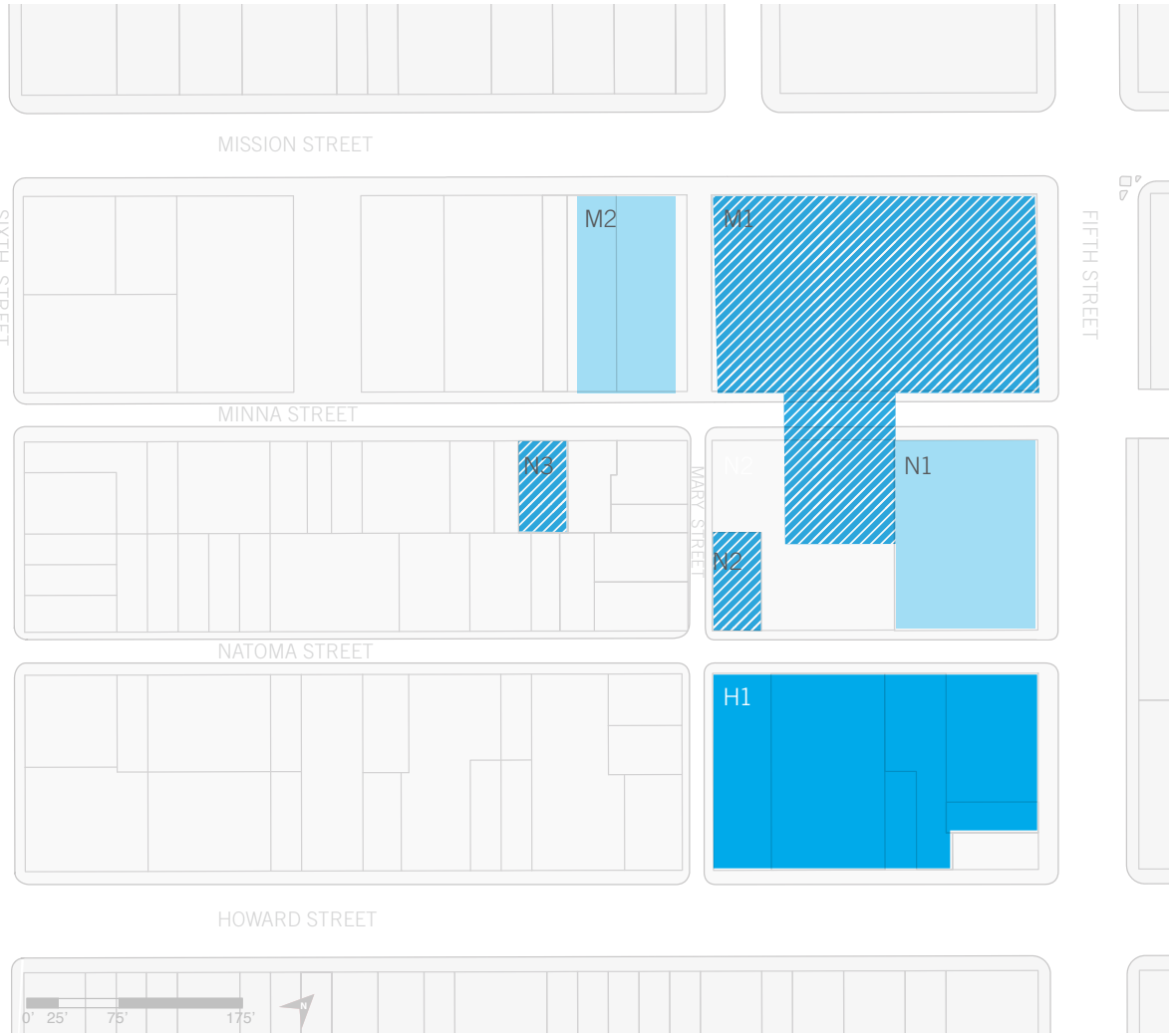


Fig. 9.3.2 LEED Certification

	GUIDING PROGRAM	DESCRIPTION	PERFORMANCE ASPIRATIONS	POSSIBLE 5M GOAL
BUILDING	**CALIFORNIA ENERGY CODE, TITLE 24, PART 6**	Administered by the California Energy Commission, the standard regulates: energy efficiency performance in buildings and drive local regulation including the City's Green Building Code. The energy performance baseline of the standard increases every five years.	The roll out of Title 24 is expected January 1, 2014. The updated code will be more strict, possible up to 20% more strict than the current 2008 code for commercial and multi-family residential buildings.	Exceed the Title 24 Code in effect.
	LEED	Leadership in Energy and Environmental Design (LEED) is administered by the non-profit U.S. Green Building Council. The rating system sets the standard for Green Building in the U.S.	The San Francisco Green Building Code requires LEED Gold certification for large commercial buildings and major renovations, and LEED Silver certification for multi-family residential buildings. LEED Platinum is the highest level of certification.	- Target LEED Gold certification for all buildings to align residential development with State net zero energy goals. - Assess LEED Platinum potentials during the early stages of design.
	AIA ARCHITECTURE 2030 DESIGN CHALLENGE	Architecture 2030 is a non-profit, non-partisan, independent organization, in alliance with the American Institute for Architects (AIA), that crafted the 2030 Design Challenge for carbon neutral building by 2030. In San Francisco, 56% of greenhouse gas (GHG) has emissions associated with building energy use. The challenge includes goals closely aligned with the California Public Utilities Commission adopted in 2008 and helps the Commission meet San Francisco Climate Action Plan goals to reduce carbon emissions 80% from 1990 levels by 2050.	Per the California Public Utilities Commission, the goal is for net zero energy by 2020 for all new residential construction and 2030 for all new commercial construction. The goal is not mandated, but sets a policy direction from the State energy code, Title 24. The AIA Design Challenge allows up to 20% of the building's energy demand to be offset by purchasing renewable energy.	Reduce greenhouse gas emissions as much as possible and use national standards for commercial and residential building types to benchmark progress.
NEIGHBORHOOD	**CENTRAL CORRIDOR ECO-DISTRICT**	The Central SoMa Plan Area, which includes the 5M site, is identified by the City Planning Department for EcoDistrict implementation - the subject of a significant re-zoning effort to encourage sustainable growth. An Eco-District is a district where neighbors, community institutions, and businesses join with city leaders and utility providers to meet sustainability goals and co-develop innovative projects. The EcoDistrict Plan will be created in collaboration with area stakeholders through a Task Force, or as projects and financing mechanisms are established through grant-funded work.	Collaboration with the Central SoMa EcoDistrict Plan (completion goal: Fall 2013) is voluntary but Task Force and SF Planning Department may adopt future policies in the Eco-District Plan. Outside of EcoDistrict planning, one district level strategy already required in the Central SoMa is dual-plumbing for new construction in order to ready buildings for the city supplied recycled water line (SF Public Works Reclaimed Water Use Ordinances).	- Evaluate district-scale building and site strategies during design. - Design building systems to easily "plug into" district level heating and cooling infrastructure in the future. - District strategy areas may include transportation, energy, water, placemaking, waste.

Table 9.3.3 Sustainability Guidelines Matrix

9.4 STORMWATER MANAGEMENT

Stormwater management and treatment within the public realm areas at 5M will employ and integrate a variety of sustainable sites best practices and low impact design strategies throughout the District.

Low Impact Design (LID) measures help reduce and delay the volume of runoff leaving a site and entering the storm/sewer system, thereby reducing the frequency of combined storm/sewer overflows, minimizing flooding impacts, and protecting bay area water quality.

5M is served by a system that conveys storm and wastewater by the same piped system. The combined storm/sewer flows receive treatment at the City's wastewater treatment plant before discharged to the Bay. Unlike conventional stormwater systems, storm/sewer systems treat urban runoff before discharge. When the capacity of storm/sewer systems is exceeded by large storm events (typically greater than the 5-year storm), localized flooding and system overflows can occur, causing the release of partially-untreated storm/wastewater into receiving water bodies. Untreated storm/sewer overflow can harm natural bay area water quality, ecosystems, and species, and cause public health concerns and beach closures.

Given its composition of sandy fill, native dune sand, clay sand, and small marsh deposits, the 5M site can infiltrate stormwater diverted through LID measures. The groundwater table is about 15-30 feet below the existing grade.

Stormwater management and LID measures implemented at 5M will comply with the San Francisco Public Utilities Commission's Stormwater Design Guidelines and requirements for new development. These measures will reduce impervious surfaces; reduce stormwater runoff rates and volumes; and capture and treat runoff.

Fig. 9.4.2a Stormwater Planter

9.4.1 STORMWATER STANDARDS

Per San Francisco Stormwater Design Guidelines, 5M disturbs more than 5,000 square feet of ground and thus shall implement LID measures pursuant to LEED Sustainable Sites Credit 6.1 Stormwater Design: Quantity Control.

Per San Francisco Stormwater Design Guidelines, the 5M site is more than 50 percent impervious and thus shall implement a stormwater management plan that results in a 25 percent decrease in the flow and volume of runoff leaving the site (based on the 2-year 24-hour design storm), compared to the existing conditions.

The 5M Project shall incorporate dual plumbing for future connection to a recycled water system.

On-site LID measures are not required for parcel N3. Runoff from this parcel is encouraged to be addressed by other 5M parcels, streets, or open spaces.

Open, softscape bioswales and large tracts of at-grade lawn area necessitating irrigation are not permitted.

Stormwater Management Legend

- Permeable Pavement
- Bio-swale / Raingarden
- Greenroof*
- Cistern*
- Flow-through Planter*

* Greenroof, Cistern, and Flow-through Planter can be used as independent LID measure or in combination.

Fig. 9.4.1 Stormwater Management Strategies

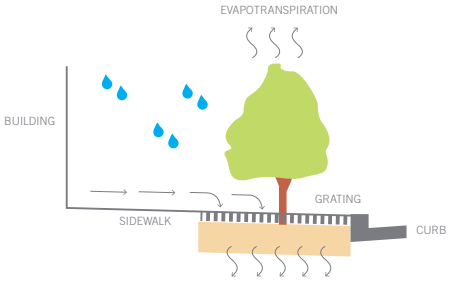
9.4.2 AT-GRADE STRATEGIES

Reduction of stormwater is achieved through reducing the area of impervious surfaces and/or replacing them with pervious surfaces that allow rainwater to percolate into the ground. At-grade strategies (see Figure 9.4.2b) include permeable street tree planters, permeable pavers within sidewalks and streets, and bio-retention areas.

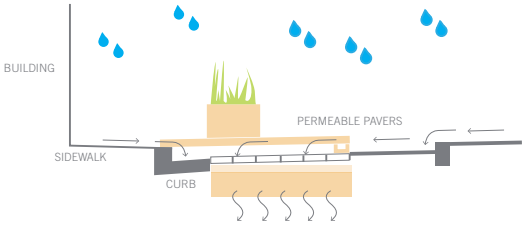
9.4.2 GUIDELINES: AT-GRADE STRATEGIES

Permeable Pavements: LID measures sited within the public realm are preferred. Recommended LID measures for streets, sidewalks, and open spaces include street tree planters, landscaping, permeable pavers, pervious pavement, and bio-retention. LID measures for streets, sidewalks, and open spaces should be compatible with the urban character of the project and the flexible, active programming of streets and public open spaces. Recommended LID measures for buildings and private open spaces include landscaping, rainwater cisterns, greenroofs, and flow-through planters.

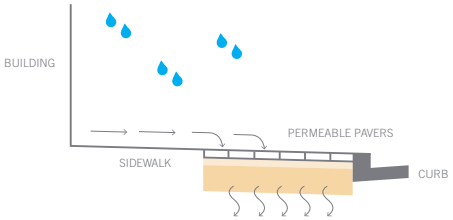
Biofiltration Planters: Interior streets and alleys should use pervious asphalt paving where feasible. Interior streets and alleys paved with permeable asphalt are encouraged to direct runoff to strips of permeable unit pavers located along curbs and at parking zones. Infiltration and storage basins are encouraged below interior streets and alleys with pervious asphalt and permeable paver strips, where feasible, depending on the nature of the native sub-soils. Strips of permeable unit pavers are encouraged for the back of curb area (street side) for sidewalks along Mission, Fifth, and Howard Streets. A bio-retention rain garden is encouraged for Central Mary Street, across from Mary Court.



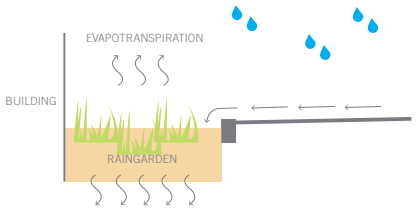
Permeable Street Tree



Permeable Pavers (Street/Parklet Strips)



Permeable Pavers (Within Sidewalk)



Bio-Retention Along Streets and Buildings

Fig. 9.4.2b At-Grade LID Strategies

Green Wall

Plaza Infiltration Planter

Sidewalk Infiltration Planter

Below-grade Cistern and Infiltration Plaza

Permeable Paving

Green Roof

Fig. 9.4.2c Infiltration Strategies

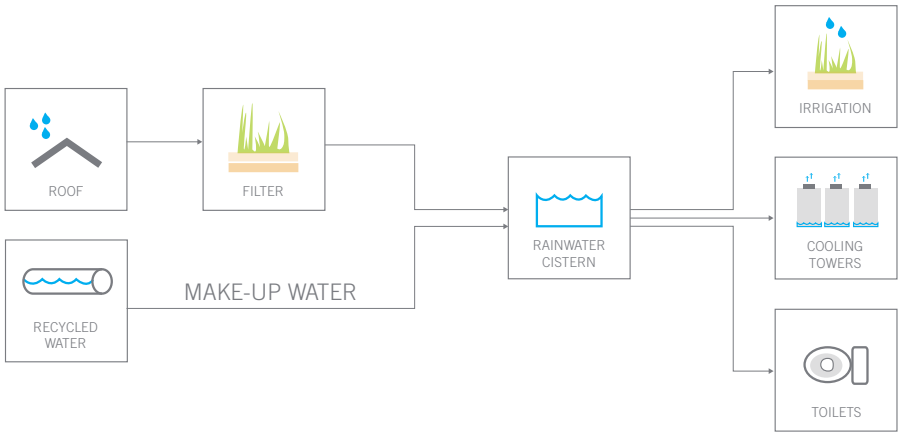
9.4.3 ABOVE GRADE STRATEGIES

Buildings can also incorporate stormwater collection strategies above grade. See Figure 9.4.3. Rainwater cisterns, green roofs, and flow-through planters all collect rainwater from roof areas and direct them through filters to either the city system or into tanks, where it is then re-used it for cooling towers, toilet flushing, irrigation and other non-potable water uses.

9.4.3 GUIDELINES: ABOVE GRADE STRATEGIES

Green Roofs: Per usable open space requirements, the Chronicle rooftop should incorporate greenroof area. Buildings are encouraged to have greenroofs, especially where combined with accessible open space. Greenroofs are encouraged to combine turf lawn, gardens, edible gardens, planter beds, native and drought-tolerant plants, local wildlife habitat, accessible open space, seating, shelter or areas for gathering. Greenroofs may be under drained or drained to the storm/sewer system, if required.

Below Grade Systems: Cisterns and rainwater harvesting systems are encouraged. Where feasible, harvested runoff could be used for non-potable uses including irrigation of streetscape and planting improvements in the public realm. Cisterns and rainwater harvesting may be under drained or drained to the storm/sewer system, if required.



Rainwater Cistern

Green Roof

Flow-Through Planter

Fig. 9.4.3 Above Grade LID Strategies

9.4.4 STORMWATER PARKLETS

Stormwater techniques can be leveraged alongside facilities for additional usable public open space. Curb-side parklets allow stormwater runoff from streets and sidewalks to flow underneath, percolating through permeable paving areas and recharging the groundwater resources. Public seating, furnishings, planting, and other public amenities expand open space areas above. See Figure 9.4.4.

9.4.4 GUIDELINES: STORMWATER PARKLETS

Public parklets should be sited and designed in accordance with San Francisco's Parklet Design Guidelines. Parklets above permeable paving areas will design surfaces and joints to drain water below, preventing ponding on habitable surfaces and between adjacent parklets.

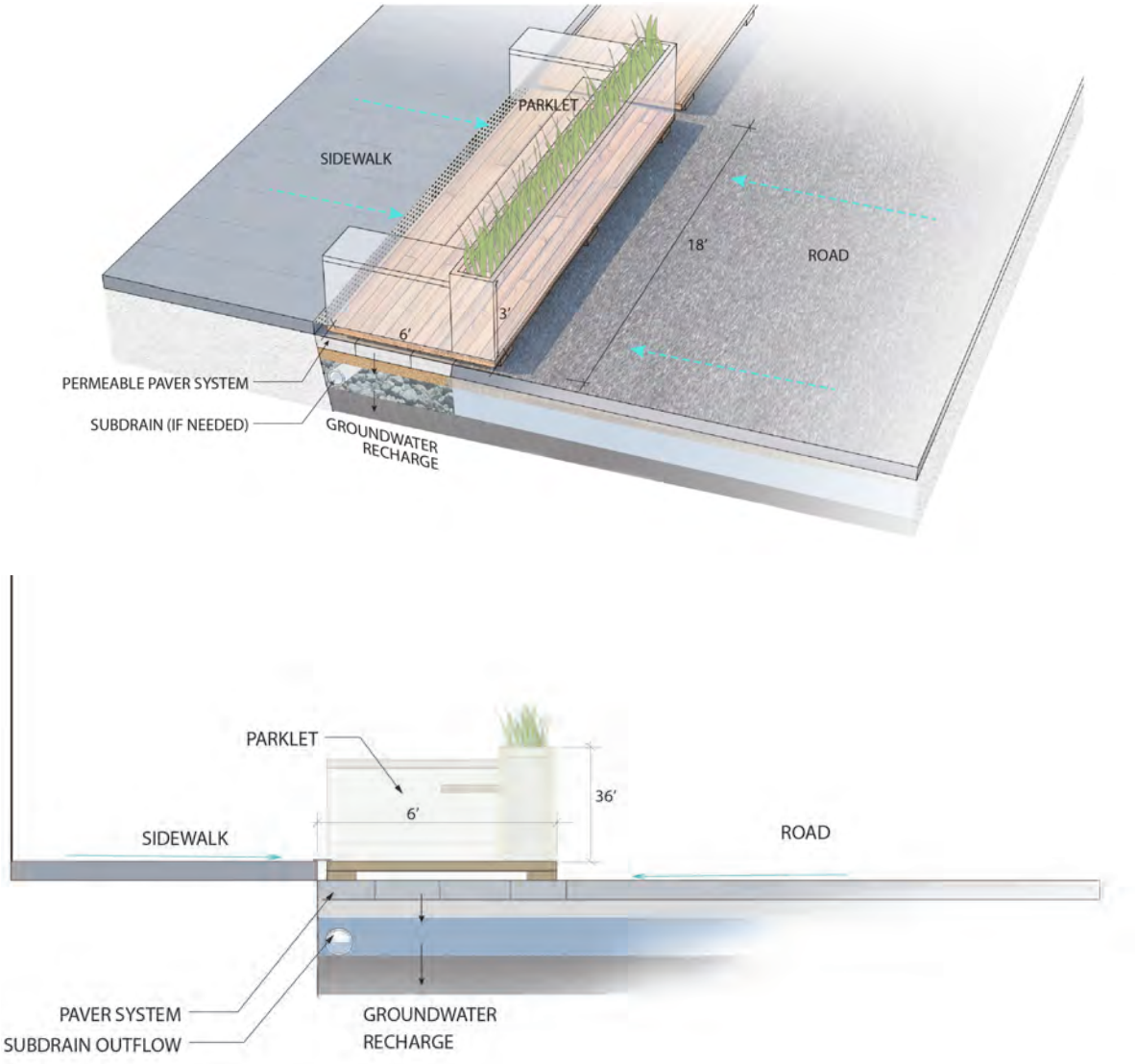


Fig. 9.4.4 Permeable Paver + Parklet Stormwater

9.5 UTILITIES

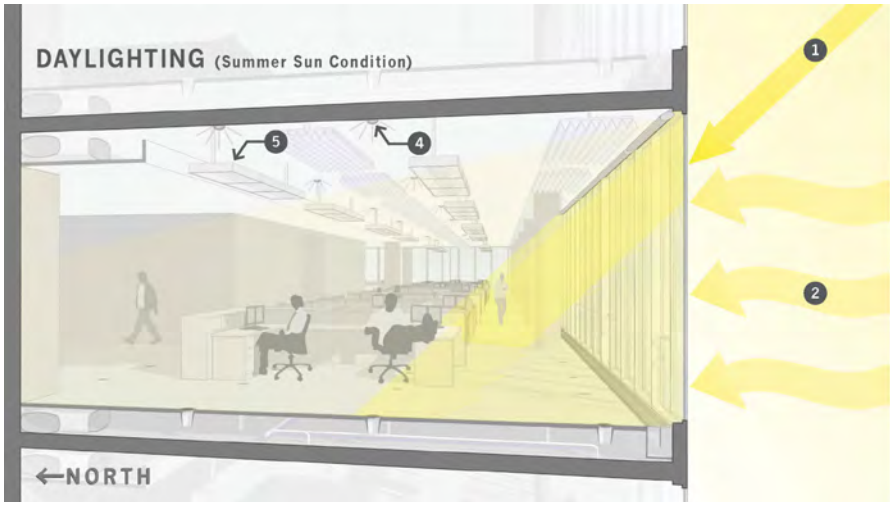
Strategic and energy-efficient daylighting, lighting, and HVAC systems can further building performance goals, achieve greater project sustainability, as well as enhance user comfort and experience.

9.5.1 GUIDELINES: INTERNAL DAYLIGHTING

Energy-efficient lighting, appliances and HVAC equipment, as well as renewable energy options should be utilized to reduce energy use and carbon emissions. Electric lighting energy use should be reduced through daylighting, efficient lighting design and appropriate lighting controls. Facades of buildings with residential, retail and office uses should be designed to shield peak gains and optimize natural lighting.

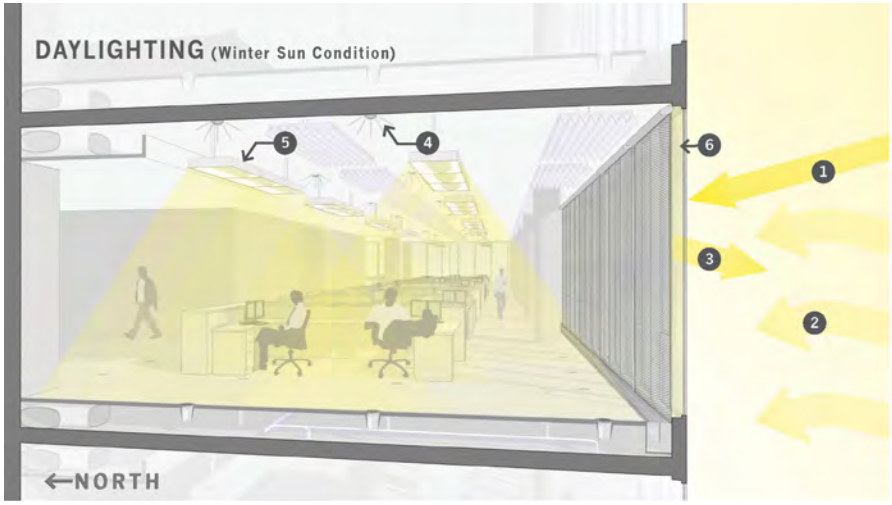
9.5.2 GUIDELINES: LIGHTING

Lighting should be provided at the lowest levels which are in accordance with the Illumination Engineering Society of North America (IESNA) lighting guidelines and applicable codes. Light levels should limit night sky pollution. Refer to *Section 8.3 Signage: Art and Signage: Site Lighting*.



1 DIRECT SUN LIGHT
2 INDIRECT LIGHT
3 REFLECTED LIGHT
4 PHOTO CELLS (sensors)
5 LIGHTS (automated)
6 SUN SHADE (manual)

High/Summer—The majority of time the sun is not low in the sky. Buildings can let in sunlight and turn off electric lights.



1 DIRECT SUN LIGHT
2 INDIRECT LIGHT
3 REFLECTED LIGHT
4 PHOTO CELLS (sensors)
5 LIGHTS (automated)
6 SUN SHADE (manual)

Low/Winter—Low sun positions (early morning, late afternoon, winter) cause glare and visual discomfort. Users can lower shades and photo cells will turn on the lights in response to lower light levels.

Fig. 9.5.1 Internal Daylighting Strategies

9.5.3 GUIDELINES: HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)

Building design should incorporate operable windows and open-air courtyards to encourage natural and cross ventilation as part of the HVAC system. HVAC energy should be reduced through load reduction measures (high performance building envelopes, lighting/equipment efficiencies, etc.) and through high-efficiency and thermally-comfortable conditioning options (displacement ventilation, active or passive chilled beams, mixed-mode ventilation, etc.). Efficiency heating and cooling energy generation should be addressed with strategies, such as high-efficiency chillers/boilers, water and air-side economizer option with cooling towers, and closed-loop ground source heat pump systems.

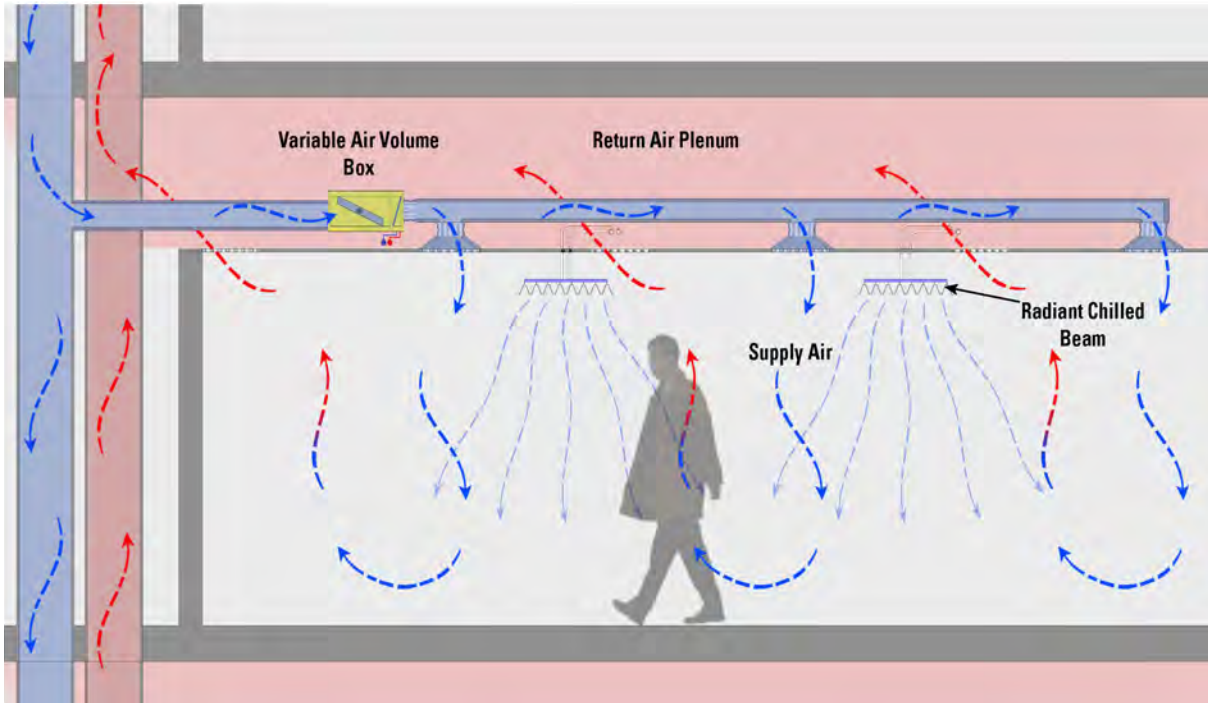


Fig. 9.5.3 HVAC Strategies: Overhead Air with Overhead Radiant Chilled Beam