NAPA PIPE DESIGN GUIDELINES

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INTRODUCTION

Intent & Objectives

1.11 INTENT

The intent of these Design Guidelines is to establish an organizing framework for development within the Napa Pipe zoning districts and to ensure an overall level of coherence in form and design. The Napa Pipe Project ("Napa Pipe") will be built incrementally over time by different builders; therefore, these Design Guidelines have been crafted to encourage flexibility and creativity in the design of development parcels, while achieving the overall intent of the zoning district, which is to encourage development of a "walkable" neighborhood with high density housing types, publicly accessible open space, and other uses (see Napa County Code Section 18.66.010(B)).

In order to guide developers, architects, landscape architects, and public officials, this regulatory document provides a clear framework for evaluating each building proposal to ensure its adherence to the overall Napa Pipe vision.

This document is designed to:

- Establish and maintain Napa Pipe's quality of life and image through clearly articulated Standards and Guidelines.
- Ensure long-term sustainability and promote economic vitality through design standards and guidelines which encourage and reward high quality development, while discouraging less attractive and less enduring alternatives.
- Enhance and protect the security, accessibility, and health, safety and welfare of the residents, employees, and visitors to Napa Pipe.
- Ensure a mix of housing types and scales at that are accessible to a variety of income levels.

Figure 1.1 Illustrative Rendering of aerial view over Napa Pipe

INTRODUCTION

Project Overview

1.21 SITE LOCATION AND SCOPE

The Napa Pipe site consists of approximately 154 acres adjacent to the Napa River and Kaiser Road. The western parcel (APN 046-412-005) is approximately 63 acres and is zoned for development of a mixed-use neighborhood between the Napa River and the railroad corridor which bisects the site. The eastern parcel (APN 046-400-030) includes approximately 17.5 acres that has been zoned for development of a Costco store and gas station, as well as an additional area of 73.5 acres that maintains its industrial zoning. These remaining 73.5 acres that are zoned industrial are not pursuant to these Design Guidelines.

1.22 DEVELOPMENT PLAN

The County ordinance establishing the Napa Pipe zoning district includes a site plan illustrating the general configuration of land uses, blocks, streets, and access roads proposed on the site. The site plan and development program are further refined in the Development Plan described in Napa County Code Section 18.66.030. As described below, the Development Plan is proposed to be adopted concurrent with these Design Guidelines and to work in concert with them and a Development Agreement to ensure orderly development of the site.

Development Program

The development program for Napa Pipe is described in the Development Agreement and Development Plan.

Phasing Plan

The phasing plan for the build-out of Napa Pipe is described in the Development Agreement and Development Plan.

Streets and Blocks

The Development Plan and Tentative Map establish a system of streets and blocks at specific dimensions intended to define the character of the Napa Pipe neighborhood as a "walkable" urban environment different from a typical suburban neighborhood. The compact block pattern provides circulation and access by automobiles, pedestrians, and bicyclists, and defines the location of public open spaces, parks, and trails. The dimensions of the blocks become the framework for the development parcels, which are described by these Design Guidelines.

1.23 DEVELOPMENT PLAN CON'T

Streets and Blocks con't

Block dimensions determine which building typologies and densities are feasible for particular development parcels. There are select blocks where certain typologies and densities are required to ensure sufficient numbers of units are constructed at Napa Pipe and an appropriate spectrum of variety and affordability to the range in the Napa County workforce.

Public Realm Parks and Open Space

Essential to Napa Pipe is the importance of a strong and varied public realm. The public realm is defined as the site area outside the development parcels including the streets, sidewalks, and open spaces including greens, squares, plazas, playgrounds, and pocket parks. The public realm is not only made up of these parks and open space, but also publicly-accessible amenities that serve Napa Pipe residents and visitors alike. Within the planning for the public realm of the Napa Pipe, a wide variety of amenities have been identified as described in the Development Plan.

INTRODUCTION

Regulatory Framework

1.31 REGULATORY DOCUMENTS

There are four documents that guide development at Napa Pipe: the Zoning Ordinance (or "zoning code"), the Development Agreement, the Development Plan, and the Design Guidelines. These documents work in concert to define the configuration and character of the Napa Pipe Project. In the event of any inconsistency, the Development Agreement shall have control over all other documents. In the event of inconsistency between the Development Plan and the Design Guidelines, the Development Plan shall have control.

The Zoning Code establishes the types and intensity of uses allowed, location(s) where these uses are permitted, height limits, and maximum (gross) densities.

The Development Agreement is a contractual agreement between the developer and the County. The Agreement grants certain development rights to the developer in exchange for complying with certain obligations. The Development Agreement would be assumed by the City if the property should annex at a future date. The term of the Development Agreement is 20 years from the date of its enactment. The Development Plan and Design Guidelines are incorporated into and are a part of the Development Agreement.

The Development Plan defines the Napa Pipe block layout and the location and design of the public realm: public open spaces, trails, and streets, including sidewalks. The scope of the Development Plan ends at the back of street sidewalks, which defines the boundaries of the development parcels for buildings. Overall Napa Pipe requirements, such as those related to parking, affordable housing, and project phasing are also defined in the Development Plan.

The Design Guidelines Whereas the Development Plan establishes the location and dimension of development parcels, the Design Guidelines defines their design and character. The Design Guidelines includes a "form based code" which establishes the physical dimensions of the anticipated building typologies including lot size, lot coverage, frontage, setbacks, and parking orientation. Standards and guidelines determine the design and character of buildings and associated private open spaces within the development parcels, allowing variety within each building typology, while ensuring a consistent quality of design.

1.32 ADOPTION/AMENDMENTS TO THE DESIGN GUIDELINES

The adoption and amendment of the Design Guidelines is subject to the same application and review procedures as a zoning text amendment.

Figure 1.2 Illustrative Rendering of Napa Pipe waterfront

INTRODUCTION

Key Zoning References

1.41 USES

The locations of planned and permitted uses in the Napa Pipe zoning district are illustrated in the Development Plan.

1.42 HEIGHTS

The Napa Pipe zoning district allows for heights of up to 55 feet in the NP-MUR-W district (18.66.110), and heights up to 48 feet in the NP-IBP-W (18.66.170) and NP-IBP (18.66.260) districts.

1.43 PARKING REQUIREMENTS

The Napa Pipe zoning code (18.66.280) requires specific numbers of parking spaces per bedroom (for residential uses), per room (for hotel), per unit (for senior housing and residential guest parking), and per square footage (for commercial uses other than hotel). These requirements can be modified as set forth in the Development Plan.

Figure 1.3 Illustrative Rendering of Neighborhood Mews

INTRODUCTION

Approvals Process

1.51 SUBMITTAL REVIEW

All submittals subject to these Design Guidelines shall be reviewed and approved by the regulatory agencies prior to submittal for building permits. Submittals which do not, in the designee's opinion, comply with the mandatory provisions of these Design Guidelines shall be rejected and must be redesigned to conform to the Design Guidelines unless the Design Guidelines are amended as provided above. All decisions of the designee may be appealed in accordance with the applicable jurisdiction's appeal procedures.

1.52 COMPLIANCE

These Design Guidelines contain mandatory and recommended provisions. Mandatory provisions are obligatory and failure to incorporate mandatory provisions shall constitute grounds for denial of an application unless an exception is granted as provided herein. Recommended provisions provide guidance on preferred design elements, but are not required. All provisions of the Design Guidelines pertaining to building form (i.e. Section 3. Form Based Code) are mandatory.

Standards and guidelines are written to be complementary. The standards provide the critical foundation; they are the select components that are required and will ensure that Napa Pipe'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 proscribed, by the guidelines that point to Napa Pipe's character.

Standards are criteria that are considered critical to achieving the goals of the design intent and are specified by the terms "shall," "required," "not allowed," and "not permitted." Compliance with standards is required unless it can be demonstrated that an acceptable alternative meets one or more of the following conditions: an alternative better achieves the stated intent; the effect of the other standards and guidelines will be improved by not applying this standard; unique site factors make the standard impractical.

Guidelines promote the goals of the project, but are voluntary and are therefore specified by the terms "may," "should," "allowed," "recommended," "not recommended," and "permitted." A project may not be denied due to a failure to comply with voluntary conditions. The term "should" does not create a mandatory condition, but does demonstrate intent. An applicant who does not comply with a "should" condition must be prepared to explain why compliance is problematic.

1.53 EXCEPTIONS

Requests for exceptions shall be considered by the Planning Commission consistent with procedures for exceptions to standards in the zoning ordinance. The Planning Commission's decision to grant or deny an exception is appealable to the legislative body consistent with appeal procedures established in code.

Napa Pipe is envisioned as a neighborhood designed to promote outdoor living and provide access to a variety of public and private open space for residents and visitors alike. Napa Pipe fosters community and creates a place connected to the surrounding landscape.

DESIGN FRAMEWORKS

2.1 Development Zones and Density
2.2 Streets and Frontages

DESIGN FRAMEWORK

Development Zones and Density

Napa Pipe is made up of two major development districts, Napa Pipe Mixed-Used Residential (NP-MUR) and Napa Pipe Industrial /Business Park (NP-IBP). Each of these districts has been identified with a special waterfront zone NP-MUR-W and NP-IBP-W, to highlight the special nature of a neighborhood along the Napa River.

Napa Pipe Mixed Used Residential (NP-MUR-W)

The Mixed Use Residential District is characterized by primarily residential blocks and a network of public parks (Parcels 1-22). Along the Napa River, re-purposed existing drydocks form a neighborhood center and opportunity for retail and public amenities with access to the waterfront (Parcel 14). A range of residential typologies with multiple possible configurations are anticipated to create a mix of units and a varied built fabric. Residential typologies range from small-lot single family and mews townhouses to multi-family townhouses and apartments. To achieve this variety in typology, building massing, as well as view potential, Napa Pipe integrates blocks designated up to 55' in allowable height.

Residential Density

Napa Pipe Mixed Use Residential Blocks 1, 11, and 19 are required to have a minimum density of 30 du/acre. Refer to Figure 2.1: Development Zones.

Napa Pipe Industrial /Business Park (NP-IBP and NP-IBP-W)

The Industrial/Business Park District is characterized by large open parks and wetlands at the southern end of the Napa Pipe. At the west, a large community park and accessory uses separate the river from parcels intended for office space and a 150-suite Hotel (Parcels C, D, E). East of the railroad right-of-way, this 17.5-acre portion of the district is intended for a Costco store (Parcel F) and fuel facility (Parcel A).

Illustrative **Block Layouts**

A sample range of possible block layouts are provided in Figure 2.2: Illustrative Block Layouts. These block layouts show a range of possible typology arrangements and combinations on an average block. The sample layouts are not meant to be exclusive, but to illustrate the variety achievable within these Design Guidelines. For additional guidelines related to block layout, refer to Section 5.12: Buildings and Blocks.

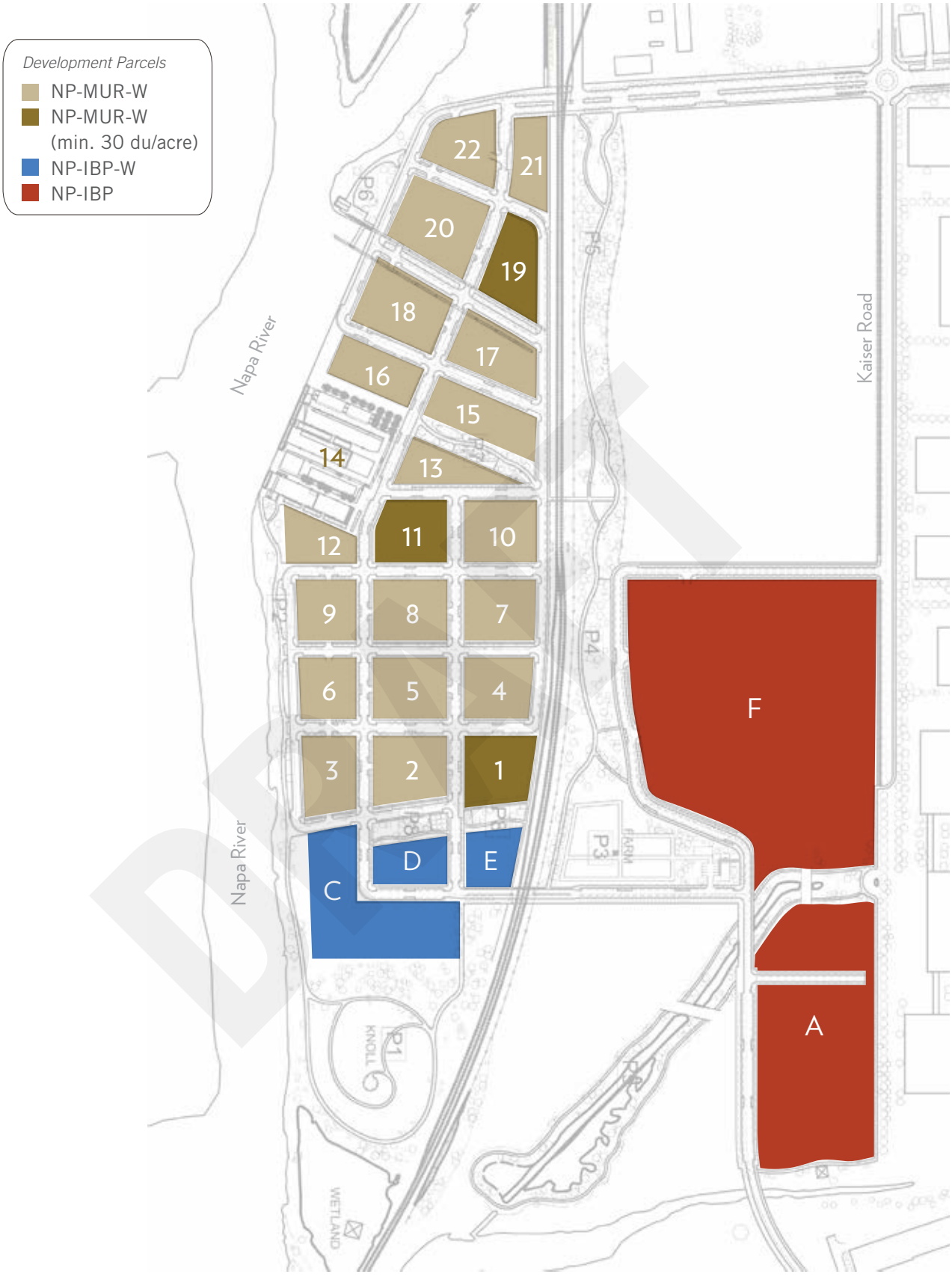
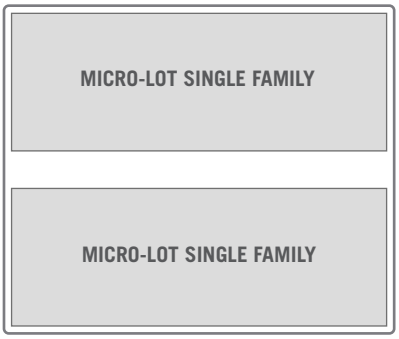
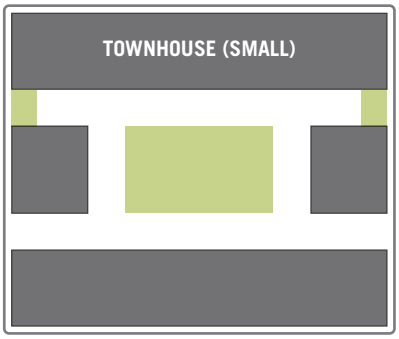


Figure 2.1 Development Zones

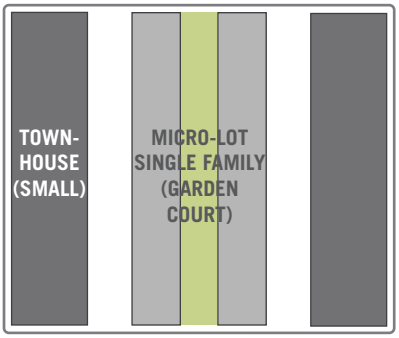


18 UNITS — 15 DU/acre

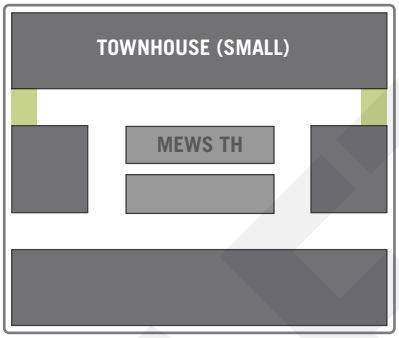


28 UNITS — 23 DU/acre

24 UNITS — DU/acre

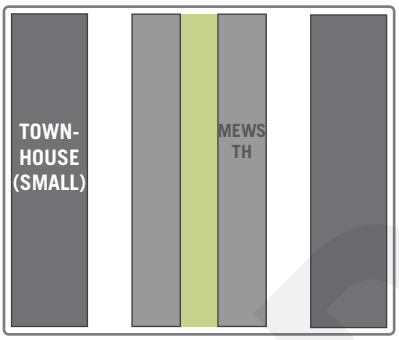


34 UNITS — 28 DU/acre

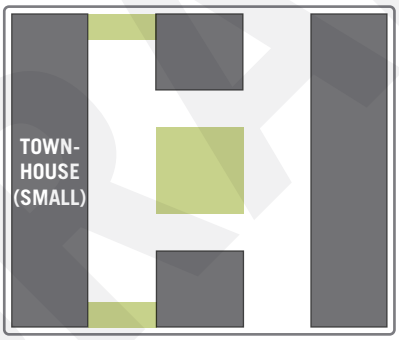


38 UNITS — 32 DU/acre

40 UNITS — 33 DU/acre

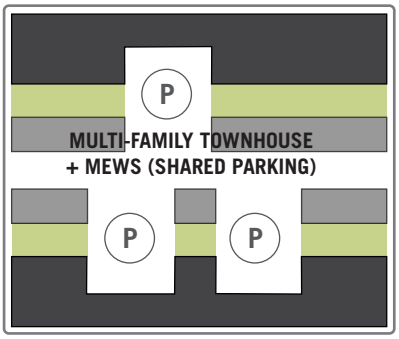


34 UNITS — 28 DU/acre

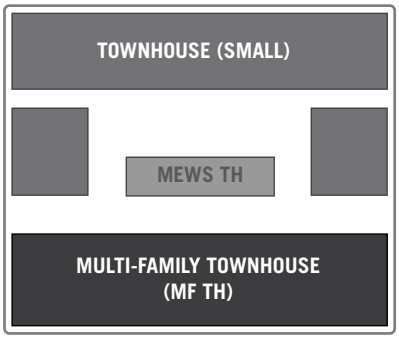


24 UNITS — 20 DU/acre

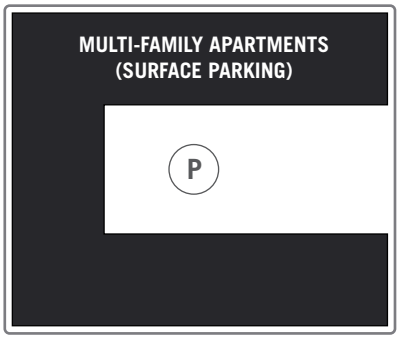
Figure 2.2 Illustrative Block Layouts and Approximate Densities



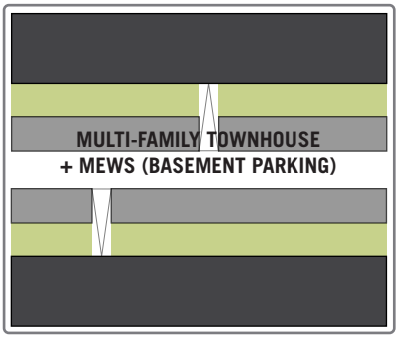
40 UNITS — 33 DU/acre
**Interdependent Parking within block*



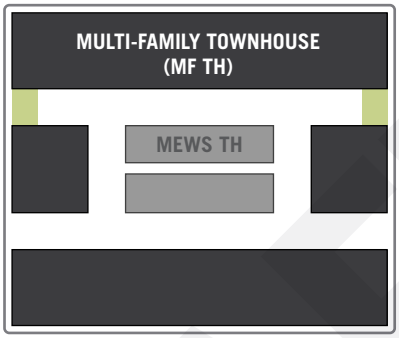
25 UNITS — 20 DU/acre



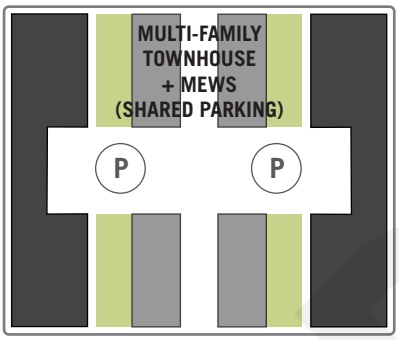
31 UNITS — 25 DU/acre
**Parking faces Railroad R.O.W.*



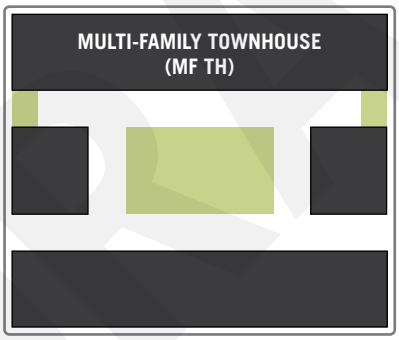
64 UNITS — 49 DU/acre



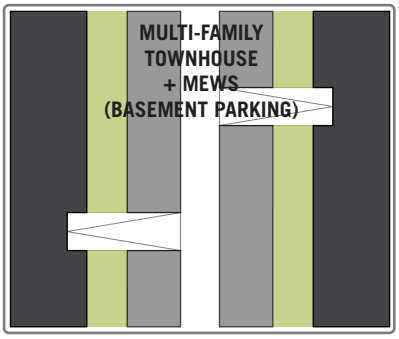
50 UNITS — 41 DU/acre



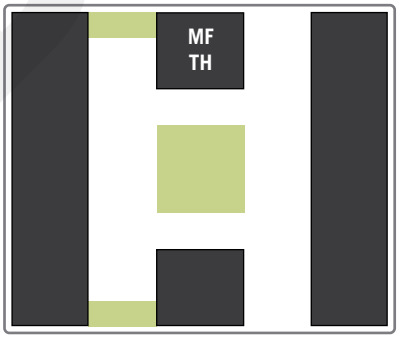
28 UNITS — 23 DU/acre



40 UNITS — 33 DU/acre



55 UNITS — 48 DU/acre



40 UNITS — 33 DU/acre

All illustrative layouts assume 1.23-acre block

- MICRO-LOT SINGLE FAMILY
- MICRO-LOT SINGLE FAMILY (GARDEN COURT)
- MEWS TOWNHOUSE
- TOWNHOUSE (SMALL)
- TOWNHOUSE (LARGE)
- MULTI-FAMILY TOWNHOUSE / STACKED FLATS
- MULTI-FAMILY APARTMENTS
- POSSIBLE GREEN SPACE

DESIGN FRAMEWORK

Streets and Frontages

Napa Pipe streets are platted on an irregular grid that responds to views and the river. The modified grid provides access to open spaces and connections to the surrounding community. The streets are key structural components within the palette of Napa Pipe public spaces. As the shared setting among buildings, streets provide an arena for community interaction and are designed to positively mediate the relationship between pedestrians and vehicles. These objectives are realized in lane width, centerline radius, curb radius, intersection spacing, provision of on-street parking, and sidewalk relationships.

Build-to lines generally provide for a setback in order to create a landscape buffer between sidewalks and buildings as well as allow for articulation in the form of stoops, bays, and balconies. Street frontage standards and guidelines are based on the following overarching principles:

» Align and face building fronts toward the primary street edge.

» Create active fronts and balconies for buildings overlook the streets.

» Locate principal building entrances on the primary street frontage.

» Locate vehicle parking, garbage storage and pickup, and mechanical equipment away from streets and hidden from view.

A street is an urban element that provides a major portion of public open space, as well as moving lanes for vehicles and bicycles. A street has two primary attributes: character and capacity. These two attributes are designed to vary at Napa Pipe, based on their orientation, primacy of the circulation, and adjacent buildings. Streets can be grouped into three main types: Primary Streets, Secondary Streets, and Shared Driveways.

Primary Streets, Secondary Streets, and Shared Driveways are all part of the circulation network that establishes the urban framework for Napa Pipe. While the intent of three types are described herein, Primary and Secondary Streets are part of the public realm and their character and design is regulated by the Development Plan. However, the design and character of Shared Driveways, which are part of the private realm within development parcels, are guided by these Design Guidelines.

Refer to Figure 2.3: Street Hierarchy for the designation of Primary, Secondary, and Signature Streets.

2.21 PRIMARY STREETS

Primary Streets in the Napa Pipe neighborhood define the basic grid and primary access for the neighborhood. Primary Streets are: the vehicular approach roads that connect to Napa Corporate Drive and Kaiser Boulevard, north/south roads through the site, and all roads crossing the railroad right-of-way. The Primary Streets provide direct access to the neighborhood center and all smaller minor streets and shared driveways. Dedicated bike lanes are only provided on the approach roads. Vehicular design speeds on major streets range from 30 MPH to 20 MPH. All major streets include street trees, street parking lanes, and may include planted medians and pits located along the curb. Sidewalks are hardscape with large canopy trees set in metal tree grates or mulch beds. A major street may also have a planted median. Refer to the Development Plan for detail on Primary Streets.

2.22 SECONDARY STREETS

Secondary Streets are defined by a pattern of shared use where bicycles and motorized vehicles share the driving lanes and are designed for a vehicular speed of 25 mph or less. Secondary Streets are typically residential streets and are characterized by narrow driving lanes, parking lanes, and sidewalks. Refer to the Development Plan for detail on Secondary Streets.

2.23 SIGNATURE STREETS

Signature Streets are important connections across the Site that lead to the active cultural centers of Napa Pipe, as well as the amenities along the Napa River. Signature Streets have unique landscape conditions and are designed to frame views of Napa Pipe's site character and surrounding context. Refer to the Development Plan for detail on Signature Streets.

2.24 SHARED DRIVEWAYS

Shared Driveways typically provide vehicular and service access to garages, mid-block mews houses, and parking courts. Shared Driveways have narrow width and no parking lanes. They are designed to be shared use lanes suitable for pedestrian traffic, with vehicular speeds 15 MPH or less. Refer to Chapter 3. Form Based Code and Section X.X Shared Driveways for standards and guidelines.

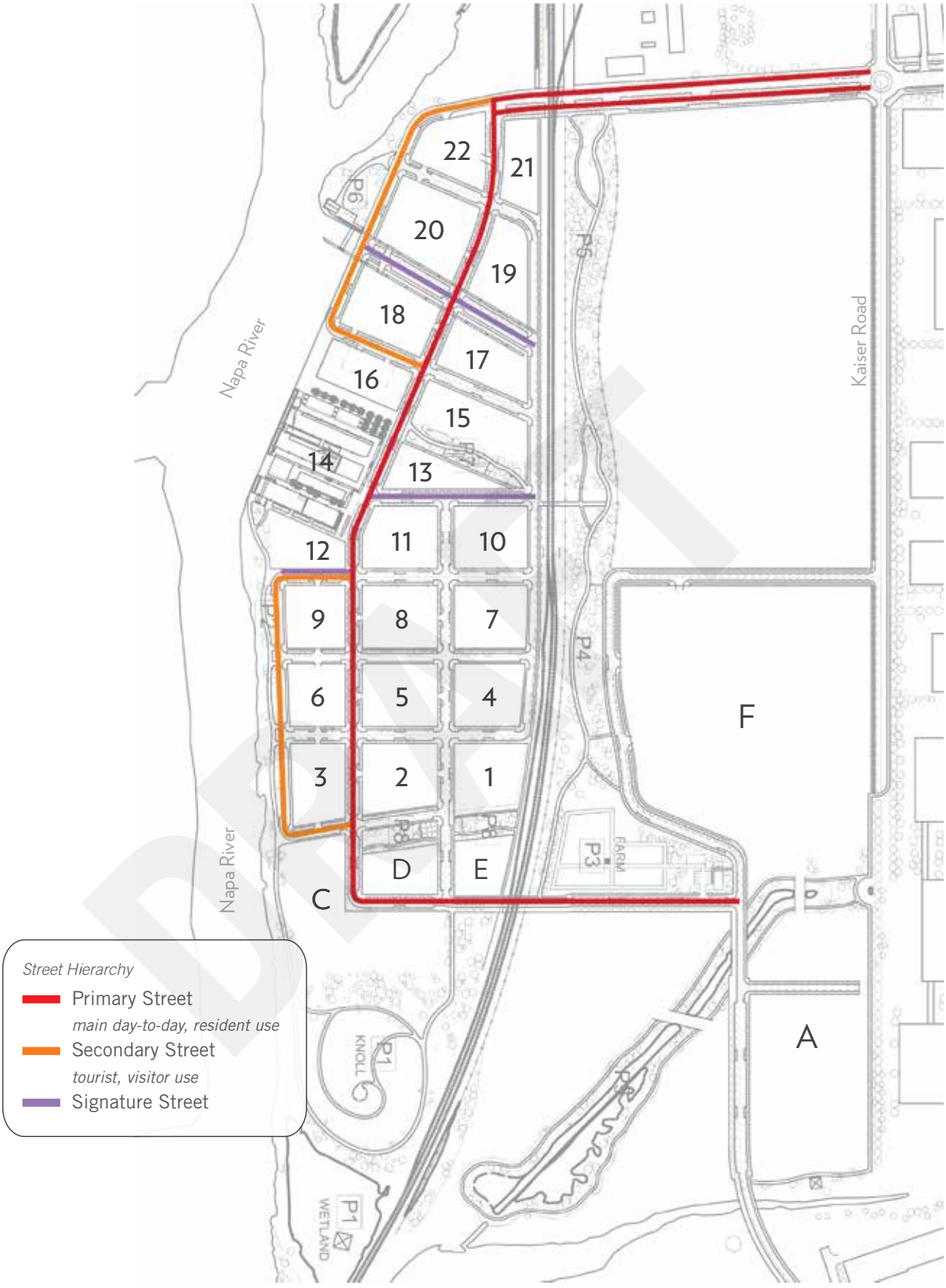


Figure 2.3 Street Hierarchy

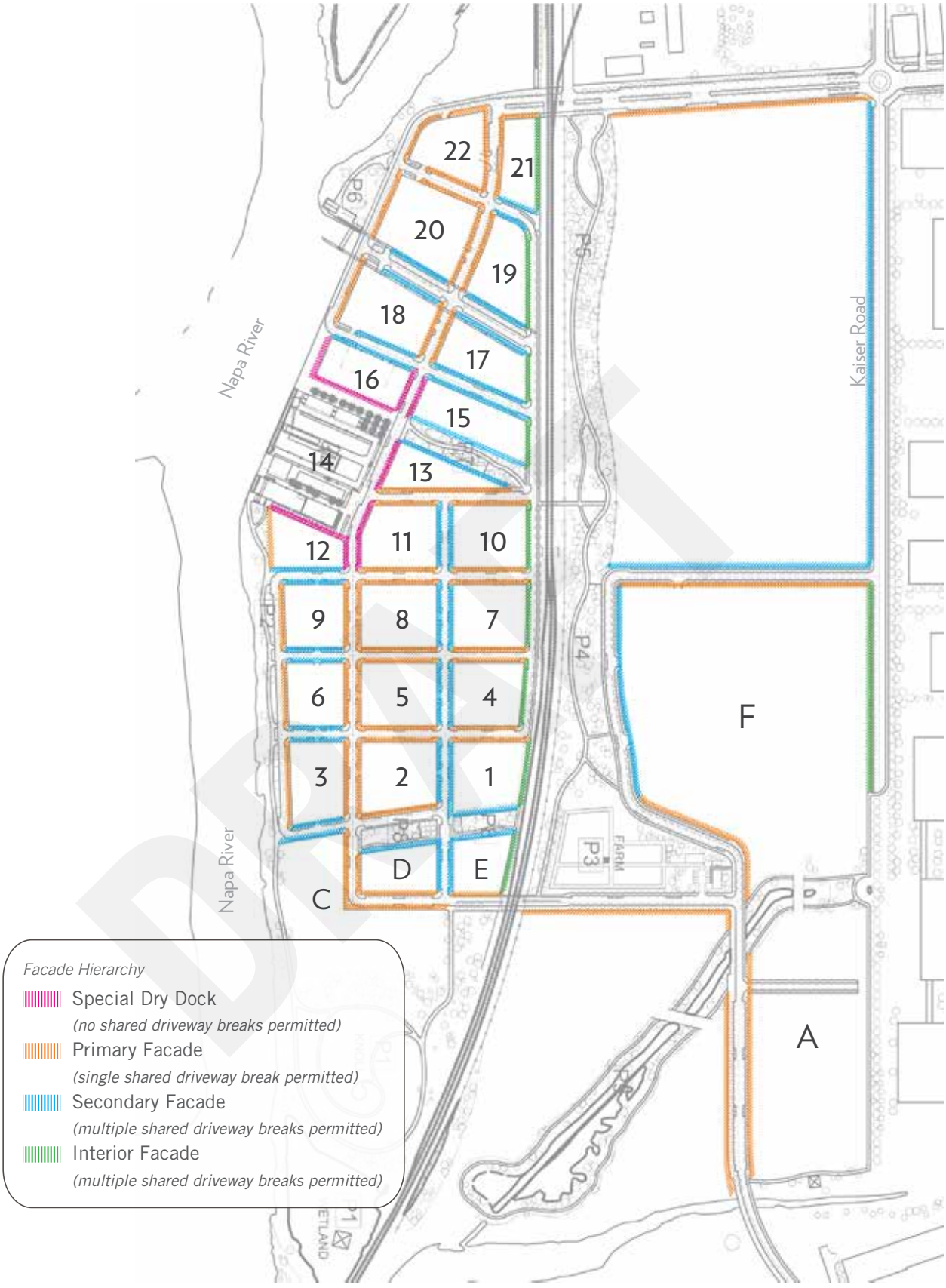


Figure 2.4 Facade Hierarchy

Figure 2.5 Build-to Lines

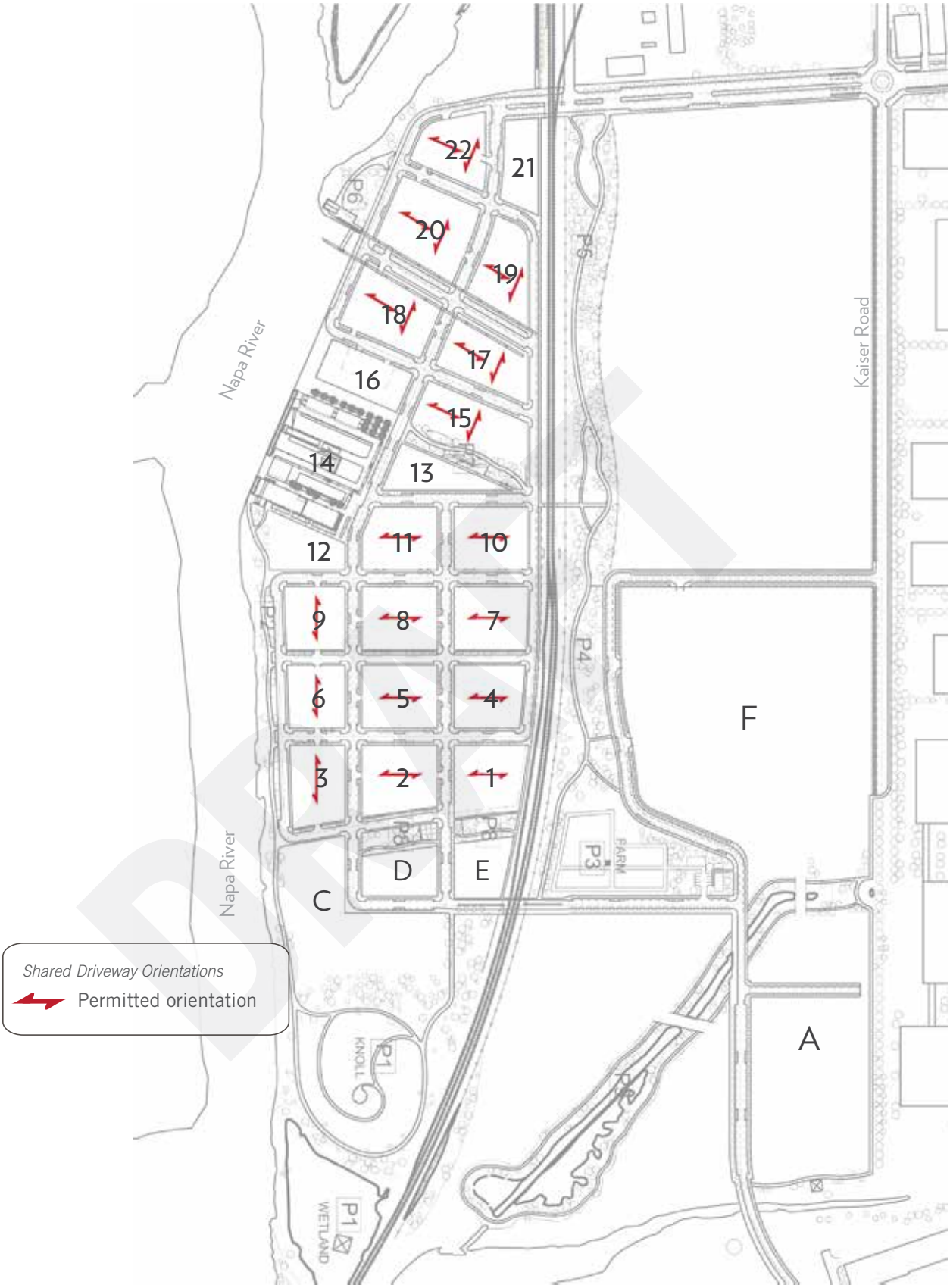


Figure 2.6 Shared Driveway Orientations

The Form-Based Code establishes the physical proportions of the anticipated building typologies including lot size, lot coverage, frontage, setbacks, and parking orientation.

FORM BASED CODE

3.1 Townhouse
3.2 Single-Family
3.3 Multi-Family
3.4 Local Retail
3.5 Office
3.6 Garage

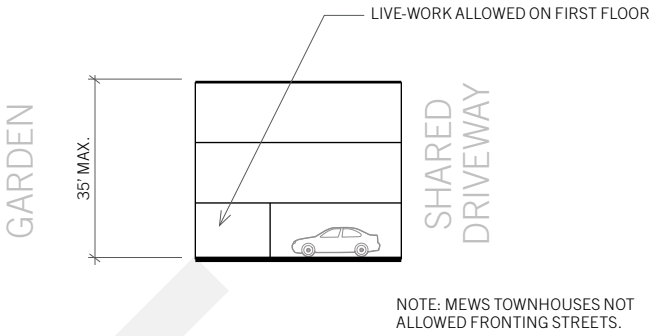
TOWNHOUSE

MEWS

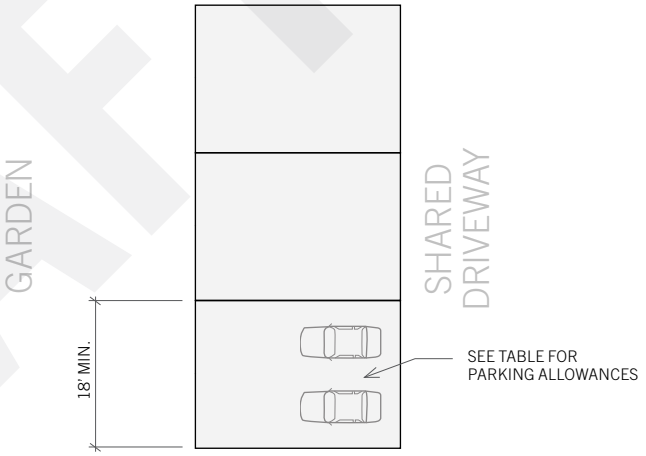
Borneo Sporenburg, Amsterdam

Earls Court Mews Carriage House, London

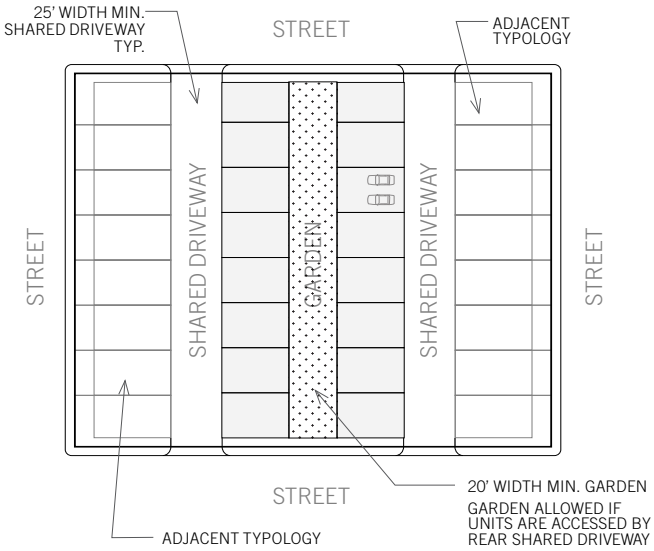
LOT OCCUPATION	Lot Area:	500 sf - 900 sf
	Lot Coverage:	100% maximum
SETBACKS	Front:	None required
	Side:	5' required for end lots
	Rear:	None required
FRONTAGE		18' minimum
HEIGHT	Main Building:	35' maximum
PARKING	Spaces:	As per zoning. Tandem allowed in units up to 1200 net SF.
	Type/Access:	Front or rear access
USES		Residential



Section Diagram



Plan Diagram



Sample Block Layout (Block 8)

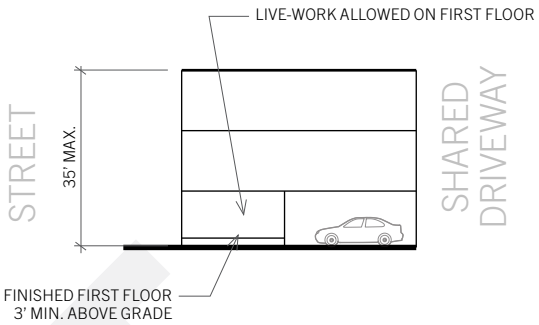
TOWNHOUSE

SMALL

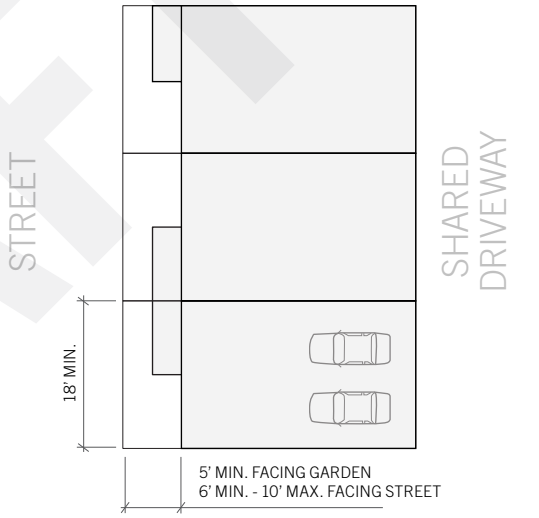
City Limits, Emeryville

Glashaus Lofts, Emeryville

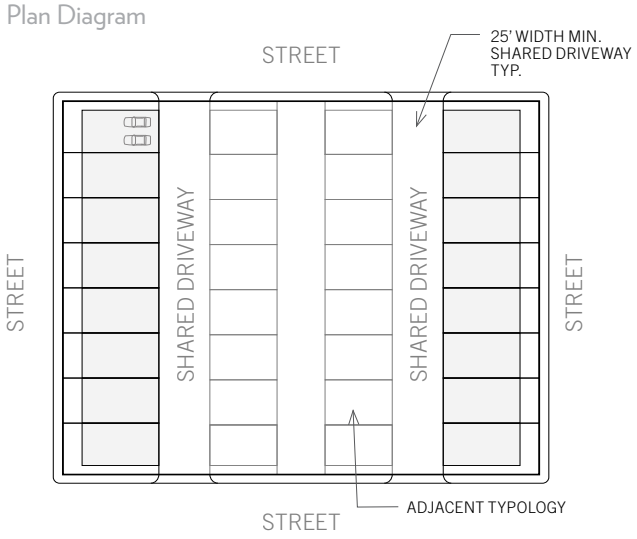
LOT OCCUPATION	Lot Area:	900 sf - 1,500 sf
	Lot Coverage:	96% maximum
SETBACKS	Front:	5' minimum facing garden 6' minimum facing street 10' maximum facing street
	Side:	5' required for end lots
	Rear:	None required
FRONTAGE		18' minimum
HEIGHT	Main Building:	35' maximum
PARKING	Spaces:	As per zoning
	Type/Access:	Front or rear access
USES		Residential



Section Diagram



Plan Diagram



Sample Block Layout (Block 8)

TOWNHOUSE

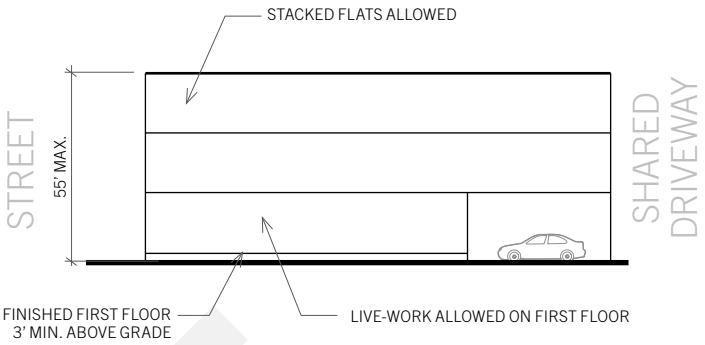
LARGE

Wyvernwood Townhouses, Seattle

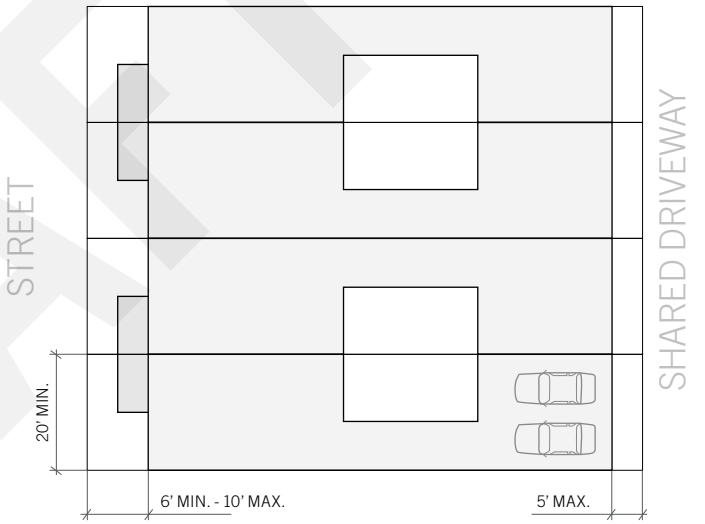
Blue Star Corner, Oakland

Photo courtesy of David Baker Architects

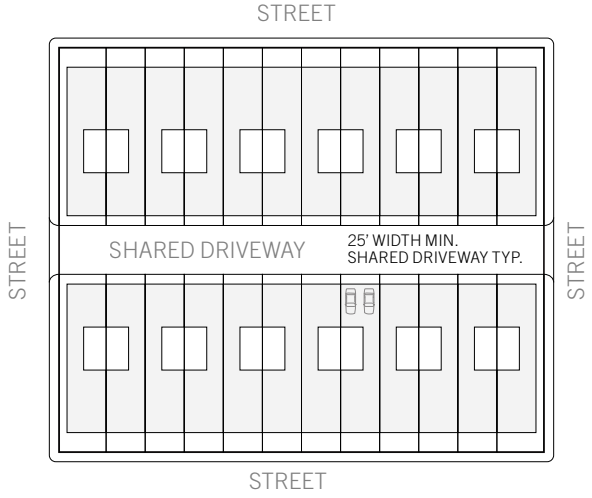
LOT OCCUPATION	Lot Area:	1,500 sf - 2,500 sf
	Lot Coverage:	70% maximum
SETBACKS	Front:	6' minimum facing street 10' maximum facing street
	Side:	5' required for end lots
	Rear:	5' maximum
FRONTAGE		20' minimum
HEIGHT	Main Building:	55' maximum
PARKING	Spaces:	As per zoning. Tandem permitted.
	Type/Access:	Rear or side access only
USES		Residential



Section Diagram



Plan Diagram



Sample Block Layout (Block 8)

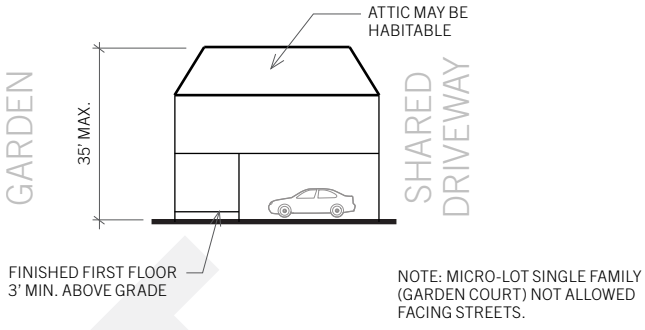
SINGLE-FAMILY

MICRO-LOT (GARDEN COURT)

Blu Homes Sidebreeze, Orinda

Beacon Street Dwell Houses, Seattle

LOT OCCUPATION	Lot Area:	1,100 sf - 1,400 sf
	Lot Coverage:	75% maximum
SETBACKS	Front:	5' minimum
	Side:	3' minimum 5' maximum for end lots
	Rear:	5' maximum
FRONTAGE		20' minimum
HEIGHT	Main Building:	35' maximum
PARKING	Spaces:	As per zoning
	Type/Access:	Rear or side access only
USES		Residential



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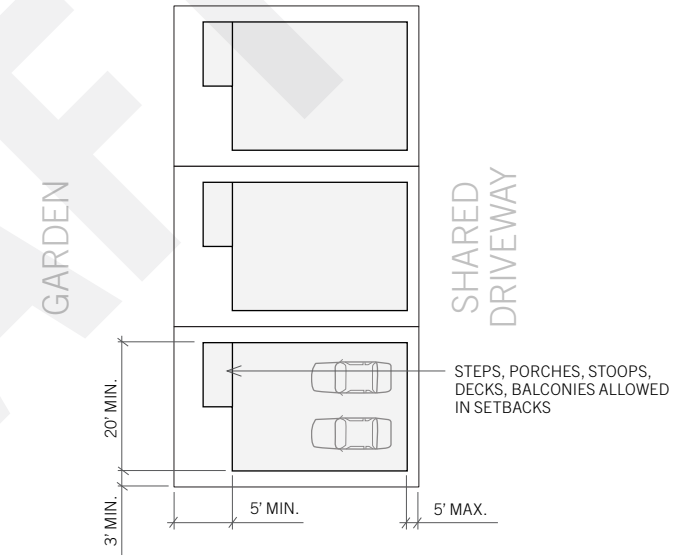

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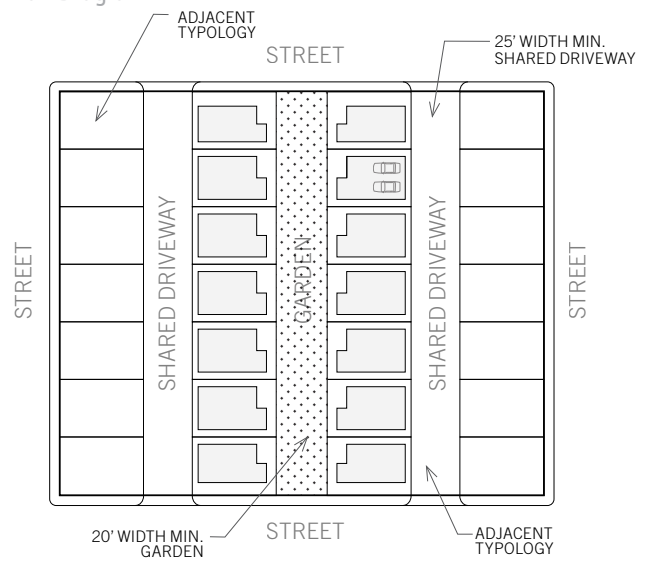


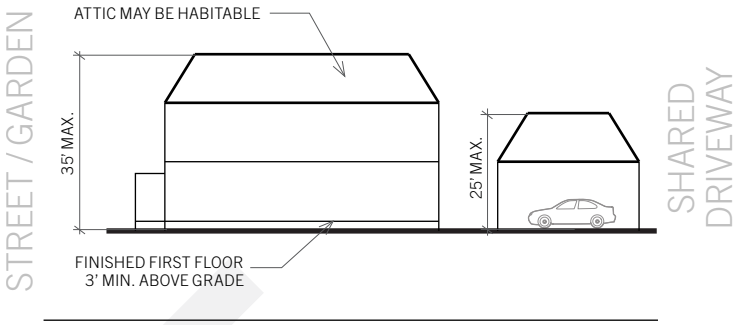
Sample Block Layout (Block 8)

SINGLE-FAMILY

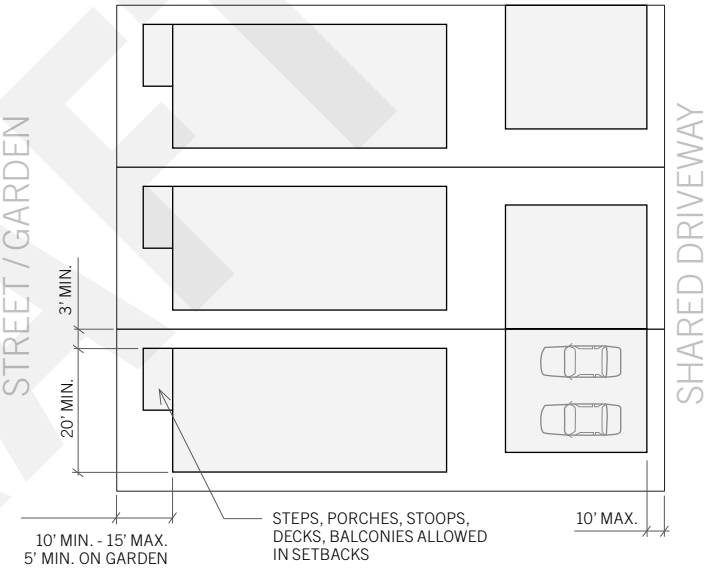
MICRO-LOT

Clarkson NestHouse, Toronto

Auburn 7, Los Angeles

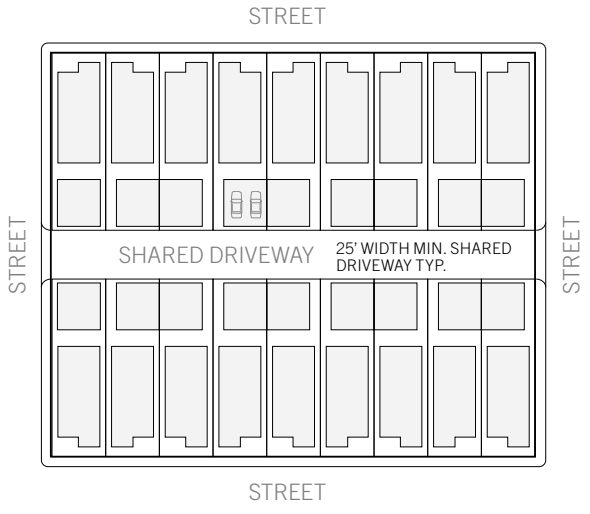


Section Diagram



Plan Diagram

LOT OCCUPATION	Lot Area:	1,400 sf - 3,500 sf
	Lot Coverage:	63% maximum
SETBACKS	Front:	10' minimum - 15' maximum 5' maximum facing garden
	Side:	3' minimum. 5' minimum for end lots
	Rear:	10' maximum
FRONTAGE		20' minimum
HEIGHT	Main Building:	35' maximum, 25' maximum for detached garage
PARKING	Spaces:	As per zoning
	Type/Access:	Rear access, side yard access allowed on corner lots
USES		Residential



Sample Block Layout (Block 8)

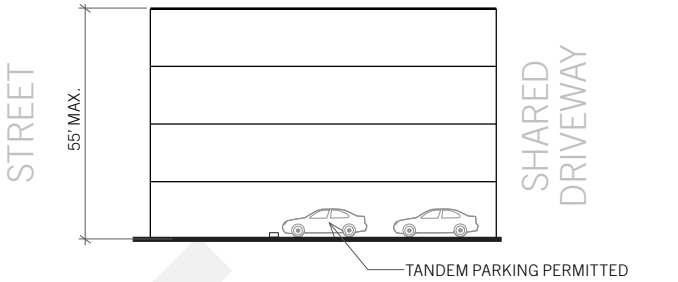
MULTI-FAMILY

TOWNHOUSES

City Limits, Emeryville

Liquid Sugar Lofts, Emeryville

LOT OCCUPATION	Lot Area:	1,100 sf - 1,400 sf
	Lot Coverage:	75% maximum
SETBACKS	Front:	5' minimum
	Side:	3' minimum 5' maximum for end lots
	Rear:	5' maximum
FRONTAGE		20' minimum
HEIGHT	Main Building:	55' maximum
PARKING	Spaces:	As per zoning
	Type/Access:	Rear or side access only. Tandem allowed.
USES		Residential



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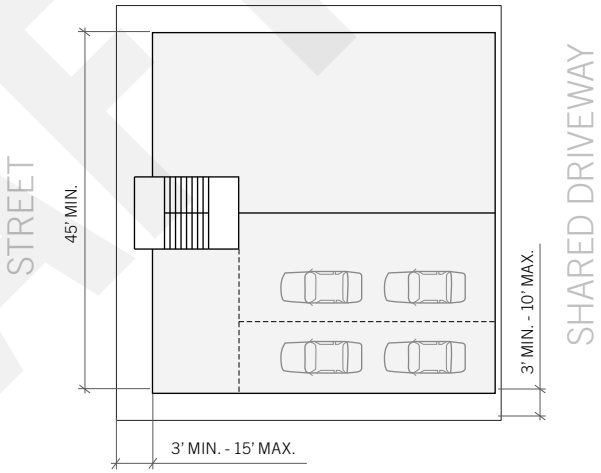

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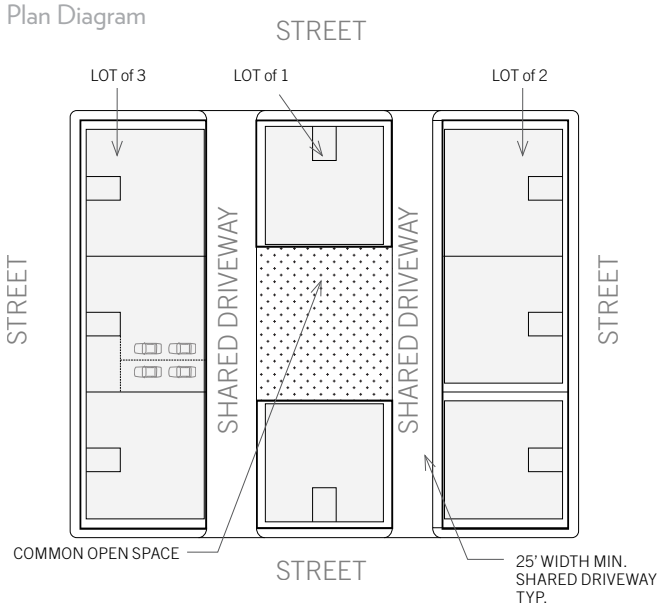


Sample Block Layout (Block 8)

MULTI-FAMILY

TOWNHOUSE + MEWS (SHARED PARKING)

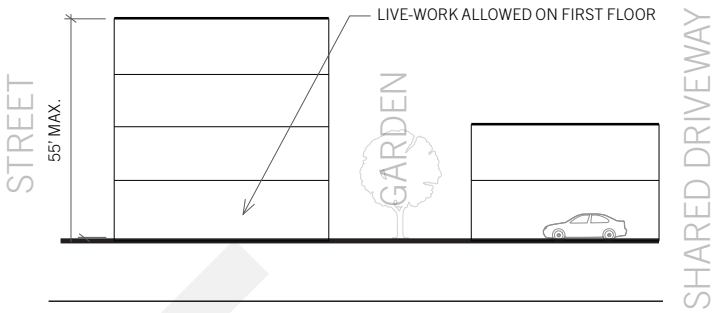
West End Commons, Oakland

Photo courtesy of David Baker Architects

Pacific Cannery, Oakland

Photo courtesy of David Baker Architects

LOT OCCUPATION	Lot Area:	16,000 sf minimum
	Lot Coverage:	80% maximum
SETBACKS	Front:	3' minimum - 10' maximum
	Side:	5' required for end lots
	Rear:	5' maximum
FRONTAGE		-
HEIGHT	Main Building:	55' maximum
PARKING	Spaces:	As per zoning
	Type/Access:	In-unit (rear or side access only), shared surface accessed by shared driveway
USES		Residential



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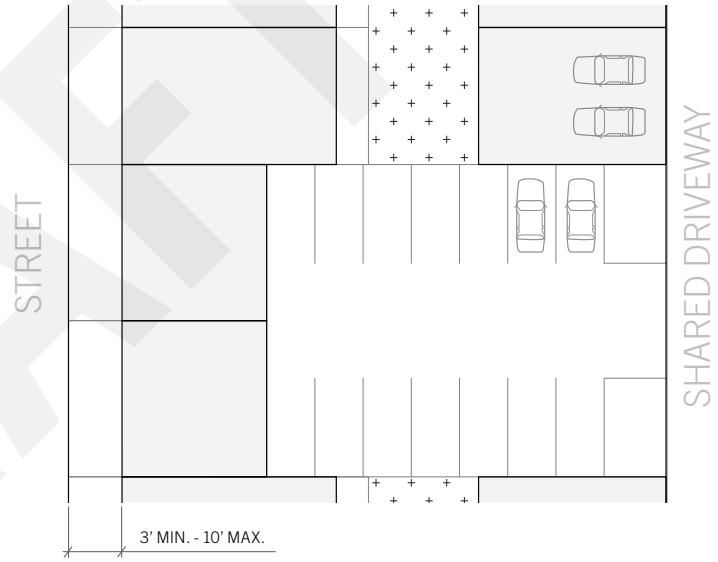
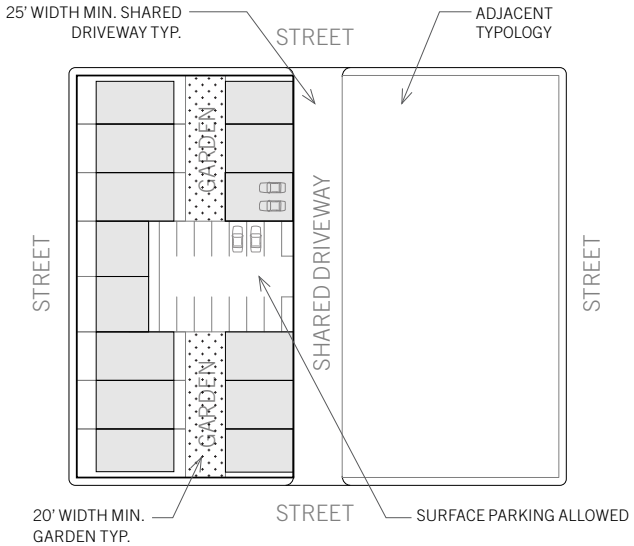


Plan Diagram



Sample Block Layout (Block 8)

MULTI-FAMILY

TOWNHOUSE + MEWS (BASEMENT PARKING)

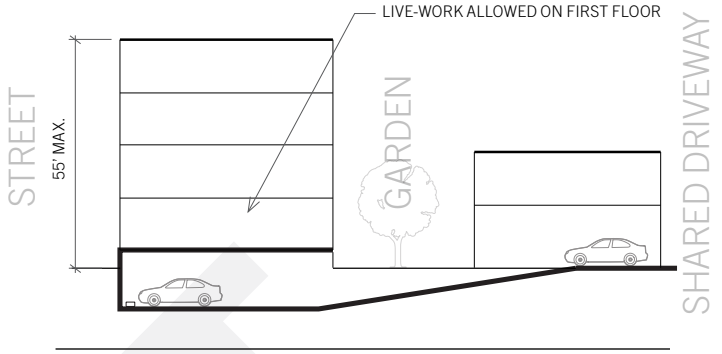
Tassafaronga Village, Oakland

Photo courtesy of David Baker Architects

Riverscape Townhouses, Portland

Photo courtesy of BRX0

LOT OCCUPATION	Lot Area:	8,000 sf minimum
	Lot Coverage:	77% maximum
SETBACKS	Front:	5' minimum - 10' maximum
	Side:	5' maximum for end lots
	Rear:	5' maximum
FRONTAGE		-
HEIGHT	Main Building:	55' maximum
PARKING	Spaces:	As per zoning
	Type/Access:	In-unit (rear or side access only), shared basement accessed by shared driveway
USES		Residential



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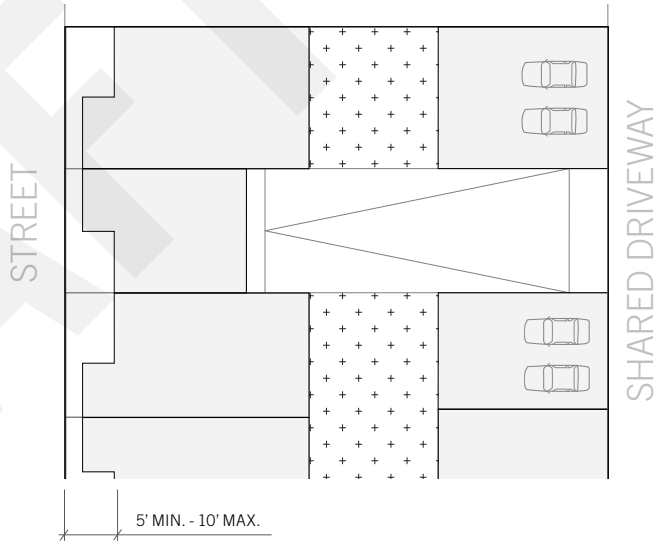

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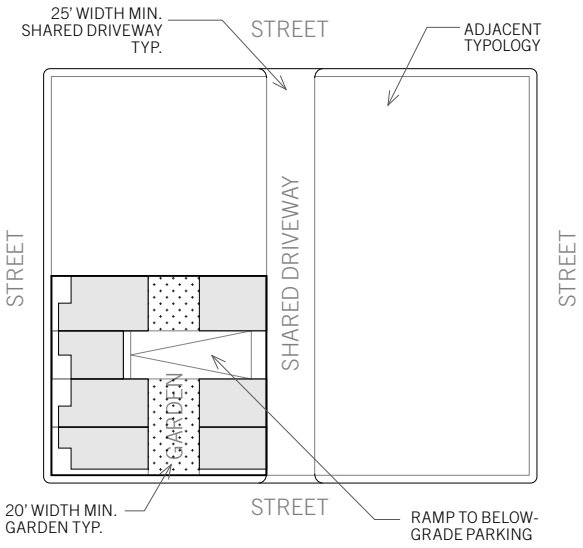


Sample Block Layout (Block 8)

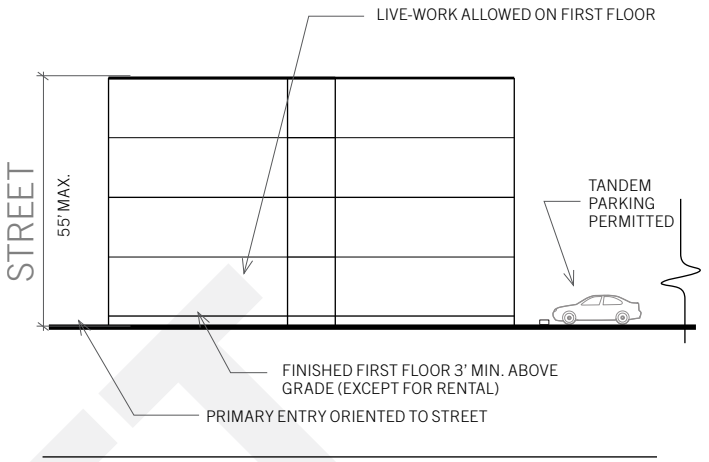
MULTI-FAMILY

APARTMENTS (SURFACE PARKING)

Celsius 44, Petaluma

Waterfront Apartments, Petaluma

LOT OCCUPATION	Lot Area:	1.75 acres maximum
	Lot Coverage:	93%
SETBACKS		5' minimum - 10' maximum
FRONTAGE		-
HEIGHT	Main Building:	55'
PARKING	Spaces:	As per zoning
	Type/Access:	Surface parking. Tandem permitted.
USES		Residential



Section Diagram

Plan Diagram

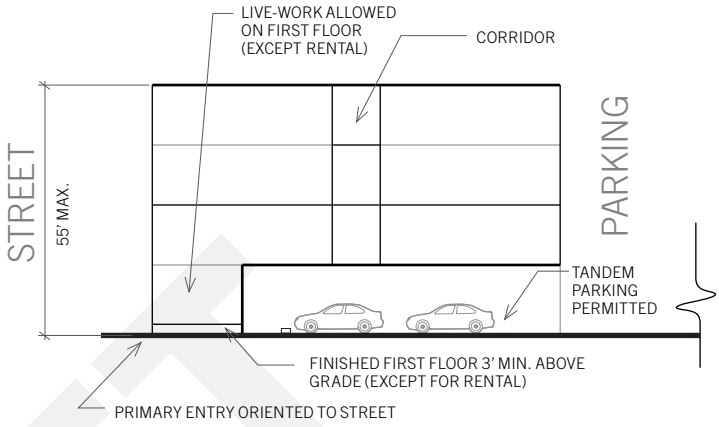
MULTI-FAMILY

APARTMENTS (HYBRID PARKING)

Harborwalk, Oakland

Riverscape Townhouses II, Portland

LOT OCCUPATION	Lot Area:	1.75 acres maximum
	Lot Coverage:	93% maximum
SETBACKS		5' minimum - 10' maximum
FRONTAGE		-
HEIGHT	Main Building:	55'
PARKING	Spaces:	As per zoning
	Type/Access:	Surface and/or tuck-under, tandem permitted
USES		Residential



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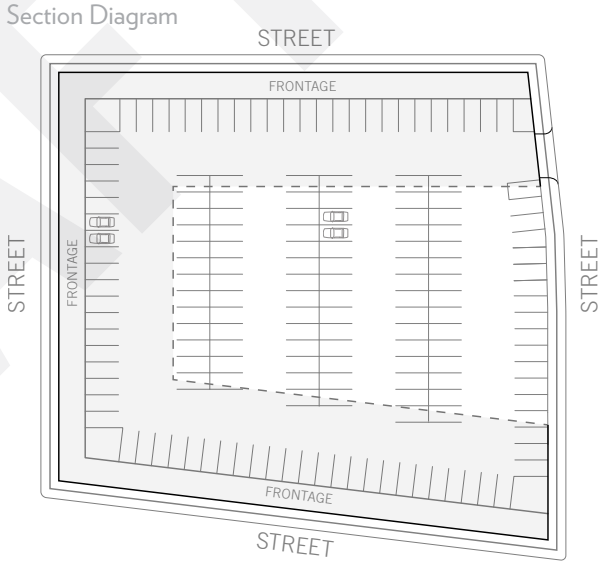
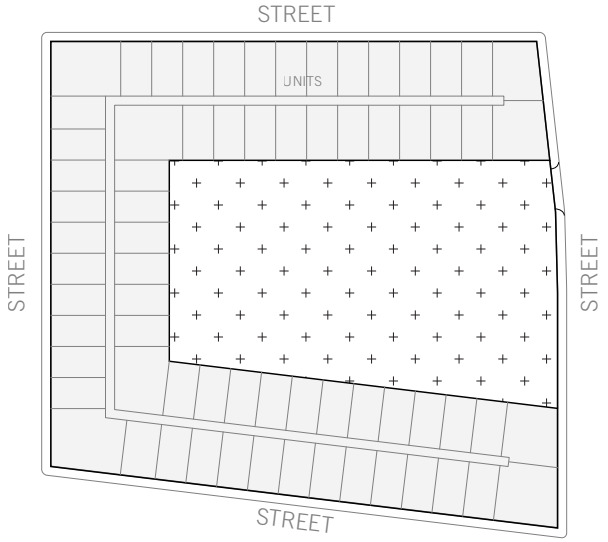




Sample Block Layout (Block 5 at grade and upper level)

MULTI-FAMILY

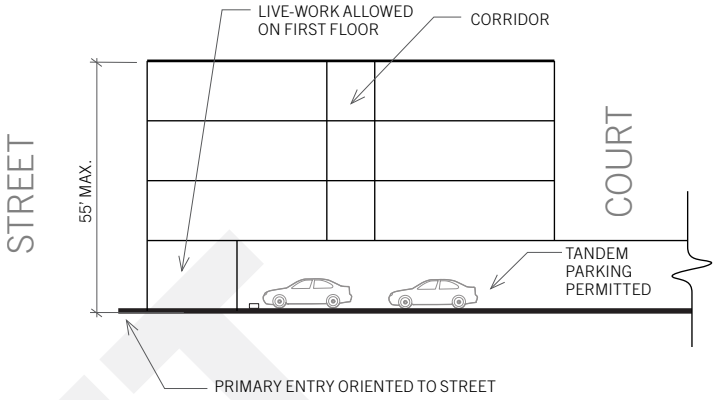
APARTMENTS (PODIUM PARKING)

Armstrong Apartments, San Francisco

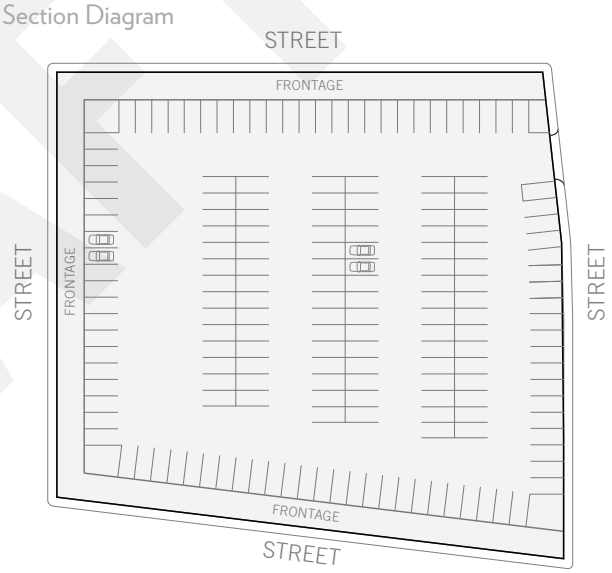
Photo courtesy of David Baker Architects

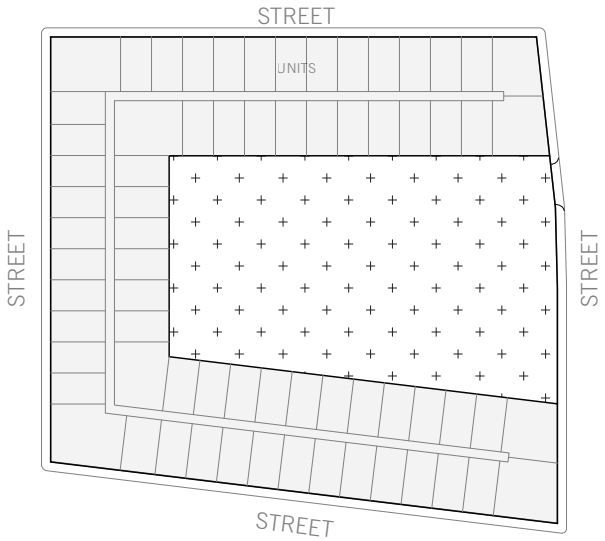
Glashaus Apartments

LOT OCCUPATION	Lot Area:	1.75 acres maximum
	Lot Coverage:	100%
SETBACKS	Front:	10' maximum
FRONTAGE		-
HEIGHT	Main Building:	55' maximum
PARKING	Spaces:	As per zoning
	Type/Access:	Podium and/or below-grade, tandem permitted
USES		Residential, first floor units may have Retail or Live-Work



Section Diagram





Sample Block Layout (Block 5 at-grade and upper level)

MULTI-FAMILY

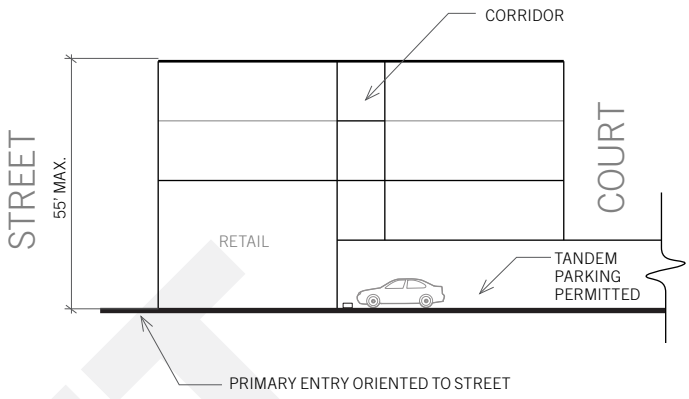
APARTMENTS WITH RETAIL

Emeryville

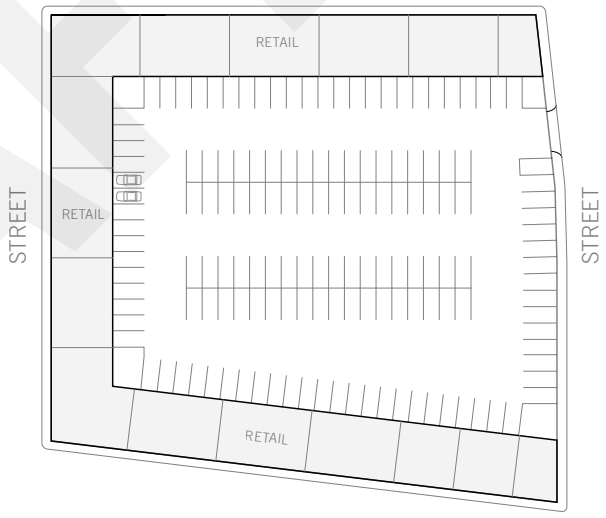
Photo courtesy of David Baker Architects

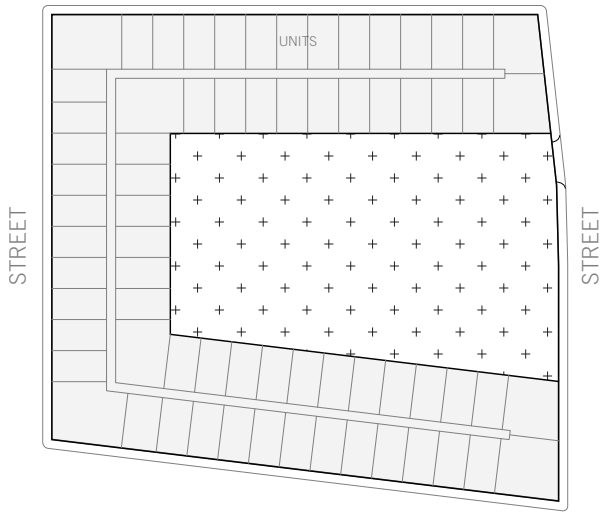
Glashaus Apartments, Emeryville

LOT OCCUPATION	Lot Area:	1.75 acres maximum
	Lot Coverage:	100%
SETBACKS	Residential:	10' maximum
	Retail:	5' maximum
FRONTAGE		-
HEIGHT	Main Building:	55' maximum
PARKING	Spaces:	As per zoning, tandem allowed for residential use.
	Type/Access:	Surface or podium. Rear or side access preferred, not to exceed 24'. Basement parking permitted.
USES		Residential and ground floor retail. First floor units may have Office or Live-Work.



Section Diagram



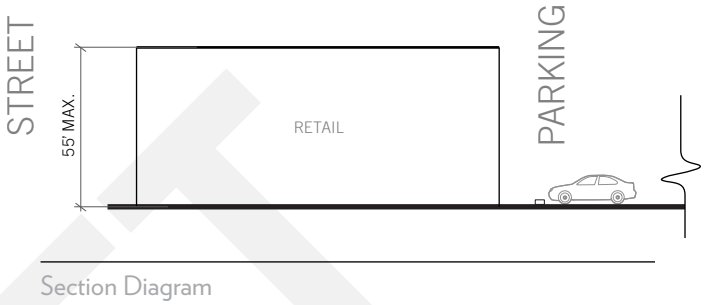


Sample Block Layout (Block 5 at grade and upper level)

LOCAL RETAIL

4th Street, Berkeley

4th Street, Berkeley



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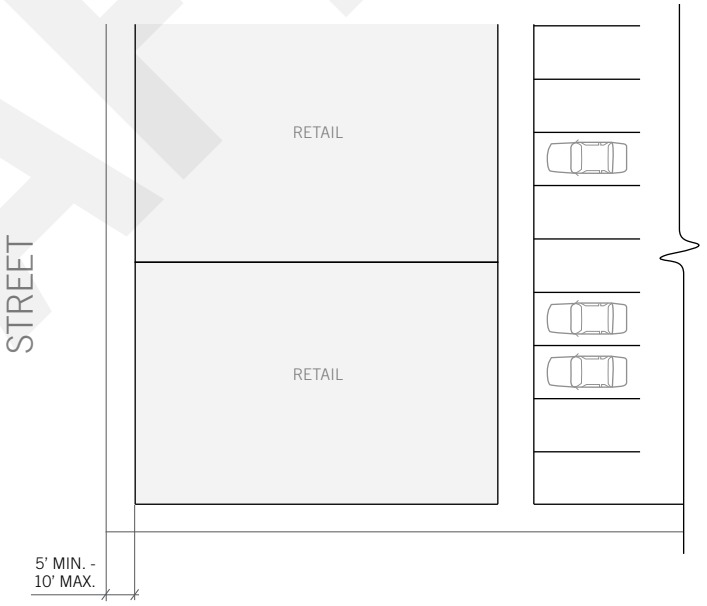


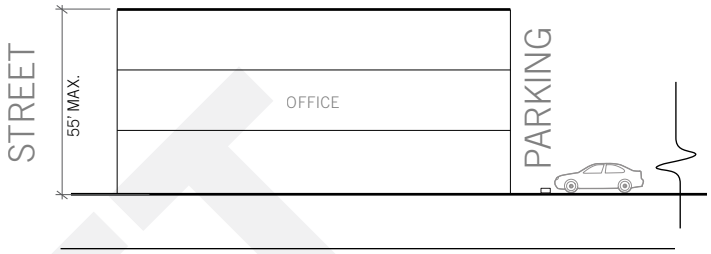
Plan Diagram

LOT OCCUPATION	Lot Area:	2 acre maximum
	Lot Coverage:	100%
SETBACKS	Front:	5' minimum - 10' maximum
FRONTAGE		-
HEIGHT	Main Building:	25' minimum and 55' maximum
PARKING	Spaces:	As per zoning
	Type/Access:	Rear surface parking with access to parking not to exceed 24'. Side yard access permitted. Parking may be provided off-site.
USES		Retail

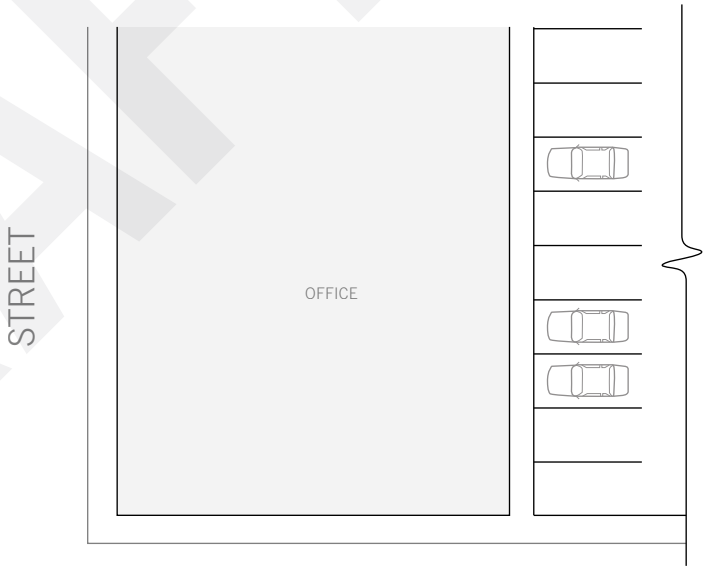
OFFICE

Berkeley Bowl, Berkeley

Woodhills Office, Portland



Section Diagram



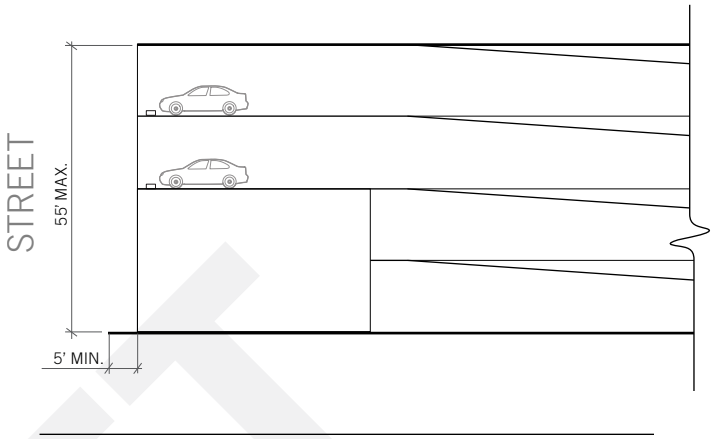
Plan Diagram

LOT OCCUPATION	Lot Area:	2 acre maximum
	Lot Coverage:	90%
SETBACKS		5' minimum - 10' maximum
FRONTAGE		-
HEIGHT	Main Building:	55' maximum
PARKING	Spaces:	As per zoning
	Type/Access:	Rear surface parking with access to parking not to exceed 24'. Side yard access permitted. Parking may be provided off-site.
USES		Commercial. Accessory Retail permitted.

GARAGE

Block 27 Parking Garage, San Francisco

UCSF Mission Bay Parking Garage, San Francisco



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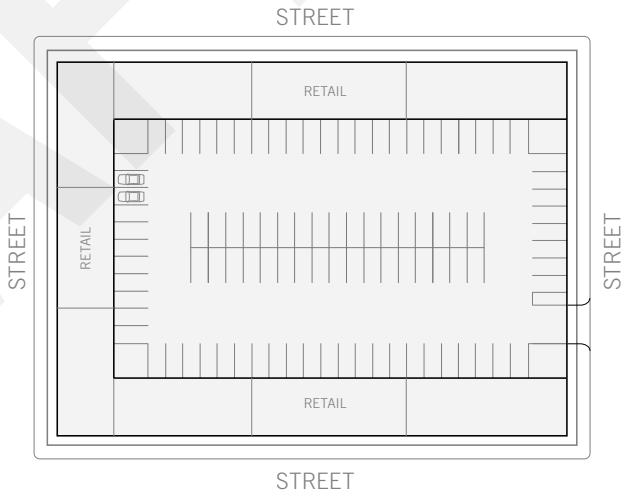

Sample Block Layout (Block 8)

LOT OCCUPATION	Lot Area:	1.75 acre maximum
	Lot Coverage:	93%
SETBACKS		5' minimum
FRONTAGE		-
HEIGHT	Main Building:	55' maximum
PARKING	Type/Access:	Structured garage
USES		Parking. At-grade accessory. Retail permitted.

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ARCHITECTURAL STYLEBOOK

4.1 Farmhouse
4.2 Craftsman
4.3 Bay Area Modern
4.4 Farm Industrial
4.5 Loft Industrial

GUIDELINES

4.01 GENERAL STYLEBOOK GUIDELINES

- Mixing of styles within a lot is not permitted, even on massing additions or accessory structures.
- Immediately adjacent lots, or lots directly opposite across a street or shared driveway, shall not be identical.
- Variation of the palette of materials, finishes and detailing within a given style may not occur on an individual building.
- Variation of the palette of materials, finishes and detailing within a given style may occur on distinct buildings within the same lot, as long as still consistent with the parameters of the style.
- Mixing styles within a block is encouraged.
- Style should be appropriate to the scale and proportion of the building.
- Farmhouse and Craftsman styles are not encouraged for multi-family buildings.

4.02 ARCHITECTURAL STYLES

In keeping with both the surrounding cultural landscape and the qualities of the site, architecture at Napa Pipe shall fall within one of the following five styles: Farmhouse, Craftsman, Bay Area Modern, Farm Industrial, and Loft Industrial.

Farmhouse

The farmhouse style is practical and incorporates the regional materials and customs of the Napa area. Massing and proportions are vertical and slender; elements are straight and symmetrical. Modest in intent and detailing, farmhouse buildings should be unpretentious, straightforward, and functional, focusing on the quality of materials and elements used.

Craftsman

The Craftsman style is robust and connected to the landscape. Massing and proportions are low, horizontal and ample; elements are asymmetrical, deep and layered. Detailing is not applied, but focuses on revealing and accentuating necessary and functioning structural elements.

Bay Area Modern

Bay Area Modern styles are clean and volumetric. Integral regional materials and indoor-outdoor spaces characterize Bay Area Modernism. The style serves to reveal the uses and form of spaces. Proportions are balanced and complementary, combining vertical massing with horizontal accents, or vice versa, in asymmetrical compositions.

Farm Industrial

The farm industrial style combines the geometries of the farmhouse style, with minimal detailing and industrial character. Basic massings have predominantly vertical proportions. Openings and building elements are simple, relate to interior uses and building structure, and encourage indoor-outdoor living. Contemporary character often involves refined industrial materials.

Loft Industrial

The loft industrial style unites residential scale and articulation with industrial forms and materials. Loft industrial buildings are horizontal in overall proportions, but articulate individual units. Façades reveal higher floor-to-ceiling heights, double-height spaces, flexible floor plans and exposed circulation. Expressed structure and contemporary materials are typical. The materiality and joinery of building elements, such as balconies or brise soleil, are opportunities for detailing.

ARCHITECTURAL STYLES

Farmhouse

4.11 OVERVIEW

- Modest Detailing: Window and door trim is modest in size. The façade is typically flat with minimal trim projection and eave overhang. Farmhouse styles often have horizontal clapboard siding and shingle roofs.

- Symmetrically Balanced Façade: Although some farmhouses feature asymmetrical massing features and porches, the main façade is often symmetrical, with a central front door and balanced windows to each side.

- Gable Roof: Medium to steep-sloped gable roofs with shallow eaves. Centered dormers are typical on pitched sides and upper story windows at gable ends.

- Other Common Features:
  - > Farmhouses are typically 1.5 or 2.5 stories in height, including habitable space in the roof story.
  - > Porch: Single-story porches extend between two-thirds to the full width of a building face and may wrap around a corner.
  - > Window: Double hung windows
  - > Chimneys: Gable end or central
  - > Panel doors.

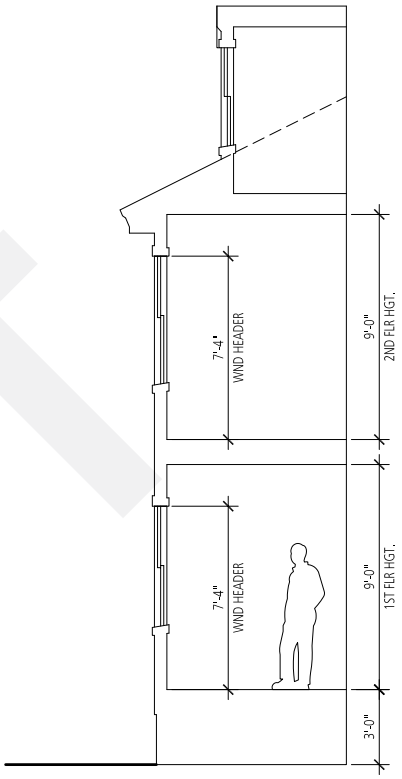


Figure 4.11 Typical Proportions and Section

PHOTO CREDIT

Figure 4.11 Farmhouse with steep-sloped gable roof and prominent porch

Figure 4.11 Assymetrical, balanced facade

Figure 4.11 Wrap-around porch

Figure 4.11 Simple, regional materials

Figure 4.11 Two modern interpretations of farmhouse style using regional materials and some contemporary detailing

4.12 MASSING

Front Façade

> Farmhouse styles are organized in plan and elevation by a system of proportioned bays. It is typical to have 3 bays defined by windows and the door in the 1st or 3rd bay. (3-bay, 5-bay)

Massing Additions

> Base Mass: Typical base mass for farmhouse style is simple, rectangular, and vertical in proportion, with narrow end frontage toward the street.

> Farmhouses may be oriented with broad side facing the street.

> Side Additions: Side additions should be shorter than the base mass and set back from the front façade. The roof should be a gable or shed roof parallel to the main building's gable and with equal or lower slope.

> Wing-Hyphen: Recommended to sit behind the main building and incorporate the principles of indoor/outdoor living. Hyphen connectors shall be shorter than the height of the addition. The height of the addition shall not exceed the height of the main building. The addition's gross floor area shall be no greater than 75% of the main building.

> Townhouse Frontage: Recommended for attached townhouse unit frontages. The typical base mass for an attached Farmhouse townhouse is simple, rectangular, narrow, and vertical in proportion. Bay windows and porches serve as projections from the base mass. Facade stepping has full setback of the base unit and maintains the continuous plane of the front facade.

4.13 ROOF

Gable

> Orientation: Typically front facing, especially for narrow frontages. Broad frontages may have side facing gable roofs.

> Cross gables are allowed but not recommended.

> Dormers: Gable roof dormers are permitted on front faces. Single shed dormer is permitted on rear faces.

> Roof slope: A roof slope of 7:12 to 12:12 is permitted.

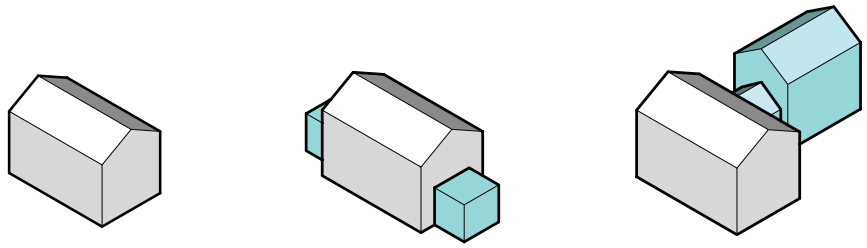


Figure 4.12 Typical single-family base massing with either small additions and distinct wing-hyphen

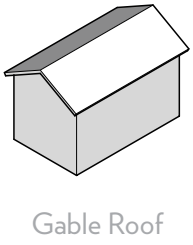


Figure 4.13 Front-facing Gable Roof

PHOTO CREDIT

Figure 4.12 Symmetrical, balanced facade with front-facing gable and small side addition

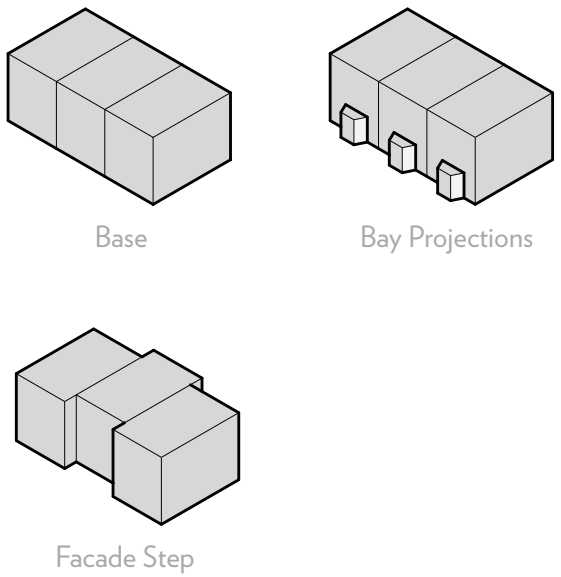


Figure 4.12 Typical Townhouse Base Massing and Facade Articulation

4.14 WINDOWS

> Main windows shall be double hung. Muntin patterns of 2/2 or 2/1 are typical.

> Dormer windows shall be smaller than main windows.

> Accent windows that indicate circulation spaces, bathrooms, or other private areas may be smaller than main windows. Accent windows may also be casement, awning, or center pivot.

> Windows within the flat faces of the gable roof story shall be smaller than main windows. These roof story windows may be double or single hung, casement, awning, or center pivot. Muntin patterns shall not be greater than main windows.

> Window trim shall follow general architectural guidelines.

> Window headers may be accented with additional trim or a pediment.

> Typical window dimensions:

Typical window is 2'-4" to 3'-0" wide. Window height is 1.75 x width.

Typical decorative lintel is 6"-10".

Sill extends at least 1" from the jamb.

> Shutters are optional.

> Any shutters shall be functional.

4.15 DOORS

> Main doors shall be panel type.

> Minimal detailing is preferred. Pilasters and lintel decoration are permitted.

> A transom window and sidelights are permitted.

4.16 FRONT PORCH

> Porches are typical.

> Porches should be along the main frontage or wrap the corner.

> Farmhouse style front porches typically have a side facing gable or shed roofs.

> Narrow lots with front facing gables may have porches with front facing gables.

> Columns are typically slender and minimal.

4.17 CHIMNEYS

> Chimneys are optional.

> Single chimneys should be centered. Double chimneys should be at gable ends.

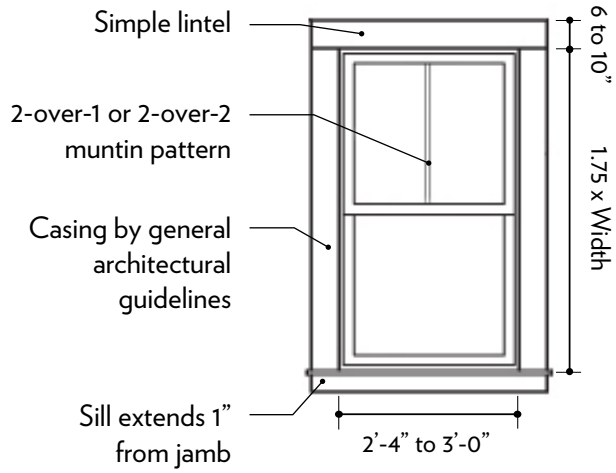


Figure 4.14 Typical Double-hung Window Type with 2 over 1 muntin pattern

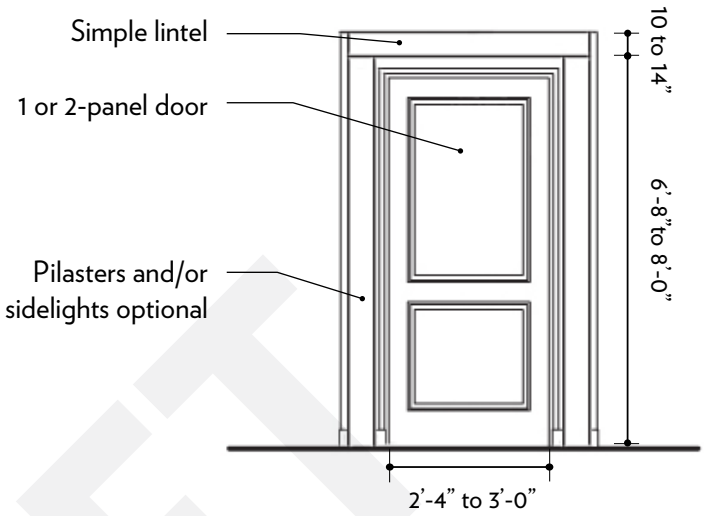


Figure 4.15 Typical Simple Panel Door Type

PHOTO CREDIT

Figure 4.1 Balanced, asymmetrical facade with simple materials and wing-hyphen massing

ARCHITECTURAL STYLES

Craftsman

4.21 OVERVIEW

» Prominent Front Porch: The building frontage typically features a single-story front porch that extends between three-quarters to the full width of the front façade. Typically the porch has a front-facing gable roof. The front entry is integrated with the porch.

» Asymmetrical Massing: Although some craftsman homes feature symmetrically balanced façades, the most common type features an off-center entry bay and adjacent living space.

» Eave Decoration: Eaves typically feature exposed roof rafters, which are typically plumb cut. Gable ends may be exposed and typically feature knee brackets. The underside of roof overhangs is typically finished off with tongue and groove decking.

» Other Common Features:

> Roof: Gable or Hip Roof

> Window: Double Hung Windows. Transom windows may be used at the sides. Awnings may be used for small er openings.

> Doors: Doors with large vision panels are typical.

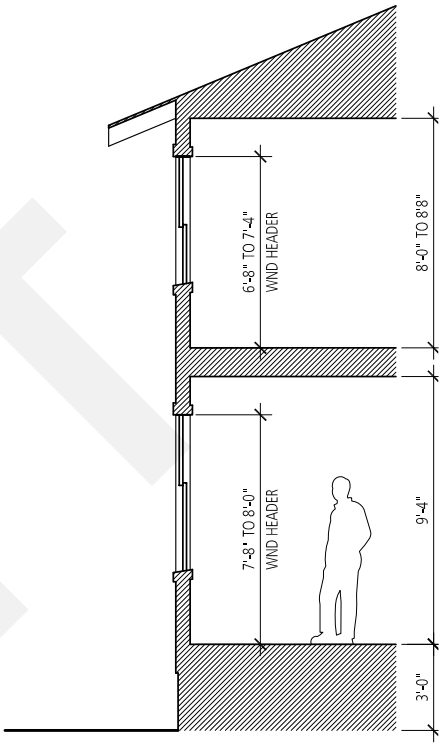


Figure 4.21 Typical Proportions and Section

Figure 4.21 Off-center entry bay with double columns on ample base.

Figure 4.21 Prominent front porches and eave decoration. Porches and dormers may have front-facing gables

Figure 4.21 Ample porch columns and multi-light windows

Figure 4.21 A modern interpretation of a craftsman front porch

4.22 MASSING

Front Façade

> Porch Width Relationships: Porches are typically 3/4 to the full width of the house frontage.

4.23 ROOF

Gable

> Recommended Orientation: Front Gable.

> Side facing gable roofs are permitted.

> Dormer Styles: Front and Rear Face: Gable roof dormers or shed dormers are permitted.

> Roof Slope: A roof slope of 3:12 – 9: 12 is permitted.

Hip

> Dormer Styles, Front Face: Gable roof dormers no wider than window width or Cupolas are permitted.

> Roof Slope: A roof slope of 3:12 – 9: 12 is permitted.

2.24 WINDOWS

> Windows shall be double hung.

> Shutters are not used.

> Upper story windows shall be no larger than the first story windows.

2.25 DOORS

> Door trim should match window trim.

> Sidelights may be used.

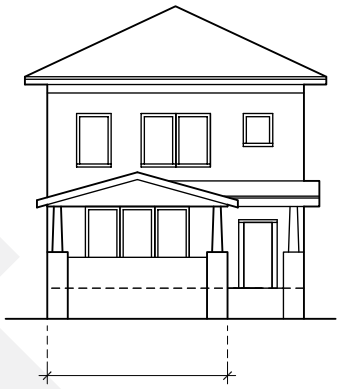


Figure 4.23 Porch as 3/4 width

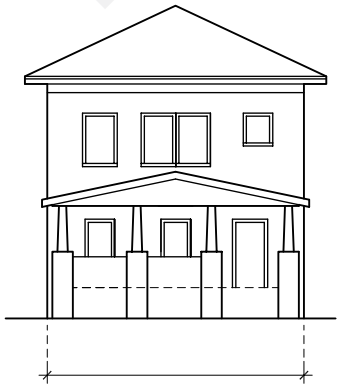
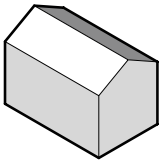


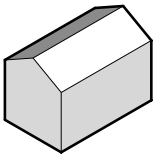
Figure 4.23 Porch as full width

Figure 4.22 Craftsman style homes typically feature a large front porch



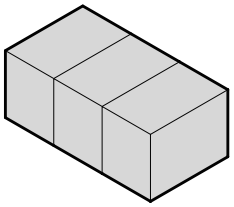
Broad Frontage Base Mass

Recommended for street frontage of 26' or more.



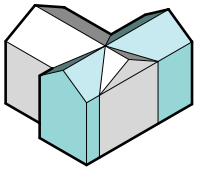
Narrow Frontage Base Mass

Recommended for street frontage of 25' or less.



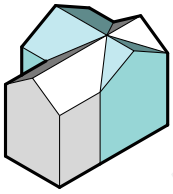
Townhouse Frontage Base

Recommended for attached townhouse unit frontages.



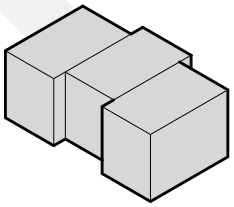
Cross Gable

The roof slope of the gable addition shall match the roof slope of the main building. The width of the cross gable shall be no more than half the face of the main building.

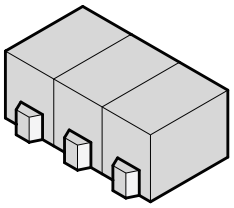


Cross Gable

The roof slope of the gable addition shall match the roof slope of the main building. The width of the cross gable shall be no more than half the face of the main building.

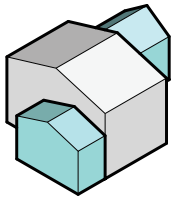


Facade Step



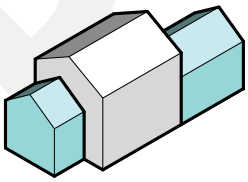
Bay Projections

Figure 4.23 Illustrative Townhouse Frontage and Massing Articulation



Front Gable

The roof slope of the gable addition may vary from the roof slope of the main building.



Front Gable

The roof slope of the gable addition may vary from the roof slope of the main building.

Figure 4.22 Illustrative Single-Family Massing with Gable Additions

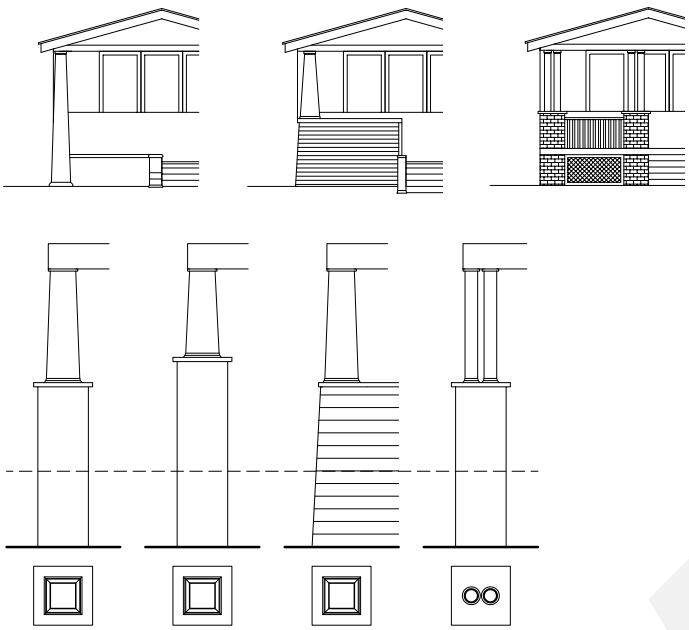


Figure 4.24 Typical Porch and Column Detail Variations

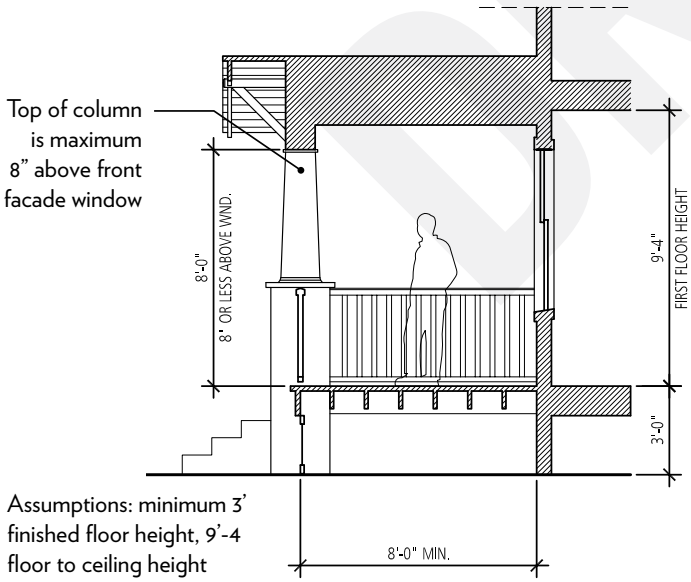


Figure 4.25 Typical Porch Proportion and Section

Figure 4.23 Eave with knee bracket (left) and rafter tail (right)

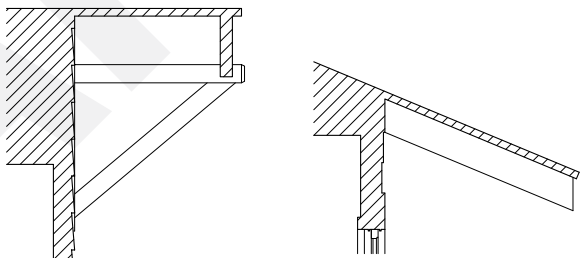


Figure 4.23 Typical exposed eave with knee bracket (left) and exposed rafter tail (right)

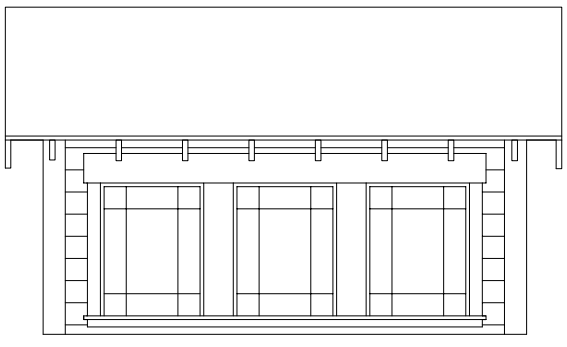


Figure 4.23 Typical Craftsman Shed Dormer

Figure 4.24 Variation on window muntin pattern

Figure 4.24 Typical Door and Window Types

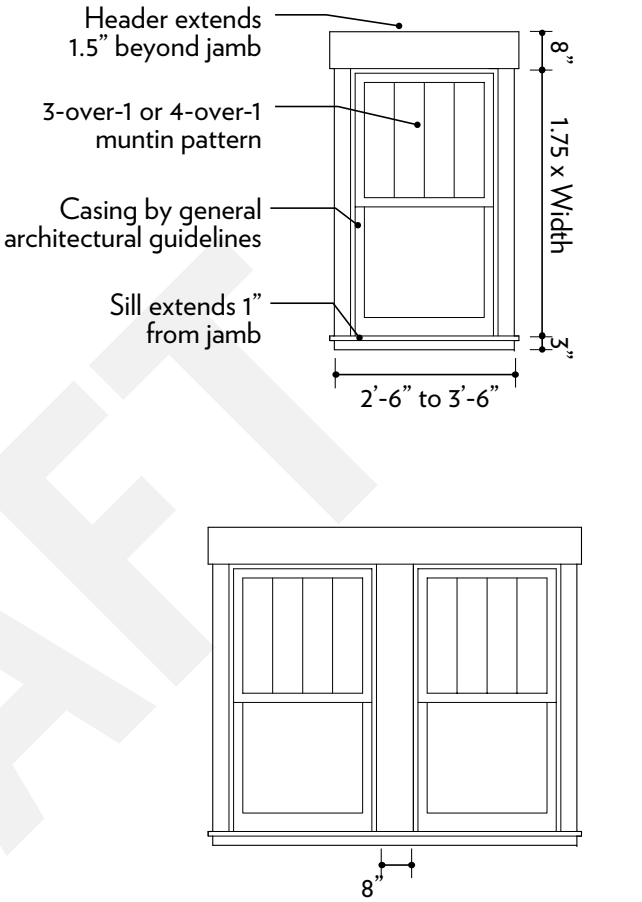


Figure 4.24 Typical Craftsman Double -Hung Window

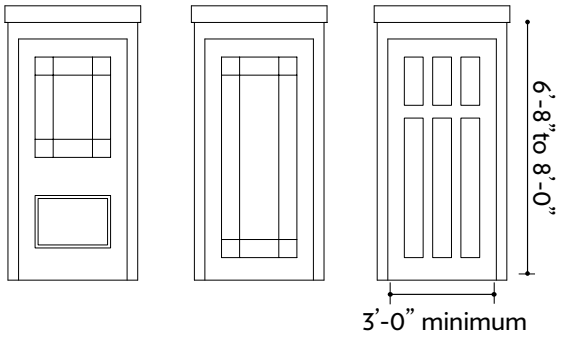


Figure 4.25 Typical Door Types

ARCHITECTURAL STYLES

Bay Area Modern

4.31 OVERVIEW

- Articulated Massing: The Bay Area Modern style uses flexible massing strategies that encourage open plan interiors. Porches and balconies are encouraged to enhance indoor-outdoor living. Massings are often asymmetrical and stem from the relationship of interior uses.

- Minimal Detailing: Window trim, door trim, and roof detailing are typically minimal. Material application is varied and flexible. Regional materials with integral color are typical, such as clean-lined, weathered wood shingles, concrete, and metal detailing.

- Clean geometries: Recesses and projections tend to have simple and bold geometries that accent depth or reveal from the main façade plane.

- Other Common Features:
  - > Material and Mass Articulation: Both material and façade variations help add visual interest to modern townhouses.
  - > Typical Wall Section: The main façade is a single plane, while façade elements project inward and outward.
  - > Bay windows and balconies project forward to articulate the façade.
  - > Inset doors or recesses articulate the façade and definition of units.

Figure 4.31 Typical Elevation and Section

Figure 4.31 Basic geometric forms with authentic, regional materials

Figure 4.31 Distributed window location and proportion create facade composition

Photo courtesy of David Baker Architects

Figure 4.31 Composition of clean geometries separates and layers the building mass

4.32 MASSING ADDITIONS

Single Family

> Base Mass: Typical base mass for bay modern is simple, rectangular, and balanced in proportion.

> Free Plan: Massing is very flexible and typically uses the plan to dictate location and size of additions. Options include: Articulation with projections and recesses; Balconies or bay windows; Occupiable roof spaces.

Townhouse Frontage

> Base: Typical base mass for bay modern is simple, rectangular, and vertical in proportion.

> Bay Projections: Bay projections may be single story, multi-story, or full height.

> Partial Step: Typically a single story in height, these may be additions or subtractions to the main building mass. The size of the projections is governed by the general architectural setback

Multi-Family Frontage

> Base: Typical base mass for bay modern is simple, rectangular, and horizontal in proportion.

> Free Plan: Flexible and layered horizontal volumes are typical locations.

> Step: Vertical articulation of bay projections and stepped additions or subtractions balance the horizontal volumes.

4.33 ROOF

Gable

> Cross gables are permitted.

> Dormers are not typical. Gable roof or shed roof dormers are permitted on front faces. Single shed dormer is permitted on rear faces.

> Roof slope: A roof slope of 5:12 to 12:12 is permitted.

Shed

> A roof slope of 4:12 to 12:12 is permitted.

> Minimal or no eaves are typical. Shallow eaves are permitted.

Flat Roof

> Modern flat roofs typically feature a smooth and trimless parapet.

> Parapet walls are the most common, although roof overhangs may also be applied.

> Flat roofs may be accessible.

Additional Details

> Minimal Eave Detail: The façade material typically extends all the way to the parapet, with minimal detail.

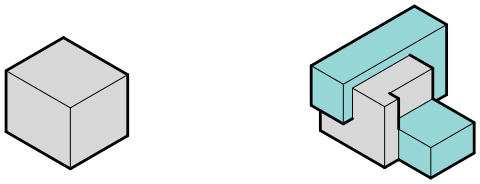


Figure 4.32 Illustrative Single-Family Massing

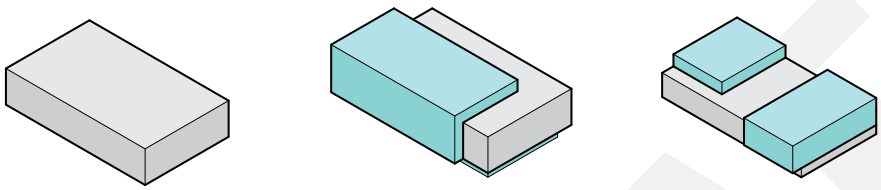


Figure 4.32 Illustrative Multi-Family Massing

Photo courtesy of David Baker Architects

Figure 4.32 Simple, repeating vertical masses tied together with horizontal eave, flat roof and contemporary materials

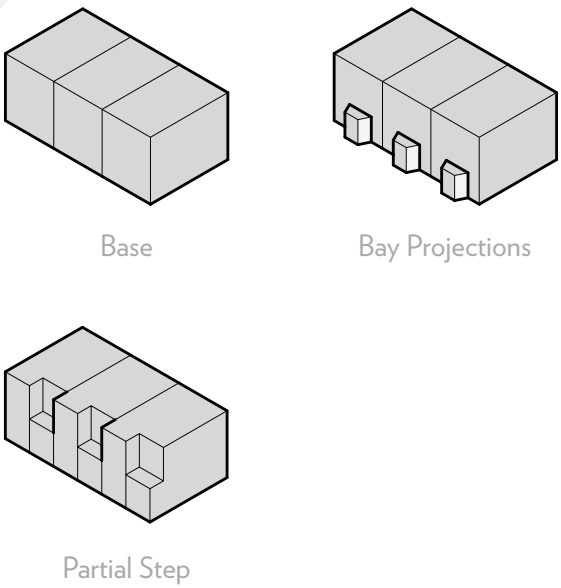


Figure 4.23 Illustrative Townhouse Frontage Articulation

4.34 PORCHES, STOOPS, STEPS

> Porches and stoops shall conform to the general architectural guidelines.

- Entry with Balcony: Balcony may be located above the front entry.

4.35 WINDOWS

> Windows have minimal or no trim.

> Shutters are not used.

> Window sizes vary and often indicate the function of the related room.

> Smaller windows are appropriate for more private spaces, such as bathrooms and bedrooms.

> Living spaces such as the living room, kitchen, and loft spaces should feature more prominent glazing.

> Window headheight and spacing may be varied, though still achieving unity in the façade.

> Typical Windows are appropriate for many uses, especially where interior light and air are desired, often awning or casement operation.

> Narrow Windows:

- Vertical orientation is appropriate as cor ner or circulation accents. Vertical narrow window height is at least 2.66 x window width.
- Horizontal orientation can accentuate views, allow for interior wall space, or enhance privacy for bathrooms. Horizontal window orientation width his 3.0 x height.

> Additional Details:

- Window sizes and head heights vary.
- Muntin divisions may be asymmetrical.

4.36 DOORS

> Exterior doors typically have no trim and are either flush against the wall or inset.

> Any combination of visor panels, and/or sidelights may be used. Slab doors are permitted. The door may stand alone, or as part of a glazed unit.

> Typical Exterior Door Dimensions: Entries are typically recessed and may feature a double-height space or balcony above. Doors typically have minimal or no trim and flush frames.

4.37 ENTRY

> Modern style doors may be arranged as part of a unit with adjacent windows.

> A typical entry may have inset vestibule accented by unique material.

> Balconies over entries provide shade and cover.

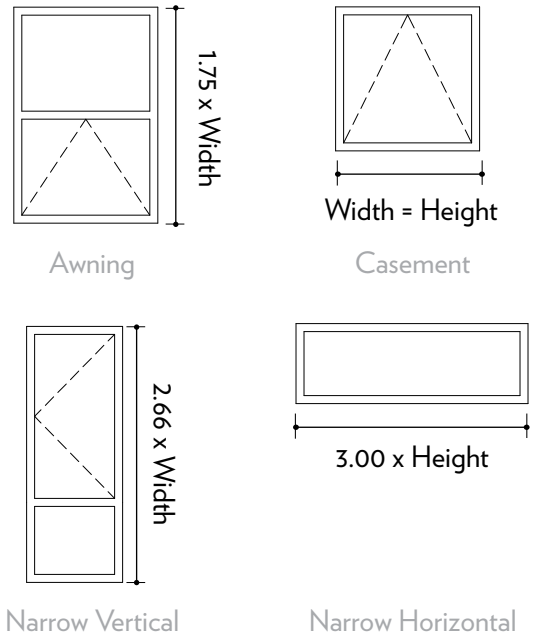


Figure 4.35 Typical Window Types

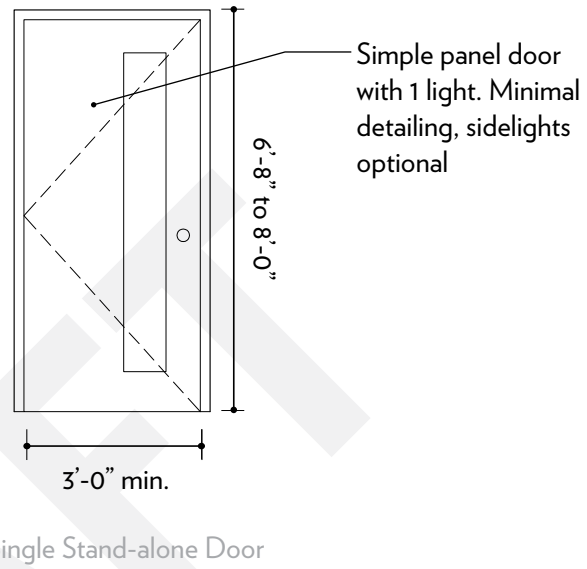


Figure 4.36 Typical Door Types

Figure 4.35 Simple, metal frame windows recessed from the facade plane

Figure 4.36 Clean geometries and detailing with unique materials at the entry

ARCHITECTURAL STYLES

Farm Industrial

4.41 OVERVIEW

» Gable, Shed or Rounded roof forms: Farm industrial roofs include low- to medium-pitch gable roofs with eaves, low- to medium-pitch shed roofs, and barrel vaulted roofs (related to vernacular forms).

» Minimal Detailing: Windows and doors have spare to no detailing. The façade is typically flat with minimal trim projection and eave overhang. Farm industrial styles use material systems to create texture, typically wide vertical clapboard, or vertical corrugated metal siding, and standing seam metal roofs.

» Asymmetrical Elements: Asymmetrical openings, additions, cut away sections, and/or accent features often complement overall symmetrical massing and façade organization.

Figure 4.41 Vertical clapboard with regional materials

Figure 4.41 Simple gable-roof forms with minimal eaves, asymmetrial composition and industrial materials

Figure 4.41 Vertical forms recall farm industrial precedents

Figure 4.41 Industrial materials and simple forms

4.42 MASSING

Massing Additions

> Base Mass: The typical base mass for farm industrial is simple and rectangular, with narrow frontage toward the street.

> For narrower lots, the base mass may be oriented with narrow side facing the street.

> Farm industrial buildings are typically continuous, vertical, articulated volumes. Additions, if any, may appear as an offset or separated portion, parallel in orientation to the base mass.

> Single Family: Overall symmetry or bay structure of the façade determine massing additions

> Townhouse Frontage:

- Base: Base mass is simple and rectilinear with vertical proportion
- Bay Projections: Bay projections may be single story, multi-story, or full height.
- Partial Step: Typically a single story in height, these may be additions or subtrac tions to the main building mass. The size of the projections is governed by the general architectural setback requirements.

> Multi-Family Frontage: Massing is articulated with long geometricl forms or vertical extensions. Finer grain of articulation relates to individual units.

> Massing additions may appear as an offset, separated, or rotated portion of the base mass.

> Massing additions should maintain a clear hierarchy of scale with the base mass.

> Wing-Hyphen: Recommended to sit behind the main building and incorporate the principles of indoor/outdoor living. Hyphen connectors shall be shorter than the height of the addition. The height of the wing shall not exceed the height of the main building. The addition's gross floor area shall be no greater than 75% of the main building.

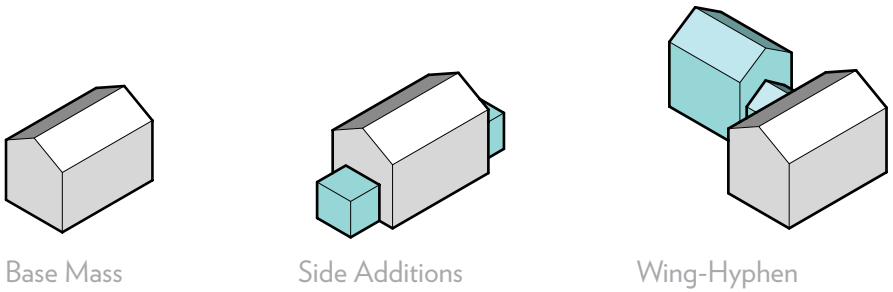


Figure 4.42 Illustrative Single-Family Massing

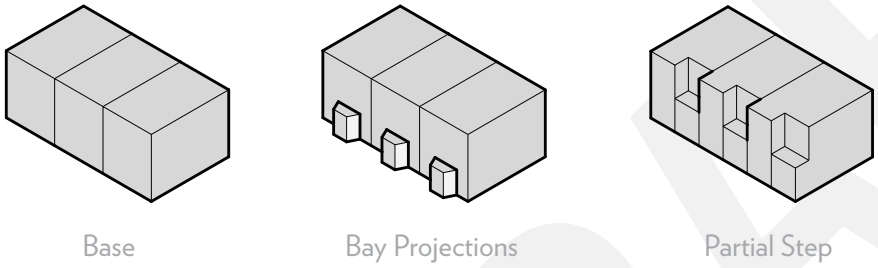
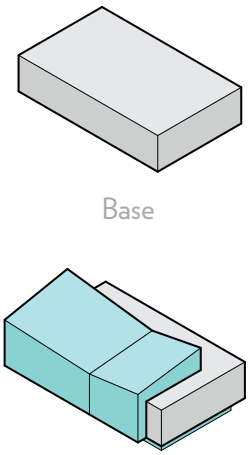


Figure 4.42 Illustrative Townhouse Massing and Frontage Articulation



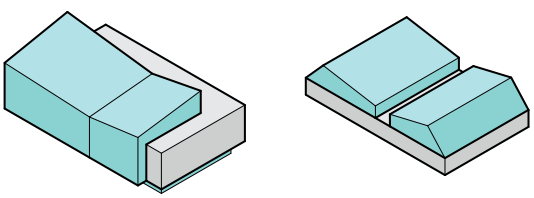


Figure 4.42 Illustrative Multi-Family Massing with Shed and Gable Roof Articulation

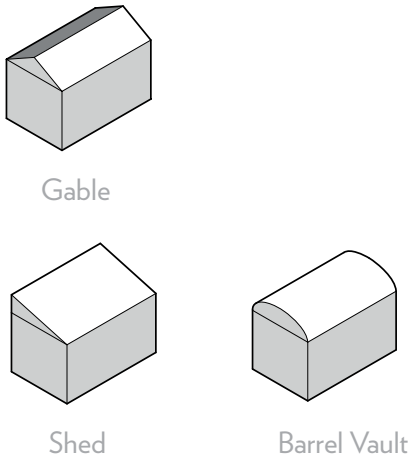


Figure 4.43 Illustrative Roof Types

4.43 ROOF

Gable

> Orientation: Side and front facing are permitted. Narrow frontages of 25' or less should have front facing gable roofs.

> Dormers: Extended shed roof dormers are permitted on either side.

> Roof slope: A roof slope of 5:12 to 12:12 is permitted.

Shed

> Orientation: Shed roofs should not orient the shortest face toward the street.

> Dormers: Extended shed roof dormers permitted.

> Roof slope: A roof slope of 5:12 to 12:12 is permitted.

Barrel Vault

> Usage: Only permitted in multi-family buildings. Barrel vaulted roof sections shall be interspersed with gable or shed roof sections.

> Orientation: Side and front facing are permitted.

> Circular section barrel vaults are preferred.

> Elliptical section barrel vaults shall orient the shorter dimension vertically.

4.44 WINDOWS

> Windows have minimal or no trim.

> Shutters are not used.

> Window sizes vary and often indicate the function of the related room; smaller windows are appropriate for more private spaces, such as bathrooms/bedrooms.

> Living spaces such as the living room, kitchen, and loft spaces should feature more prominent glazing.

> Window head height and spacing may be varied, though still achieving unity in the façade.

> Typical Windows are appropriate for many uses, especially where interior light and air are desired, often awning or casement operation.

> Narrow Windows:

- Vertical orientation is appropriate as corner or circulation accents.
- Horizontal orientation can accentuate views, allow for interior wall space, or enhance privacy for bathrooms.

> Dormer windows, or windows within façades at gable ends shall be smaller than main windows.

> Additional details:

- Curtain wall systems vary widely and can be integrated with a variety of materials. Curtain walls may replace a portion of or full façade, particularly at gable ends adjacent to open spaces. Curtain walls are appropriate for engaging living spaces to the outdoors. Panel sizes vary, but typically feature a single panel for doors and an upper transom panel.
- Window sizes and head heights vary.
- Ribbon windows can highlight views.

4.45 DOORS

> Minimal detailing is preferred.

> A transom window and sidelights are permitted.

> Entries are typically coplanar with the façade. Exterior doors typically have minimal trim and are either flush against the wall or minimally inset.

> Any combination of visor panels, and/or sidelights may be used. Slab doors are permitted. The door may stand alone, or as part of a glazed unit.

4.46 FRONT PORCH

> Porches are optional.

> Porches should be along the main frontage or wrap corner.

> Farm Industrial style front porches typically have a side facing gable roof.

> Narrow lots with front facing gables may have porches with front facing gables.

> Columns, railings, and detailing are typically slender and minimal.

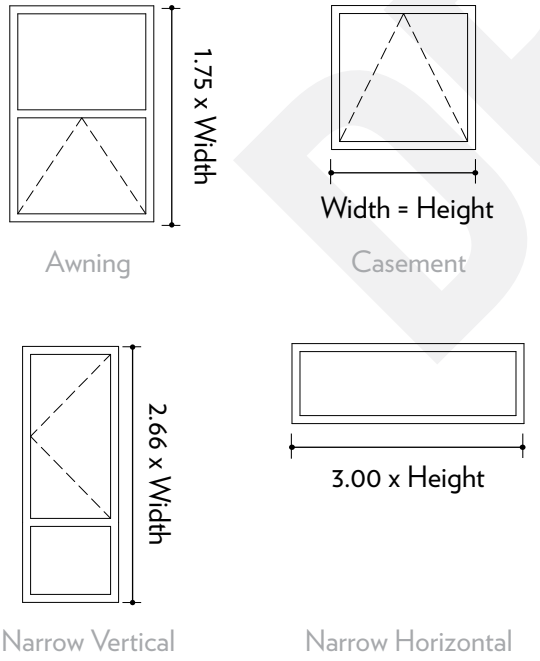


Figure 4.44 Windows are a varying sizes with minimal trim

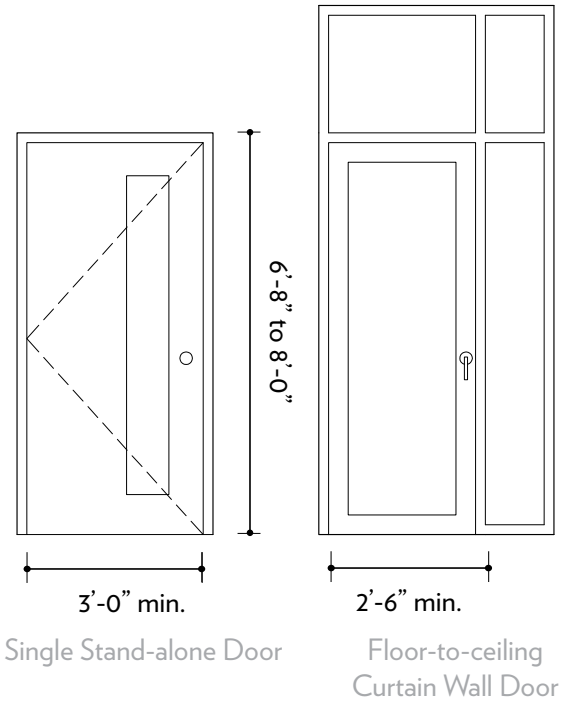


Figure 4.45 Typical Door Types

ARCHITECTURAL STYLES

Loft Industrial

4.51 OVERVIEW

- Simple Massing: The loft industrial style uses basic massing strategies that create simple, planar envelopes for revealing open, flexible, and tall interior spaces.

- Clean geometries: Recesses and projections tend to have simple and bold geometries that accent depth or reveal from the main façade plane. Recesses and projections may also provide massing articulation and relate to the expression of units.

- Minimal Detailing: Visual interest in loft Industrial buildings results from large multi-light windows, use of integral materials, exposed structure, and the expression of interior spaces. Openings and entries are often oversized and have multiple uses. Window and door trim is typically not used. Roof details tend to be minimal.

- Façade Repetition: Loft Industrial building façades typically repeat equal bays organized around building structure, unit spacing, and glazing. The façade is balanced, neither symmetrical nor asymmetrical. Locations of main entries and building circulation vary.

- Other Common Features:

  Variation in the expression and application of materials adds visual interest. Typical Wall Section: The main façade is a single plane, while façade elements project inward and outward. Bay windows and balconies project forward to articulate the façade. Inset doors or recesses articulate the façade and the definition of units.

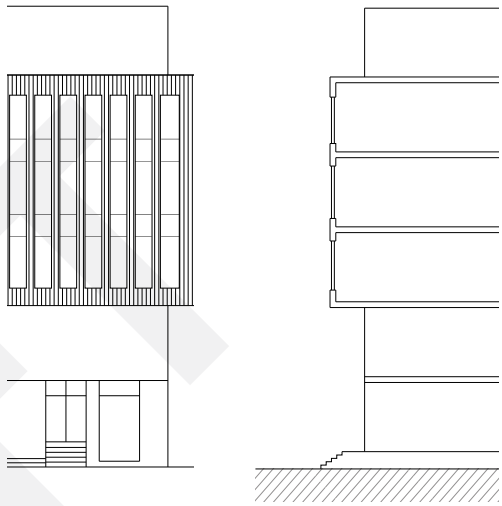


Figure 4.51 Typical Elevation and Section

Figure 4.51 Clean geometries with the variation and expression of projections, recesses and industrial materials as ornamentation

Photo courtesy of David Baker Architects

Photo courtesy of David Baker Architects

Figure 4.51 Vertical massing articulation related to individual units, living spaces, or composition of volumes.

4.52 MASSING

Massing Additions

> Base Mass: Typical base mass is simple & rectangular.

> Loft industrial buildings are typically continuous, horizontal, articulated volumes. Additions are unusual. Additions, if any, may appear as an offset or separated portion, parallel in orientation to the base mass.

> Single Family:

- Free Plan: Massing is very flexible and typically uses the plan to dictate location and size of additions.

  Options include: Articulation with projections and recesses; Balconies or bay windows; Occupiable roof spaces.

> Townhouse Frontage

- Base: Typical Townhouse base is simple, rectangular.
- Bay Projections: Bay projections may be single story, multi-story, or full height and often reflect interior unit height, width and double-height spaces.
- Partial Step: Typically a single story in height, may be additions/ subtractions to main build ing mass. Projections size governed by the general architectural setback requirements.

> Multi-Family Frontage

- Base: Typical multi-family base mass is horizontal in overall proportion.
- Multi-family massing typically has tall vertical projections that articulate units and internal living spaces. Vertical projections may wrap over the parapet onto the roof.

Figure 4.52 Illustrative massing with vertical frontage articulation and roof forms

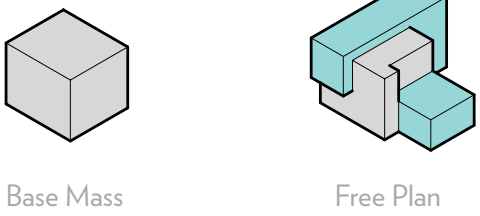


Figure 4.52 Illustrative Single-Family Massing

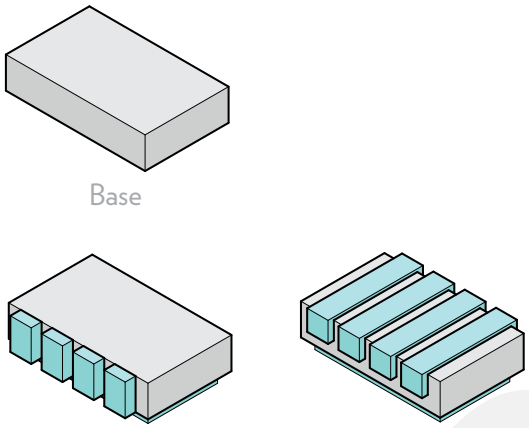


Figure 4.52 Illustrative Multi-Family Massing

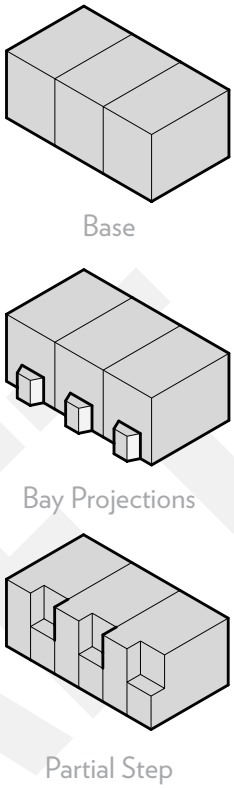


Figure 4.52 Illustrative Frontage Articulation

Photo courtesy of David Baker Architects

Figure 4.52 Illustrative multi-family massing. A large-scale projection is articulated with recesses related to windows and living spaces

4.53 ROOF

Flat Roof

> Loft industrial flat roofs typically feature a smooth and simple parapet. Parapet articulation should be consistent with the building's bay system, entries, or building corners.
> Parapet walls are most common, although roof overhangs and higher roof volumes may be applied, especially for composite roofs.
> Flat roofs may be accessible.
> Flat roofs may be combined with one other form: gable, shed, barrel vaulted. Such roof composition should clearly relate to expression of units/building bays.

Gable, Shed, Barrel Roof Sections

> Gable Orientation: Side and front facing are permitted. A roof slope of 5:12 to 12:12 is permitted.
> Shed Orientation: Shed roof sections should be side facing with the tall face toward the street. Roof slope: A roof slope of 5:12 to 12:12 is permitted.
> Barrel Vault Orientation: Elliptical section barrel vaults shall orient the shorter dimension vertically.

Penthouse Levels

> Loft industrial buildings may have upper stories that appear as additions, but integral in design/articulation.
> Penthouse levels are typically setback from the main parapet to maintain the predominant roofline, its visual hierarchy, and provide roof access.

4.54 PORCHES, STOOPS, STEPS

> Porches are optional.
> Porches and stoops shall conform to the general architectural guidelines.
> Loft Industrial buildings commonly feature balconies on upper levels. French balconies may also be an option where setback requirements are restrictive.
> Balconies may also be located above front entries.

Photo courtesy of David Baker Architects

Figure 4.53 Illustrative Roof Articulation

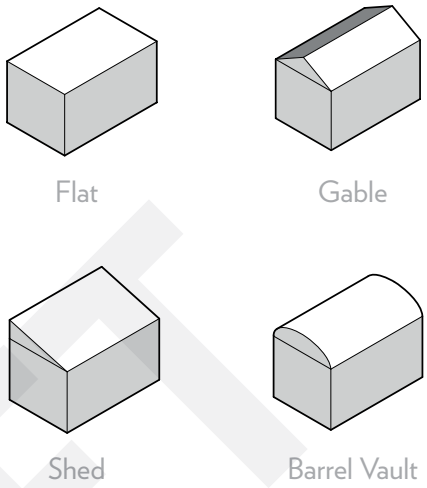


Figure 4.53 Illustrative Roof Types

Photo courtesy of David Baker Architects

Figure 4.53 Illustrative Integrated Penthouse level with stepback and roof articulation

Figure 4.54 Typical steps and stoops with balcony over entry

4.55 WINDOWS

> Windows have minimal or no trim.
> Shutters are not used.
> Window sizes vary and often indicate the function of the related room.
> Smaller windows are appropriate for more private spaces, such as bathrooms and bedrooms.
> Living spaces (the living room, kitchen, and loft spaces) should feature more prominent glazing, often oversized/revealing tall or double-height interior spaces.
> Window headheight and spacing may be varied, though still achieving unity in the façade.
> Typical Windows are appropriate for many uses, especially where interior light and air are desired, often awning or casement operation.
> Narrow Windows:

- Vertical orientation is appropriate as corner or circulation accents.
- Horizontal orientation can accentuate views, allow for interior wall space, or enhance privacy for bathrooms.

> Additional Details:

- Industrial windows and curtain wall systems are encouraged. Systems vary widely and can be integrated with a variety of materials.
- Industrial, multi-light windows bring light and air into tall spaces and double-height spaces, especially at upper levels.
- Curtain walls are appropriate for engaging living spaces to the outdoors. Panel sizes vary, but typically feature a single panel for doors and an upper transom panel.
- Window sizes and head heights vary.
- Muntin divisions may be asymmetrical.
- Ribbon windows can highlight views.

4.56 DOORS

> Exterior doors typically have no trim and are either flush against the wall or inset.
> Any combination of visor panels, and/or sidelights may be used. Slab doors are permitted. The door may stand alone, or as part of a glazed unit.
> Typical Exterior Door Dimensions: Entries are typically recessed and may feature a double-height space or balcony above. Loft Industrial style doors typically have no trim and the frame is flush with the wall.

4.57 ENTRIES

> Loft Industrial Entries may be standalone but are typically arranged as part of a unit with adjacent glazing.
> A typical entry may have an inset vestibule accented by unique material.
> Balconies over entries provide façade articulation, shade, and cover from the elements.

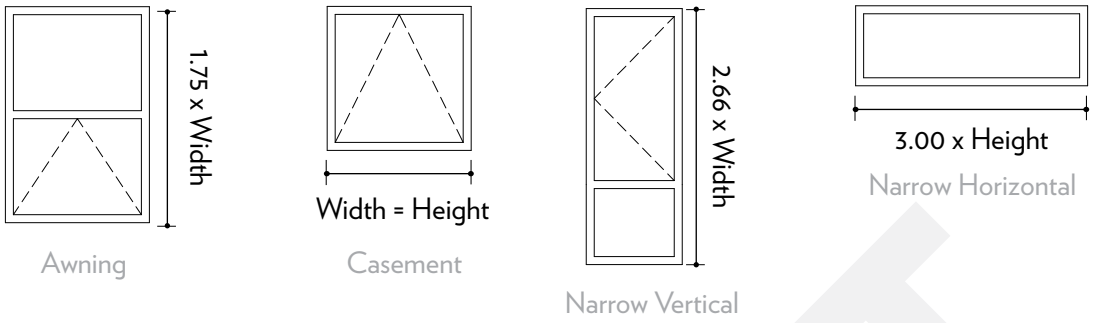


Figure 4.55 Typical Loft Industrial Window Types

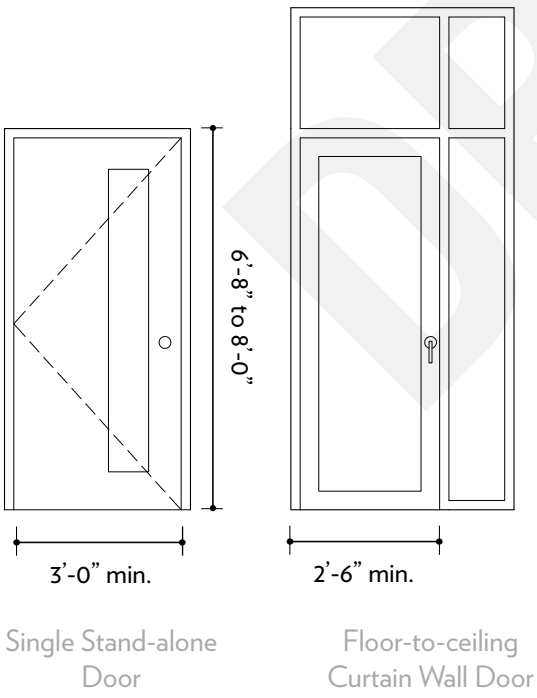


Figure 4.56 Typical Door Types

Figure 4.56 Illustrative porch with brise soleil in authentic materials and minimal detailing

Figure 5.0 A loft industrial style with clean geometric forms, shed roof, industrial windows and prominent eave detailing

DESIGN STANDARDS & GUIDELINES

5.1 Residential
5.2 Local Retail
5.3 Large-Format Retail
5.4 Office
5.5 Private Realm Landscape
5.6 Sustainability

RESIDENTIAL

Intent & Objectives

5.11 OVERVIEW

The Napa Pipe Development is intended to provide a mix of housing types, among other uses. Types include rental and for-sale, low income to market rate, and studio to three-bedroom units. The Design Guidelines, serve to both require and encourage the components that will ensure the desired quality and character of the residential buildings and landscapes at Napa Pipe.

The Form-Based Code includes the following twelve residential typologies:

Mews Townhouse
Small Townhouse
Large Townhouse
Micro-Lot Single Family Garden Court
Micro-Lot Single Family
Multi-Family Townhouse
Multi-Family Townhouse + Mews (Surface Parking)
Multi-Family Townhouse + Mews (Basement Parking)
Multi-Family Apartments (Surface Parking)
Multi-Family Apartments (Hybrid Parking)
Multi-Family Apartments (Podium Parking)
Multi-Family Apartments with Retail

The standards and guidelines herein apply to all residential Form-Based Code typologies, unless otherwise noted. Residential Guidelines also apply to Hotel uses. Specific standards and guidelines that relate to the multi-family typologies are also included.

Figure 5.11 Building wall has clean composition and perceivable thickness due to recessed windows and niche with unique materials.

STANDARDS MATRIX

BUILDINGS & BLOCKS	Building Orientation	1. Consistent street frontages shall be on Primary Frontage Streets 2. Principal frontages shall be along Primary Frontage Streets 3. Shared driveway access is prohibited from Primary Frontage Streets 4. Principal entrances shall be on Primary Frontage Streets 5. 10' max. between buildings on Primary Frontage Streets
FRONTAGE & SETBACK	Frontage	1. Building elevations shall not be replicated across street or on more than 2 consecutive parcels 2. Individual buildings on the same street shall be visually distinct 3. Every third building in a row shall vary 4. High quality and durable elements of the building façade
	Street Variety	1. A continuous roof/ridge line is prohibited on a row of more than 3 townhouses
	Entries	1. Primary entry access from public street/open space for ground level units 2. Building entries for multi-family buildings oriented to a public street 3. Frontages and principal entries along Primary Frontage Streets 4. Frontages on multiple Primary Frontage Streets shall have entries from each street
	Setbacks	1. Variations in setbacks along a block are permitted within 5' feet from the primary datum 2. Front porches, stoops, steps, bay windows, and balconies permitted within the front setback
	Stoops	1. Entry steps shall be min. 3' feet x max. 6' wide.
	Porches	1. Porches shall be open 2. Porch floors shall be pressure-treated wood, composite, concrete, stone, or brick 3. Chain link fencing is prohibited
	Projections: Balconies	1. Balconies are permitted to be recessed or protruding 2. Balcony floors shall be pressure-treated wood, composite simulated wood, metal, or concrete, and visible vinyl elements such as soffits and architectural details are not permitted 3. Railings shall be steel, wood, or composite simulated wood and integrated w. façade design 4. Projecting balconies shall be a min. 10' above public right-of-way 5. Balconies shall be well detailed with high-quality, durable materials 6. Balconies shall not be covered
	Projections: Decks	1. Decks shall be at the rear of the building 2. Enclosed decks are not permitted 3. Deck floors shall be pressure-treated wood, composite simulated wood, or concrete 4. Deck railings shall be steel, wood, composite simulated wood & integrated in façade design

TO BE UPDATED PENDING FINAL STANDARDS

FRONTAGE & SETBACK (MULTI-FAMILY)		1. Adjacent buildings shall be visually distinct from each other 2. A mix of principal entries and ground level units is required on all Primary Frontage Streets 3. Roofs on multi-family buildings shall not be a single-mass with a continuous ridgeline 4. Overall street frontage shall have diversity and richness in materials, projections and open-
ARCHITECTURAL	Façade	1. High visibility buildings at public street corners shall be enhanced with architectural elements
	Windows	1. All exterior elevations shall have windows 2. Exposed exterior elevations shall have 20% min. glazing 3. Replacement material for glass shall not be used 4. Reflective glazing is not permitted 5. Glass shall be clear color, but neutral color spandrel, etched/blasted, fritted glass permitted 6. Shutters, if any, shall be sized and detailed to appear to be operable 7. Window shall have reveals. Glass shall be set back 3" min. from the building façade 8. Glass setback and trim shall be appropriate per architectural stylebook 9. Muntin patterns shall be sized per architectural stylebook 10. Muntins shall be integral to the design of the window 11. Muntins between double set glass are not permitted 12. Aluminum windows shall be durable, high quality, and heavy gauge
	Doors	1. All exterior doors shall be appropriate to the building style 2. Single doors shall have door height of 6'8" min. - 8' max., width of 3' min. - 4' max. 3. Double doors shall have door height of 6'8" min. - 9' max., width of 4'8" min. - 5'6" max. 4. Exterior doors shall be made of steel, wood, or glass and finished to ensure durability
	Garage	1. Garage openings shall be a maximum of 9' high 2. Garage doors may not exceed 10' in width 3. Garage doors shall be made of wood, embossed hardwood, fiberglass, steel, or aluminum. 4. Garages shall have single doors, double garage doors are permitted if not visible from street 5. Garage doors shall be recessed 1 foot or more behind the face of the garage front elevation 6. Garage (and door) style, materials, finishes, and colors shall be compatible w. main massing 7. Garage massing, design, construction shall be integral to overall main building design 8. Garages shall be oriented to internal shared driveways.

TO BE UPDATED PENDING FINAL STANDARDS

STANDARDS MATRIX

ARCHITECTURAL DETAILS CON'T	Roofs	1. Roofs shall be low-glare materials 2. Roofs shall have natural/naturalistic materials with integral color 3. Snap-on batten type standing seam metal roofs are not allowed 4. Flat roofs visible from adjacent properties shall be covered with a finished material 5. Gutters, if used, shall be aligned with the roofline and building edges 6. Downspouts shall match gutters in material and finish
	Eaves	1. Eaves shall be 1' min. - 3' max. in depth
	Dormers	1. Dormer windows shall be smaller than the windows on lower floors 2. Dormers shall be spaced evenly
	Columns	1. Square columns shall be 6" min. width, with or without capitals and bases 2. Round columns shall be 6" min. outer diameter, with or without capitals and bases
	Addresses & Signage	1. Residential address numbers shall be 3" max., mounted to the building only
	Satellite & Anntenae	1. Large satellite dishes and antennae are not permitted 2. Small satellite dishes and antennae shall not be visible from public streets
	Solar Panels	1. Solar panels shall not be visible from primary streets **TO BE UPDATED PENDING FINAL STANDARDS** 2. Solar panels shall not produce direct glare or redirect sunlight into adjacent residential units
	Lighting	1. Light sources shall have zero direct-beam illumination, per LEED-ND requirements 2. Building design should refer to most current LEED checklist for lighting design guidelines
	Materials	1. With multiple materials traditionally heavier materials shall be located below lighter materials 2. All openings in brick or stone construction shall be spanned by a header 3. All headers shall: - Use materials with regard to their traditional structural capacity (veneer finishes shall be con-figured in a way that corresponds with the material's traditional load-bearing configuration) - Be wider than the opening they span; Be brick, stone, cast stone, terra cotta or metal; and be in one of the following forms: lintel, arch and jack arch 4. Buildings with brick/stone construction and a raised first floor level shall have a water table 5. All window openings in brick or stone construction shall have a sill at their base 6. All brick and stone structures shall contain a cap which shall: Protect the tops of all brick and stone structures exposed to the weather, including: garden walls, stair treads, planter edges and freestanding piers; Be made of stone, cast stone, terra cotta or slate; and be rectangular or more ornate on the edges. S12. Aluminum, Vinyl, or T-1-11 siding is not permitted S13. Vinyl details are not permitted on any building area visible from a public street S14. Synthetic concrete (EIFS) is not permitted visible from a public right-of-way or common open space
OPEN SPACE	Residential Units	1. All residential units shall have 200 square feet min. aggregate of outdoor space within block
	Common Open Space	1. Common open spaces shall be 20' min. in width

PARKING & SERVICE	Orientation	1. Shared driveways should be the primary source of access to off- street residential parking 2. Off-street parking should be hidden from view from designated primary streets
	Surface Parking	1. Surface parking shall not be oriented to Primary Frontage Streets 2. Surface parking shall not be accessed from Primary Frontage Streets 3. Temporary surface parking is permitted on building lots during phased project buildout 4. Off-street parking areas shall be set back 10' min. along R.O.W. excluding shared driveways 5. Ground level parking shall be screened from sidewalk/open space
	Structured Parking	1. Parking structures shall conceal views of parked autos from streets and open spaces. Visibility of parking shall be limited to 25% of building frontage. 2. Setbacks from property line permitted to accommodate landscaping and buffer features 3. Entrances to structured parking shall not be placed on boulevards or designated primary frontage streets
	Shared Driveways	1. Parking on shared driveways is only permitted in designated areas 2. Parking along shared driveways is not permitted, even within rear setback areas between the shared driveways and private garages
	Service	1. Service access to apartments/units above retail shall be in block, not on Primary Frontage 2. Buildings with structured parking shall have service access through the parking lot
	Garbage	1. Trash collection shall be within the block and not along public frontages 2. Within the block, trash collection is permitted from shared driveways and parking areas

TO BE UPDATED PENDING FINAL STANDARDS

5.12 BUILDINGS & BLOCKS

Building Orientation

In order to create inviting, pedestrian-oriented streets, block layouts should be organized to reinforce the primary east-west, hills to river, orientation of the site.

> Standards:

S1. Primary Streets, as identified in the Façade Hierarchy Diagram, shall have consistent street frontages with building fronts aligned and oriented to these streets.

S2. All buildings along Primary Streets shall have their principal frontage along that street.

S3. Access to Shared Driveways is prohibited from Primary Streets.

S4. Spaces between buildings on Primary Streets shall be no larger than 10 feet, except as needed for shared driveway access to parking garages or required by building code.

S5. Vehicle parking, garbage, and mechanical equipment shall not be visible from Primary Streets.

> Guidelines:

G1. Multi-family buildings that front on more than one Primary Street may have more than one principal frontage.

G2. Shared Driveways should be generally oriented as per Fig. 2.6 Shared Driveway Orientations diagram.

Corners

Corners present special design opportunities within the overall design of a building and block and should be highlighted in the design. Consider unique design features such as tall building elements, changes of materials, bay windows, projections, prominent entries.

Block Layouts

The range of sample block layouts in Chapter 2: Design Framework illustrate a broad range of building typologies, arrangement on blocks, and combinations of typologies on a block. These sample layouts are not meant to be exclusive, merely to illustrate the rich variety possible with these typologies and guidelines. The following are additional guidelines that apply to the block layout of the Form Based Code typologies.

> Guidelines:

G1. At an individual block level, developers are encouraged to include multiple typologies to create variety and interest, as feasible.

G2. Where one building typology is used for an entire block, architectural and massing articulation should modulate the building scale and vary the facade.

G3. Single buildings should be designed coherently and should not try to simulate multiple buildings.

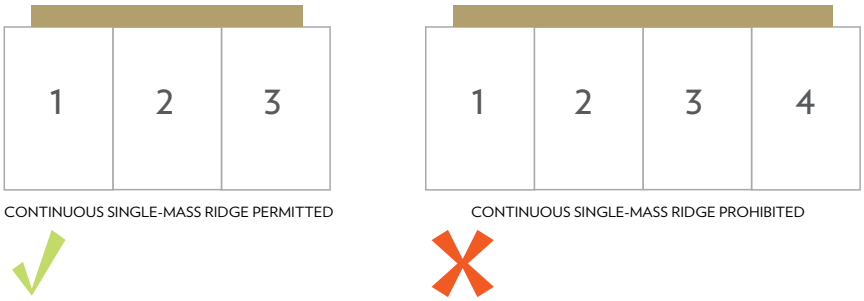


Figure 5.12 Single roof mass with continuous ridge line permitted on maximum of 3 consecutive townhouses.

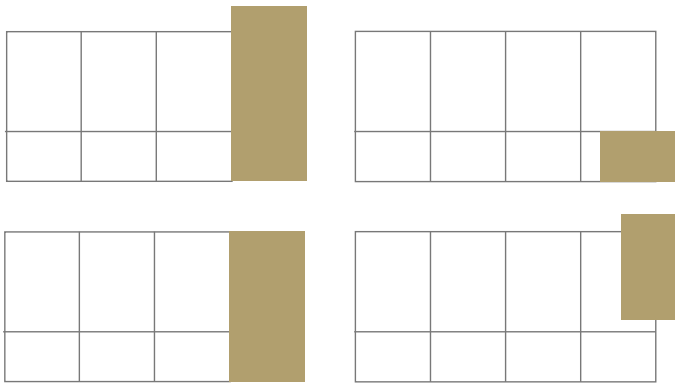


Figure 5.12 Corners of individual buildings and blocks are special design opportunities for greater height, prominent entries, projections, and material articulation.

Figure 5.12 Architectural projections and recesses should not be continuous and should be maximum 18' in continuous length for maximum 70% of total frontage.

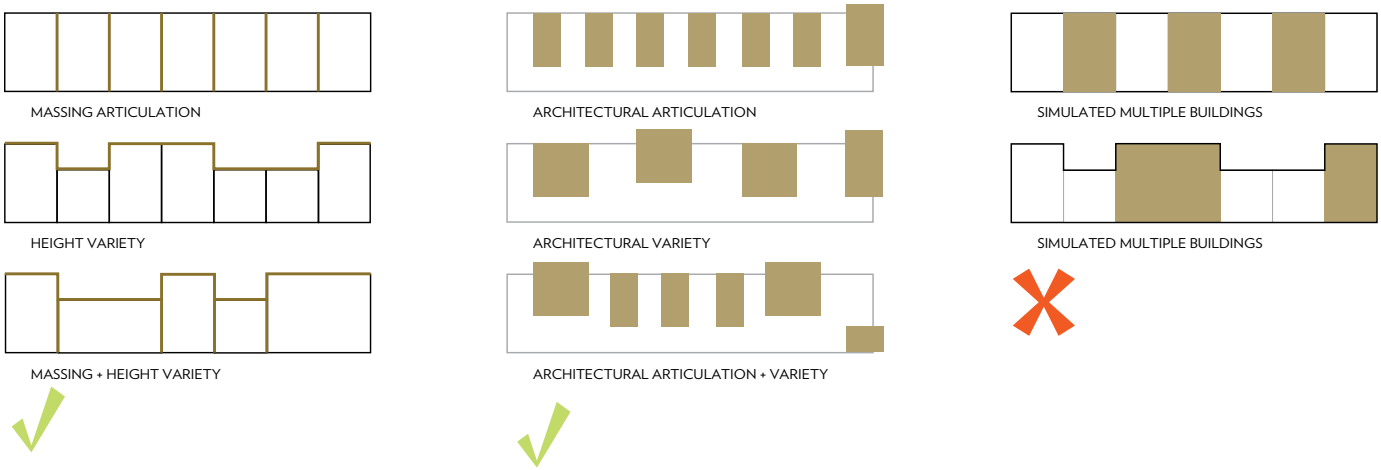


Figure 5.12 When one building typology is used for an entire block, modulate the building scale and vary the façade. However, single buildings that try to simulate multiple buildings are not recommended.

5.13 GENERAL FRONTAGE & SETBACK GUIDELINES

Frontage

> Standards:

S1. For detached units, building elevations shall not be replicated across the street from each other or on more than two consecutive parcels. Attached townhouse units that are designed as a holistic sequence are exempted.

S2. Individual buildings on the same street shall be visually distinct from each other with variations in style, building massing, color, materials, window arrangement, window type, porch, eave level, architectural details, or roofline.

S3. Every third building in a row shall vary in at least two of the above architectural elements from its adjacent buildings.

S4. Elements of the building façade, such as entries, porches, and other architectural elements shall be well-detailed with high quality, durable materials and attention to method of joinery and water-proofing. These elements shall be proportioned to relate to human scale, facilitate pedestrian activity and enliven the public realm.

S5. Stepbacks, setbacks and height changes shall be a minimum of 3 feet.

S6. For block frontages with more than one building, individual building setbacks shall not deviate more than 5 feet from the setback datum established by the building on the corner lot.

> Guidelines:

G1. Buildings should overlook the street with active fronts.

G2. Architectural projections and recesses should not be continuous and should be limited to no more than 18' in continuous length for a maximum of 70% of total frontage.

Street Variety

> Standards:

S1. A continuous single-mass roof with continuous ridge line is prohibited on a row of more than 3 townhouses.

S2. Architectural projections and recesses in the form of stoops, porches, balconies, and bays are required to provide direct access to the outdoors within each unit and/or provide a variety of depths and features on the streetwall.

> Guidelines:

G1. Overall continuity in the parapet line of a row of townhouses is encouraged.

G2. Variation in building form should relate to the scale of individual building units or rooms such as recessed or projecting bays, shifts in massing or distinct roof shapes.

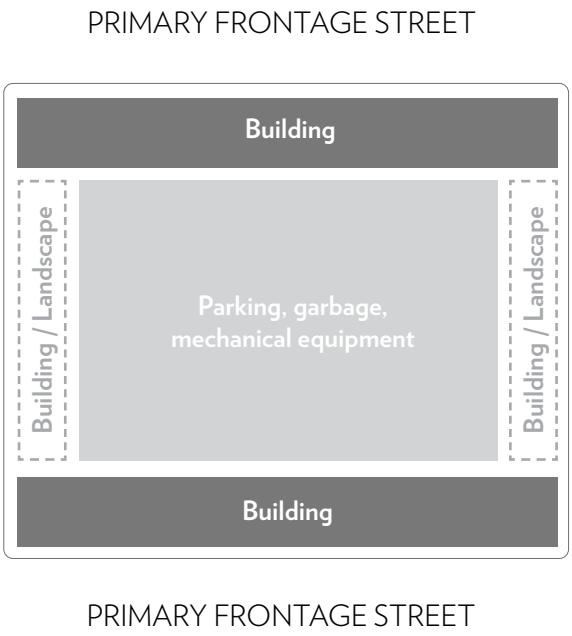


Figure 5.13 Vehicle parking, garbage, and mechanical equipment are screened form Primary Frontage Streets

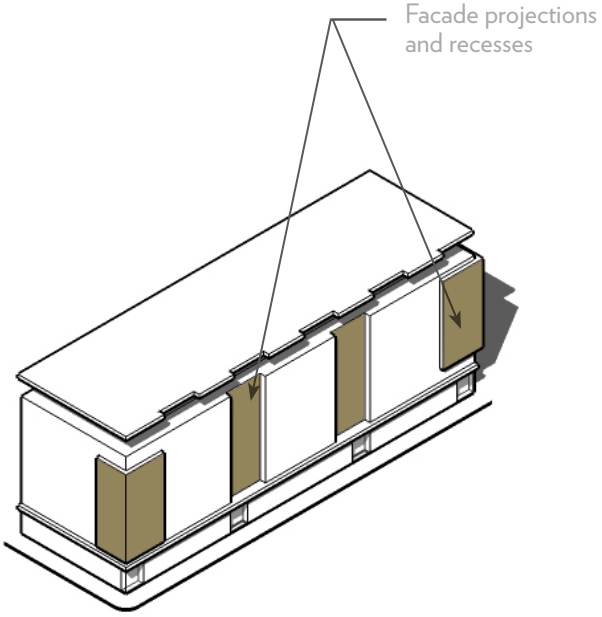
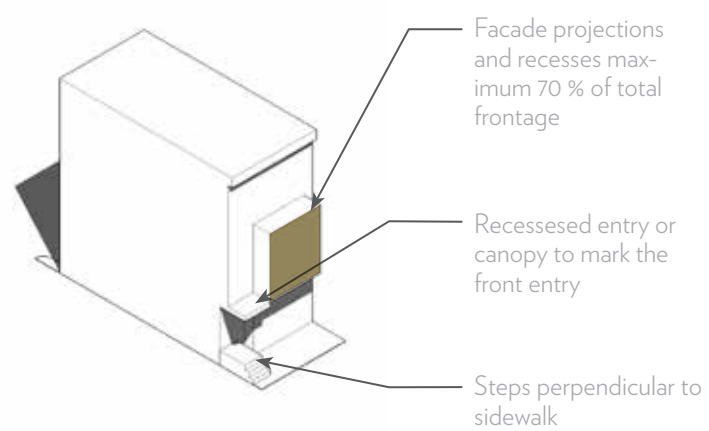
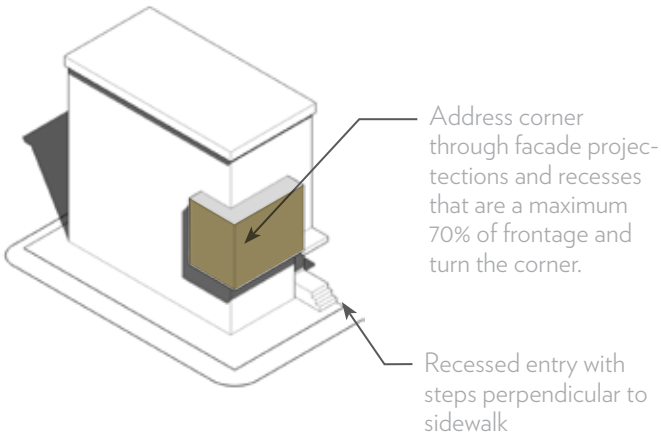


Figure 5.13 Recesses and projecting bays vary the building form and relate to the scale and rhythm of individual units as well as corner articulation.



Typical Unit



Corner Unit

Figure 5.13 Frontage Articulation and Entries for Typical and Corner Units

Figure 5.13 Articulation of the building mass needs to be coherent. Good: Cohesive composition (left). Bad: Overdone cacophany (right)

Figure 5.13 Recessed building entries show hierarchy with different depth, width, material change and awning proportion. Minimal landscaped setback provides separation from the sidewalk.

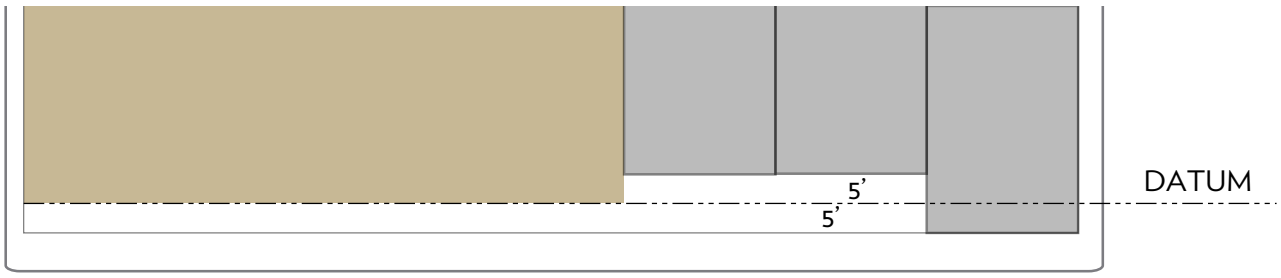


Figure 5.13 Variations in building setbacks occur within 5 feet of the first building’s primary datum.

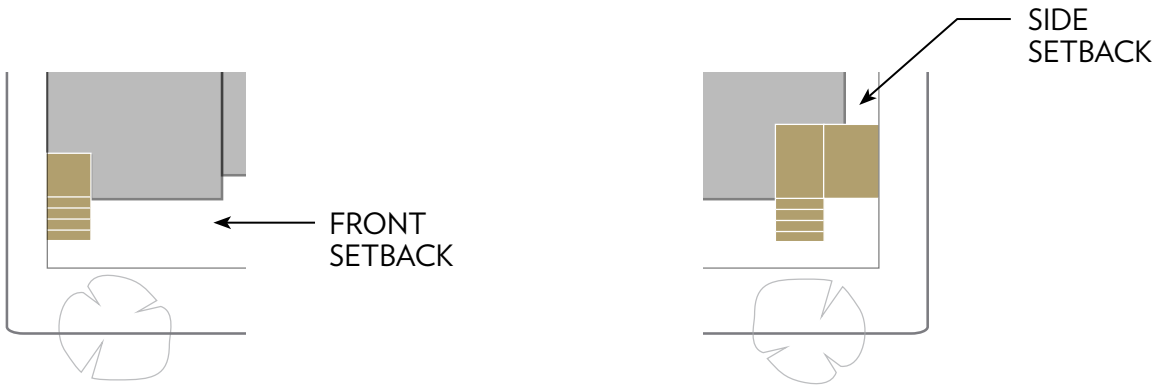


Figure 5.13 Front porches, stoops, steps, bay windows, and balconies permitted within front setback and verandas, bay windows, porches, and balconies permitted within side setback

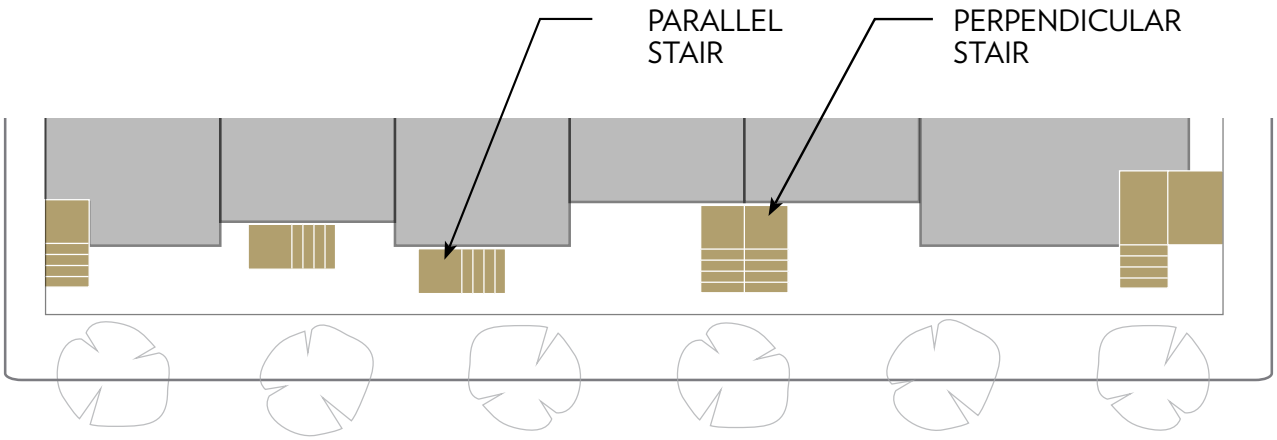


Figure 5.13 Stoops preferred perpendicular to sidewalk

5.13 GENERAL FRONTAGE & SETBACK GUIDELINES CON'T

Entries

> Standards:

S1. All ground level units shall have primary entry access from a street or common open space.

S2. Building entries for multi-family buildings shall be located on front facades oriented to a public street.

S3. All buildings that have frontage along Primary Streets shall have their principal entry from that street.

S4. Multi-family buildings that front on more than one Primary Street shall have entries from each of the streets. Such entries may be principal entries or entries to individual units.

S5. Storefronts in mixed-use buildings shall connect directly to the sidewalk.

S6. Entrances shall be marked with stoops, steps, porches, recesses and other architectural features to articulate the façade and create a pedestrian friendly frontage.

S7. Entry detailing should incorporate overall building design features.

S8. Expanded entry features such as Port Cocheres are allowed for hotel uses, within a 30-foot setback from Primary Streets.

> Guidelines:

G1. Mews townhouses may have a primary entry from streets, common open spaces, or Shared Driveways.

G2. Entries may be paired to create a common entrance for two units.

G3. Buildings on corners are encouraged to have secondary entrances on secondary frontages.

G4. Changes in the façade plane, materials or colors are encouraged to mark entries.

Setbacks

> Standards:

S1. Variations in setbacks along a block are permitted within 5 feet from the primary datum established by the first building setback established along the block.

S2. Front porches, stoops, steps, bay windows, and balconies are permitted within the front setback.

S3. Verandas, bay windows, porches, and balconies are permitted within the side setback.

Stoops

> Standards:

S1. Entry steps shall be minimum 3 feet and maximum 6 feet in width.

S2. Stoops shall be wood, brick, stone, metal or concrete.

> Guidelines:

G1. Stoops should be used to mediate the vertical distance between sidewalk grade and raised finished floors of ground floor units.

G2. Where space is available, stoops should be perpendicular to the sidewalk.

G3. At-grade unit entries are permitted within rental multi-family and affordable projects to meet Fair Housing and Accessibility requirements.

G4. Stoop design and materials are encouraged to reflect the traditions and patterns of Napa County and the Napa Pipe site and the overall design of the building.

Figure 5.13 Stoops and entry steps are a minimum of 3' and maximum 6' in width and frame the vegetated setback area.

Figure 5.13 Recessed entries and balconies with projections and unique materials create variety along the building frontage.

Figure 5.13 Well-detailed recessed building entry with substantial awning and authentic materials.

5.13 GENERAL FRONTAGE & SETBACK GUIDELINES CON'T

Porches

> Standards:

S1. Porches shall not be enclosed.

S2. Porch floors shall be pressure-treated wood, composite, concrete, stone, or brick. Porch railings shall be wood and/or metal.

S3. Chain link fencing is prohibited.

S4. Spaces under porches, if any, shall not be visible.

> Guidelines:

G1. Porches can be used instead of, or in combination with, stoops.

G2. On corner lots, porches can be wrapped to orient to both streets.

G3. Design and materials are encouraged to reflect the traditions and patterns of Napa County and the Napa Pipe site and the overall design of the building.

Projections: Balconies

> Standards:

S1. Balconies are permitted to be recessed or protruding.

S2. Balcony floors shall be pressure-treated wood, composite wood, metal, stone, tile, or concrete. Visible vinyl elements such as soffits and architectural details are not permitted.

S3. Balcony railings shall be steel, wood, or composite simulated wood and should be integrated into the façade design.

S4. Projecting balconies shall be a minimum of 10' above the public right-of-way.

S5. Balconies shall be well-detailed with high-quality, durable materials and attention to the method of joinery.

S6. Balconies shall not be enclosed.

S7. Balconies shall be a minimum of 3 feet and maximum of 6 feet in depth.

S8. Railings shall be at least 25% transparent.

> Guidelines:

G1. Balconies may project up to 3' beyond the property line where not over vehicular rights of way.

G2. The undersides of balconies, visible from the street, are important design details and should be considered within the overall design and materials of the building. Unfinished structural elements are only permitted if within the design language of the building.

Projections: Decks

> Standards:

S1. Decks shall be at the rear of the building.

S2. Enclosed decks are not permitted.

S3. Deck floors shall be pressure-treated wood, composite wood, stone, or concrete.

S4. Deck railings shall be steel, wood, or composite simulated wood and should be integrated into the façade design.

> Guidelines:

G1. Decks may be shaded with awnings, trellises, or other devices, which should be held back from the face of the building.

Figure 5.13 Well-detailed steel and wood hanging balconies with attention to the method of joinery.

Figure 5.13 Well-detailed balcony integrated with massing transition, partial awning, and wrapping the corner

Photo courtesy of David Baker Architects

Figure 5.13 Well-detailed open deck with slatted wood shading system and attention to the method of joinery.

Projections: Bay Windows

> Standards:

S1. Bay windows may project up to 3' beyond the property line.

S2. Projecting bay windows shall be a minimum of 10' above the public right-of-way.

5.14 ADDITIONAL FRONTAGE & SETBACK GUIDELINES FOR MULTI-FAMILY BUILDINGS

> Standards:

S1. Adjacent buildings shall be visually distinct from each other.

S2. A mix of principal entries and ground level units with direct access from the street is required along all Primary Streets. ADA/FH may require some at-grade units.

S3. The depth of recessed entries shall be a minimum of 3 feet and maximum of 6 feet.

S4. Roofs on multi-family buildings shall not be a single-mass with a continuous ridgeline, except for flat roofs.

S5. Overall street frontage shall have diversity and richness in materials, projections, and openings, within an overall cohesive street frontage composition.

> Guidelines:

G1. Articulation should accent individual units or building bays through the use of façade reveals, projections, recesses, expressed entries, architectural detail, and material articulation.

G2. Façade modulation should have a vertical rhythm related to unit articulation. Consistent horizontal elements should tie the vertical articulation together across the building. Minimum change in plane shall be 1 foot. Vertical modulation should reinforce entries.

G3. Corner conditions should optimize openings on external faces, solar orientation, and corner entries.

G4. Recessed entries are recommended. Change in material or articulation are encouraged to mark entries. Entry detailing should be related to the design features of the building.

G5. Building faces should be articulated a minimum of every 25'.

G6. Multi-Family buildings with upper level setbacks for penthouses are permitted to have decks oriented toward, but not visible from, the street.

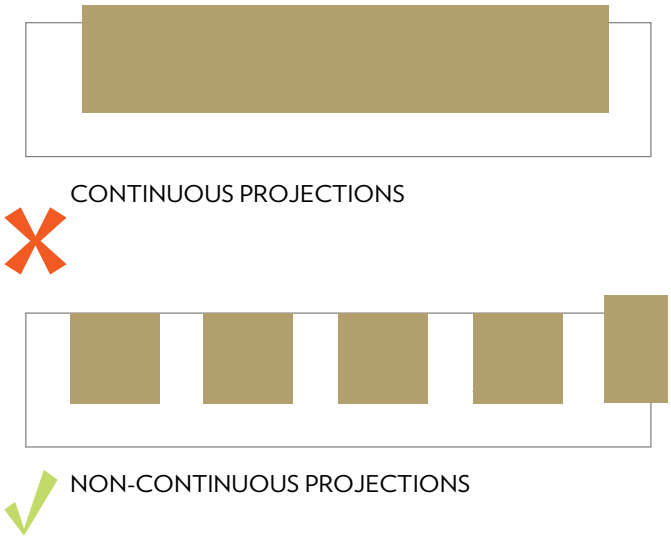


Figure 5.13 Uninterrupted continuous projections are not permitted. Non-continuous projections create variety and modulate building mass

Photo courtesy of David Baker Architects

Figure 5.14 Facade reveals, height variation, and screening detail accent individual units and sculpt massing.

Figure 5.14 Visual variety of color and material within a unified and cohesive composition.

Photo Courtesy of David Baker Architects

Figure 5.14 Street Frontage Modulation and Variety with vertical rhythm articulating units. Consistency in glazing and material ties the vertical articulation together.

5.15 ARCHITECTURAL DETAILS

Facade Composition

> Standards:

S1. High visibility buildings at the corners of streets shall be enhanced with architectural elements such as porches, stoops, bay windows, balconies, eaves, brise-soleil, or massing articulation. Façade materials shall turn the corner and extend a minimum of 5'. Corner buildings shall have consistent material treatments on front and exposed side façades.

> Guidelines:

G1. In order to modulate their scale, multi-story buildings should articulate the base, middle and top, separated by cornices, string cornices, stepbacks or other articulating features.

G2. Building walls should have perceivable thickness, visual interest and character. A selection of architectural details such as vertical and horizontal recesses and projections, changes in height, floor levels, roof forms, parapets, cornice treatments, belt courses, pilasters, window reveals, forms and color as appropriate to each site can create shadows and texture and add to the character of a building. Corner buildings may have secondary side entrances to activate these streets.

Windows

> Standards:

S1. All exterior elevations shall have windows.

S2. Exposed exterior elevations shall have a minimum of 20% glazing. Window area does not include window trims.

S3. Replacement material for glass shall not be used.

S4. Reflective glazing is not permitted.

S5. All glass shall be clear in color. Neutrally colored spandrel, etched or blasted glass, and fritted glass are permitted.

S6. Shutters, if any, shall be sized and detailed to appear to be operable.

S7. Windows shall have reveals. Glass shall be set back a minimum of 3" from the building façade.

S8. Glass setback and trim shall be appropriate per the architectural stylebook.

S9. Muntin patterns shall be sized and proportioned per the intent of the architectural stylebook.

S10. Muntins shall be integral to the design of the window.

S11. Muntins between double set glass are not permitted.

S12. Aluminum windows shall be durable and heavy gauge.

S13. Skylights shall be located on the back of roof ridges or flat roofs.

> Guidelines:

G1. Operable windows are encouraged.

G2. Window wells are discouraged.

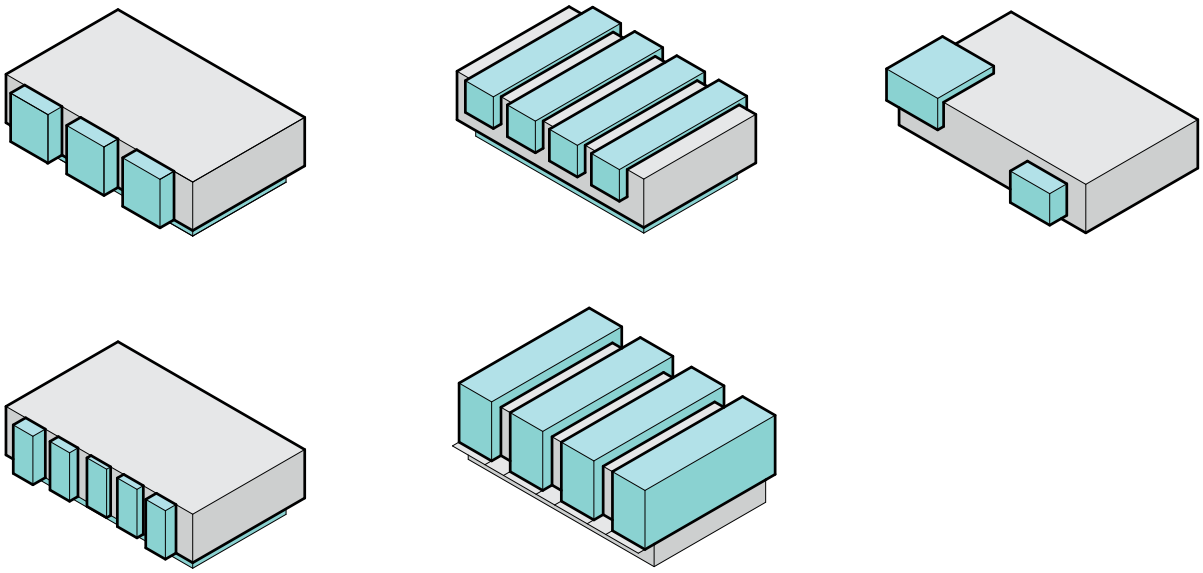


Figure 5.15 Illustrative Façade Massing and Articulation. Facade projections create rhythm and variety across the facade and accent vertical units.

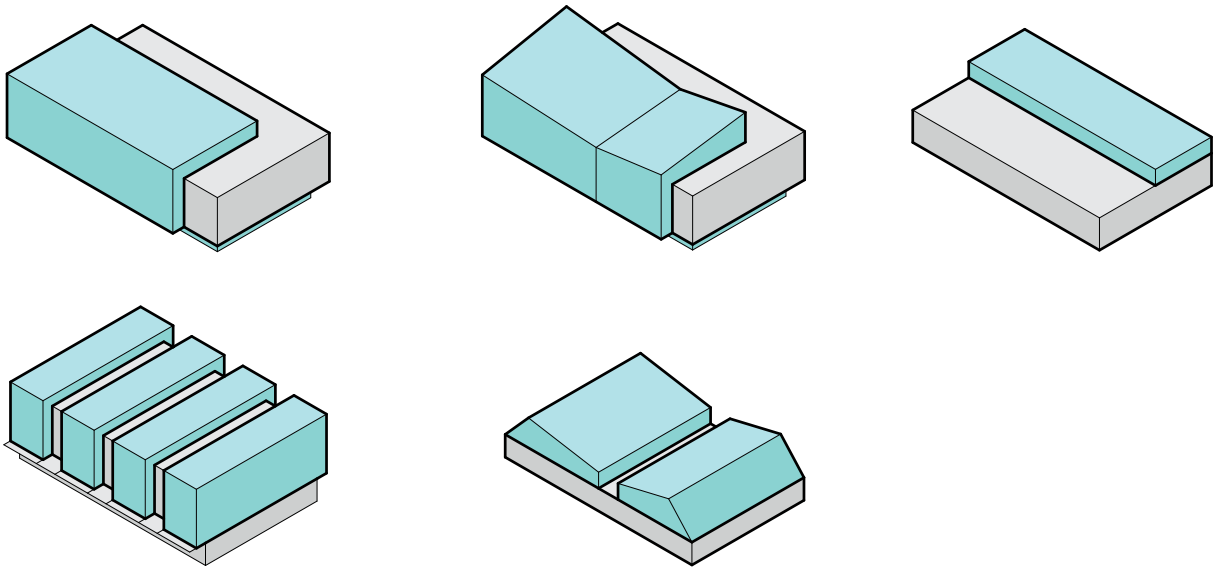


Figure 5.15 Illustrative Roof Massing and Articulation. Roof projections can modulate the roof line, tie the building together horizontally, and emphasize building corners. Should be combined with facade articulation.

5.15 ARCHITECTURAL DETAILS CON'T

Doors

> Standards:

S1. All exterior doors shall be of a size, trim, proportion, panel/muntin configuration appropriate to the building style.

S2. Single doors shall have a minimum door height of 6'8" and a maximum height of 8'. Minimum width is 3 feet and maximum is 4 feet.

S3. Double doors shall have a minimum door height of 6'8", with maximum of 9 feet. Minimum width is 4'8", maximum 5'6".

S4. Exterior doors shall be made of steel, wood, or glass and finished to ensure durability.

S5. Storm door windows and screens shall be aluminum or finished wood, free of decorative trim.

> Guidelines:

G1. Sidelights are encouraged.

Garage

> Standards:

S1. Garage openings shall be a maximum of 9' high

S2. Garage doors may not exceed 10' in width

S3. Garage doors shall be made of wood, embossed hardwood, fiberglass, steel, or aluminum.

S4. Garages shall have single garage doors. For two car garages not visible from a street, double garage doors are permitted.

S5. Garage doors shall be recessed 1 foot or more behind the face of the garage front elevation.

S6. Style, materials, finishes, and colors for garages and garage doors shall be consistent and compatible with the main massing.

S7. Massing, design, and construction of the garage shall be integral to the overall design of the main building.

S8. Garages shall be oriented to internal Shared Driveways.

S9. Garages facing the street are permitted for corner/end units and access to podium, tuck under, and/or structured parking. Such garages may not be oriented to Primary Streets.

> Guidelines:

G1. Garage door fenestration is encouraged.

Figure 5.15 Good: Building wall has perceivable thickness with window reveals, projections, deep recesses, and overhangs.

Figure 5.15 Bad: Building walls are too planar and have poor thickness and visual character due to insufficient window reveal and insufficient depth of articulation.

Figure 5.15 Individual buildings on the same street are visually distinct from each other with variations in window placement, color and material articulation, while they are united in overall horizontal data, vertical rhythm of massing, and color/material palette.

Figure 5.15 Articulate building facades a minimum of every 25'. Facade modulation should have vertical rhythm. Accent with reveals, recesses, entries, details, and projections

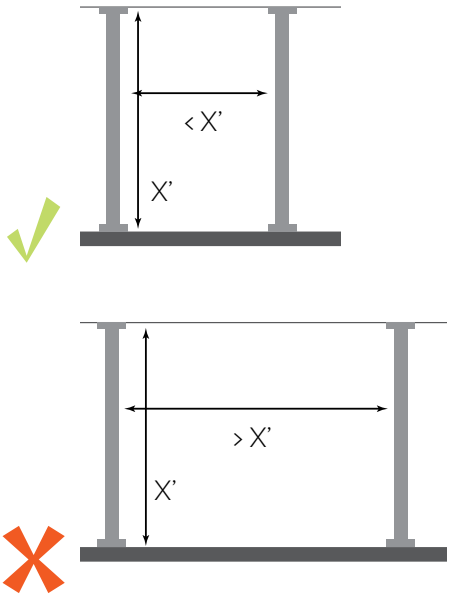
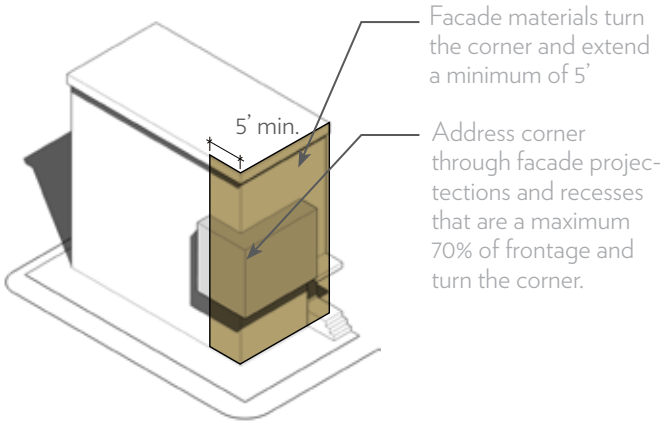


Figure 5.15 Columns are spaced no farther apart than they are tall



Corners and Corner Units

Figure 5.15 Corners and Corner units are special opportunities for architectural features, windows, and entries

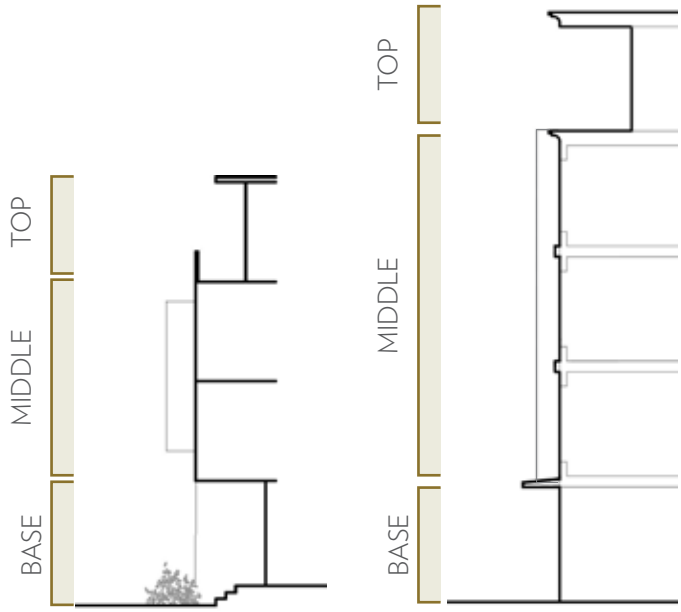


Figure 5.15 Multi-story buildings articulated with base, middle, and top.

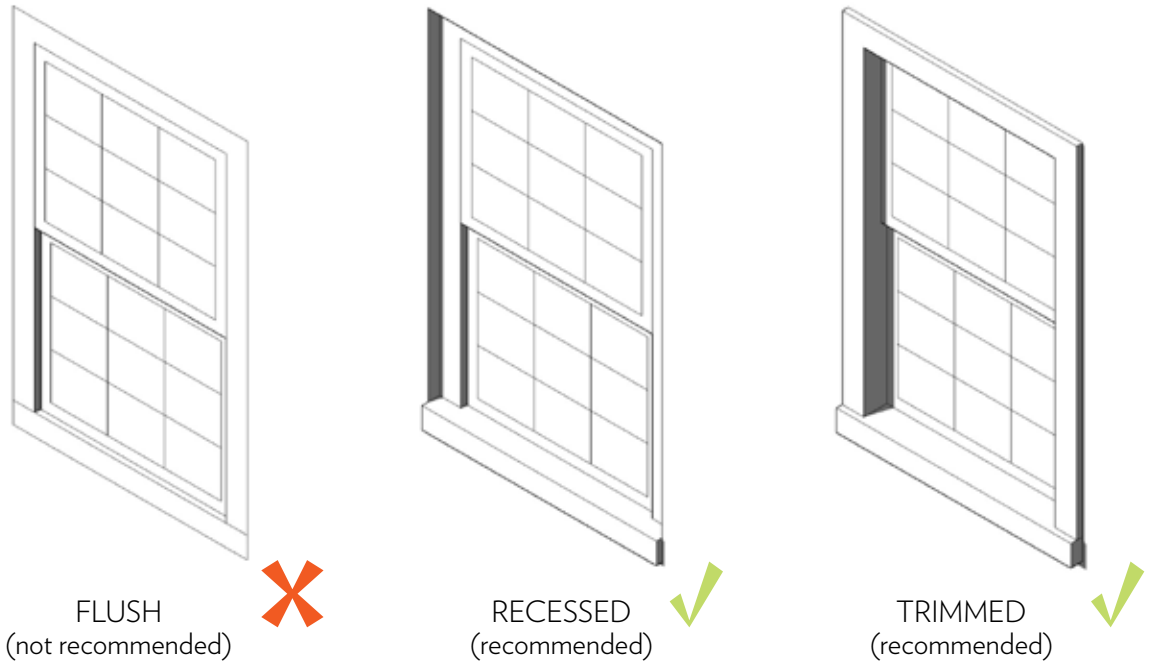


Figure 5.15 Regardless of wall type, flush windows are not recommended — they do not create perceivable thickness in the building wall

Figure 5.15 Deep awning, recessed windows, deep window louvers, and overall material texture all contribute to create depth and shadow that modulate the façade.

PHOTO CREDIT

Figure 5.15 Exterior doors are wood, glass, and steel; They are recessed entry with greater height and finished with unique materials.

Figure 5.15 Good: Garage door openings are recessed at least 1' from the facade plane, a maximum of 9' high.

Figure 5.15 Good: Garage doors have variation in material and color consistent with the building. Narrow doors maximize planted areas.

Figure 5.15 Bad: Minimal depth of the garage door recess creates a flat facade. Wide garage doors limit opportunity for planting.

5.15 ARCHITECTURAL DETAILS CON'T

Roofs

> Standards:

S1. Roofs shall be low-glare materials.

S2. Roofs shall have natural/naturalistic materials with integral color, including: standing seam metal (copper, zinc, stainless steel or similar); Composition shingles; v-crimp metal panels or similar; corrugated metal; clay tile; green roofs.

S3. Snap-on batten type standing seam metal roofs are not allowed.

S4. Flat roofs visible from adjacent properties shall be covered with a finished material such as concrete pavers, clay pavers, crushed granite ballast, or green roof.

S5. Gutters, if used, shall be aligned with the roofline and building edges.

S6. Downspouts shall match gutter material and finish.

S7. A parapet per building code shall be used to edge any flat roof that is used as exterior deck accessed from inside the building.

S8. Roof penetrations, including but not limited to vents, ventilators, turbines, flues, etc. shall be metal with natural finish and integral color.

> Guidelines:

G1. Roof articulation should provide variety and reinforce the reading of distinct, individual units.

G2. Roofscapes should create variety across blocks and throughout the project.

G3. Preferred composition shingles are standard 3-tab or "architectural" shingles with appearance of shakes.

G4. Green roofs should be covered, installed, and maintained with plant materials and sufficient soil/growth medium so plants grow and thrive.

G5. Flat or low-slope roofs may also be single-ply membrane, built-up, or modified bitumen.

Eaves

> Standards:

S1. Unless otherwise specified, eaves shall be a minimum of 1 foot and maximum of 3 feet in depth.

Dormers

> Standards:

S1. Dormer windows shall be smaller than the windows on lower floors.

S2. Appropriate to an architectural style, dormers are encouraged for long-span rooflines.

Columns

> Standards:

S1. Square columns shall be 6-inch minimum width, with or without capitals and bases.

S2. Round columns shall be 6-inch minimum outer diameter, with or without capitals and bases.

> Guidelines:

G1. Columns and piers should be spaced no farther apart than they are tall.

G2. Columns should be painted or natural wood (termite resistant), cast iron, concrete with smooth finish, brick, or stone.

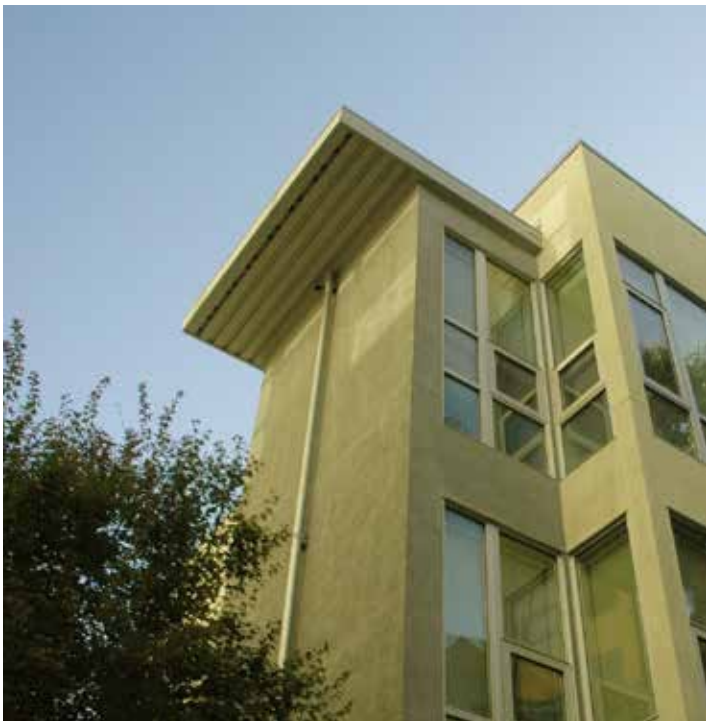


Figure 5.15 Eave depth helps articulate the facade

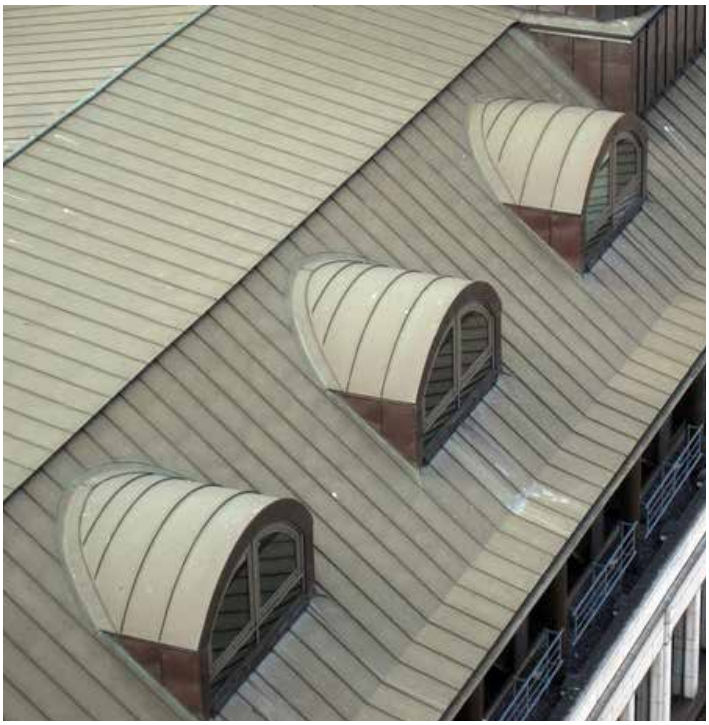


Photo courtesy of Oast House Archive

Figure 5.15 Dormers add variety to long-span rooflines

Figure 5.15 Roof articulation emphasizes the massing and articulation of individual units. Eave depth helps modulate the facade.

5.15 ARCHITECTURAL DETAILS CON'T

Addresses & Signage

> Standards:

S1. Residential address numbers shall be a maximum of 3", mounted to the building only.

Mailboxes

> Guidelines:

G1. Mailboxes should be integrated into the building design and may be ganged to occupy less space.

Satellite Dishes & Antennae

> Standards:

S1. Large satellite dishes (greater than 24" in diameter) and antennae not permitted.

S2. Small satellite dishes and antennae shall not be visible from streets and shall be located and coordinated within building design.

Solar Panels

> Standards:

S1. Solar panels shall not be visible from Primary Streets.

S2. Solar panels shall not be used where they would produce direct glare or redirect sunlight into adjacent residential units.

> Guidelines:

G1. All flat roofs should be structurally designed to accommodate solar panel arrays.

G2. Solar panels for hot water generation or photovoltaic generation are encouraged, but must be integrated with the roof design.

Lighting

> Standards:

S1. In order to reduce glare, all interior and exterior light sources shall be selected and designed such that zero direct-beam illumination leaves the building site, per LEED-ND requirements.

S2. Building design should refer to the most current LEED checklist for lighting design guidelines and best practices.

Building Materials

> Standards:

S1. Where more than one material is used, traditionally heavier materials (stone, brick, concrete with stucco, etc.) shall be located below lighter materials (wood, fiber cement board, siding, etc). The change in material shall occur along a horizontal line, preferably at floor level.

S2. All openings in brick or stone construction shall be spanned by a header.

S3. All headers shall: Use materials with regard to their traditional structural capacity (veneer finishes shall be configured in a way that corresponds with the material's traditional load-bearing configuration); Be wider than the opening they span; Be brick, stone, cast stone, terra cotta or metal; and be in one of the following forms: lintel, arch and jack arch.

S4. All buildings with brick or stone construction and with a raised first floor level shall have a water table which shall: Involve a reveal in the wall surface a minimum of 1/2 inch; and on brick buildings, be comprised of brick, but may also be comprised of stone or cast stone.

S5. All window openings in brick or stone construction shall have a sill at their base which shall: Be wider than the window opening; Be generally rectangular in form, and shall be sloped slightly away from the window opening to shed water; and be made of brick, stone, cast stone or terra cotta.

S6. All brick and stone structures shall contain a cap which shall: Protect the tops of all brick and stone structures exposed to the weather, including: garden walls, stair treads, planter edges and freestanding piers; Be made of stone, cast stone, terra cotta or slate; and be rectangular or more ornate on the edges.

S12. Aluminum, Vinyl, or T-1-11 siding is not permitted.

S13. Vinyl details such as soffits, eaves, and trim are not permitted on any building area that is visible from a Primary and Secondary Streets.

S14. Synthetic concrete (EIFS), such as dryvit, is not permitted on any building element that is visible from a Primary or Secondary Street, public park, or common open space.

> Guidelines:

G1. Regional precedents and particular influences from the Napa Pipe site and history should be considered in the selection of building materials.

G2. Materials should be consistent with architectural style.

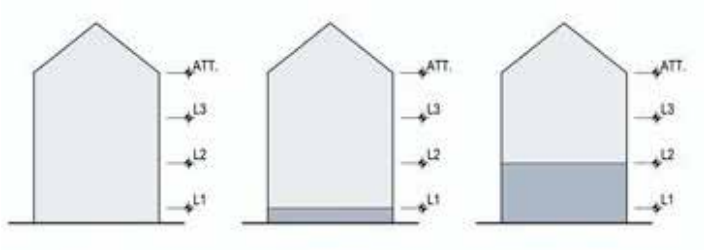
G3. Material variety and innovation is encouraged.

G4. The façades of buildings should be finished with more than one finish material.

Figure 5.15 Bad: Residential address numbers are overly large and not coordinated with the primary facade.

Figure 5.15 Good: Residential address number is small, individual, and located within the entry recess instead of the primary facade.

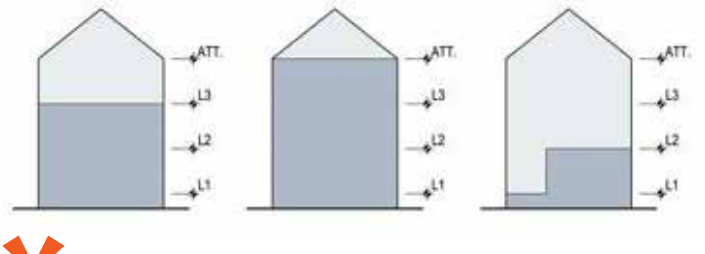
SINGLE-FAMILY AND GARDEN COURT HOMES



Recommended: Ground Level Material Treatment To Emphasize Human Scale

Material variation at ground level can help reduce the building to a more human scale, especially at the street and entry level.

Recommended. Change of color or material at the ground level reinforces the human scale.



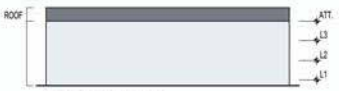
Not Recommended: Arbitrary and Haphazard Material Changes

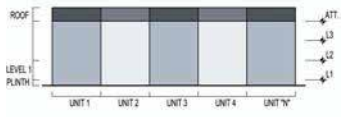
Material changes that occur at levels above the ground floor or the random stepping of materials can be distracting and is not recommended. A change in material should cover a significant portion of the building face; small patches of variation should be avoided.

Not Recommended. Haphazard upper level and stepped material changes are distracting.

Figure 5.15 Material Application Strategies

TOWNHOUSES





Unified Facade

In the case of a single material, such as brick, stucco, or metal siding, it is important to articulate the facade with windows and balconies.

Tiered Facade

A unique material treatment at ground level creates a human scale relationship between the building and the street.

Alternating Facade

Vertical variation of materials adds visual interest, and breaks up large horizontal mass.

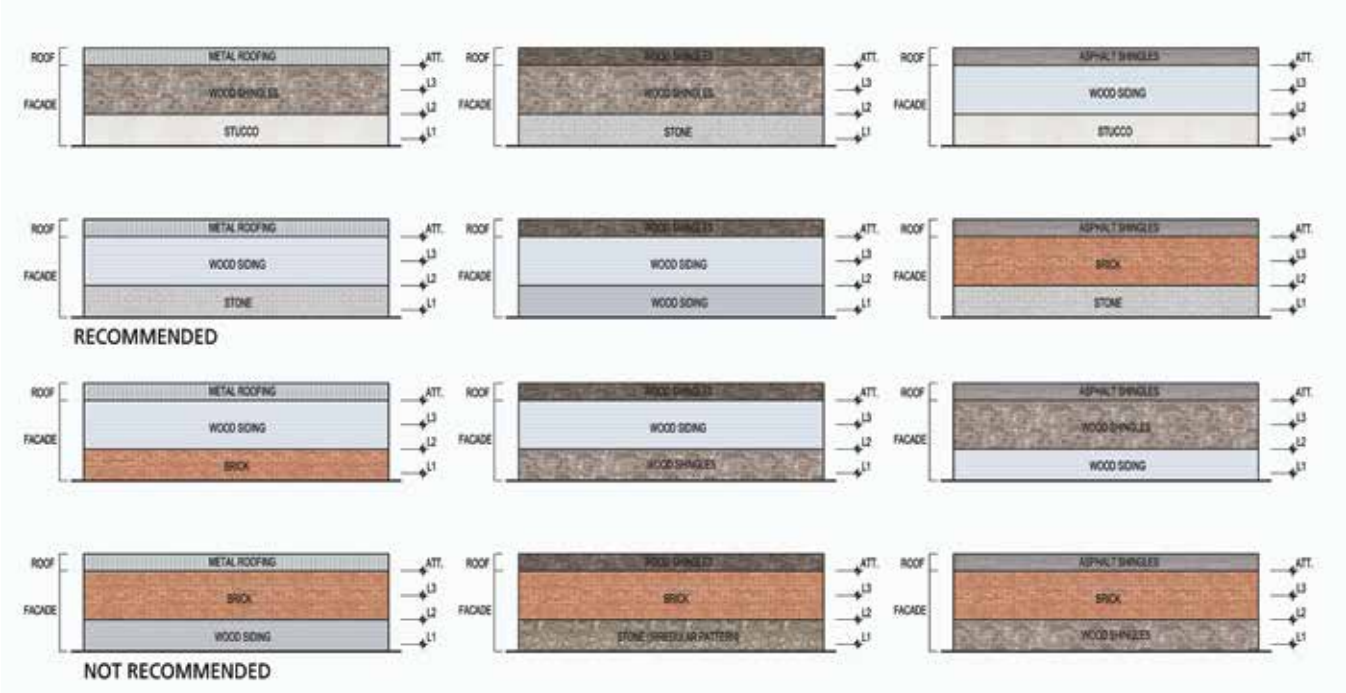
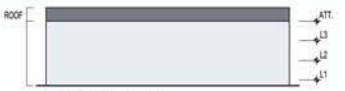


Figure 5.15 A variety of high-quality materials can create interesting articulation and overall architecture. Materials and material veneers should be used and organized in accordance with their traditional structural capcaity.

MULTI-FAMILY



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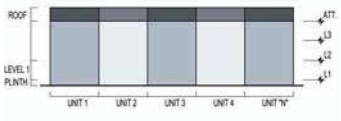
In the case of a single material, such as brick, stucco, or metal siding, it is important to articulate the facade with windows and balconies.

Tiered Facade

A unique material treatment at ground level creates a human scale relationship between the building and the street.

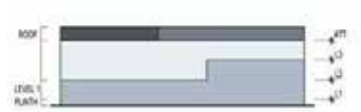


Alternating Facade

Vertical variation of materials adds visual interest, and breaks up large horizontal mass.

Not Recommended.

Upper level material changes not visible from the street scale.



Material change across levels which do not reflect the overall massing and arrangement of the building.

Material changes which have no relation to units or facade.

Figure 5.15 Material Application Strategies

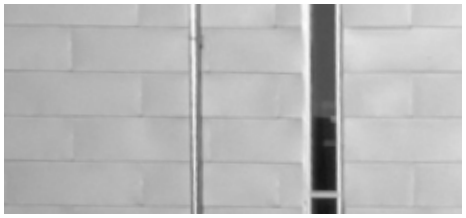
TOWNHOUSE AND MULTI-FAMILY MATERIALS AND FACADE COMPOSITION

Stucco

Wood

Steel

Wood

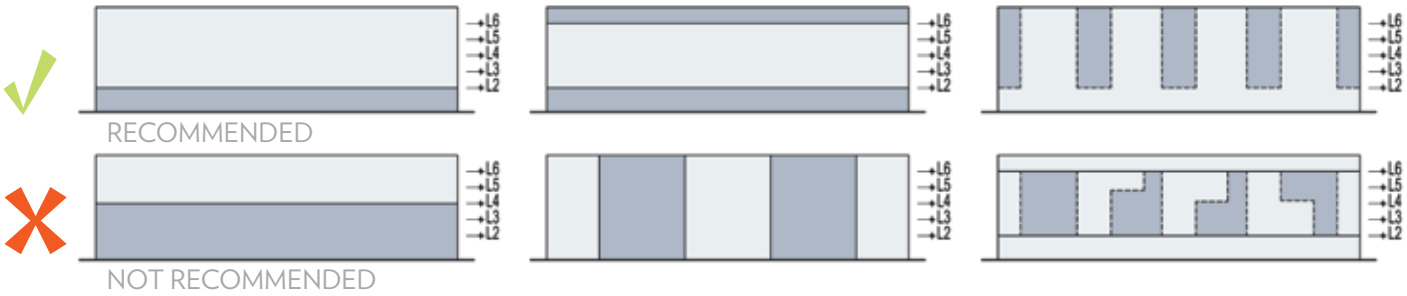


Metal Panels/Corrugated Metal

Concrete

Figure 5.15 Building materials that are regional and/or reflect the heritage of the Site will add authenticity to Napa Pipe.

TOWNHOUSE



MULTI-FAMILY

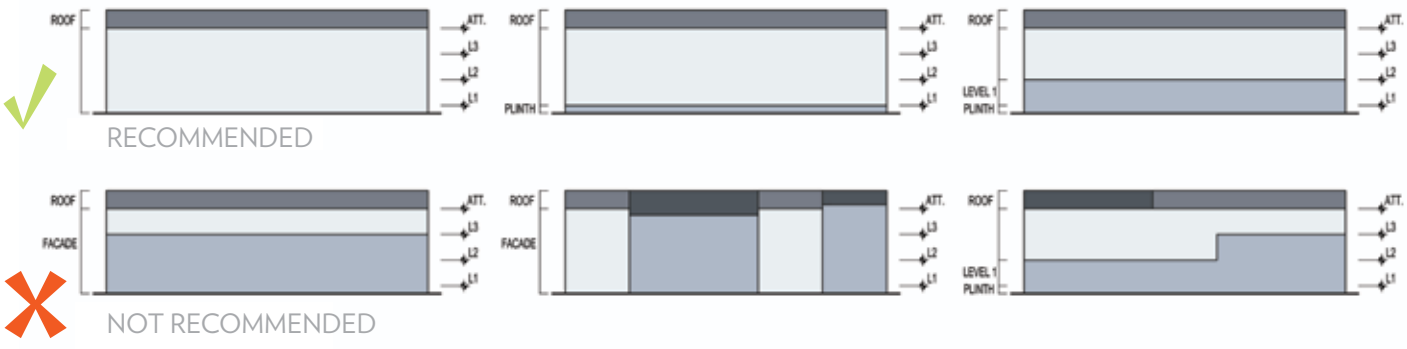


Figure 5.15 Façade composition is important for establishing design quality. Balanced, organized and composed facades based on these illustrated principles for materials and architectural features are recommended for Townhouses and Multi-Family Apartments.

5.15 ARCHITECTURAL DETAILS CON'T

G5. Building walls should have perceivable thickness, visual interest and character. A selection of architectural details such as vertical and horizontal recesses and projections, changes in height, floor levels, roof forms, parapets, cornice treatments, belt courses, pilasters, window reveals, forms and color as appropriate to each site can create shadows and texture and add to the character of a building.

G6. Allowable exterior materials include: Cement Board (including Hardi-Plank), Concrete, Concrete Masonry, Metal—natural finish, such as copper, zinc, stainless steel, galvanized steel, Stucco/exterior plaster—integral color, smooth texture, Wood with clear, stain, or painted finish, Wood—naturally weathering with no finish.

G7. Exterior materials should be low-reflectance and "naturally" colored, utilizing the inherent and integral qualities of the chosen material.

G8. Extensive expanses of a single, smooth-textured material are discouraged.

G9. Materials should be used with regard to their traditional structural capacity.

G10. Veneer finishes should be configured in a way that corresponds with the material's traditional load-bearing configuration.

G11. Exposed foundation walls (below the first floor elevation) should be concrete (painted and/or stuccoed concrete block system or "C.B.S."), brick, or natural/manufactured stone.

G12. All headers should: be 4 inches minimum in height, project from wall surface 1/2 inch minimum.

G13. All sills should: Be a minimum of 2 inches in height; and project from the wall surface a minimum of 1 inch.

G14. Buildings should use materials that are durable, economically-maintained and of a quality that will retain their appearance over time.

5.16 OPEN SPACE DISTRIBUTION

Residential Units

> Standards:

S1. All residential units at Napa Pipe shall have a minimum of 200 square feet aggregate of outdoor space provided within the development parcel.

> Guidelines:

G1. Outdoor space may be for an individual unit such as balconies, decks, roof decks, yards, and setback areas.

G2. Outdoor space may be shared in a building such as shared yards, common open spaces, roof decks, courtyards, gardens, etc.

G3. The 200 square foot minimum may be met with individual, common, or a combination of both types of space.

Common Open Spaces

> Standards:

S1. Common open spaces shall be a minimum of 20 feet wide.

> Guidelines:

G1. Individual units may have a primary entrance facing a common open space.

Design Guidelines for the design and character of private realm landscape are described in Chapter 6: Private Realm Landscape Design Guidelines.

Photo courtesy of Bakoko

Figure 5.16 Individual and Common Outdoor Space should emphasize indoor/outdoor living opportunities

Figure 5.16 At-grade Common Open Spaces offer opportunity for respite, gathering and play within the block.

5.17 PARKING & SERVICE

Orientation

> Standards:

S1. Shared Driveways should be the primary source of access to off-street residential parking. Parking along Shared Driveways may be head-in, diagonal or parallel. Garages should be accessed from the Shared Driveway and located in rear of the lot.

S2. Off-street parking should be hidden from view from designated Primary Streets.

S3. Vehicle parking and service yards shall be located mid-block, behind buildings, to reinforce the street wall and create active street frontages.

S4. The following parking space dimensions and provisions shall apply:

- Head-in or diagonal parking spaces: 9 feet by 18 feet.

- Parallel parking spaces: 8 feet by 20 feet minimum.

- Drive aisles in parking lots: 24 feet wide for two-way circulation and to provide adequate backup space for 90 degree head-in parking.

- A portion of the parking spaces may be designated for use by compact cars, which require smaller dimensions, or for tandem parking, subject to approval.

Surface Parking

> Standards:

S1. Surface parking shall not be oriented to Primary Streets.

S2. Surface parking shall not be accessed from Primary Streets.

S3. Temporary surface parking is permitted on building lots during phased project buildout.

S4. Off-street parking areas shall be set back a minimum of 10 feet from property lines along rights-of-way, excluding Shared Driveways.

S5. Ground level parking facing streets or open spaces shall be screened from the sidewalk and the open space. Screening may include buildings and/or landscaping.

S6. The minimum width for a landscaping area to screen parking shall be 5 feet.

S7. Parking lots shall be landscaped as per the Landscape Design Guidelines.

> Guidelines:

G1. Temporary surface parking on building lots during phased project build out should meet standards and guidelines for sustainable surface parking.

Structured Parking

> Standards:

S1. Parking structures shall conceal views of parked autos from streets and open spaces. Visibility of parking shall be limited to 25% of building frontage.

S2. Setbacks from the property line are permitted to accommodate landscaping and other buffer features including climbing vines, trellises, trees or similar landscape elements.

S3. Entrances to structured parking shall not be placed on Primary Streets or Signature Streets.

S4. Parking structures shall be compatible in color,

form and quality of architectural details with adjacent buildings and development patterns at Napa Pipe.

> Guidelines:

G1. Openings to parking areas other than garage doors should be limited to those required by applicable building codes or other regulations for ventilation. Openings should be well above or below eye level and should be covered with visually attractive screening to minimize the parking and its lighting from being seen from the street.

G2. Signage and light sources internal to the parking structure should not be visible from outside the parking structure. Lighting, particularly on parking decks, should not illuminate or produce glare to adjacent properties.

Shared Driveways

> Standards:

S1. Parking on Shared Driveways is only permitted in designated areas.

S2. Parking along Shared Driveways is not permitted, even within rear setback areas between the shared driveway and private garages.

S3. Shared Driveways shall be landscaped as per the guidelines articulated in the landscape chapter.

Service

> Standards:

S1. Service access to apartment buildings or to units above retail shall be provided within the block but not along Primary Street frontage.

S2. Buildings with structured parking shall have service access through the parking lot.

Garbage

> Standards:

S1. Trash collection shall be within the block and not along street frontages.

S2. Within the block, trash collection is permitted from shared driveways and parking areas.

S3. Trash collection areas shall be contained and masked from view.

Figure 5.17 The minimum 5' landscape setback for surface parking screens the parking from view and provides opportunity for vegetation

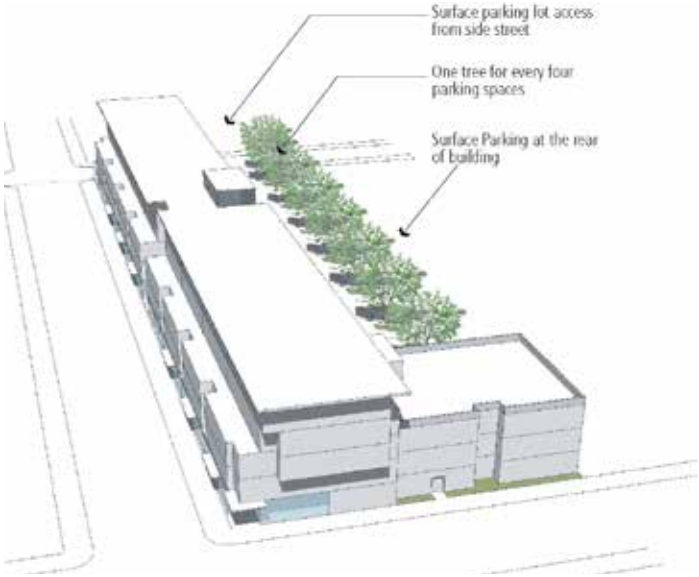


Figure 5.17 Typical Parking Orientation -- Surface parking is located within the block with access from Secondary Streets

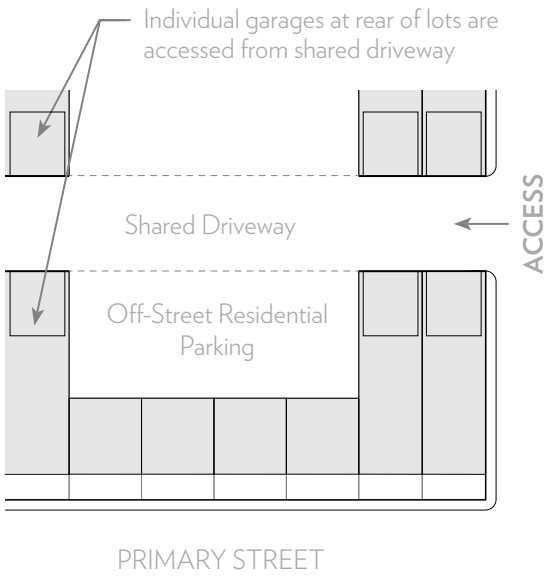


Figure 5.17 Surface parking can not be accessed from a Primary Street

Figure 5.17 Access to structured parking is minimal, not located on Primary or Signature Streets, and articulated with material screening.

LOCAL RETAIL

Intent

5.21 OVERVIEW

Well-designed, inviting and transparent storefronts are a critical component in creating an attractive and vibrant neighborhood. Frequent entries, continuous display windows, obvious locations for signs, and sensitively scaled proportions should be incorporated into new storefronts.

5.22 ARCHITECTURAL CHARACTER

> Standards:

S1. Designs should reflect the industrial heritage of the Napa Pipe site with a focus on honest materials of strength and character.

S2. Appropriate materials might include steel, corrugated metal, heavy timber wood, textured block, concrete, and stucco.

5.23 STREET FRONTAGE

> Standards:

S1. Retail buildings shall be oriented with a primary frontage along the Primary Street.

S2. Continuous length of blank walls shall not be permitted.

> Guidelines:

G1. Street level frontage should be primarily devoted to entrances, shop windows or other displays.

G2. Except for recessed entries, arcades, and similar features that provide benefit for pedestrians, storefronts should be built to the property line. Recessed portions should not diminish the streetwall.

G3. Retail frontage should consider recessed or projecting bays, expression of architectural or structural modules and detail and/or variations such as surface relief, expressed joints and details, color and texture.

G4. Recessed doorways for retail uses are encouraged, and they should be a minimum of 2 feet in depth. Recessed doorways provide cover for pedestrians and customers in bad weather; they help identify the location of store entrances, provide a clear area for out-swinging doors, and offer the opportunity for interesting paving patterns, signage, and displays.

G5. Recommended treatments for recessed entries include special paving materials such as terrazzo, ornamental ceilings such as coffering, and/or decorative light fixtures.

PHOTO CREDIT

Figure 5.23 Local retail orients primary frontage to Primary Streets. The primary frontage is primarily devoted to entrances and glazing.

STANDARDS MATRIX

FRONTAGE &	Street Frontage	1. Retail buildings shall not be oriented with primary frontage along Prinicpal Frontage Street
	Entries	1. Primary entrances shall be located along the Primary Frontage Street 2. Doors or entrances with public access shall be provided at intervals no greater than 200 feet along a block
ARCHITECTURAL DETAILS	Windows & Transparency	1. Clear, untinted glass shall not be used at near the street level to allow maximum visual interaction between sidewalk areas and the interior of buildings 2. Bottoms of the storefront windows shall be between 1 and 3 feet above sidewalk grade 3. Reflective glass shall not be permitted
	Materials	1. Where more than one material is used, traditionally heavier materials (stone, brick, concrete with stucco) shall be located below lighter materials (wood, fiber cement board, siding), the change in material shall occur along a horizontal line, preferably at the floor level. 2. Where side facades are built of a different material than the front facade, the front facade
	Awnings & Marquees	1. Awnings and marquees shall occur forward of the setback and may encroach within the right-of-way, but shall not extend to the curb line 2. The following minimum dimensions for first floor awnings shall be applicable, there are no minimum requirements for awnings above the first floor
	Signage Band	1. Flashing, moving and neon-lit signs are prohibited 2. Retail signs along sidewalks shall be located a minimum of 8' above the pedestrian sidewalk 3. Signs shall not be placed so as to obstruct windows, storefronts, architectural elements, or cornices, signs painted on storefront windows are permitted 4. Maximum area of a single sign mounted perpendicular to a facade shall not exceed 10 sq. ft.
	Lighting	1. Decks shall be at the rear of the building
PARKING & SERVICE	Service & Access	1. Multiple points of vehicular access to service and parking are not permitted from Primary Frontage Streets 2. Service doors are not permitted along Primary Frontage Streets unless required by code 3. Service areas shall not be visible from public streets, screening elements shall be designed
	Parking	1. Parking shall be located behind the building 2. Parking shall be oriented to Primary Frontage Streets

TO BE UPDATED PENDING FINAL STANDARDS

5.23 STREET FRONTAGE CON'T

G6. Outdoor features and activities such as sidewalk cafes and walk-up windows are encouraged.

G7. Retail storefronts should be articulated at a minimum every 50 feet.

G8. Individual storefronts should be clearly defined by architectural elements, such as piers and separations of glass.

G9. Distinct individual storefronts are encouraged, but multiple storefronts within the same building should be visually compatible in terms of scale, alignment, color, and materials.

G10. An expression line or cornice should delineate the top of the façade. Expression lines and cornices should consist of either a molding extending a minimum of 4 inches, or a change in the surface plane of the building wall greater than 8 inches.

5.24 ENTRIES

> Standards:

S1. The primary entrances shall be located along Primary Streets.

S2. Doors/entrances with public access shall be provided at intervals no greater than 200 feet along a block.

S3. All retail doors facing the street shall be operable and remain unlocked during business hours.

> Guidelines:

G1. When retail is along more than one Primary Street, entries should be along each of the streets.

G2. All individual retail uses should have direct access from the public sidewalk. For larger retail tenants, entries should generally occur at a minimum of every 50 feet. In-line retail stores should generally have entries every 25 feet.

G3. Entries and doors should be substantial and well-detailed. Doors should match the materials, design and character of the display window framing. Narrowline aluminum frame doors are not recommended.

5.25 WINDOWS & TRANSPARENCY

> Standards:

S1. Clear, untinted glass shall be used at and near the street level to allow maximum visual interaction between sidewalk areas and the interior of buildings.

S2. Bottoms of the storefront windows shall be between 1 and 3 feet above sidewalk grade.

S3. Reflective glass shall not be permitted.

S4. False window mullions shall not be permitted.

> Guidelines:

G1. A minimum of 75% of the storefront area should be transparent. Where privacy is desired for restaurants, professional services, and similar uses, windows should be divided into smaller panes.

G2. Where a substantial length of windowless wall is found to be unavoidable, eye-level displays, a contrast in wall treatment, outdoor seating and/or landscaping should be used to enhance visual interest and pedestrian area vitality.

G3. Storefronts should remain unshuttered at night and provide clear views of interior spaces lit from within.

G4. Storefront windows should not be completely obscured with display cases that prevent customers and pedestrians from seeing inside.

Photo courtesy of David Baker Architects

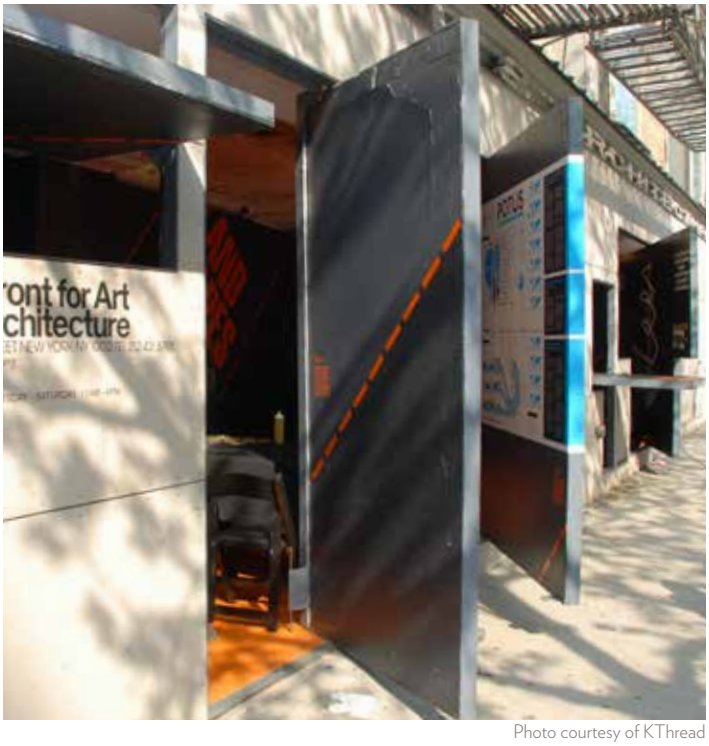
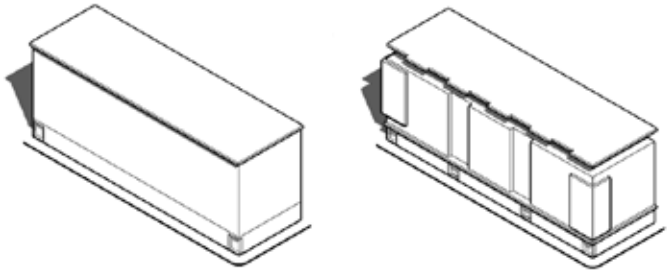


Photo courtesy of KThread

Photo courtesy of Mr. T in DC

Figure 5.24 Highly transparent and permeable retail entries and storefronts advance opportunities for indoor/outdoor living,



Plain/ blank surfaces
(Not recommended)

Articulate massing

Figure 5.23 The ground floor level of multi-story buildings is articulated to relate local retail to the human scale.

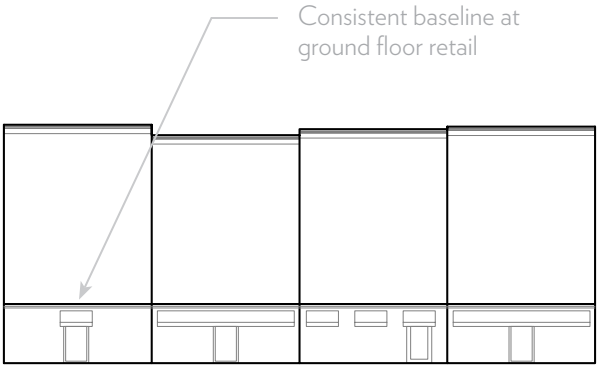


Figure 5.23 Local retail within multi-story buildings can have a horizontal datum defining the ground floor level.

Figure 5.25 Minimum of 75% transparency for local retail storefronts.

5.26 MATERIALS

> Standards:

S1. Where more than one material is used, traditionally heavier materials (stone, brick, concrete with stucco, etc.) shall be located below lighter materials (wood, fiber cement board, siding, metal siding, etc). The change in material shall occur along a horizontal line, preferably at the floor level.

S2. Where side façades are built of a different material than the front façade, the front façade material shall extend around the corner and along the side façade for a minimum of 18 inches.

> Guidelines:

G1. Appropriate materials might include steel, corrugated metal, heavy timber wood, textured block, concrete, and stucco.

G2. The palette of wall materials should be kept to a minimum, preferably two or less. Using the same wall materials as adjacent or nearby buildings helps strengthen the district character.

G3. Use materials with regard to their traditional structural capacity. Veneer finishes should be configured in a way that corresponds with the material's traditional load-bearing configuration.

G4. Buildings should use materials that are durable, economically maintained, and of a quality that will retain their appearance over time.

G5. Metal siding that refers to the history of the site and Napa Farm Industrial precedents, as well as stone and stone veneers are appropriate as a basic building material or as a special material for wall panels or sills in combination with other materials such as siding, stucco, brick and concrete.

G6. Poured-in-place concrete and pre-cast concrete are appropriate as a basic building material with special consideration to formwork, pigments, and aggregates that can create rich surfaces.


Stucco


Concrete


Corten Steel


Wood


Corrugated Metal


Concrete

Figure 5.26 Materials Palette

5.27 AWNINGS & MARQUEES

> Standards:

S1. Awnings and marquees shall occur forward of the setback and may encroach within the right-of-way, but shall not extend to the curb line.

S2. The following minimum dimensions for first floor awnings shall be applicable. There are no minimum requirements for awnings above the first floor.

S3. Awnings shall be made of fabric, metal, glass, or wood.

S4. High-gloss or plasticized fabrics shall not be used.

> Guidelines:

G1. Awnings are recommended along the retail frontage. Shape, size, color, and material should be consistent with architectural style/character of the building.

G2. Awnings should fit within enframed storefronts and be compatible with adjacent awnings.

5.28 SIGNAGE BAND

> Standards:

S1. Flashing, moving, and neon-lit signs shall not be permitted.

S2. Retail signs along sidewalks shall be located a minimum of 8 feet above the pedestrian sidewalk.

S3. Signs shall not be placed so as to obstruct windows, storefronts, architectural elements, or cornices. However, signs painted on storefront windows and walls are permitted.

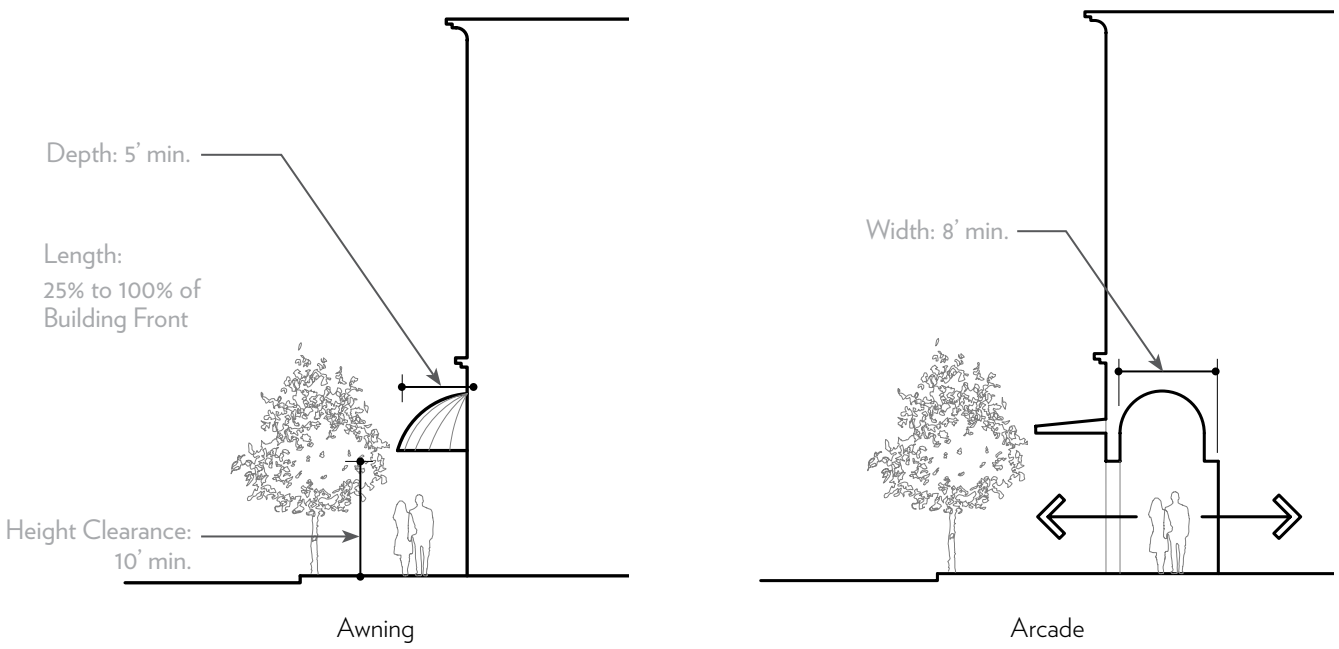


Figure 5.27 Typical Awning Section. Awnings and marquees that are forward of setback are recommended. Arcades are permitted.

5.28 SIGNAGE BAND CON'T

S4. Signs shall not cover or obscure architectural elements.

S5. The maximum area of any single sign mounted perpendicular to a given façade shall not exceed 10 square feet.

S6. All lighting and electrical elements such as wires, conduits, junction boxes, transformers, ballasts, switches and panel boxes must be concealed from view.

> Guidelines:

G1. Signage should be appropriate to the building and site, and designed to relate to the building's particular composition, scale, and architectural character.

G2. Signs should be primarily oriented toward and promote the pedestrian environment.

G3. Signs should be flat against the façade or mounted projecting from the façade.

G4. All projecting signs should be double-faced with a maximum thickness of 12 inches.

G5. Signs that are externally lit from the front are recommended.

G6. Individual tenant signs may be located on individual storefronts, over display windows, and/or at entries.

G7. A sign may occupy up to 10% of the building façade area.

G8. Flat signs placed parallel to the building face should not project more than 12 inches from the surface of the building.

5.29 LIGHTING

> Standards:

S1. Building lighting that blinks is not allowed.

S2. Lighting at building entrances and ground level shall be provided for security.

> Guidelines:

G1. Building lighting should highlight significant architectural features, signs, entrances, walkways, or display windows.

G1. Lighting should be integral to the design of the building.

5.210 SERVICE & ACCESS

> Standards:

S1. Vehicular Access to service and parking is limited to a single access point from Primary Streets

S2. Service doors are not permitted along Primary Streets unless required by code.

S3. Service areas shall not be visible from public streets. Screening elements shall be designed consistent with the overall architecture of the building.

5.211 PARKING

> Standards:

S1. Parking shall be located behind the building.

S2. Parking shall not be oriented to Primary Streets.

S3. Parking shall be designed as per the General Parking Guidelines.

Photo Courtesy of David Baker Architects

Figure 5.27 Awnings and marquees forward of setback relate to the human scale and mitigate exposure to sun and rain.

Figure 5.28 Blade sign and Painted sign that relate to industrial character.

LARGE-FORMAT RETAIL

Intent

5.31 OVERVIEW

Large-format retail development should be designed to complement the site setting and development character, and to minimize visual and physical impacts. Frontages should be visually interesting with prominent entries and contextual architectural feature.

5.32 ARCHITECTURAL CHARACTER

> Guidelines:

G1. Designs should reflect the industrial heritage of the Napa Pipe site with a focus on honest materials of strength and character.

G2. Appropriate materials might include steel, corrugated and textured metal panels, heavy timber wood, textured block, concrete, and stucco.

5.33 BUILDING FORM

> Standards:

S1. Parapets shall be used to conceal flat roofs and rooftop equipment from public view.

> Guidelines:

G1. Recognizing the spatial demands of the large-format building typology create a generally horizontal building, building details should be considered that incorporate vertical elements such as entries, and signage (incorporated into the design).

G2. Vertical features should refer to the materiality and detailing evident in the site history and be made of materials that contrast (and complement) the primary building material.

G3. Roof forms should be simple, appropriate to the scale of development, and reflective of the site's industrial heritage including flat, shed, and gabled forms.

5.34 BUILDING ORIENTATION

> Standards:

S1. The building shall be oriented with primary and secondary facades toward Kaiser Road.

Figure 5.32 Large-format retail articulation of massing

Photo Courtesy of David Neubert

Figure 5.32 Emphasis on building entries and vertical details create contrast and interest along horiztonal building proportions.

STANDARDS MATRIX

BUILDINGS & BLOCKS	Building Form	1. Parapets shall be used to conceal flat roofs and rooftop equipment from public view, the average height of such parapets shall not exceed 15% of the height of the supporting wall and such parapets shall not at any point exceed 1/3 of the supporting wall height
	Building Orientation	1. The building shall be oriented with primary and secondary façades per diagram
FRONTAGE & SETBACK	Frontage	1. Use clear windows and doors to make the pedestrian level facade facing the street highly transparent, and locate active uses at grade (restaurants, in-store boutiques, waiting areas) 2. Create scale and interest by eleminating blank walls and incorporating architectural features
ARCHITECTUR-	Architec-ture	1. Building trim and accent areas may feature brighter colors, but neon tubing shall not be
	Signage	1. Back-lit, flashing, moving, and neon-lit signs shall not be permitted 2. Signs shall not be placed on or to obstruct windows, storefronts or cornices 3. All lighting and electrical elements (i.e. wires, conduits, junction boxes, transformers, ballasts,
	Lighting	1. Building lighting that blinks is not allowed
LANDSCAPING	Landscap-ing	1. A minimum area equal to 10% of the gross interior parking area shall be landscaped (inclusive of stormwater management landscape elements) 2. No parking row shall be longer than 15 parking stalls without a planting area 3. Linear islands shall be minimum 6 feet wide and minimum 7 feet long, and densely planted area shall be provided at end of each parking aisle 4. 85% of available landscape areas shall be designed for performative stormwater management
	Stormwater Manage-ment	1. Parking lot design shall manage all project stormwater on site by incorporating methods of stormwater management utilizing low impact development techniques

TO BE UPDATED PENDING FINAL STANDARDS

Figure 5.3 Material transitions among layered facade elements break up the massing, articulate the volume and create depth.

Figure 5.3 Architectural details such as awnings, louvers, arcades, and lighting create additional depth across the facade and are opportunities for complementary material changes which further articulate the building mass.

Figure 5.35 Streetscapes with landscaping, planting, hardscape areas, sidewalk details and street furniture can integrate Large-Format retail into Napa Pipe and the surroundings. Landscaping, as well as permeable paving, contribute to stormwater management.

Figure 5.35 Appropriate materials include corrugated metal panels that relate to Napa Pipe heritage.

Figure 5.35 Building walls with texture create shadows and visual interest on the building.

Figure 5.35 Direct, safe, continous, defined pedestrian access from public sidewalks integrates Large-Format retail to the surrounding areas.

5.35 BUILDING FRONTAGE

> Standards:

S1. Use clear windows and doors to make the pedestrian level façade of walls facing the street highly transparent. Locate active uses at grade, such as restaurants, specialty in-store boutiques, food concessions and waiting areas.

S2. Create scale and interest by eliminating blank walls and incorporating architectural features of interest and utility such as a contrast in wall treatment and/or planting.

> Guidelines:

G1. For Large Format Retail, streetscapes are particularly important in integrating the development into the site. Attention should be given to elements that enhance the street experience such as landscaping, sidewalk details, hardscape areas, and, where appropriate, street furniture.

G2. Create scale and interest by breaking up wall massing, and incorporating architectural features of interest and utility such as a contrast in wall treatment and/or landscaping. Articulation may include storefront bays with modulating building elements such as recesses, projections, expressed entries, building forms, trellises, columns, pilasters, and/or other clearly expressed architectural details.

G3. Building facades should include the following elements: color change; texture change; material change; and expression of architecture.

G4. Provide direct, safe, continuous and clearly defined pedestrian access from public sidewalks, along any façade with a customer entrances, and along any façade adjacent to parking areas. Pedestrian walkways should be designed to meet the city standards.

G5. The primary building entrance should be architecturally prominent. Consider vertical elements, overhangs, canopies, signage, lighting, and larger pedestrian areas with active uses for vendor-retail.

5.36 ARCHITECTURAL DETAILS

> Standards:

S1. Building trim and accent areas may feature brighter colors, but neon tubing shall not be permitted.

S2. The design of the fuel facility shall be consistent with the main building in terms of colors, materials, and signage.

> Guidelines:

G1. Building walls should have visual interest, and character. A selection of architectural details such as vertical and horizontal change in roof forms, parapets, cornice treatments, belt courses, pilasters and color as appropriate to each site can create shadows and texture and add to the character of a building.

G2. A cornice or expression line should delineate the top of the façade. Expression lines and cornices should consist of a change in surface plane of the building.

G3. Facades should be of low reflectance, subtle, neutral or earth tone colors. The use of high intensity and metallic colors shall not be permitted.

G5. All utility equipment should be designed as a component of the building and screened from view from any public right-of-way if feasible.

G6. Service areas that are external to the building should be designed to incorporate landscaping and/or structures with a height sufficient to completely conceal the use.

Figure 5.36 Primary building entrance is architecturally prominent with vertical emphasis. Additional emphasis includes features such as awnings, arcades, signage, lighting and building articulation at the cornice line.

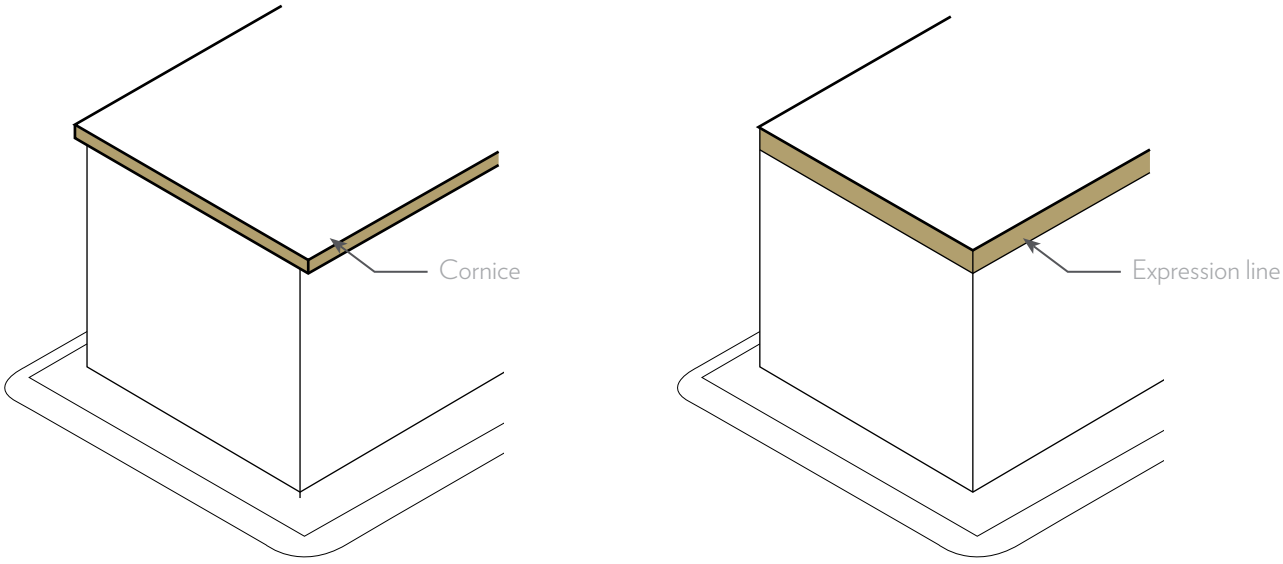


Figure 5.36 Cornice or expression line delineating top of facade.

5.37 SIGNAGE

> Standards:

S1. Back-lit, flashing, moving, and neon-lit signs shall not be permitted.

S2. Signs shall not be placed so as to obstruct windows, storefronts, or cornices.

S3. Signage shall allow for the prototypical signage program for each tenant.

S4. All lighting and electrical elements such as wires, conduits, junction boxes, transformers, ballasts, switches and panel boxes must be concealed from view.

> Guidelines:

G1. Signage should be appropriate to the building and site, and designed to relate to the building's particular composition, scale, and architectural character.

G2. Signage should be considered an important architectural feature within the overall building design.

G3. Signs should be flat against the façade, mounted projecting from the façade, or incorporated into the architecture.

G4. Signage may be included on a vertical element that extends beyond the roof the building.

G5. Ground-mounted signs should complement the architectural character of the primary building and should be integrated with landcape features.

G6. Signs that are externally lit from the front are recommended.

5.38 LIGHTING

> Standards:

S1. Building lighting that blinks is not allowed.

S2. Provide lighting at building entrances and for security at ground level.

> Guidelines:

G1. Building lighting should highlight significant architectural features, signs, entrances, walkways.

G2. Wall lighting should be integral to the design of the building.

5.39 PARKING

> Guidelines:

G1. Parking lots should be configured and designed to reduce the apparent mass of paved surfaces and minimize stormwater impacts.

G2. Parking lot design and landscaping should make orientation and circulation legible and intuitive.

G3. Parking lot design should provide clear site circulation and utilize landscaping to define main drives and divide the parking fields. Walkways should be attractive and well-defined by pavement treatment, landscaping and lighting.

5.310 LANDSCAPING

> Standards:

S1. A minimum area equal to ten (10%) of the gross interior parking area shall be landscaped (inclusive of stormwater management landscape elements).

S2. No parking row shall be longer than fifteen (15) parking stalls without a planting area (inclusive of stormwater management landscape elements).

S3. Linear islands shall be no less than six (6) feet in width and a minimum seven (7) feet in length, densely planted area shall be provided at the end of each parking aisle.

S4. A minimum 10' wide planting area is required along all street frontages. This landscape area should include trees at a minimum of 30' o.c. and sufficient understory planting to screen the parking lot from adjacent streets.

> Guidelines:

G1. Low-maintenance landscape should be used in and around parking lots using native plants and water-efficient irrigation techniques.

G2. Landscaping within the parking areas should consist of a combination of end-row islands and linear islands between rows of parking stalls.

G3. Trees should be evenly distributed within the parking lot so that, at tree maturity, forty percent (40%) of the parking lot will be shaded at noon.

G4. Plantings supplemented with walls and/or fencing compatible with the architecture of the primary buildings are permitted.

G5. Eighty-five percent (85%) of the available landscape areas should be planted or be designed for performative stormwater management.

Figure 5.36 Industrial Heritage of the Napa Pipe site displayed in honest materials of strength and character

5.311 STORMWATER MANAGEMENT

> Standards:

S1. Parking lot design shall manage all project stormwater on site by incorporating methods of stormwater management utilizing low impact development techniques.

> Guidelines:

G1. Stormwater facilities should be sized appropriately to match the soil infiltration capacity and designed to capture a minimum of eighty percent (80%) of annual runoff.

G2. Stormwater BMPs should include structural controls and bioengineering techniques designed to facilitate natural water cycling processes (i.e. evaporation, transpiration, and groundwater recharge) by capturing, filtering, infiltrating, and/or storing stormwater. Components of these soil- and plant-based systems can carry out one or more of the aforementioned functions, including some that store water for various durations (from 24 hours to permanent storage).

G3. Stormwater management might include:

- *Infiltration and flow-through planters*: Infiltration planters are preferred; Flow-through planters should be used where native soil conditions are unfavorable to infiltration, where there is underlying soil contamination, and/or where the seasonal high water table is within 10 feet of the landscape surface. Stormwater planters are easily incorporated into retrofit conditions and in places where space is limited. They can be built to fit between driveways, utilities, trees and other existing site elements and can be planted with a simple palate of edges and/or rushes or a mixture of trees and shrubs. Because planters have no side slopes and are contained by vertical curbs, it is best to use plants that will grow at least as tall as the planter's walls in order to help "soften" the edges.

- *Rain gardens ("bioretention")*: Rain gardens should be designed for natural infiltration. However, if infiltration is not possible, rain gardens can also be designed as a flow-through system with an underdrain. Generally, locations with soil infiltration rates that exceed or meet the accepted standard of 0.5"/hr are suitable for using infiltrative rain gardens. Rain gardens can be planted with a variety of trees, shrubs, grasses, and groundcovers, depending on the site context and conditions.

- *Swales*: Swales are open channels or depressions with dense vegetation used to transport, decelerate, and treat runoff. Swales can come in the form of a grassed channel, dry swale, or wet swale.

- *Vegetated Filter Strips/Riparian Buffers*: Vegetated filter strips are flat pieces of land with low slopes, which are designed to encourage natural sheet flow of stormwater as opposed to channeled runoff.

- *Dry Detention Basins*: A dry detention basin is a vegetated basin with controlled outlets, designed to detain runoff (lowering flows and reducing velocity) for a short amount of time (e.g. 24 hours or less), partially removing pollutants before the water is discharged.

- *Wet Retention Basins*: Wet retention basins are designed to capture, filter, store, and infiltrate stormwater, and have storage capacity adequate for flood volumes of water.

- *Permeable Pavement*: Alternative pavers slow the flow of runoff, allowing it to filter into the soil, sustaining an area's natural hydrological cycle, and in some cases,

allowing microbes to break down contaminants before entering the soil layer. A number of paving substitutions have been developed to reduce the range of environmental impacts associated with the use of pavement. Types of permeable and semi permeable alternative pavers include gravel, cobble, concrete, wood mulch, brick, open jointed pavers filled with turf or aggregate, turf blocks, natural stone, and pervious concrete. If alternative pavers are not feasible for the entire parking lot due to traffic demands, the aisles and driveways can be constructed using conventional pavement, and alternative pavers can be used in parking stalls, crosswalks, and overflow lots. Permeable pavement shall be regularly maintained to ensure continued performance.

G4. For stormwater management, when feasible, it is best to align landscape facilities perpendicular to the sheet flow of water in order to maximize the potential for capturing runoff. If this optimum alignment is in conflict with the desired pedestrian flow to and from the main entrance, the design should incorporate bridges/pathways over the stormwater facilities and/or walkways for people to safely walk alongside the stormwater facilities. Assuring that pedestrians can easily cross over stormwater facilities is essential to prevent people from cutting through the landscaped areas

5.312 SERVICE & ACCESS

> Guidelines:

G1. Service areas should be designed internal to the building and screened from the public right-of-way in a manner that complements the overall building architecture.

Figure 5.37 Building signage is related to and supports the overall massing, facade articulation, and architecural features. Signs should be flat against the façade, mounted projecting from the façade, or incorporated into the architecture.

OFFICE

Intent

5.41 OVERVIEW

The following guidelines refer to uses such as office and related uses. The guidelines encourage an active and visually interesting pedestrian environment and building placement and character that will ensure that office buildings have a distinctive identity that will complement the overall visual perception of Napa Pipe.

Office uses at Napa Pipe are envisioned as complementary to the residential and mixed-use character of the site. The Design Guidelines, which include the Form-Based Code, serve to both require and encourage the components that will ensure the desired quality and character of office buildings and landscapes at Napa Pipe. If a building and/or parcel includes both office uses and other uses, the applicant must comply with this section for the portions of the building and/or parcel containing such office uses and shall comply with the appropriate provisions of applicable sections for the other uses.

5.42 SITE PLACEMENT

> Standards:

S1. Primary Streets shall have consistent street frontages with building fronts aligned to and oriented to these streets.

S2. All buildings along Primary Streets shall have their principal frontage along that street.

S3. Buildings shall have their principal entrance (with operable doors) on the Primary Street frontage.

S4. Vehicle parking, garbage, and mechanical equipment shall not be visible from Primary Streets.

PHOTO COURTESY OF SEIER + SEIER

Figure 5.41 Vertical rhythm of facade material and glazing balances horizontal building mass. Materials and color palette relate to the industrial character of Napa Pipe.

STANDARDS MATRIX

BUILDINGS & BLOCKS	Site Placement	1. Primary Frontage Streets as identified in the Facade Hierarchy Diagram shall have consistent street frontages with building fronts aligned to and oriented to these streets 2. Buildings along Primary Frontage Streets shall have their principal frontage along that street 3. Buildings shall have their principal entrance (with operable doors) on primary street frontage
FRONTAGE & SETBACK	Frontage & Setback	1. A continuous length of flat walls shall not be permitted 2. Stepbacks, setbacks and height changes shall be a minimum of 2 feet
ARCHITECTURAL DETAILS	Façade Composition	1. High visibility buildings at the corners of public streets shall be enhanced with architectural elements (projections, shades, eaves, brise-soleil, massing articulation) 2. Façade materials shall turn the corner and extend a minimum of 5 feet
	Windows	1. All exterior elevations shall have windows 2. Exterior elevations facing public streets shall have a minimum of 33% glazing 3. Reflective glazing not permitted 4. All glass shall be clear in color, neutrally colored spandrel, etched/blasted glass and fritted glass are permitted 5. Aluminum windows shall be durable, high quality and heavy gauge
	Roofs	1. Roof forms should match the principal building in style, detailing, and materials 2. Roofs shall be low-glare materials 3. Snap-on batten type standing seam metal roofs are not allowed 4. Flat roofs visible from adjacent properties shall be covered with a finished material such as concrete pavers, clay pavers, crushed granite ballast, green roof 5. Gutters, if used, shall be aligned with the roofline and building edges 6. Downspouts shall match gutters in material and finish 7. A parapet per building code shall be used to edge any flat roof that is used as exterior deck accessed from inside the building
	Solar Panels	1. Solar panels shall not be visible from Primary Frontage Streets 2. Solar panels shall not be used if they would produce direct glare/redirect sunlight into
	Lighting	1. In order to reduce glare, all interior and exterior light sources shall be selected and designed such that zero direct-beam illumination leaves the building site, per LEED-ND requirements 2. Building design should refer to the most current LEED checklist for lighting design guide-
	Materials	S1. Where more than one material is used, traditionally heavier materials shall be located below lighter materials, the change in material shall occur along a horizontal line S2. Synthetic concrete (EIFS), such as Dryvit, is not permitted on any building element that is

TO BE UPDATED PENDING FINAL STANDARDS

PARKING & SERVICE	Parking & Service	1. Surface parking and service areas shall not be oriented to Primary Frontage Streets 2. Parking and loading shall not be accessed from Primary Frontage Streets 3. Ground level parking facing streets/open spaces shall be screened from the sidewalk and open space, screening may include buildings and/or landscaping 4. The minimum width for a landscaping area to screen parking shall be 5 feet 5. Off-street parking areas shall be set back a minimum of 10' from property lines along public

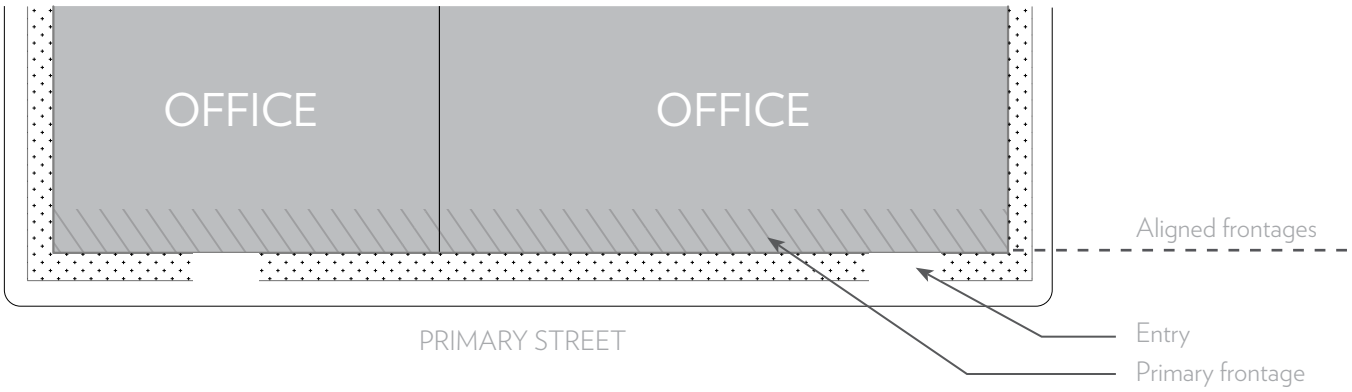


Figure 5.42 Primary Frontage Street with consistent frontages

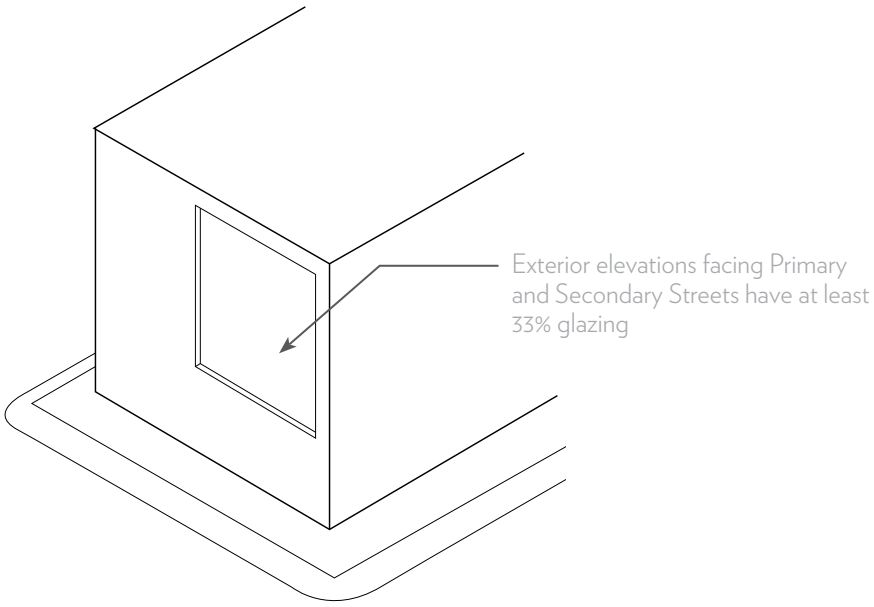
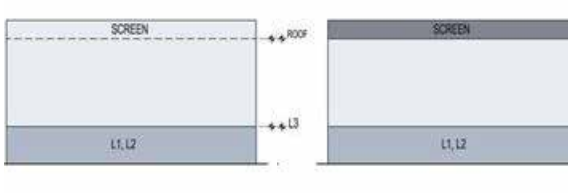


Figure 5.42 Glazing along Primary and Secondary Streets

OFFICE FACADE COMPOSITION

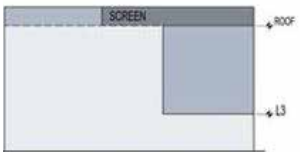


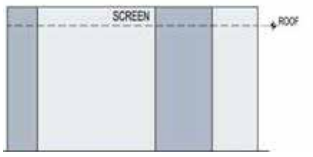
Unified Facade

For a single material system or curtain wall, it is important to articulate the facade with interest and texture.

Tiered Facade

A unique material treatment at ground level serves to ground the building to its site and sorroundings. Roof screening may be given its own unique treatment as well.





Not Recommended.

A “wedding cake” application of materials.

Material changes should relate to masses, and should not be flatly applied to a single face.

Vertical articulation should relate to plan requirements and/or massing and should not be random.

NOTE: L1, L2, L3 = BUILDING STORIES, ATT. = ATTIC LEVEL

Figure 5.44 Facade Composition and Material Application Strategies

OFFICE MATERIALS AND COMPOSITION

Concrete

Concrete can be cast with a smooth or textured finish. It is typically used to complement a curtain wall system.

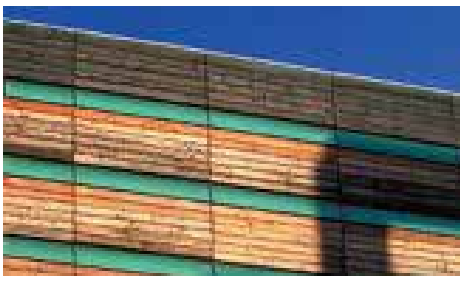
Stucco

Stucco is typically features a textured finish that looks smooth from a distance. It can be applied in many different colors.

Curtain Walls

Curtain wall systems can create a very dynamic and lively facade by creating texture through creative detailing, repetition, and changes in transparency.

Wood



Wood in modern construction can be used in a variety of ways. It is often used for screening (above) or may be more traditionally applied as a siding (below).

Wood Panels

Wood panels systems typically feauture a smooth finish and echo warmth and texture of natural wood. Wood panels combine well with other metal based finishes concrete.

Metal Finishes

Metal finishing systems very widely depending on the type of metal used. It can be applied as siding as in the copper example above, or be used as a rain screen like the perforated metal below.

5.42 SITE PLACEMENT CON'T

> Guidelines:

G1. Office buildings that front on more than one Primary Street may have more than one principal frontage.

G2. Corners present special design opportunities within the overall design of a building and block and should be highlighted in the design. Consider unique design features such as tall building elements, changes of materials, projections, and prominent entries.

G3. Take into account facade orientation and incorporate into overall building design elements that take advantage of the sun exposure such as passive shading devices and other sun mitigating elements into overall architectural design.

5.43 FRONTAGE & SETBACK

> Standards:

S1. A continuous length of flat walls shall not be permitted.

S2. Stepbacks, setbacks and height changes shall be a minimum of 2 feet.

S3. Storefronts in mixed-use buildings shall connect directly to the sidewalk.

> Guidelines:

G1. Street level frontage should be primarily devoted to entrances and windows.

G2. Overall street frontage should have diversity and richness in materials, projections, and openings, within an overall cohesive street frontage composition.

G3. Buildings may have more than one entry.

G4. Changes in the façade plane, materials, or colors are encouraged to mark entries.

G5. Building faces should be articulated a minimum of every 50 feet.

G6. Articulation may include bays with modulating building elements such as recesses, projections, expressed entries, building form, columns, pilasters, and/or other clearly expressed architectural details.

G7. The primary façade of any office building may be setback no more 10' from the property line to facilitate architectural features, public open space and landscaping as per the landscape guidelines in Chapter 6.

5.44 ARCHITECTURAL DETAILS

Façade Composition

> Standards:

S1. High visibility buildings at the corners of public streets shall be enhanced with architectural elements such as projections, shades, eaves, brise-soleil, or massing articulation.

S2. Façade materials shall turn the corner and extend a minimum of 5 feet.

S3. Corner buildings shall have consistent material treatments on front and exposed side façades.

> Guidelines:

G1. In order to modulate their scale, multi-story buildings should articulate the base, middle and top, separated by cornices, string cornices, stepbacks or other articulating features.

G2. An expression line should delineate the division between the first story and the second story. A cornice should delineate the top of the façade. Expression lines and cornices should extend a minimum of 4 inches. Changes in the surface plane of the building wall greater than 8 inches.

G3. Elements of the building façade, such as entries, windows, cornice lines, and other architectural elements should have high quality detailing. These elements should be proportioned to relate to human scale and facilitate pedestrian activity and enliven the public realm.

Windows

> Standards:

S1. All exterior elevations shall have windows.

S2. Exterior elevations facing public streets shall have a minimum of 33% glazing. Window area does not include window trims.

S3. Reflective glazing is not permitted.

S4. All glass shall be clear color. Neutrally-colored spandrel, etched/blasted glass, fritted glass permitted.

S5. Aluminum windows shall be durable, high quality, and heavy gauge.

S6. Curtain wall, rain screen, and structural glass systems are permitted.

S7. Buildings shall include operable windows.

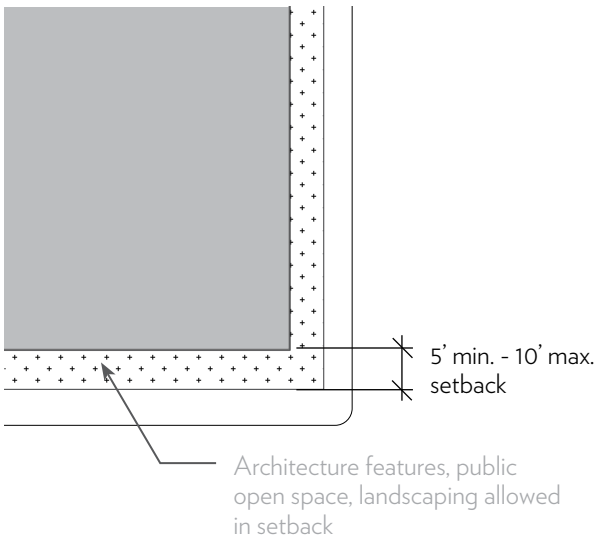


Figure 5.42 Primary facade set back from property line

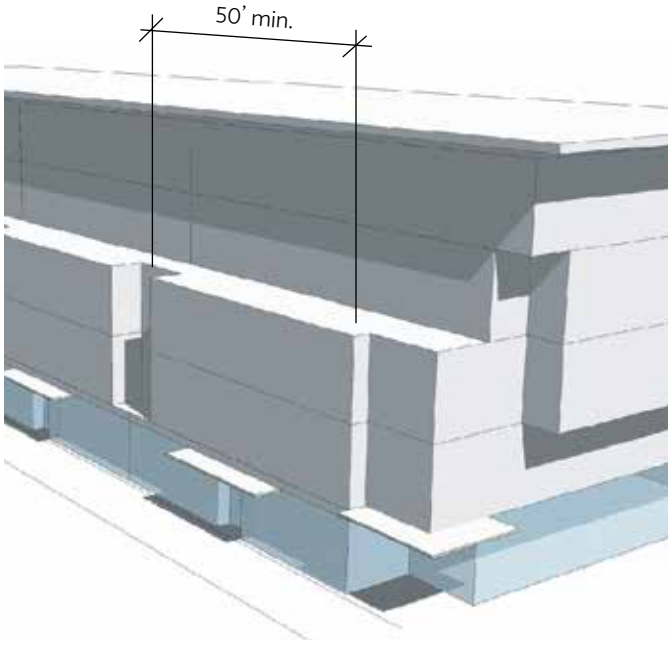


Figure 5.43 Articulated building faces

5.44 ARCHITECTURAL DETAILS CON'T

Roofs

> Standards:

S1. Roof forms should match the principal building in terms of style, detailing, and materials.

S2. Roofs shall be low-glare materials.

S3. Snap-on batten type standing seam metal roofs are not allowed.

S4. Flat roofs visible from adjacent properties shall be covered with a finished material such as concrete pavers, clay pavers, crushed granite ballast, or green roof.

S5. Gutters, if used, shall be aligned with the roofline and building edges.

S6. Downspouts shall match gutters in material/finish.

S7. A parapet per building code shall be used to edge any flat roof that is used as exterior deck accessed from inside the building.

S8. Roof penetrations, including but not limited to vents, ventilators, turbines, flues, etc. shall be metal with natural finish and integral color.

S9. Mechanical equipment should be organized and designed as a component of the roofscape and not appear to be a leftover or add-on element. Mechanical equipment should be screened.

> Guidelines:

G1. Green roofs should be covered, installed, and maintained with plant materials and sufficient soil/growth medium so plants grow and thrive.

G2. Flat or low-slope roofs may also be single-ply membrane, built-up, or modified bitumen.

Solar Panels

> Standards:

S1. Solar panels shall not be visible from Primary Frontage Streets.

S2. Solar panels shall not be used if they would produce direct glare/redirect sunlight into residential units.

> Guidelines:

G1. All flat roofs should be structurally designed to accommodate solar panel arrays.

Lighting

> Standards:

S1. In order to reduce glare, all interior and exterior light sources shall be selected and designed such that zero direct-beam illumination leaves the building site, per LEED-ND requirements.

S2. Building design should refer to the most current LEED checklist for lighting design guidelines and best practices.

Materials

> Standards:

S1. Where more than one material is used, traditionally heavier materials (stone, brick, concrete with stucco) shall be located below lighter materials (wood, fiber cement board, siding). The change in material shall occur along a horizontal line, preferably at floor level.

S2. Synthetic concrete (EIFS), such as Dryvit, is not permitted on any building element that is visible from a public right-of-way or public park.

> Guidelines:

G1. Regional precedents and particular influences from the Napa Pipe site and history should be considered in the selection of building materials.

G2. Materials should reflect the traditions and patterns of the surrounding Napa County and Napa Pipe site.

G3. Materials should be consistent with architectural styles.

G4. Material variety and innovation is encouraged.

G5. Building walls should have perceivable thickness, visual interest and character. A selection of architectural details such as vertical and horizontal recesses and projections, changes in height, floor levels, roof forms, parapets, cornice treatments, belt courses, pilasters, window reveals, forms and color as appropriate to each site can create shadows and texture and add to the character of a building.

G6. To avoid visual chaos, facades should consist of no more than three materials, textures, or colors – excluding windows and framing. Any changes in primary wall material should occur across a horizontal line, with the heavier-appearing material below the lighter (e.g., wood over bricks, or bricks over stone). If used, brick should be used to at least the second floor's floor line.

G7. Exterior materials should be low-reflectance and "naturally" colored, utilizing the inherent and integral qualities of the chosen materials.

G8. Exposed foundation walls (below the first floor elevation) should be concrete (painted and/or stuccoed concrete block system "C.B.S."), brick, or natural/manufactured stone.

G9. Veneer finishes should be configured in a way that corresponds with the material's traditional load-bearing configuration.

G10. Buildings should use materials that are durable, economically-maintained and of a quality that will retain their appearance over time.

5.45 PARKING & SERVICE

> Standards:

S1. Surface parking and service areas shall not be oriented to Primary Streets.

S2. Parking and loading shall not be accessed from Primary Streets.

S3. Ground level parking facing streets/open spaces shall be screened from the sidewalk and open space. Screening may include buildings and/or landscaping.

S4. The minimum width for a landscaping area to screen parking shall be 5 feet.

S5. Off-street parking areas shall be set back a minimum of 10' from property lines along streets, excluding Shared Driveways.

S6. Parking lots shall be landscaped as per the Landscape Guidelines.

GARAGE

Intent & Objectives

5.51 GENERAL

> Standards:

S1. Parking requirements for all uses at Napa Pipe, including Residential, Local Retail, Large-Format Retail, and Office, shall be determined by the Development Plan.

S2. ADA parking and access shall be provided in accordance with all applicable state and local codes.

> Guidelines:

G1. Garages should provide off-street bicycle parking.

G2. Off-street bicycle parking should be convenient and easily accessible from the street.

G3. Shared parking is encouraged.

5.52 ORIENTATION & ACCESS

> Standards:

S1. Garage entries shall minimize curb cuts.

S2. Vehicular entries to garages shall not be located along Primary Streets.

> Guidelines:

G1. Garages may be freestanding or incorporated into larger overall building designs.

G2. Garages may be above grade, below grade, partially below-grade, or a combination.

G3. Below-grade garages are encouraged.

G4. Pedestrian exit door alcoves adjacent to the sidewalk are discouraged unless integrated with active spaces such as primary entrances, liner uses, or public open spaces.

STANDARDS MATRIX

UNIVERSAL STANDARDS		1. Parking requirements for all uses at Napa Pipe, including residential, local retail, large-format retail, and office, shall be determined by the Development Plan
BUILDING &	Orientation & Access	1. Garage entries shall minimize curb cuts.
ARCHITECTURAL DESIGN	Design & Articulation	1. Garage design and articulation shall be compatible with adjacent buildings in pattern, modulation, scale and massing 2. Mechanical vents and utilities related to garages shall minimize visual and audio impacts on public streets as much as possible

TO BE UPDATED PENDING FINAL STANDARDS

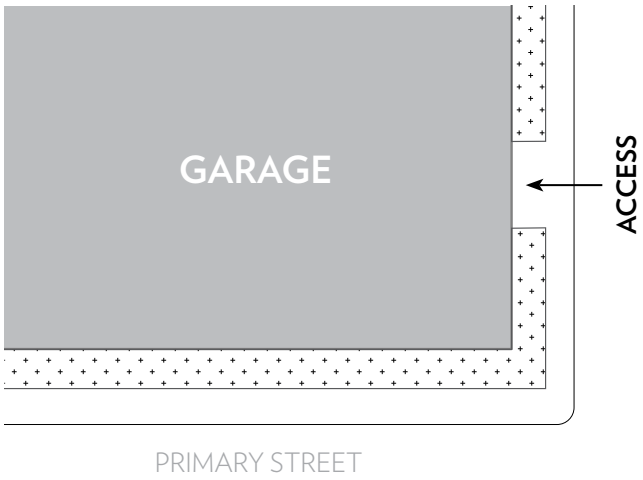


Figure 5.5 Vehicular entry not located along Primary Street

5.53 DESIGN & ARTICULATION

> Standards:

S1. Garage design and articulation shall be compatible with adjacent buildings in pattern, modulation, scale and massing.

S2. Mechanical vents and utilities related to garages shall minimize visual and audio impacts on public streets as much as possible.

S3. Blank, undifferentiated walls and openings at eye level are not permitted where garages are adjacent to the sidewalk.

> Guidelines:

G1. Garages should be designed with a modulated system of vertical openings and façade articulation.

G2. Openings should have sufficient screening to block views of cars on upper levels and to screen surrounding buildings, streets, and open spaces from Garage lighting.

G3. Façade screening systems or scrims are encouraged along streets and open spaces.

G4. Parking garages should be screened from streets and open spaces with liner uses such as retail, lobbies, creative/community uses, or residential units/entries, where feasible.

Figure 5.53 Garage openings screened to block views of cars on upper levels

Figure 5.53 Garages designed with modulated system of façade articulation

SUSTAINABILITY

Intent & Objectives

5.61 OVERVIEW

As a means of reducing global warming related impacts of a project, the project applicant shall incorporate additional measures to reduce the project's contribution to the countywide GHG emissions associated with development assumed under the County's General Plan. Such measures shall include the following additional items from the California Attorney General's Office (2008) list of suggested measures for reducing global warming related impacts of a project.

5.62 ENERGY EFFICIENCY

> Standards:

S1. Design buildings to meet LEED certification requirements applicable as of the project approval date.

S2. Install light colored "cool" roofs and cool pavements.

S3. Install efficient lighting in all buildings (including residential). Also install lighting control systems, where practical. Use daylight as an integral part of lighting systems in all buildings.

S4. Install light emitting diodes (LEDs) or other high efficiency lighting for traffic, street and other outdoor lighting.

S5. Limit the hours of operation or provide minimally acceptable light intensities for outdoor lighting.

5.63 WATER CONSERVATION & EFFICIENCY

> Standards:

S1. Design buildings and lots to be water-efficient. Only install water-efficient fixtures and appliances.

S2. Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. Prohibit businesses from using pressure washers for cleaning driveways, parking lots, sidewalks, and street surfaces unless required to mitigate health and safety concerns. These restrictions shall be included in the Covenants, Conditions, and Restrictions of the community.

Figure 5.61 Sustainable streetscape treatment

Figure 5.65 Bike parking located near building entrances

STANDARDS MATRIX

SUSTAINABILITY	Energy Efficiency	1. Parking requirements for all uses at Napa Pipe, including residential, local retail, large-format retail, and office, shall be determined by the Development Plan
	Water Conservation & Efficiency	1. Garage entries shall minimize curb cuts. 2. Vehicular entries to garages shall not be located along Primary Streets
	Solid Waste Measures	1. Garage design and articulation shall be compatible with adjacent buildings in pattern, modulation, scale and massing 2. Mechanical vents and utilities related to garages shall minimize visual and audio impacts on public streets as much as possible
	Transportation & Motor Vehicles	1. Promote ride sharing programs at employment centers 2. At commercial land uses, all forklifts, "yard trucks" or vehicles that are predominately used on-site at non-residential land uses shall be electric-powered or powered by biofuels that are produced from waste products, or shall use other technologies that do not rely on direct fossil fuel consumption 3. At commercial land uses, limit idling time for commercial vehicles, including delivery and construction vehicles 4. Promote the use of alternative fueld vehicles and neighborhood electric vehicle programs through prioritized parking within new commercial and retail areas for electric vehicles, hybrid vehicles, and alternative fuel vehicles 5. Provide shuttle service from mixed-use and employment areas to public transit 6. Provide information on all options for individuals and businesses to reduce transportation-related emissions, including education and information about public transporation 7. Provide bicycle parking near building entrances to promote cyclist safety, security and conve-
	Performance Standard	1. Demonstrate that the project achieves a redution of greenhouse gas emissions consistent with the target stipulated in the County's Climate Change Action Plan as adopted by the BOS on or before approval of the project, and incorporate additional measures if necessary to

TO BE UPDATED PENDING FINAL STANDARDS

5.64 SOLID WASTE MEASURES

> Standards:

S1. Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).

S2. Provide interior and exterior storage areas for recyclables and green waste at all buildings.

S3 . Provide adequate recycling containers in public areas, including parks, school grounds, paseos, and pedestrian zones in areas of mixed-use development.

5.65 TRANSPORTATION & MOTOR VEHICLES

> Standards:

S1. Promote ride sharing programs at employment centers (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading zones and waiting areas for ride share vehicles, and providing a web site or message board for coordinating ride sharing).

S2. At commercial land uses, all forklifts, "yard trucks," or vehicles that are predominately used on-site at non-residential land uses shall be electric-powered or powered by biofuels (such as biodiesel [B100]) that are produced from waste products, or shall use other technologies that do not rely on direct fossil fuel consumption.

S3. At commercial land uses, limit idling time for commercial vehicles, including delivery and construction vehicles.

S4. Promote the use of alternative fuel vehicles and neighborhood electric vehicle programs through prioritized parking within new commercial and retail areas for electric vehicles, hybrid vehicles, and alternative fuel vehicles.

S5. Provide shuttle service from mixed-use and employment areas to public transit.

S6. Provide information on all options for individuals and businesses to reduce transportation-related emissions, including education and information about public transportation.

S7. Provide bicycle parking near building entrances to promote cyclist safety, security and convenience.

S8. Provide secure bicycle storage at public garage parking facilities.

S9. Locate facilities and infrastructure in all land use types to encourage the use of low or zero emission vehicles (e.g. electric vehicle charging facilities and conveniently located alternative fueling stations).

5.66 PERFORMANCE STANDARD

> Standards:

S1. Demonstrate that, by implementation of the measures set forth above, the project achieves a reduction of greenhouse gas emissions, as compared to "Business As Usual," consistent with the target stipulated in the County's Climate Change Action Plan as adopted by the BOS on or before approval of the project. Incorporate additional measures, such as the installation of solar power or other renewable energy systems, if necessary to ensure this target is achieved.

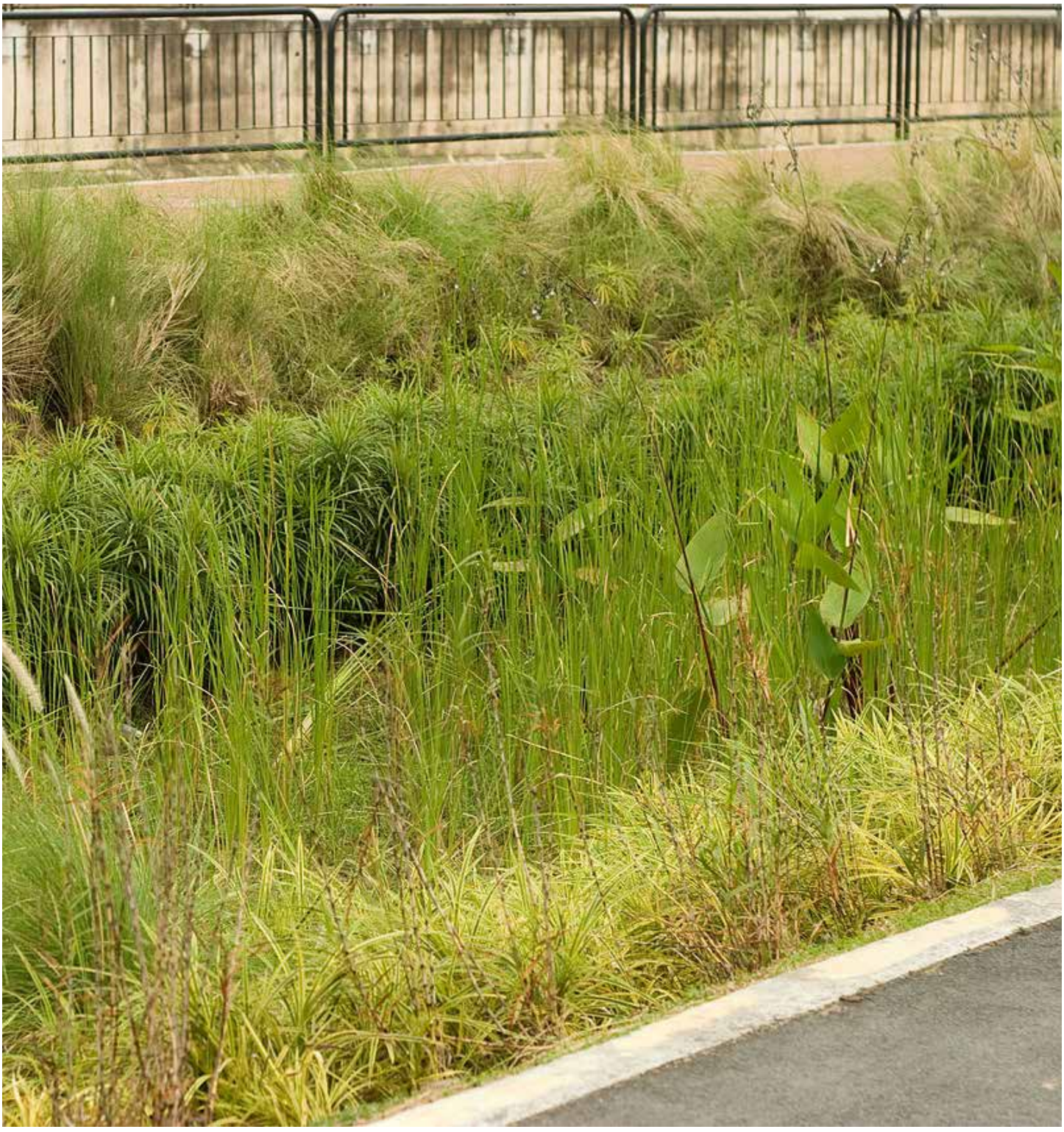


Figure 6.0 Vegetated stormwater facilities with native plantings are a central part of Landscape Sustainability at Napa Pipe

LANDSCAPE STANDARDS & GUIDELINES

6.1 Residential
6.2 Local Retail
6.3 Office
6.4 Garage
6.5 Sustainability
6.6 Materials & Implementation
6.7 Planting
6.8 Phasing

RESIDENTIAL

Intent & Objectives

6.11 OVERVIEW

Residential open spaces are the transition between the public and the private realm. These spaces should promote outdoor living as well as take advantage of Napa Pipe's climate and views. Private landscape areas include setbacks (front, side, and rear), private common open spaces, and shared driveways. Please refer to the Sustainability chapter for guidelines for surface parking lots.

Setbacks are the transition between private and public zones. The front setback is an extension of the public street— an open and social space. Rear setbacks mainly address service and screening. Side setbacks often support service and circulation.

Private Common Open Spaces are areas within residential development lots that are not associated with only one unit. These areas are accessible to multiple residents and the public, but are not within the public realm. Such spaces include linear gardens, mid-block gardens, and other common open spaces outside building setback areas.

Shared Driveways are narrow streets within blocks that provide access to garages, entrance to units, service functions, and emergency and fire access. They also enhance light and views and pedestrian circulation.

Figure 6.1 Front setback precedent: Variegated low planting and small trees in the front setback area do not obstruct windows. Access path to the primary entry continues the material of the sidewalk.

STANDARDS MATRIX

LANDSCAPE	Planting	1. A minimum 25% and maximum 75% of front setback area shall be planted 2. Plantings shall not directly obscure building windows 3. Planting screens in front setbacks shall not be taller than 4' unless not obstructing windows 4. Landscape screening in setback areas shall comply with the planting palette 5. Plantings prohibited in setback areas include large trees, medium trees, and turf 6. All trees are prohibited in side setbacks 7. Rear setbacks less than 10' deep may not have trees
	Hardscape	1. All hardscape materials shall be complementary and coordinate with architecture style 2. Hardscape run-off shall be directed into landscaped areas 3. 25% of side setback areas shall be permeable 4. Planting minimums shall be met 5. Pedestrian access between unit entries and the adjacent street, shared driveway or open space shall be provided in the front setback 6. Walkways leading to units within setback areas, and in private common open spaces, shall be minimum 3' wide with maximum 5% slope and maximum 2% cross-slope 7. Side setbacks shall have a minimum 18" clear and paved path of travel, except for end lots 8. To the extent possible, paved connections to individual units shall be staggered from the opposite side [illegible] 9. Paved driveways in rear setbacks shall provide access to all private garages 10. Pedestrian access between unit entries and the adjacent street, shared driveways or open space shall be provided 11. Hardscape paving in rear setbacks must have maximum 5% slope, maximum 2% cross slope
	Fences & Walls	1. Public acces to private common open space and shared driveways shall be maintained, and gates, fences, walls or other structures limiting public access are prohibited 2. Fences/walls are not permitted in shared driveway right-of-ways 3. Fence/wall materials shall complement building architectural style, material, color 4. Privacy fences/walls are prohibited in front yards: fences and walls shall be maximum 36" tall 5. Any fence/wall in a side or rear setback shall be a maximum of 8' tall 6. For fences along slopes, equal increment level fence steps must be used to ensure all vertical pickets remain vertical 7. Fences/walls in the front setback shall run the full length, and parallel to, the property line 8. Fences/walls along shared property line must be shared; two parallel fences not permitted 9. Any fence/wall shall run along the property line except where it returns to the building 10. Fences/walls in front setbacks that return to building must terminate at right angle to front facade 11. Gates, where used, shall swing into the property rather than onto sidewalk/open space 12. All fence/wall screening must be in accordance with screening standards in material palette
	Furnishings	1. All site furnishings shall complement the architectural style, material and color 2. Furnishings in private common open space shall be ADA compliant 3. Prohibited in front setbacks: trash/recycling receptacles, ganged mailbox, utility units/meters 4. Mailboxes shall be located in accordance with the US Postal Service regulations 5. Prohibited site elements include but not limited to: bicycle racks, bollards, free-standing flagpoles and playground equipment

TO BE UPDATED, PENDING FINAL STANDARDS

	Furnishings con't	6. Fixed benches, chairs and tables, as well as handrails, are not permitted in shared driveways 7. Bollards are permitted at ends of shared driveways, if perpendicular to travel direction, to control vehicular access, provided fire access is not required, and bollards are not permitted in shared driveway interiors or parallel to path of travel 8. Handrails are not permitted in side setbacks
	Structures & Enclosures	1. Structures include elements such as: arbors, trellises and pergolas, and enclosures include elements such as: maintenance or storage sheds 2. Strucutres and enclosures are not permitted in the shared driveway right-of-way 3. Greenhouses and storage sheds are not permitted in the front or side setback 4. Detached structures or enclosures in setback areas shall not obstruct more than 25% of front building facade, or cover more than 20% of setback area or obstruct windows 5. Side or rear setbacks less than 5 feet deep may not have structures 6. Structures and enclosures shall complement the architectural style, material, color 7. Walk-in structures and enclosures, or those made of plastics, are not permitted in setbacks 8. Greenhouses and plastic structures/enclosures not permitted in private common open 9. In private common open spaces, permitted structures shall be maximum of 10' high, and permitted enclosures shall be maximum 8' high and maximum 20 sq. ft. footprint
	Planting for Private Common Open Spaces	1. A minimum of 40% of landscape area shall be shaded by canopy trees 2. A minimum of 70% of landscape area shall be permeable in multi-family typologies 3. A minimum of 30% of landscape area shall be permeable in typologies that are not multi-family 4. Of total planted area, 60% shall be planted with shrubs and 40% with groundcover or turf 5. Large tress shall be placed a minimum of 12' from the buildings 6. At the time construction is completed, any bare soil on a lot shall be convered by shrubs, groundcover or mulch 7. Prohibited materials include but are not limited to artificial turf
	Shared Driveways	1. Shared driveways shall have 25' wide right of way 2. Plantings/furnishings are permitted as specified in the right of way, if a minimum 18' clear travel lane is maintained for emergency and fire access 3. Entrances to shared driveways shall be curb cuts rather than at grade intersections 4. Vehicular access to private garages shall be provided, if planting or other elements installed adjacent to building face/setback, a clear zone at least garage/driveway width must be provided 5. A minimum 50% of the total shared driveway area shall be permeable 6. Planting beds shall be a maximum 7' in width 7. Trees are permitted only in planters a minimum 5' width 8. Turf and artificial turf are prohibited 9. In shared driveways parallel to primary roads, traffic calming measures shall be installed
	Lighting	1. All lights shall complement the architectural style, material, color 2. The following light types are prohibited: vehicular-rated bollard, free-standing floor, light attached to trees, overhead string lights, vehicular pole lights 3. Decorative pedestrian pole lights in front setback shall be minimum 3'-6" and maximum 8' tall 4. No more than 1 decorative pole light is permitted within the front setback 5. Decorative pole lights are not permitted in side setbacks

TO BE UPDATED, PENDING FINAL STANDARDS

6.12 PLANTING

For additional information on required and allowable plant density, size, species, installation, maintenance, etc. refer to the Planting Palette.

> Standards:

S1. A minimum of 25% and maximum of 75% of front setback area shall be planted.

S2. Plantings adjacent to buildings shall not directly obscure building windows.

S3. Planting screens in front setbacks shall not be taller than 4' unless they are not obstructing windows.

S4. Plantings shall not obstruct paths of travel.

S5. Landscape screening in setback areas shall comply with the planting palette.

S6. Plantings prohibited in setback areas include large trees, medium trees, and turf.

S7. All trees are prohibited in side setbacks.

S8. Setbacks less than 12' wide shall not have trees.

> Guidelines:

G1. Planting in setbacks may be used for screening and should be predominantly evergreen.

G2. Front setback areas intended to be cohesive, not cacophonous; a maximum of 5 species should be planted.

G3. Plantings in larger front setbacks may include small accent or ornamental trees.

G4. Plantings in setbacks may include vines or espalier, low-medium shrubs, groundcovers, window boxes and plantings in pots/planters or at grade.

G5. Biofiltration planters are recommended for rear setbacks.

6.13 HARDSCAPE

> Standards:

S1. All hardscape materials shall be complementary and coordinate with the architecture style in material, and color.

S2. Run-off from impervious surfaces shall be directed to pervious areas.

S3. 25% of side setback areas shall be permeable.

S4. Planting minimums shall be met.

S5. Pedestrian access between unit entries and the adjacent street, shared driveway, or open space shall be provided.

S6. Walkways and unit-entry walkways shall be a minimum of 3' wide.

S7. All walkways and hardscape areas shall have a minimum slope of 1, maximum slope of 5% and maximum cross slope of 2%.

S8. Side setbacks shall have a minimum 18" clear and paved path of travel, except for end lots.

S9. Primary walkways in private common open spaces shall be a minimum of 6' wide.

S10. Paved driveways in rear setbacks shall provide access to all private garages.

S11. Hardscape pads shall be provided in rear setbacks for trash/recycling receptacles.

> Guidelines:

G1. Paving materials include, but are not limited to concrete, gravel, stone, wood, and unit pavers.

G2. In private common open spaces, permitted hardscape elements include decks, water features, stepping stones, and steps. Paved seating areas are also permitted in multi-family private common open spaces.

G3. To the extent possible, paved connections to individual units should be staggered from the opposite side of the common open space, if applicable.

G4. Lead walks should be constructed of the same material as the adjoining sidewalk.

G5. Pedestrian paths and lead walks in side setbacks may be porous concrete, unit pavers, or stone.

G6. Pedestrian paths in rear setbacks and private common open spaces should use permeable pavements.

Figure 6.1 Pedestrian paths and common open spaces combine hardscape, permeable paving, and plantings. Plantings shall not directly obsucre building windows or obstruct the path of travel.

6.14 FENCES & WALLS

> Standards:

S1. Public access to private common open space and shared driveways shall be maintained. Gates, fences, walls or other structures limiting public access are prohibited.

S2. Fences and walls are not permitted in shared driveway right-of-ways.

S3. Fence and wall material shall complement building architectural style, material, and color.

S4. Privacy fences and walls are prohibited in the front yards: fences and walls shall be no more than 36" tall.

S5. Any fence or wall in a side or rear setback shall be a maximum of 8'-0" tall.

S6. For fences along slopes, vertical pickets remain vertical. Pickets perpendicular to slope are prohibited.

S7. Fences and walls in the front setback shall run the full length – and parallel to – the property line.

S8. Fences or walls along a shared property line must also be shared; two parallel fences are not permitted.

S9. Any fence or wall shall run along the property line except where it returns to the building.

S10. If fences or walls in front setbacks return to the building, they must terminate at a right angle to the front facade.

S11. Gates, where used, shall swing into the property rather than onto the sidewalk or open space.

S12. All fences, gates, and walls shall be in accordance with the screening standards outlined in the material palette.

> Guidelines:

G1. Gates should match adjoining fences.

G2. Walls in front setbacks may act as retaining walls.

G3. Screen fencing and walls may be used to screen utilities, waste/recycling areas, and parking areas.

G4. Fences and/or walls may be used to screen rear and side setbacks, back yards, and lots which abut one another.

G6. Screening should have landscape material that is predominantly evergreen installed on the street or shared driveway side.

Figure 6.1 Low fences complement the building style, material and color. Plantings shall not obstruct the path of travel.

6.15 FURNISHINGS

> Standards:

S1. All site furnishings shall complement the architectural style, material, and color.

S2. Furnishings in private common open space shall be ADA compliant and not obstruct building access.

S3. Mailboxes shall be located in accordance with the US Postal Service regulations.

S4. Elements allowed in front setbacks include, but are not limited to: benches, chairs, tables, grill/outdoor barbeque, handrails, and outdoor umbrellas.

S5. Multi-family apartments may also have bicycle racks in the front setback.

S6. The following items are prohibited in front setbacks: trash/recycling receptacles, ganged mailboxes, utility units/meters, heating or air conditioning units.

S7. Side setbacks of end lots are permitted the same elements as front setbacks.

S8. Allowable elements in side and rear setbacks include, but are not limited to: rain cisterns, small covered compost bins, trash/recycling receptacles, mailboxes, utility meters, heating/air conditioning units.

S9. Restricted elements include, but are not limited to: bicycle racks, bollards, freestanding flagpoles, and playground equipment.

S10. Fixed benches, chairs, tables, as well as handrails, are additionally not permitted in shared driveways.

S11. Bollards are permitted at the ends of shared driveways, if perpendicular to the direction of travel, to control vehicular access, provided fire access not required. Bollards are not permitted in shared driveway interiors or parallel to the path of travel.

S12. Bollards, play equipment, small water features, and outdoor fireplaces or firepits are also permitted in multi-family private common open spaces.

S13. Handrails are not permitted in side setbacks.

> Guidelines:

G1. Trash receptacles should be covered with an attached lid.

G2. Trash receptacles in private common open spaces should have a rain guard over opening. Trash containers should be within/screened by an external housing.

G3. Ganged mailboxes are encouraged to be integrated with other elements.

6.16 STRUCTURES & ENCLOSURES

> Standards:

S1. Structures include elements such as arbors, trellises and pergolas. Enclosures include elements such as maintenance or storage sheds.

S2. Structures and enclosures are not permitted in the shared driveway right-of-way.

S3. Greenhouses and storage sheds are not permitted in the front or side setback.

S4. Detached structures or enclosures in setback areas shall not obstruct more than 25% of front building façade, or cover more than 20% of the setback area, be higher than the first story of the adjacent building, or obstruct windows.

S5. Side and rear setbacks less than 5 feet deep may not have structures.

S6. Structures shall have a minimum 18" path of travel.

S7. Structures and enclosures shall complement the architectural style, material, and color.

S8. Walk-in structures and enclosures, or those made of plastic, among others are not permitted in setbacks.

S9. Greenhouses and plastic structures or enclosures are not permitted in private common open spaces.

S10. In private common open spaces, permitted structures shall be a maximum of 10' high. Permitted enclosures, such as maintenance sheds, shall be a maximum of 8' high and not greater than 20 SF in footprint.

> Guidelines:

G1. Structures and enclosures may have plantings.

G2. Reclaimed/recycled materials are recommended.

G3. Detached structures or enclosures should not be higher than the first story of the adjacent building.

6.17 PLANTING FOR PRIVATE COMMON OPEN SPACES

For additional information on required and allowable plant density, size, species, installation, maintenance, etc. refer to the Planting Palette.

> Standards:

S1. A minimum of 40% of the landscape area shall be shaded by canopy trees.

S2. A minimum of 70% of the landscape area shall be permeable in multi-family typologies.

S3. A minimum of 50% of the landscape area shall be planted, except for 25% in multi-family typologies.

S4. Large trees shall be placed a minimum of 12' feet from the buildings.

S5. At the time construction is completed, bare soil on a lot shall be covered by shrubs, groundcover, or mulch.

S6. Artificial turf is prohibited.

> Guidelines:

G1. Of the total planted area, roughly 60% shall be planted with shrubs and 40% with groundcover.

G2. In multi-family typologies, plantings along street or shared driveway frontages should permit physical access and views into the open space. Dense, tall shrubs or low, spreading trees should be avoided. If planting beds are too dense to allow for foot traffic, provide a minimum of two entry paths into the private common open spaces.

G3. In multi-family typologies, consider dense, screening plantings along rear façades of adjoining units.

G4. In multi-family townhouse typologies, up to 30% of the landscape area may be used for resident allotment gardens and related structures and uses such as compost bins and storage sheds. A fence a maximum of 4' high should surround allotment gardens.

G5. Vines may be planted on vertical structures.

G6. Biofiltration planters are recommended.

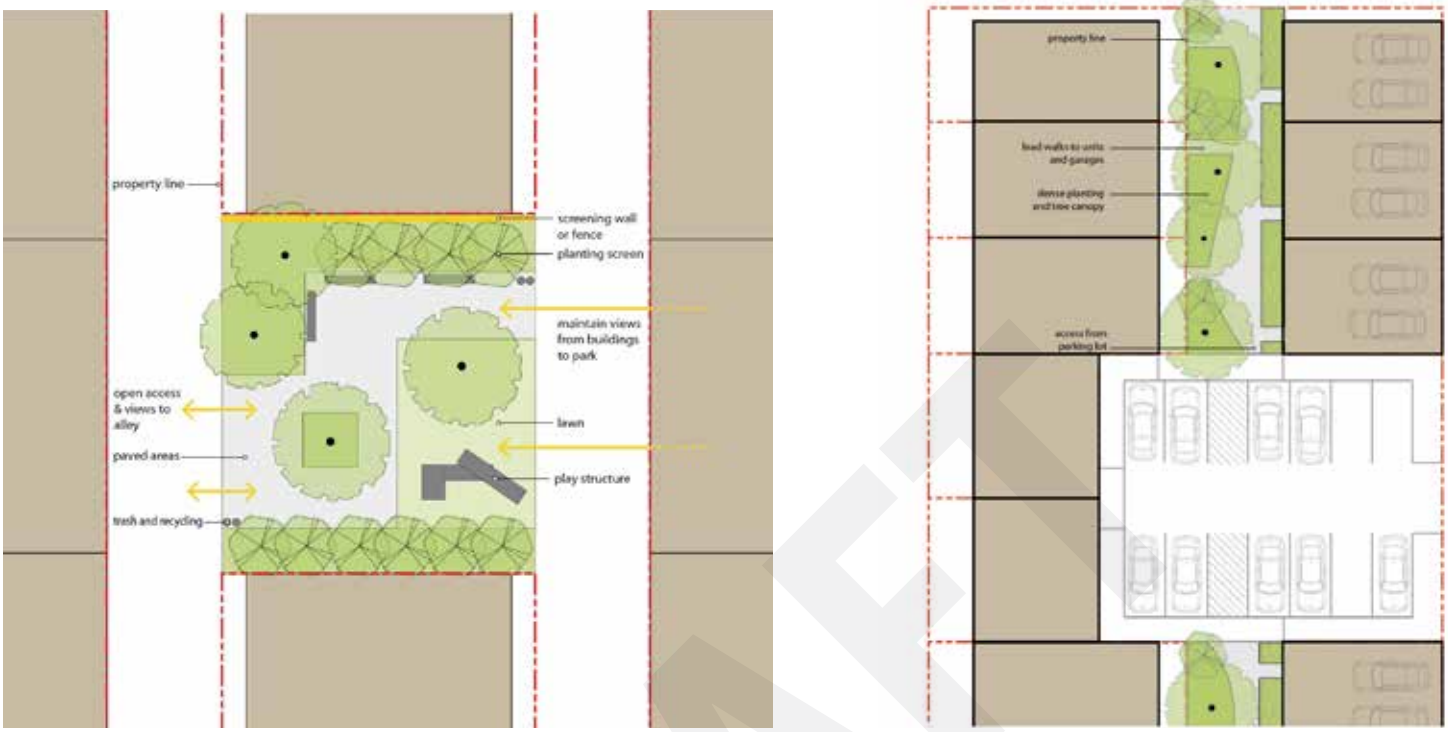
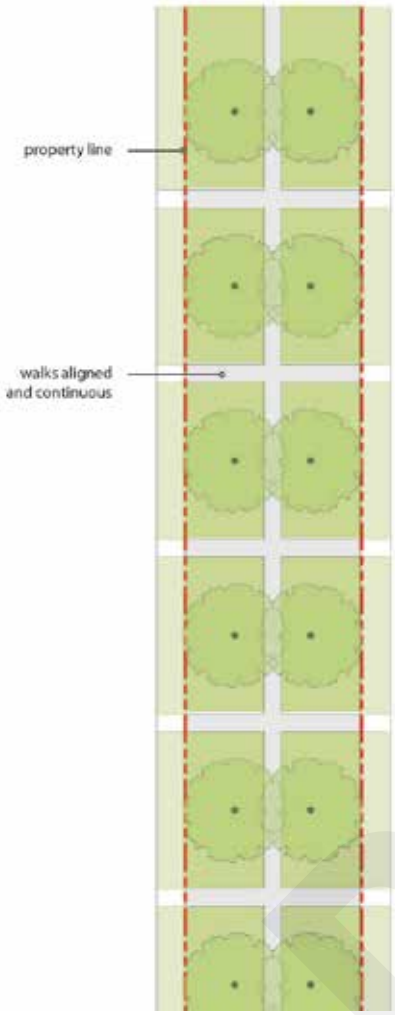


Figure 6.1 Private Common Open Space Square & Strip

Figure 6.1 Private Common Open Space includes hardscape for paths of travel, low vegetation, and small trees. Low walls are opportunities for siting as well as higher planting for spatial variety.

Figure 6.1 Private Common Open Space: Plant Diversity

Prohibited
Option 1 (symmetrical)



Prohibited
Option 2 (symmetrical)

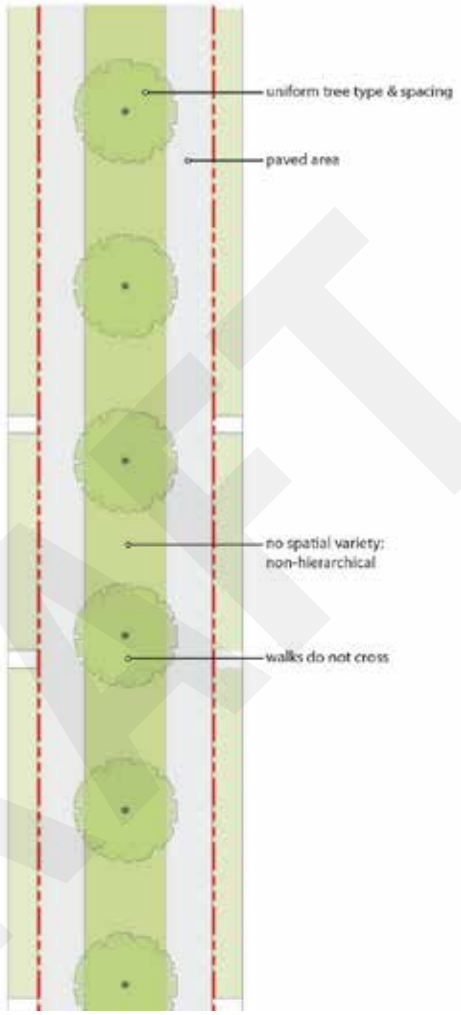


Figure 6.1 Private Common Open Space: Plant Diversity

6.18 SHARED DRIVEWAYS

For additional information on required and allowable plant density, size, species, installation, maintenance, etc. refer to the Planting Palette.

Additional standards and guidelines for hardscape and planting in shared driveways include the following.

> Standards:

S1. Shared driveways shall have a 25' wide right-of=way.

S2. A minimum 18' travel lane shall be negotiable by fire and other emergency vehicles.

S3. Plantings and furnishings are permitted as specified in the right-of-way, if a minimum 18' clear travel lane is maintained for emergency and fire access.

S4. The shared driveway right-of-way surface shall be flush.

S5. Curb cuts at shared driveway entrances are prohibited. Entrances to shared driveways shall be depressed curbs.

S6. Vehicular access to private garages shall be provided. If planting or other elements are installed adjacent to the building face or setback, a clear zone at least the width of the garage or driveway must be provided.

S7. A minimum 50% of the total shared driveway area shall be permeable.

S8. Planting beds shall be a maximum of 7' in width.

S9. Trees are permitted only in planters a minimum of 5'x5'.

S10. Turf and artificial turf are prohibited.

S11. In shared driveways parallel to primary roads, traffic calming measures shall be installed to discourage local traffic shortcuts.

> Guidelines:

G1. Allowable traffic calming measures include chicane planters, neck-down planters at shared driveway entrances, pedestrian paving, among others.

G2. Planters and traffic calming measures may alternate sides of the shared driveway provided the 18' clear EVA is maintained.

G3. Planting areas may be asymmetrical within the shared driveway.

G4. Vines may be planted on vertical structures.

G5. Potted plants are permitted but raised planters are not recommended.

G6. Biofiltration planters are recommended.

6.19 LIGHTING

> Standards:

S1. All lights shall be coordinated and complement the style, material, and color of surrounding architecture and street furnishings.

S2. The following light types are prohibited: flood lights, , pedestrian pole lights, and path lights.

S3. Prohibited lights include: vehicular-rated bollard lights, free-standing flood lights, and vehicular pole lights.

S4. Pedestrian pole lights in the front setback shall be a minimum 3'-6" and a maximum of 8'-0" tall.

S5. Pedestrian pole lights shall be less intense than overhead street lights.

S6. No more than one pole light is permitted within

the front setback per unit.

S7. Pedestrian pole lights are not permitted in rear setbacks, or in side setbacks, except for the side setbacks of end units along streets.

> Guidelines:

G1. Exterior lighting should not be excessive and be the amount that is reasonable and necessary for safety and wayfinding.

G2. Pedestrian pole lights should be minimal in design and be in scale with the residential context.

G3. Outdoor lighting should not impact adjacent properties.

G4. Allowable light types include, but are not limited to: accent lights, decorative bollard lights, down lights, low-level path lights, landscape lights, up lights.

G5. Bollard lighting is recommended for pedestrian-oriented areas.

G6. In shared driveways, façade-mounted lights and ambient lighting from adjacent buildings are allowed.

G7. Façade-mounted lights in shared driveways should be mounted to garage or building facades at appropriate intervals.

Figure 6.1 Lighting is minimal in design and in-scale with the surrounding residential context.

LOCAL RETAIL

Intent & Objectives

6.21 OVERVIEW

Landscape for Local Retail emphasizes the importance of the pedestrian realm, indoor/outdoor activity, and the local traditions and vegetation of the Napa region.

6.22 PLANTING

For additional information on required and allowable plant density, size, species, installation, maintenance, etc. refer to Planting Palette.

> Standards:

S1. Plantings adjacent to buildings shall not directly obscure building windows.

S2. Turf is prohibited in setback areas.

S3. Large and medium trees are prohibited in setbacks less than 20'. Small trees are prohibited for setbacks less than 12'.

S4. Trees and surface planting beds are prohibited adjacent to the building.

S5. Between streets and surface parking lots, 75% of the setback shall be pervious and trees are required.

S6. Planting screens may be a maximum of 4' tall if they are not obscuring windows.

> Guidelines:

G1. Planting in setbacks may be used for screening and should be predominantly evergreen.

G2. Planting should use a limited species palette.

G3. Plantings in setbacks may include trees (per requirements), vines or espalier, low-medium shrubs, groundcovers, window boxes and plantings in pots/planters or at grade.

G4. Bio-filtration planters are recommended for rear setbacks.

Figure 6.2 Hardscape material transitions can signal changes in programming and use, as well as adding visual interest and texture. Wood planks and cobbles emphasize pedestrian orientation.

STANDARDS MATRIX

	Furnishings con't	6. Benches, chairs and tables that are fixed, as well as handrails, are not permitted in alleys 7. Bollards are permitted at ends of alleys, if perpendicular to travel direction, to control vehicular access, provided fire access is not required, and bollards are not permitted in alley interiors or parallel to path of travel 8. Handrails are not permitted in side setbacks
	Structures & Enclosures	1. Structures include elements such as: arbors, trellises and pergolas, and enclosures include elements such as: maintenance or storage sheds 2. Strucutres and enclosures are not permitted in the alley right-of-way 3. Greenhouses and storage sheds are not permitted in the front or side setback 4. Detached structures or enclosures in setback areas shall not obstruct more than 25% of front building facade, or cover more than 20% of setback area or obstruct windows 5. Side or rear setbacks less than 5 feet deep may not have structures 6. Structures and enclosures shall complement the architectural style, material, color 7. Walk-in structures and enclosures, or those made of plastics, are not permitted in setbacks 8. Greenhouses and plastic structures/enclosures not permitted in private common open 9. In private common open spaces, permitted structures shall be maximum of 10' high, and permitted enclosures shall be maximum 8' high and maximum 20 sq. ft. footprint
	Planting for Private Common Open Spaces	1. A minimum of 40% of landscape area shall be shaded by canopy trees 2. A minimum of 70% of landscape area shall be permeable in multi-family typologies 3. A minimum of 50% of landscape area shall be permeable in typologies that are not multi-family 4. Of total planted area, 60% shall be planted with shrubs and 40% with groundcover or turf 5. Large tress shall be placed a minimum of 12' from the buildings 6. At the time construction is completed, any bare soil on a lot shall be convered by shrubs, groundcover or mulch 7. Prohibited materials include but are not limited to artificial turf
	Alleys	1. Alleys shall have 25' wide right of way 2. Plantings/furnishings are permitted as specified in the right of way, if a minimum 18' clear travel lane is maintained for emergency and fire access 3. Entrances to alleys shall be curb cuts rather than at grade intersections 4. Vehicular access to private garages shall be provided, if planting or other elements installed adjacent to building face/setback, a clear zone at least garage/driveway width must be provided 5. A minimum 50% of the total alley area shall be permeable 6. Planting beds shall be a maximum 7' in width 7. Trees are permitted only in planters a minimum 5' width 8. Turf and artificial turf are prohibited 9. In alleys parallel to primary roads, traffic calming measures shall be installed
	Lighting	1. All lights shall complement the architectural style, material, color 2. The following light types are prohibited: vehicular-rated bollard, free-standing floor, light attached to trees, overhead string lights, vehicular pole lights 3. Decorative pedestrian pole lights in front setback shall be minimum 3'-6" and maximum 8' tall 4. No more than 1 decorative pole light is permitted within the front setback 5. Decorative pole lights are not permitted in side setbacks

TO BE UPDATED, PENDING FINAL STANDARDS

6.23 HARDSCAPE

> Standards:

S1. All hardscape materials shall be complementary and coordinate with the architecture style in material, and color.

S2. Run-off from impervious surfaces shall be directed to pervious areas.

S3. Pedestrian access between entrances and the adjacent street and parking lot shall be provided.

S4. Walkways and hardscape areas shall have a minimum width of 5', maximum slope of 5% and maximum cross slope of 2%.

S5. Hardscape pads shall be provided in rear setbacks for trash/recycling receptacles.

> Guidelines:

G1. Pedestrian paths in rear setbacks should use permeable pavements.

6.24 FENCES & WALLS

> Standards:

S1. Fence and wall materials shall complement the building material and color.

S2. Fences and walls are prohibited along building frontage.

> Guidelines:

G1. Screen fencing and walls may be used to screen utilities, waste/recycling areas, and parking areas.

G2. Walls may act as retaining walls.

6.25 SITE FURNISHINGS & ENCLOSURES

> Standards:

S1. Site furnishings shall complement building material and color.

S2. Bicycle racks are required at a minimum of 1 per 1,000 GSF retail space.

S3. Allowable elements include, but are not limited to: benches, chairs, tables, grill/barbeque, umbrellas, bike racks.

S4. Trash/recycling receptacles are permitted in rear setbacks.

S5. Prohibited elements include: mailboxes, utility meters, heating or air conditioning units, bollards, freestanding flagpoles.

S6. Structures and enclosures are not permitted.

> Guidelines:

G1. Trash receptacles should be covered with an attached lid.

6.26 LIGHTING

> Standards:

S1. Lights shall complement the material and color of surrounding architecture and street furnishings.

S2. Only accent lighting is allowed.

> Guidelines:

G1. Exterior lighting should not be excessive and be the amount that is reasonable and necessary for safety and wayfinding.

G2. Outdoor lighting should not impact adjacent properties.

OFFICE

Intent & Objectives

6.31 OVERVIEW

Landscape and open space for Office mediates the transition between residential and office uses and creates outdoor space for workers and visitors.

6.32 PLANTING

For additional information on required and allowable plant density, size, species, installation, maintenance, etc. refer to Planting Palette.

> Standards:

S1. 75% of the setback area shall be planted, excluding area required to meet minimum access and circulation requirements.

S2. Plantings adjacent to buildings shall not obscure building windows.

S3. Turf and vegetable gardens are prohibited in setback areas.

S4. Large and medium trees are prohibited in setbacks less than 20'. Small trees are prohibited for setbacks less than 12'.

S5. Planting screens may be a maximum of 4' tall if they are not obscuring windows.

> Guidelines:

G1. Planting in setbacks may be used for screening and should be predominantly evergreen.

G2. Planting should use a limited species palette.

G3. Plantings in setbacks may include trees (per requirements), vines or espalier, low-medium shrubs, groundcovers, window boxes and plantings in pots/planters or at grade.

G4. Grasses, perennials, and groundcovers are preferred to shrubs.

G5. Bio-filtration planters are recommended for rear setbacks.

Figure 6.3 Low seating in hardscape common open spaces provides opportunities for outdoor use and gathering. Planting should be predominantly evergreen and preferably grasses, perennials, and groundcovers.

	Furnishings con't	6. Benches, chairs and tables that are fixed, as well as handrails, are not permitted in alleys 7. Bollards are permitted at ends of alleys, if perpendicular to travel direction, to control vehicular access, provided fire access is not required, and bollards are not permitted in alley interiors or parallel to path of travel 8. Handrails are not permitted in side setbacks
	Structures & Enclosures	1. Structures include elements such as: arbors, trellises and pergolas, and enclosures include elements such as: maintenance or storage sheds 2. Strucutres and enclosures are not permitted in the alley right-of-way 3. Greenhouses and storage sheds are not permitted in the front or side setback 4. Detached structures or enclosures in setback areas shall not obstruct more than 25% of front building facade, or cover more than 20% of setback area or obstruct windows 5. Side or rear setbacks less than 5 feet deep may not have structures 6. Structures and enclosures shall complement the architectural style, material, color 7. Walk-in structures and enclosures, or those made of plastics, are not permitted in setbacks 8. Greenhouses and plastic structures/enclosures not permitted in private common open 9. In private common open spaces, permitted structures shall be maximum of 10' high, and permitted enclosures shall be maximum 8' high and maximum 20 sq. ft. footprint
	Planting for Private Common Open Spaces	1. A minimum of 40% of landscape area shall be shaded by canopy trees 2. A minimum of 70% of landscape area shall be permeable in multi-family typologies 3. A minimum of 50% of landscape area shall be permeable in typologies that are not multi-family 4. Of total planted area, 60% shall be planted with shrubs and 40% with groundcover or turf 5. Large tress shall be placed a minimum of 12' from the buildings 6. At the time construction is completed, any bare soil on a lot shall be convered by shrubs, groundcover or mulch 7. Prohibited materials include but are not limited to artificial turf
	Alleys	1. Alleys shall have 25' wide right of way 2. Plantings/furnishings are permitted as specified in the right of way, if a minimum 18' clear travel lane is maintained for emergency and fire access 3. Entrances to alleys shall be curb cuts rather than at grade intersections 4. Vehicular access to private garages shall be provided, if planting or other elements installed adjacent to building face/setback, a clear zone at least garage/driveway width must be provided 5. A minimum 50% of the total alley area shall be permeable 6. Planting beds shall be a maximum 7' in width 7. Trees are permitted only in planters a minimum 5' width 8. Turf and artificial turf are prohibited 9. In alleys parallel to primary roads, traffic calming measures shall be installed
	Lighting	1. All lights shall complement the architectural style, material, color 2. The following light types are prohibited: vehicular-rated bollard, free-standing floor, light attached to trees, overhead string lights, vehicular pole lights 3. Decorative pedestrian pole lights in front setback shall be minimum 3'-6" and maximum 8' tall 4. No more than 1 decorative pole light is permitted within the front setback 5. Decorative pole lights are not permitted in side setbacks

TO BE UPDATED, PENDING FINAL STANDARDS

6.33 HARDSCAPE

> Standards:

S1. All hardscape materials shall be complementary and coordinate with building architecture in material, and color.

S2. Run-off from impervious surfaces shall be directed to pervious areas.

S3. Pedestrian access between entrances and the adjacent street and parking lot shall be provided.

S4. Walkways shall be a minimum 5' wide with a maximum slope of 5% and maximum cross slope of 2%.

S5. Hardscape pads shall be provided in rear setbacks for trash/recycling receptacles.

> Guidelines:

G1. Spaces for outdoor dining and gathering are encouraged.

G2. Pedestrian paths in rear setbacks should use permeable pavements.

6.34 FENCES & WALLS

> Standards:

S1. Fence and wall materials shall complement the building material and color.

S2. Fences and walls are prohibited along building frontage.

> Guidelines:

G1. Fencing and walls may be used to screen utilities, waste/recycling areas, and parking areas.

G2. Walls may act as retaining walls.

6.35 SITE FURNISHINGS & ENCLOSURES

> Standards:

S1. Site furnishings shall complement building material and color.

S2. Bicycle racks are required at a minimum of 1 per 1,000 GSF retail space.

S3. Allowable elements include, but are not limited to: benches, chairs, tables, grill/barbeque, umbrellas, bike racks.

S4. Trash/recycling receptacles are permitted in rear setbacks.

S5. Prohibited elements include: mailboxes, utility meters, heating or air conditioning units, bollards, freestanding flagpoles.

S6. Structures and enclosures are not permitted.

> Guidelines:

G1. Trash receptacles should be covered with an attached lid.

6.36 LIGHTING

> Standards:

S1. Lights shall complement the material and color of surrounding architecture and street furnishings.

S2. Only accent lighting is allowed.

> Guidelines:

G1. Exterior lighting should not be excessive and be the amount that is reasonable and necessary for safety and wayfinding.

G2. Outdoor lighting should not impact adjacent properties.

GARAGE

Intent & Objectives

6.41 OVERVIEW

» Plantings for Garage mediate the transition and form of the building to the public realm, public open spaces and adjacent Residential, Office, Local Retail uses. A primary important function is the screening of building facades along active streets.

6.42 PLANTING

For additional information on required and allowable plant density, size, species, installation, maintenance, etc. refer to Planting Palette.

> Standards:

S1. Plantings adjacent to retail frontages shall not obscure retail windows.

S2. Planting in setbacks shall be used for screening parking frontages and should be predominantly ever-green.

S3. Turf and vegetable gardens are prohibited in setback areas.

S4. Large and medium trees are prohibited in setbacks less than 20'. Small trees are prohibited for setbacks less than 12'.

> Guidelines:

G1. Planting should use a limited species palette.

G2. Plantings in setbacks may include trees (per requirements), vines/espalier, low-medium shrubs, groundcovers, plantings in pots/planters or at grade.

Figure 6.4 Plantings in setbacks shall be used for screening Garage frontages and should be predominantly evergreen. Vines and espalier relate to the Napa region.

STANDARDS MATRIX

LANDSCAPE	Planting	1. A minimum 25% and maximum 75% of front setback area shall be planted 2. Plantings shall not directly obscure building windows 3. Planting screens in front setbacks shall not be taller than 4' unless not obstructing windows 4. Landscape screening in setback areas shall comply with the planting palette 5. Plantings prohibited in setback areas include large trees, medium trees, and turf 6. All trees are prohibited in side setbacks 7. Rear setbacks less than 10' deep may not have trees
	Hardscape	1. All hardscape materials shall be complementary and coordinate with architecture style 2. Hardscape run-off shall be directed into landscaped areas 3. 25% of side setback areas shall be permeable 4. Planting minimums shall be met 5. Pedestrian access between unit entries and the adjacent street, alley or open space shall be provided in the front setback 6. Walkways leading to units within setback areas, and in private common open spaces, shall be minimum 3' wide with maximum 5% slope and maximum 2% cross-slope 7. Side setbacks shall have a minimum 18" clear and paved path of travel, except for end lots 8. To the extent possible, paved connections to individual units shall be staggered from the opposite side [illegible] 9. Paved driveways in rear setbacks shall provide access to all private garages 10. Pedestrian [illegible] and [illegible] space shall be provided 11. Hardscape ~~paving in rear setbacks must have maximum 5% slope~~, maximum 2% cross slope 12. Hardscape pads shall be provided in rear setbacks for trash/recycling receptacles
	Fences & Walls	1. Public acces to private common open space and alleys shall be maintained, and gates, fences, walls or other structures limiting public access are prohibited 2. Fences/walls are not permitted in alley right-of-ways 3. Fence/wall materials shall complement building architectural style, material, color 4. Privacy fences/walls are prohibited in front yards: fences and walls shall be maximum 36" tall 5. Any fence/wall in a side or rear setback shall be a maximum of 8' tall 6. For fences along slopes, equal increment level fence steps must be used to ensure all vertical pickets remain vertical 7. Fences/walls in the front setback shall run the full length, and parallel to, the property line 8. Fences/walls along shared property line must be shared; two parallel fences not permitted 9. Any fence/wall shall run along the property line except where it returns to the building 10. Fences/walls in front setbacks that return to building must terminate at right angle to front facade 11. Gates, where used, shall swing into the property rather than onto sidewalk/open space 12. All fence/wall screening must be in accordance with screening standards in material palette
	Furnishings	1. All site furnishings shall complement the architectural style, material and color 2. Furnishings in private common open space shall be ADA compliant 3. Prohibited in front setbacks: trash/recycling receptacles, ganged mailbox, utility units/meters 4. Mailboxes shall be located in accordance with the US Postal Service regulations 5. Prohibited site elements include but not limited to: bicycle racks, bollards, free-standing flagpoles and playground equipment

TO BE UPDATED, PENDING FINAL STANDARDS

6.43 HARDSCAPE

> Standards:

S1. All hardscape materials shall be complementary and coordinate with building architecture in material, and color.

S2. Run-off from impervious surfaces shall be directed to pervious areas.

S3. Pedestrian access between entrances and the adjacent street and parking lot shall be provided.

S4. Walkways shall be a minimum 5' wide with a maximum slope of 5%, maximum cross slope of 2%.

6.44 FENCES & WALLS

> Standards:

S1. Fencing and walls shall be used to screen garage frontage areas, utilities, and waste/recycling areas.

> Guidelines:

G1. Walls may act as retaining walls.

6.45 SITE FURNISHINGS & ENCLOSURES

> Standards:

S1. Site furnishings shall complement building material/color.

S2. Allowable elements include, but are not limited to: benches, chairs, tables, umbrellas, bike racks.

S3. Trash/recycling receptacles are permitted in rear setbacks.

S4. Prohibited elements include: mailboxes, utility meters, heating or air conditioning units, bollards, freestanding flagpoles.

S5. Structures and enclosures are not permitted.

> Guidelines:

G1. Trash receptacles should be covered with an attached lid.

6.46 LIGHTING

> Standards:

S1. Lights shall complement the material and color of surrounding architecture and street furnishings.

S2. Only accent lighting is allowed.

> Guidelines:

G1. Exterior lighting should not be excessive and be the amount that is reasonable and necessary for safety and wayfinding.

G2. Garage interior lighting and outdoor lighting should not impact adjacent properties.

SUSTAINABILITY

Intent & Objectives

6.51 OVERVIEW

Landscape Sustainability encompasses the design, construction, operation and maintenance of the site. Its goals and elements seek to establish a balance beneficial to both the users and Napa's unique natural environment. In addition to complying with the Napa County requirements and codes, additional measures intended to protect and conserve resources such as water, energy, soil and construction materials are outlined below.

6.52 OBJECTIVES

- Recharge of groundwater supply through infiltration
- Mitigate pollutants from stormwater runoff
- Minimize need for irrigation water
- Encourage and sustain local fauna and flora
- Minimize impact on night sky

Figure 6.5 Sustainable stormwater features recharge groundwater and also contribute to the public realm with passive cooling, planting, and encouraging local flora and fauna.

STANDARDS MATRIX

LANDSCAPE	Planting	1. A minimum 25% and maximum 75% of front setback area shall be planted 2. Plantings shall not directly obscure building windows 3. Planting screens in front setbacks shall not be taller than 4' unless not obstructing windows 4. Landscape screening in setback areas shall comply with the planting palette 5. Plantings prohibited in setback areas include large trees, medium trees, and turf 6. All trees are prohibited in side setbacks 7. Rear setbacks less than 10' deep may not have trees
	Hardscape	1. All hardscape materials shall be complementary and coordinate with architecture style 2. Hardscape run-off shall be directed into landscaped areas 3. 25% of side setback areas shall be permeable 4. Planting minimums shall be met 5. Pedestrian access between unit entries and the adjacent street, shared driveway or open space shall be provided in the front setback 6. Walkways leading to units within setback areas, and in private common open spaces, shall be minimum 3' wide with maximum 5% slope and maximum 2% cross-slope 7. Side setbacks shall have a minimum 18" clear and paved path of travel, except for end lots 8. To the extent possible, paved connections to individual units shall be staggered from the opposite side [illegible] 9. Paved driveways in rear setbacks shall provide access to all private garages 10. Pedestrian access between entries and [illegible] driveway/open space shall be provided 11. Hardscape paving in rear setbacks must have maximum 5% slope, maximum 2% cross slope
	Fences & Walls	1. Public acces to private common open space and shared driveways shall be maintained, and gates, fences, walls or other structures limiting public access are prohibited 2. Fences/walls are not permitted in shared driveway right-of-ways 3. Fence/wall materials shall complement building architectural style, material, color 4. Privacy fences/walls are prohibited in front yards: fences and walls shall be maximum 36" tall 5. Any fence/wall in a side or rear setback shall be a maximum of 8' tall 6. For fences along slopes, equal increment level fence steps must be used to ensure all vertical pickets remain vertical 7. Fences/walls in the front setback shall run the full length, and parallel to, the property line 8. Fences/walls along shared property line must be shared; two parallel fences not permitted 9. Any fence/wall shall run along the property line except where it returns to the building 10. Fences/walls in front setbacks that return to building must terminate at right angle to front facade 11. Gates, where used, shall swing into the property rather than onto sidewalk/open space 12. All fence/wall screening must be in accordance with screening standards in material palette
	Furnishings	1. All site furnishings shall complement the architectural style, material and color 2. Furnishings in private common open space shall be ADA compliant 3. Prohibited in front setbacks: trash/recycling receptacles, ganged mailbox, utility units/meters 4. Mailboxes shall be located in accordance with the US Postal Service regulations 5. Prohibited site elements include but not limited to: bicycle racks, bollards, free-standing flagpoles and playground equipment

TO BE UPDATED, PENDING FINAL STANDARDS

	Furnishings con't	6. Fixed benches, chairs and tables, as well as handrails, are not permitted in shared driveways 7. Bollards are permitted at ends of alleys, if perpendicular to travel direction, to control vehicular access, provided fire access is not required, and bollards are not permitted in alley interiors or parallel to path of travel 8. Handrails are not permitted in side setbacks
	Structures & Enclosures	1. Structures include elements such as: arbors, trellises and pergolas, and enclosures include elements such as: maintenance or storage sheds 2. Strucutres and enclosures are not permitted in the alley right-of-way 3. Greenhouses and storage sheds are not permitted in the front or side setback 4. Detached structures or enclosures in setback areas shall not obstruct more than 25% of front building facade, or cover more than 20% of setback area or obstruct windows 5. Side or rear setbacks less than 5 feet deep may not have structures 6. Structures and enclosures shall complement the architectural style, material, color 7. Walk-in structures and enclosures, or those made of plastics, are not permitted in setbacks 8. Greenhouses and plastic structures/enclosures not permitted in private common open 9. In private common open spaces, permitted structures shall be maximum of 10' high, and permitted enclosures shall be maximum 8' high and maximum 20 sq. ft. footprint
	Planting for Private Common Open Spaces	1. A minimum of 40% of landscape area shall be shaded by canopy trees 2. A minimum of 70% of landscape area shall be permeable in multi-family typologies 3. A minimum of 20% of landscape area shall be permeable in typologies that are not multi-family 4. Of total planted area, 60% shall be planted with shrubs and 40% with groundcover or turf 5. Large tress shall be placed a minimum of 12' from the buildings 6. At the time construction is completed, any bare soil on a lot shall be convered by shrubs, groundcover or mulch 7. Prohibited materials include but are not limited to artificial turf
	Alleys	1. Alleys shall have 25' wide right of way 2. Plantings/furnishings are permitted as specified in the right of way, if a minimum 18' clear travel lane is maintained for emergency and fire access 3. Entrances to alleys shall be curb cuts rather than at grade intersections 4. Vehicular access to private garages shall be provided, if planting or other elements installed adjacent to building face/setback, a clear zone at least garage/driveway width must be provided 5. A minimum 50% of the total alley area shall be permeable 6. Planting beds shall be a maximum 7' in width 7. Trees are permitted only in planters a minimum 5' width 8. Turf and artificial turf are prohibited 9. In alleys parallel to primary roads, traffic calming measures shall be installed
	Lighting	1. All lights shall complement the architectural style, material, color 2. The following light types are prohibited: vehicular-rated bollard, free-standing floor, light attached to trees, overhead string lights, vehicular pole lights 3. Decorative pedestrian pole lights in front setback shall be minimum 3'-6" and maximum 8' tall 4. No more than 1 decorative pole light is permitted within the front setback 5. Decorative pole lights are not permitted in side setbacks

TO BE UPDATED, PENDING FINAL STANDARDS

6.53 STORMWATER MANAGEMENT

Managing stormwater on-site proves beneficial to plants and the environment. Water absorption that soaks into the soil slowly with low impact can be achieved through a variety of designed features. Pervious hardscape surface, biofiltration planters/rain gardens, vegetative swales all contribute to the recharge of groundwater and the reduction of site run-off.

> Standards:

S1. Biofiltration plantings shall be a diverse mixture of species, with no monocultures.

S2. A maintenance plan shall be developed for all stormwater management elements and shall include occasional trash removal, pruning and replacement of plants.

S3. Compaction of soil shall be avoided to increase infiltration.

> Guidelines:

G1. Low Impact Development (LID) stormwater techniques such as swales, rain gardens, flow-through planters, biofilters, and pervious paving should be considered and integrated where possible.

G2. In areas of low vehicular traffic consider using alternatives to impervious asphalt such as pervious asphalt or concrete.

G3. Bioswales, rain gardens, and other stormwater elements should be placed at least 10'-0" from all building foundations.

G4. Pervious pavements should be used in as many pedestrian and vehicular areas as possible to promote the direct recharge of the water table.

G5. Consider mechanical separators and/or filters for all biofiltration techniques.

G6. The sides of swales should be gently sloped to reduce erosion.

G7. Flow-through planters should be used in areas where soil has poor infiltration as well as over podium conditions.

6.54 SOILS

Proper analysis of existing soil is a vital step in the early planning and design phases. Napa Pipe is in a unique condition since the majority of the site will be raised to meet flood elevation requirements. Importing new planting soil may not be necessary if fill material/soil may be amended. Testing soil pH, compaction, permeability, texture, and chemistry will help determine how to address the fill material/soil.

> Standards:

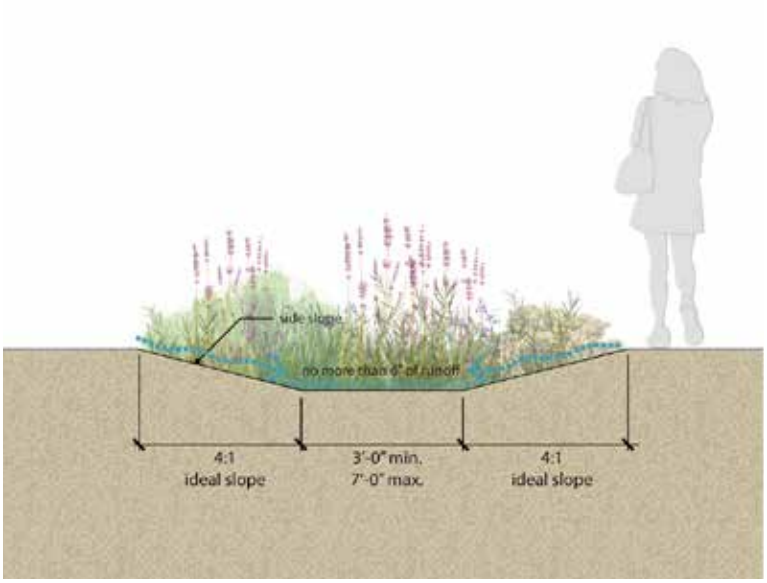
S1. Soil and irrigation water tests by a qualified professional are required prior to design.

S2. If the fill material is not adequate for planting, the appropriate amount of fill shall be excavated and replaced with new planting soil. See the Planting section for required soil depths.

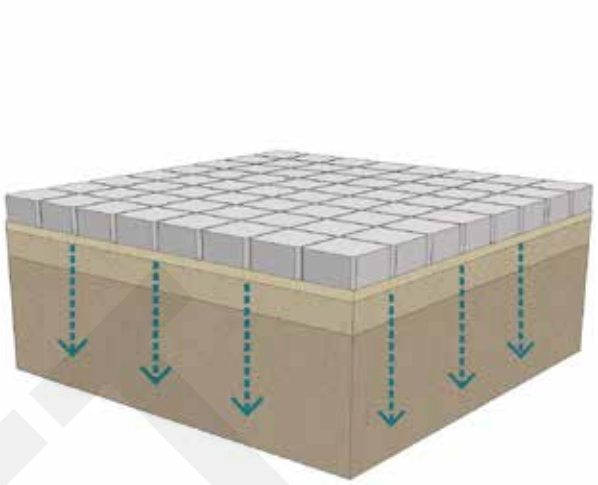
S3. Soil compaction protection plans shall be developed. 'No compaction zones' shall be identified with proper fencing and signage.

> Guidelines:

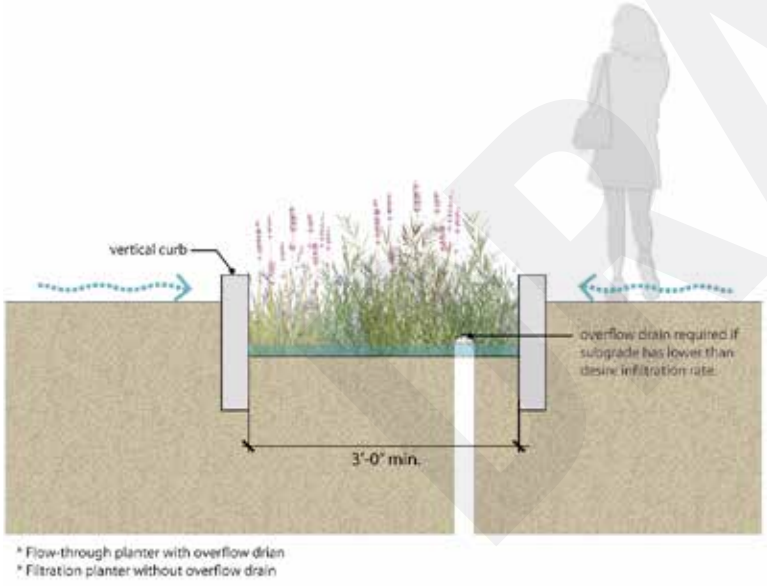
G1. Fill materials/soils should be amended as necessary to increase infiltration.



Vegetated Swale / Rain Garden



Permeable Paving



Flow-Through Planter & Infiltration Planter

Disconnected Leader

Figure 6.5 Biofiltration techniques

6.55 MICROCLIMATES

Microclimates will exist across the site. These may arise from differences in sun exposure, moisture and soil. Design practices should address these conditions in order to provide sustainable solutions.

> Standards:

S1. The selection of appropriate planting shall address the sunny and shady areas of the site.

S2. Seasonal microclimate shall be considered.

S3. Pedestrian areas shall be mostly shaded by tree canopy or shade structures.

> Guidelines:

G1. Paved areas should be limited to the amount needed for circulation and intensive program.

G2. Light paving materials are encouraged to reduce urban heat island effect.

G3. SRI (Solar Reflectance Index Calculator) values for paving surfaces of 29 or higher is recommended.

G4. Shade trees should be maximized.

5.65 NATIVE PLANTS

The use of native planting provides numerous benefits to the environment and community. Native plants are more suitable to local climate and therefore require less water after establishment. Healthy and adapted plants reduce the need for pesticides and fertilizers, limiting harmful chemical pollution in the groundwater and storm drains. Appropriate and sustainable plantings encourage and support regional habitat.

> Standards:

S1. The use of invasive plants is not permitted.

> Guidelines:

G1. The use of non-indigenous plant species, especially those with high water demands, should be limited.

G2. Emphasis should be placed on native plants that are adaptable to projected climate change.

G3. Turf should be minimized.

5.66 MATERIALS SOURCE

Material selection should be appropriate to the site's history, culture and climate. Use of local materials reduce the costs and pollution associated with transportation.

> Guidelines:

G1. Locally-produced materials should be used where appropriate and practical.

5.67 RENEWABLE & RECYCLED MATERIALS

The use of renewable and recycled materials preserves water, energy, and resources.

> Guidelines:

G1. Recycled materials should be used where appropriate and practical.

G2. Consider use of materials with recycled content.

G3. Construction material should be recycled and reused when possible.

G4. Organic mulches made out of landscape trimmings and grass clippings are encouraged.

	VEGETATED SWALE	RAIN GARDEN (OR BIORENTION AREAS)	PERVIOUS PAVING	INFILTRATION PLANTERS	FLOW-THROUGH PLANTERS
QUALITIES	Main function: Capture & convey stormwater Shallow, captures, conveys, potentially infiltrates. Slight longitudinal slope. Depressed with side slopes.	Main function: Maximum storage runoff Shallow, captures, slows, filters water. Typically larger areas. No longitudinal slope. Depressed. Main function: maximum storage of runoff. Versatility in shape.	Main function: Infiltration of stormwater Allows rain water to flow and soak into soil.	Main function: Capture & retain storm-water Contained landscape areas. Capture and retain stormwater runoff. Narrow, flat-bottom. Have vertical side walls instead of side slopes.	Main function: Capture & retain storm-water Contained landscape areas. Capture and retain stormwater runoff. Narrow, flat-bottom. Have vertical side walls instead of side slopes. Excess water moved into underdrain systems. Does not infiltrate.
BENEFITS					
GROUND WATER RECHARGE	x	x	x	x	
STORMWATER RUN-OFF REDUCTION		x	x	x	x
WATER QUALITY TREATMENT	x	x		x	
RUNOFF VELOCITY REDUCTION	x	x			
APPLICATIONS					
SETBACK AREAS		x	x		
PRIVATE COMMON OPEN SPACES	x	x	x		x (planters over podium)
SHARED DRIVEWAYS	x		x		
SURFACE PARKING	x	x	x	x	x

Figure 6.5 Stormwater Management Strategies

5.68 IRRIGATION & WATER USE

> Standards:

S1. Irrigation shall be provided for all plantings until establishment (3-5 years). After this time, irrigation shall be used only in conditions of extreme heat and drought.

S2. Plants shall be selected for low water demands.

S3. Efficient irrigation systems and technologies (such as rain or moisture sensors and soil tensiometers) shall be used.

S4. All landscape areas shall have a layer of mulch in order to retain moisture and reduce water needs.

S5. Any cisterns or water harvesting tanks shall be covered securely.

> Guidelines:

G1. Grey water and rain water may be used for landscape irrigation.

G2. Plants with similar water needs should be grouped together and share the same irrigation zone.

G3. More efficient alternatives to the traditional sprinkler heads with lower water use should be considered. These include, but are not limited to: hose, drip or subsurface irrigation.

G4. Cisterns or rain water harvesting tanks are allowed for specific typologies.

G5. Any cisterns or water harvesting tanks should have a maintenance plan that addresses potential clogging by leaves or other debris.

G6. Disconnected leaders that deposit roof water into planters or cisterns are allowed and are encouraged.

5.69 LIGHTING

Outdoor lighting may serve many purposes in the open landscape. Lighting is required for practical visibility and way-finding but may also create ambiance. Sustainable lighting practices address the strategic placement of lights, light levels, fixture type, and light efficiency. In order to minimize wasteful light pollution and light consumption, all lighting within Napa Pipe should follow the Dark Sky guidelines.

> Standards:

S1. Outdoor lighting shall minimize light pollution.

S2. All lighting systems shall address appropriate lighting needs.

> Guidelines:

G1. Light should be directed only where it is needed.

G2. Glare and lighting up to the sky should be avoided.

G3. All landscape lighting should have low light levels.

G4. Energy efficient light fixtures are encouraged.

G5. Solar lighting is encouraged.

	SINGLE DRIVE AISLE PARKING LOT	MULITPLE DRIVE AISLE PARKING LOT
MINIMUM SHADING OF PAVEMENT	25%	10%
MAXIMUM RATIO OF IMPERVIOUS SURFACE AREA TO WATER-RECEIVING LANDSCAPE AREA	3:1	4:1
MINIMUM ON-SITE STORMWATER TREATMENT	50% of a 2" storm	35% of a 2" storm

Figure 6.5 Sustainability Requirements for Parking Lots

Figure 6.5 Parking Lot Infiltration Strategy

5.610 SUSTAINABLE SURFACE PARKING

Goals

- The principal visual aspect of the parking lot should not be long, uninterrupted rows of parked cars. Parking lots should be subdivided into a series of smaller, connected lots with landscaping strips and/or bioswales, pedestrian pathways, and shade trees.

- Parking lots should be configured and designed to reduce the apparent mass of paved surfaces and minimize stormwater impacts.

- Design and landscaping should make orientation and circulation legible and intuitive.

- Design should provide safe and convenient through-routes for pedestrians. Walkways should be attractive and well-defined by pavement treatment, raised walkways, landscaping and lighting.

- Site circulation should minimize the conflict between pedestrians and vehicles.

Planting

> Standards:

S1. Trees shall be placed in the high areas of bio-filtration planters, unless the tree species is adaptable to frequently wet soil.

S2. The tree selection for parking lots shall be diverse and shall avoid a singles species per aisle.

S3. Canopy trees shall be used to shade paved surfaces; at maturity, shade coverage shall be 25% for parking lots with one drive aisle and 10 % for parking lots with multiple drive aisles.

S4. Bio-filtration shall be used to manage stormwater on-site; see table for required areas and ratios.

S5. Bio-filtration planters shall be a minimum of 5' wide and 5 parking stalls long.

S6. The perimeter of surface lots shall employ a vegetated swale or other bio-filtration technique with a minimum width of 10' between the public R.O.W. and the parking lot paving.

S7. Tree islands shall be a minimum size of 1 parking space (approximately 10'x20').

S8. A minimum area equal to ten (10%) of the gross interior parking area shall be landscaped (inclusive of stormwater management landscape elements).

S9. Mature tree canopy coverage shall be at least 50% of paved surfaces.

S10. Eighty-five percent (85%) of the available landscape areas shall be planted or be designed for performative stormwater management.

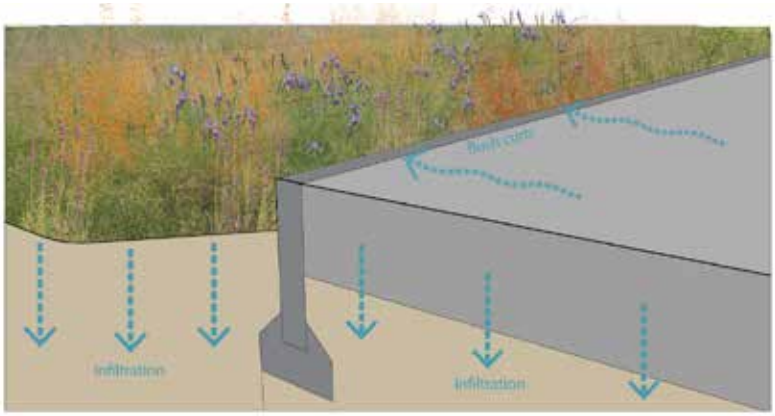
S11. No parking row shall be longer than fifteen (15) parking stalls without a planting area (inclusive of stormwater management landscape elements).

S12. A minimum 10' wide landscape area is required along all street frontages. This landscape area should include trees at a minimum of 30' o.c. and sufficient understory planting to screen the parking lot from adjacent streets.

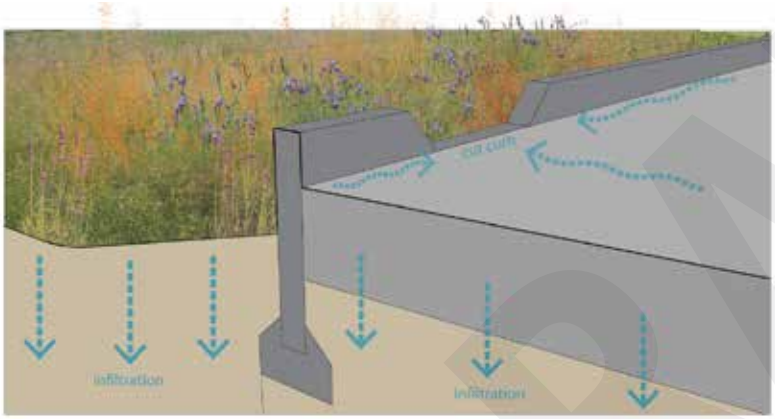
S13. Linear islands shall be no less than six (6) feet wide and a minimum seven (7) feet long, densely planted area shall be provided at the end of each parking aisle.

S14. Plantings supplemented with walls and/or fencing compatible with the architecture of the primary buildings are permitted.

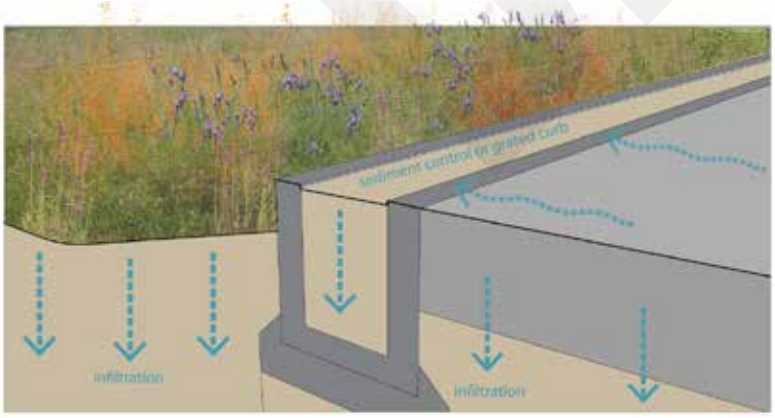
S15. Parking lot tree selection shall be diverse and shall avoid single species per aisle.



Flush Curb



Curb Cut



Sediment Control or Grated Curb

Figure 6.5 Curb Alternatives - Sections

Planting Con't

>Guidelines:

G1. Bioswales in parking areas should be at least 2' to 8' wide at the bottom and 2"-4" deep.

G2. Check dams and weirs may be used in steep conditions to slow the speed of stormwater runoff.

G3. Allowable bio-filtration types include, but are not limited to: bio-filtration planters, vegetated swales, rain garden.

G4. Landscaping within the parking areas should consist of a combination of end-row islands and linear islands between rows of parking stalls.

G5. Low-maintenance landscape should be used in and around parking lots using native plants and water-efficient irrigation techniques.

G6. Tree islands are encouraged to be a minimum size of 1 parking space, approximately 9'x18'.

G7. Sink-free tree islands should be limited in order to have opportunities for infiltration.

G8. Trees should be evenly distributed within the parking lot.

G9. Walls and fences should be no less than twenty percent (20%) transparent and should not exceed four (4) feet in height.

Hardscape

> Standards:

S1. All pavement shall slope towards bio-filtration areas.

S2. Wheel stops shall be provided for parking spaces fronting bio-filtration planters.

S3. Sidewalks or pedestrian paths shall be provided adjacent to the rear building façades to provide building access.

S4. Proper overflow systems shall be included.

S5. The vehicular travel lane shall be impervious.

S6. Pedestrian walkways shall be protected from vehicular traffic by planted buffers or raised curbs.

S7. Vertical grade changes greater than or equal to 6 inches and adjacent to pedestrian walkways shall have raised curbs, low-profile railings, change in materials, or other approaches to allow for safe pedestrian circulation.

S8. Safe pedestrian circulation shall be provided separately from the vehicular travel lane, and in a manner that protects planted areas from trampling and compaction.

S9. No parking row shall be longer than fifteen parking stalls without a planting area (inclusive of stormwater management landscape elements).

S10. Pervious paving shall be regularly maintained to ensure continued performance.

S11. Flow control devices are required as site conditions warrant.

S12. Means of connecting impervious surfaces to bio-filtration planters shall be provided.

>Guidelines:

G1. Avoid over-sized parking stalls and drive aisles when possible. Parking stalls and drive aisles should be as narrow as allowed by code in order to maximize planting and infiltration.

G2. Bio-filtration planters are recommended between

parking space aisles.

G3. Paving for parking stalls should be pervious.

G4. Cut or flush curbs are encouraged to connect impervious surfaces to bio-filtration planters.

G5. Raised curbs are recommended in areas with high vehicular traffic for safety.

G6. Infiltration trenches are allowed.

G7. A low-maintenance sediment control system is encouraged.

G8. Pedestrian bridges and walkways over depressed planters are allowed.

Figure 5.6 Bio-filtration planters with native, drought-tolerant plantings are recommended between drive aisles.

MATERIALS & IMPLEMENTATION

Intent & Objectives

6.61 OVERVIEW

The materials and colors of Napa Pipe should be inspired by the hills, woodlands, vineyards, and salt marshes of the landscape, the atmospherics of fog, sun and sky, the viticultural heritage of the Napa Valley, and the industrial aura of Napa Pipe. These complex strains of inspiration for Napa Pipe must be reconciled through sensitive, thoughtful, creative design.

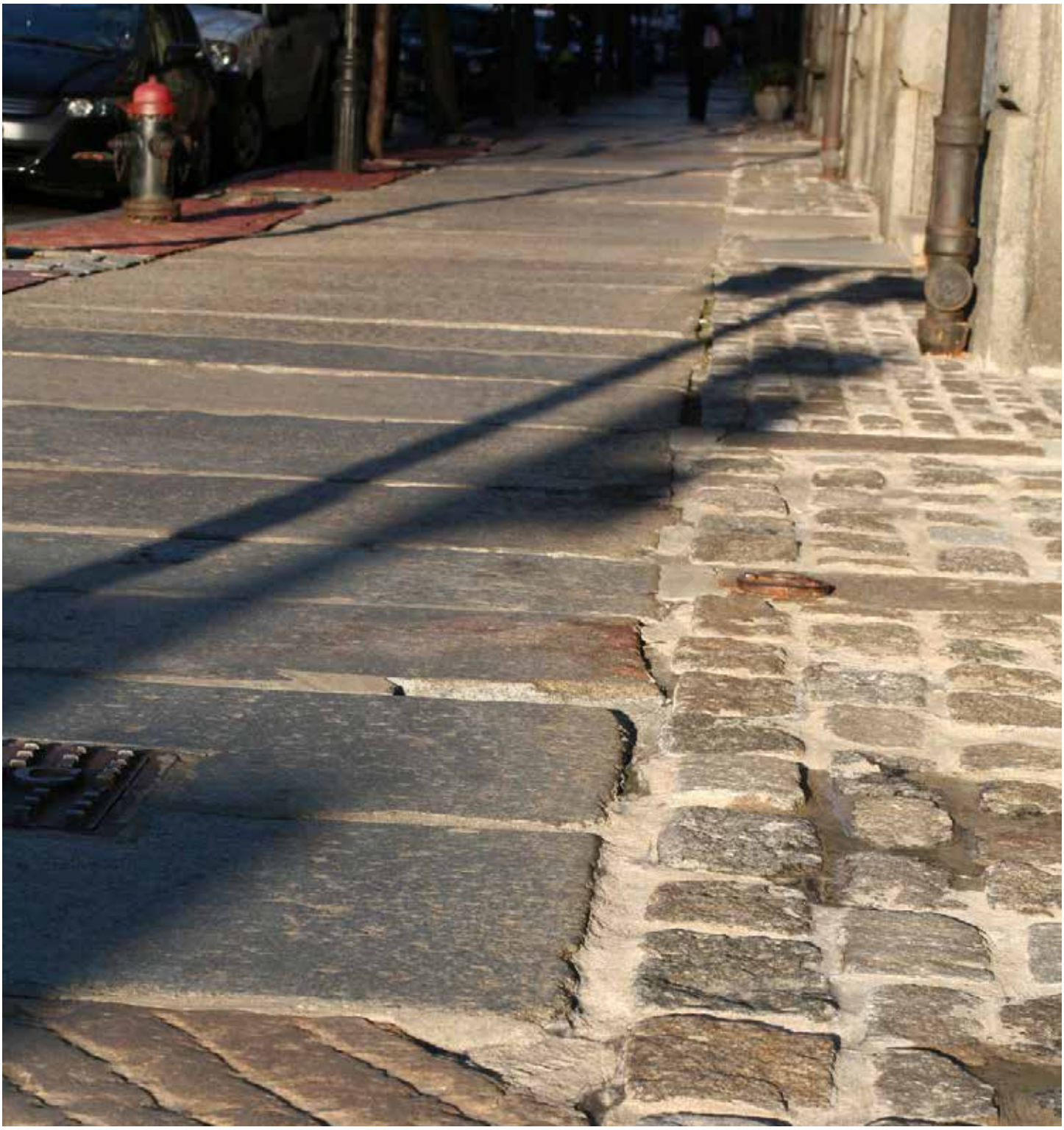


Figure 6.6 Variation in material, size, and color of hardscape creates texture, interest, and demarcates transition zones. Stone is a high-quality, durable, and attractive material preferred for pedestrian areas with high activity and visibility.

STANDARDS MATRIX

LANDSCAPE	Planting	1. A minimum 25% and maximum 75% of front setback area shall be planted 2. Plantings shall not directly obscure building windows 3. Planting screens in front setbacks shall not be taller than 4' unless not obstructing windows 4. Landscape screening in setback areas shall comply with the planting palette 5. Plantings prohibited in setback areas include large trees, medium trees, and turf 6. All trees are prohibited in side setbacks 7. Rear setbacks less than 10' deep may not have trees
	Hardscape	1. All hardscape materials shall be complementary and coordinate with architecture style 2. Hardscape run-off shall be directed into landscaped areas 3. 25% of side setback areas shall be permeable 4. Planting minimums shall be met 5. Pedestrian access between unit entries and the adjacent street, shared driveway or open space shall be provided in the front setback 6. Walkways leading to units within setback areas, and in private common open spaces, shall be minimum 3' wide with maximum 5% slope and maximum 2% cross-slope 7. Side setbacks shall have a minimum 18" clear and paved path of travel, except for end lots 8. To the extent possible, paved connections to individual units shall be staggered from the opposite side [illegible] 9. Paved driveways in rear setbacks shall provide access to all private garages 10. Pedestrian access between entries and [illegible] driveway/open space shall be provided 11. Hardscape paving in rear setbacks must have maximum 5% slope, maximum 2% cross slope
	Fences & Walls	1. Public acces to private common open space and shared driveways shall be maintained, and gates, fences, walls or other structures limiting public access are prohibited 2. Fences/walls are not permitted in shared driveway right-of-ways 3. Fence/wall materials shall complement building architectural style, material, color 4. Privacy fences/walls are prohibited in front yards: fences and walls shall be maximum 36" tall 5. Any fence/wall in a side or rear setback shall be a maximum of 8' tall 6. For fences along slopes, equal increment level fence steps must be used to ensure all vertical pickets remain vertical 7. Fences/walls in the front setback shall run the full length, and parallel to, the property line 8. Fences/walls along shared property line must be shared; two parallel fences not permitted 9. Any fence/wall shall run along the property line except where it returns to the building 10. Fences/walls in front setbacks that return to building must terminate at right angle to front facade 11. Gates, where used, shall swing into the property rather than onto sidewalk/open space 12. All fence/wall screening must be in accordance with screening standards in material palette
	Furnishings	1. All site furnishings shall complement the architectural style, material and color 2. Furnishings in private common open space shall be ADA compliant 3. Prohibited in front setbacks: trash/recycling receptacles, ganged mailbox, utility units/meters 4. Mailboxes shall be located in accordance with the US Postal Service regulations 5. Prohibited site elements include but not limited to: bicycle racks, bollards, free-standing flagpoles and playground equipment

TO BE UPDATED, PENDING FINAL STANDARDS

	Furnishings con't	6. Fixed benches, chairs and tables, as well as handrails, are not permitted in shared driveways 7. Bollards are permitted at ends of shared driveways, if perpendicular to travel direction, to control vehicular access, provided fire access is not required, and bollards are not permitted in shared driveway interiors or parallel to path of travel 8. Handrails are not permitted in side setbacks
	Structures & Enclosures	1. Structures include elements such as: arbors, trellises and pergolas, and enclosures include elements such as: maintenance or storage sheds 2. Strucutres and enclosures are not permitted in the shared driveway right-of-way 3. Greenhouses and storage sheds are not permitted in the front or side setback 4. Detached structures or enclosures in setback areas shall not obstruct more than 25% of front building facade, or cover more than 20% of setback area or obstruct windows 5. Side or rear setbacks less than 5 feet deep may not have structures 6. Structures and enclosures shall complement the architectural style, material, color 7. Walk-in structures and enclosures, or those made of plastics, are not permitted in setbacks 8. Greenhouses and plastic structures/enclosures not permitted in private common open 9. In private common open spaces, permitted structures shall be maximum of 10' high, and permitted enclosures shall be maximum 8' high and maximum 20 sq. ft. footprint
	Planting for Private Common Open Spaces	1. A minimum of 40% of landscape area shall be shaded by canopy trees 2. A minimum of 70% of landscape area shall be permeable in multi-family typologies 3. A minimum of 30% of landscape area shall be permeable typologies that are not multi-family 4. Of total planted area, 60% shall be planted with shrubs and 40% with groundcover or turf 5. Large tress shall be placed a minimum of 12' from the buildings 6. At the time construction is completed, any bare soil on a lot shall be convered by shrubs, groundcover or mulch 7. Prohibited materials include but are not limited to artificial turf
	Shared Driveways	1. Shared driveways shall have 25' wide right of way 2. Plantings/furnishings are permitted as specified in the right of way, if a minimum 18' clear travel lane is maintained for emergency and fire access 3. Entrances to shared driveways shall be curb cuts rather than at grade intersections 4. Vehicular access to private garages shall be provided, if planting or other elements installed adjacent to building face/setback, a clear zone at least garage/driveway width must be provided 5. A minimum 50% of the total shared driveway area shall be permeable 6. Planting beds shall be a maximum 7' in width 7. Trees are permitted only in planters a minimum 5' width 8. Turf and artificial turf are prohibited 9. In shared driveways parallel to primary roads, traffic calming measures shall be installed
	Lighting	1. All lights shall complement the architectural style, material, color 2. The following light types are prohibited: vehicular-rated bollard, free-standing floor, light attached to trees, overhead string lights, vehicular pole lights 3. Decorative pedestrian pole lights in front setback shall be minimum 3'-6" and maximum 8' tall 4. No more than 1 decorative pole light is permitted within the front setback 5. Decorative pole lights are not permitted in side setbacks

TO BE UPDATED, PENDING FINAL STANDARDS

6.62 HARDSCAPE

Hardscape areas shall be consistent with the Water Management Guidelines contained in the Development Plan.

> Standards:

S1. Hardscape material selections shall respond to the surrounding architecture and shall reinforce and define the open space within the site.

S2. Parking lanes or parking spaces in surface parking lots shall be pervious paving.

S3. All vehicular paving shall meet proper structural standards.

S4. Pervious paving shall be installed with well-drained sub-soil and base courses.

S5. Colored concrete shall have integral color; surface-applied color is prohibited.

S6. All hardscape surfaces shall have a minimum slope of 1%, a maximum slope of 5%, and a maximum cross slope of 2%.

S7. The following materials are prohibited: Artificial or simulated stone (paving or veneer), artificial boulders, painted paving (except for required traffic striping), stamped or artificially textured paving.

S8. The following hardscape colors are prohibited: Fluorescent colors, high intensity colors, metallic colors.

> Guidelines:

G1. Pervious paving systems are encouraged for vehicular and pedestrian areas.

G2. The use of recycled asphalt or concrete pavement to produce aggregate bases is recommended.

G3. Recycled bases may be produced when existing parking areas or buildings are demolished for site preparation.

G4. Locally sourced materials are recommended.

G5. Durable, high quality materials are recommended.

G6. Accent or decorative paving is permitted to designate entrances, high-traffic pedestrian areas or pedestrian gathering areas.

G7. Natural and neutral colors are recommended for all hardscape materials.

G8. For allowable paving materials, see table 'PAVING: Allowable materials per area"

G9. Allowable paving joint materials include, but are not limited to: stone fines, grass, gravel, mortar, sand.

G10. Allowable step materials include, but are not limited to: concrete (poured-in-place), concrete (precast), metal, natural stone, wood timber.

G11. Allowable decking materials include, but are not limited to: composite simulated wood, natural wood, reclaimed wood.

G12. Allowable concrete finishes includes, but are not limited to: exposed aggregate, brushed finish, salt finish, steel trowel.

G13. For allowable wall materials, see Fences, gates, and Walls section.

	SETBACKS	PRIVATE COMMON OPEN SPACE	SHARED DRIVEWAY R.O.W.	SURFACE PARKING
PAVING CHARACTERISTICS	- Withstand pedestrian-load only	- Withstand pedestrian-load only	- May be pervious - Shall withstand vehicular load	- May be pervious at parking stalls - May be impervious at vehicular traffic lanes - Withstand vehicular load
PAVING TYPES ALLOWED	- Ceramic tile - Cobblestone - Composite material - Concrete pavers - Concrete (poured-in-place) - Crushed stone - Flagstone - Gravel - Natural stone - Unit pavers (brick, concrete, stone) - Wood	- Cobblestone - Composite material - Concrete pavers - Concrete (poured-in-place) - Crushed stone - Flagstone - Gravel - Natural stone - Reinforced grass - Rubber playground surfacing - Unit pavers (brick, concrete, stone)	- Ashpalt - Asphalt (pervious) - Cobblestone - Concrete pavers - Concrete (permeable) - Concrete (poured-in-place) - Natural stone - Unit pavers (brick, concrete, stone) - Unit pavers with open joints	- Ashpalt - Asphalt (pervious) - Cobblestone - Concrete pavers - Concrete (permeable) - Concrete (poured-in-place) - Natural stone - Unit pavers (brick, concrete, stone) - Unit pavers with open joints
PAVING TYPES PROHIBITED	- Asphalt - Rubber playground surfacing	- Asphalt - Ceramic tile	- Ceramic tile - Composite material - Crushed stone - Flagstone - Reinforced grass or groundcover - Rubber playground surfacing - Wood	- Ceramic tile - Composite material - Crushed stone - Flagstone - Reinforced grass or groundcover - Rubber playground surfacing - Wood

Table 6.6 Allowable Paving per Area


Cobblestone

Gravel

Concrete (permeable)

Wood


Crushed stone


Asphalt (permeable)


Unit pavers


Paving with open joists or reinforced

Figure 6.6 Pervious Paving Materials

6.63 SITE FURNISHINGS

Hardscape areas shall be consistent with the Water Management Guidelines contained in the Development Plan.

> Standards:

S1. All permanent or built-in site furnishings shall reinforce the design concept and surrounding elements.

S2. All site furnishings shall be of high-quality, durable materials and construction.

S3. All site furnishings colors shall complement the adjacent architecture.

S4. Sufficient clearance shall be provided for all site furnishings.

> Guidelines:

G1. Bike racks and bike rack locations should be designed to the extent possible based on the LEED-ND and County recommendations.

G2. Bike racks should be sited in well-lit areas and close to building entrances.

G3. Allowable site furnishing materials include, but are not limited to: concrete, metal (aluminum, steel), stone, recycled materials, wood.

6.64 STRUCTURES & ENCLOSURES

Structures and enclosures may include storage closets, trellis, arbors and pergolas.

> Standards:

S1. The following materials are prohibited for structures and enclosures: plastic, plasticized fabrics.

> Guidelines:

G1. Allowable materials for structures and enclosures include, but are not limited to: CMU blocks, concrete (poured in place), fabric, glass, metal, recycled material, wood.

6.65 LIGHTING

The use of exterior lighting shall be restrained and handled in a way that is in keeping with the light-sensitive character of the Napa Pipe neighborhood. The 2005 Residential Compliance Manual regulates outdoor lighting for residential land uses. Landscape lighting that is not permanently attached to buildings is not regulated by this manual. The 2005 Nonresidential Compliance Manual limits the lighting power for general site illumination for outdoor lighting applications, including parking lots, walkways, building entrances, sales lots, and other paved areas of the site.

Requirements for outdoor lighting energy efficiency are determined by the 2005 Building Energy Efficiency Standards (September 2006 Revision). These requirements do not apply to public streets, sports fields, children's playgrounds, public monuments, signage, or landscape lighting. The requirements apply to site private roadways (i.e. shared driveways), parking lots, sidewalks, and walkways.

All lighting types, source, restrictions, installation methods, and equipment shall conform to the requirements of all applicable codes. Final fixture types are to be determined and are subject to approval for design guideline conformance.

	ALLOWABLE	PROHIBITED
BOLLARDS	- Concrete - Metal - Stone	- Plastic
BENCHES	- Metal - Stone - Wood	- Composite material plastic
MOVABLE PLANTERS	- Aluminum - Ceramic - Concrete - Fiberglass - High-density plastic - Metal - Painted metal - Stainless steel - Stone - FCS-certified wood	N/A
TRASH & RECYCLING RECEPTACLES	- Metal - Wood	- Plastic
TABLES & CHAIRS	- Concrete - High-density plastic - Metal - Wood	- Composite material - Fiberglass
TREE GRATES & TREE GUARDS	- Cast iron - Metal - Painted metal - Stainless steel	- Aluminum - Painted steel (only prohibited for tree grates)
WHEEL STOPS	- Concrete - Wood	- Plastic

Figure 6.6 Allowable Site Furnishing Materials

6.65 LIGHTING CON'T

> Standards:

S1. All light pole types, fixture colors and color rendering shall respond to the surrounding architecture and shall reinforce and define the open space within the site.

S2. The lighting design shall use an appropriate hierarchy of lighting types.

S3. All light fixtures shall have adequate shielding, lenses, or full cut-off devices to minimize light pollution, light trespassing and glare.

S4. Lighting in private common open spaces shall provide a uniform distribution of light at entrances and pedestrian walkways.

S5. Lights in publicly accessible areas shall be shatter/vandal resistant and shall not emit excessive heat that can potentially cause burns.

S6. All private outdoor lighting shall be located outside the right-of-way.

S7. Prohibited light types include: flood lights, lights attached to trees, neon lighting (in all areas other than the Town Center).

> Guidelines:

G1. Light should not be directed beyond the property.

G2. Efficient lighting types are recommended.

G3. Durable lighting types are recommended.

G4. Lighting systems in private common open space should turn off automatically when there is sufficient day lighting and turn on automatically when natural lighting is not providing sufficient light.

G5. Lighting fixtures should be compatible in scale to adjacent buildings and structures.

G6. Lighting should not conflict with tree canopies.

G7. Temporary decorative lighting such as low wattage lighting used for holidays, festivals, markets, and other special events may be allowed if they do not pose a hazard or a nuisance.

G8. Allowable Accent Light Types: canopy lighting, marker lights, sconces, step lights, strip lights, path lights, wall lights.

G9. Allowable Pole Light Types:

- Residential decorative lights (allowable size: min. 3'-6", max. 8'-0")
- Private common open space pole lights (allowable size: min. 8'-0", max. 12'-0")
- Parking lot pole lights (allowable size: min. 10'-0", max. 15'-0"?)

LIGHTING TYPES DIAGRAM (OLIN)

Figure 6.6 Lighting Types

6.66 FENCES, GATES & WALLS

Fencing should be used for primarily aesthetic purposes to define front yards and side yards of corner lots. Fencing is a minor site element that helps define the character of the different neighborhoods as well as define individual spaces (public vs. private space). Fences and walls may also provide screening to allow for privacy or to minimize of unsightly views or utilities.

> Standards:

S1. Screen fencing shall be either board-on-board, board-on-board with a masonry base, or entirely masonry.

S2. Prohibited fence, gate & wall materials include: chain link, lightweight tube steel or lightweight aluminum, railroad ties, vinyl or plastic.

> Guidelines:

G1. Natural and neutral colors are recommended for fences, gates and walls.

G2. Allowable fence, gate and wall materials include, but are not limited to: brick, CMU block, concrete (precast), concrete (poured-in-place), exterior tile, metal, natural stone, stucco, wood.

G3. Allowable wall finishes includes, but are not limited to: exposed aggregate, brushed finish, salt finish, stucco finish, steel trowel.

G4. Allowable fence and wall types:

- Ornamental fence/wall: no less than 50% transparent and shall not exceed 42" in height
- Semi-private fence/wall: between 25-50% transparent and shall not exceed 8'-0" in height
- Privacy fence/wall: no more than 25% transparent and shall not exceed 8'-0" in height
- Accent walls: no less than 50% transparent and shall not exceed 8'-0" in height
- Retaining walls: no more than 25% transparent and shall not exceed 42" in height

6.67 EDGING

> Standards:

S1. Prohibited edging materials include: plastic.

> Guidelines:

G1. Allowable edging materials include, but are not limited to: concrete, metal (i.e. aluminum, Cor-ten steel, steel)

6.68 WATER FEATURES

> Standards:

S1. Water features shall respond to the surrounding architecture and landscape.

S2. Water features shall be small, accent elements

S3. Fencing and railing is not permitted around fountains or ponds.

S4. Naturalized ponds are prohibited.

S5. Liners shall not be visible.

S6. Liners shall be dark colored and discrete.

> Guidelines:

G1. Water features may include seat walls.

G2. Photovoltaic power is encouraged to minimize energy consumption.

G3. Biological balance is encouraged to minimize chemical treatment.

G4. Pond recirculation and/or aeration systems are encouraged.

	SETBACKS (FRONT)	SETBACKS (SIDE)	SETBACKS (REAR)	PRIVATE COMMON OPEN SPACE	SHARED DRIVEWAY R.O.W.	SURFACE PARKING
RESIDENTIAL	18" min. to 42" max. 50-95% transparent	3'-0" min. to 8'-0" max. 0-95% transparent	3'-0" min. to 8'-0" max. 0-95% transparent	18" min. to 42" max. 50-95% transparent	NOT ALLOWED	NOT ALLOWED
LOCAL RETAIL	NOT ALLOWED	3'-0" min. to 8'-0" max. 0-95% transparent	3'-0" min. to 8'-0" max. 0-50% transparent	N/A	N/A	N/A
OFFICE	36" max. 0-95% transparent	3'-0" min. to 8'-0" max. 0-95% transparent	3'-0" min. to 8'-0" max. 0-50% transparent	N/A	N/A	N/A
LIGHT INDUSTRIAL	36" max. 0-95% transparent	3'-0" min. to 8'-0" max. 0-95% transparent	3'-0" min. to 8'-0" max. 0-50% transparent	N/A	N/A	N/A
GARAGE	None recommended.	None recommended.	None recommended.	N/A	N/A	N/A

Note: See text for exceptions related to enclosures.

Figure 6.6 Fences, Gates and Walls: Height & Transparency

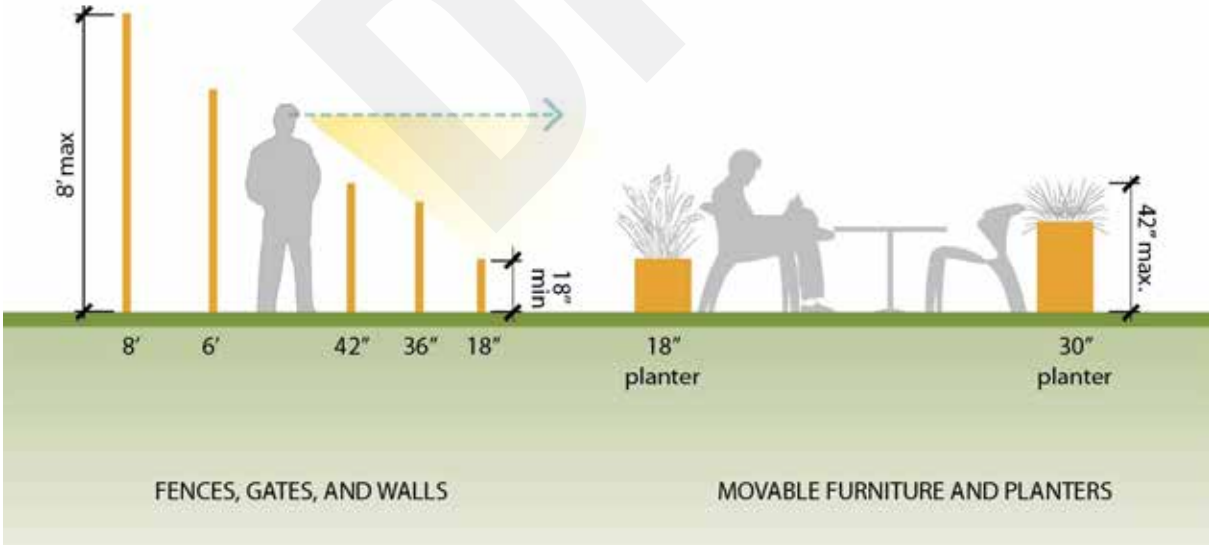
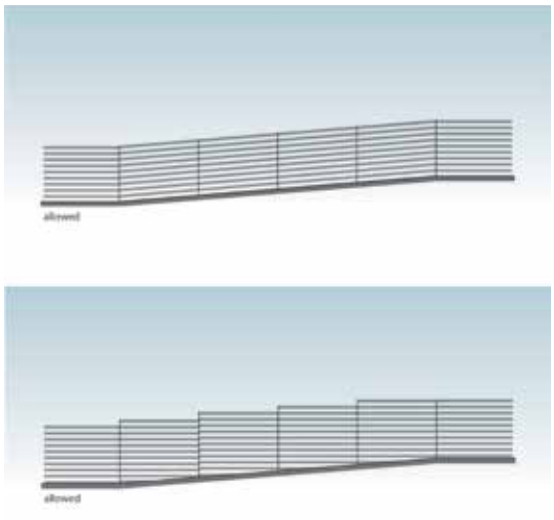
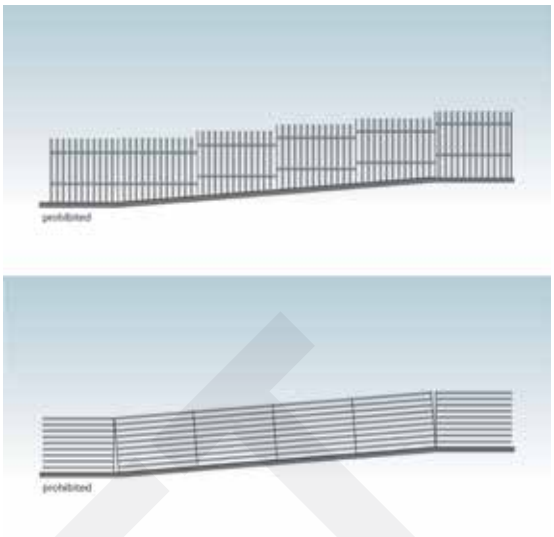


Figure 6.6 Visibility: Fences, Gates, Walls, Furniture, Planters

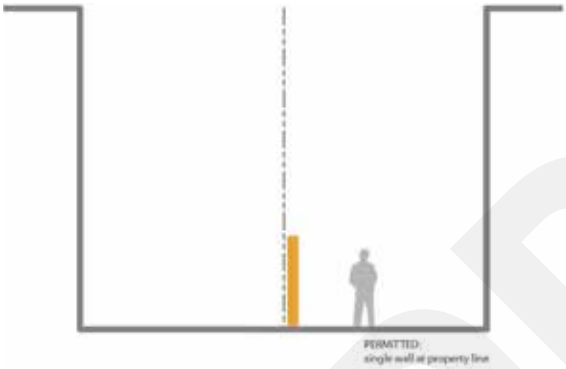
Incremental Fence - ALLOWED



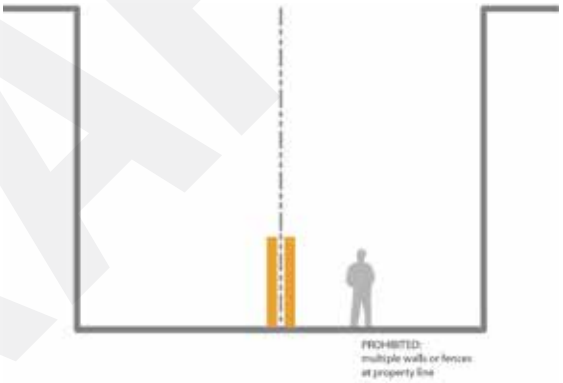
Incremental Fence - PROHIBITED



Fence Wall - ALLOWED



Fence Wall - PROHIBITED



Planting Screening - ALLOWED

Planting Screening - PROHIBITED

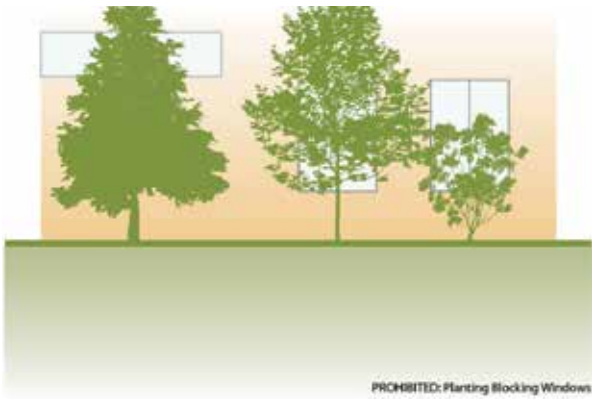


Figure 6.6 Wall, Fence, Planting Guidelines

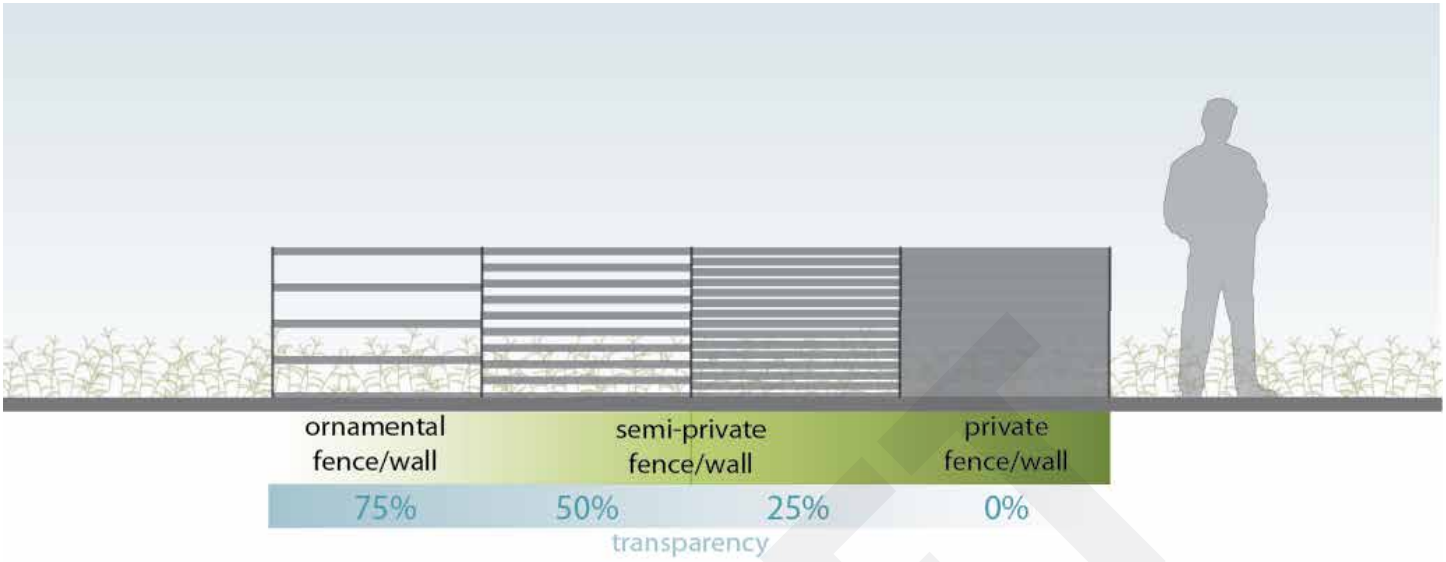


Figure 6.6 Wall Gradients Diagram

Privacy Fence

Privacy Wall

Low Fence

Low Wall

Accent Wall

Ornamental Fence

Retaining Wall

Figure 6.6 Wall and Fence Precedents

6.69 SIGNAGE

Signage at Napa Pipe will be a key element that will unify different areas, help define character, and provide wayfinding within the community. In general, there should be an overall sign family and style. Individual portions of the site may have more specific sign types that fit within the overall design family. Signage attached to buildings is addressed in the Architectural Design Guidelines. Final signage designs are to be determined and are subject to approval for design guideline conformance.

>Standards:

S1. Signage should be integrated where practical and appropriate into buildings or landscape structures.

S2. Shall not obstruct architectural features/elements.

S3. Prohibited signage types include: animated signs, billboards, flashing signs (except at Town Center Retail), inflated signs, moving signs, neon-lit signs (except at Town Center Retail).

S4. Prohibited signage materials include: plastic.

> Guidelines:

G1. Illuminated signs should not create light pollution.

G2. Custom signage is allowed upon approval.

G3. Freestanding signs are discouraged, except where required by local regulations.

G4. Signage colors or color combinations should allow for good legibility.

G5. Allowable signage materials include, but are not limited to: ceramic, fiberglass, metal, stone, wood.

6.610 HARDSCAPE INSTALLATION

> Standards:

S1. All hardscape paving shall have a maximum slope of 5% and maximum cross slope of 2%.

S2. All paving materials shall meet applicable buildings and safety codes; specifically relating to slip resistance and tripping standards.

S3. Pavements, especially in primarily pedestrian areas shall have an aggregate base rather than concrete.

S4. All paved surfaces shall have proper grades and slopes to ensure adequate conveyance of water into stormwater management areas. Pavement slopes and pervious/impervious hardscape areas shall coordinate with stormwater management techniques to maximize the amount of stormwater runoff that can potentially be managed. See Figure 6.610.

6.611 SITE FURNISHINGS INSTALLATION

> Standards:

S1. Anchored site furnishing footings shall not be visible.

> Guidelines:

G1. Site furnishings in private common open spaces and over podium may be permanently anchored.

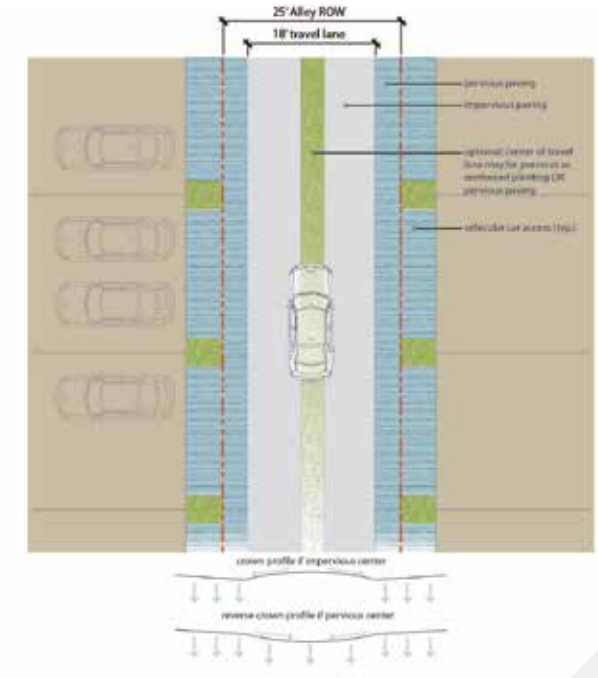
6.612 LIGHTING INSTALLATION

> Standards:

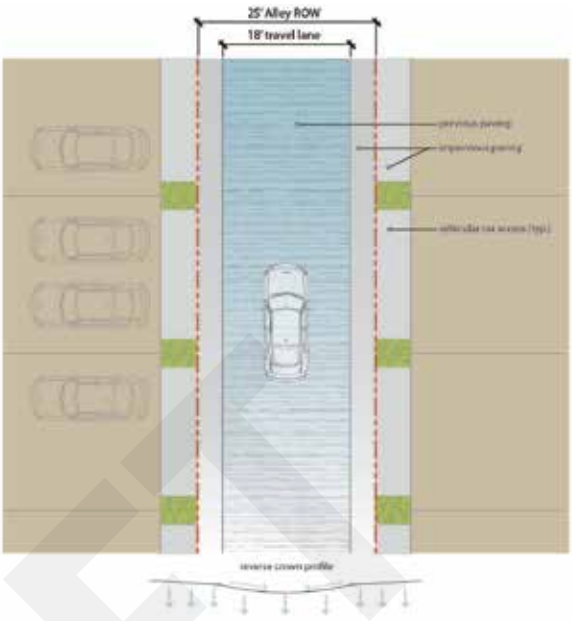
S1. All lighting and electrical elements must be concealed from view, including: wire, conduits, junction boxes, transformer, ballasts, switches, and panel boxes.

S2. Light post footings shall not be visible.

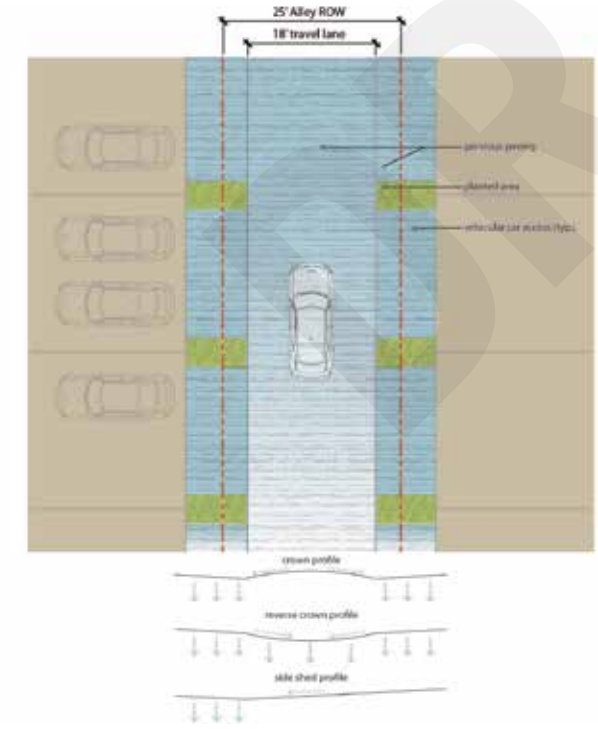
Shared Driveways
Recommended Condition 1



Shared Driveways
Recommended Condition 2



Shared Driveways
Recommended Condition 3



Shared Driveways
Prohibited Condition

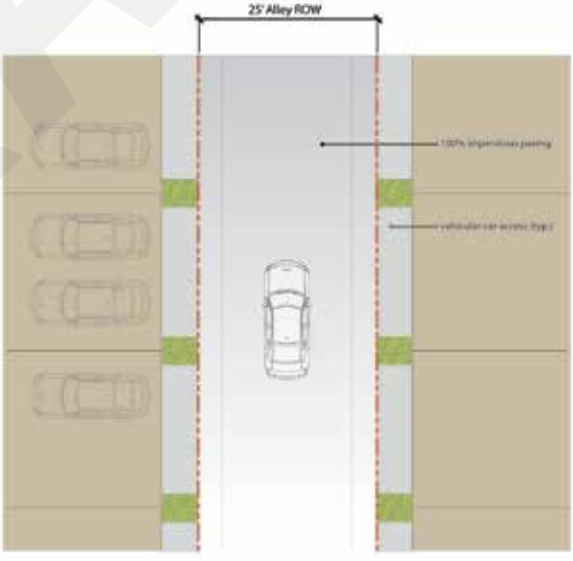
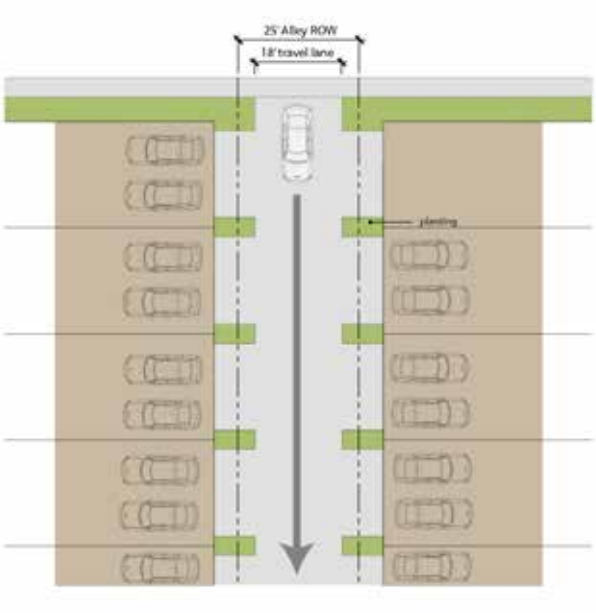


Figure 6.6 Street Profiles for Shared Driveways

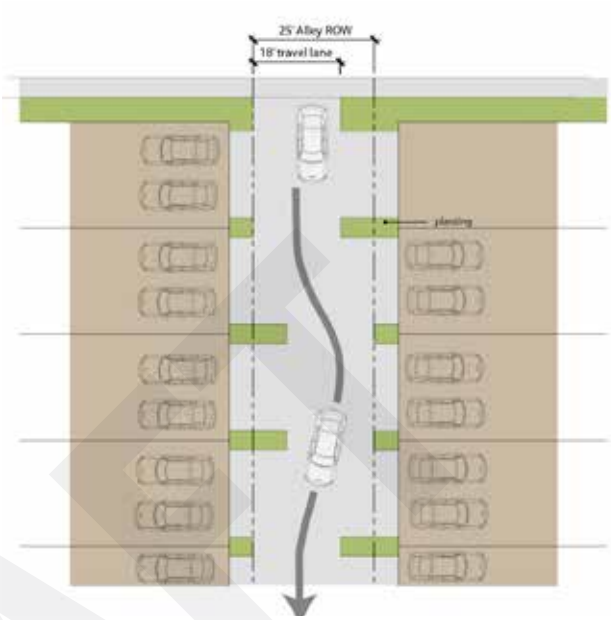
Recommended Shared Driveway

Figure 6.6 Shared Driveway Recommendations

Shared Driveways
Traffic calming - Neckdown



Shared Driveways
Traffic calming - Chicane



Shared Driveways
Traffic calming - Accent paving

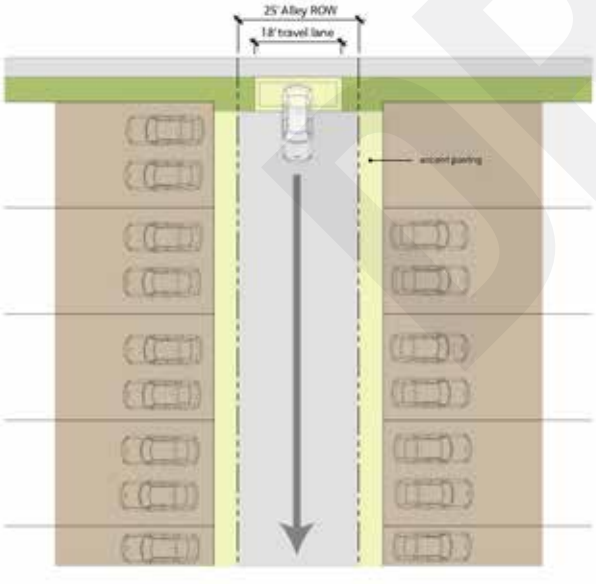


Figure 6.6 Street Profiles for Shared Driveways

6.613 GENERAL OPERATIONS & MAINTENANCE

Universal Standards:

- Unobstructed access to properly maintain all elements shall be provided.

- All materials and devices shall be kept functioning and be reinstalled, repaired or replaced when broken.

- All shall be clean of debris

- Mechanical equipment shall be maintained regularly.

- All locks, hinges and fixtures shall be maintained and working properly.

- Fences, gates, and walls shall be kept in alignment and be reinstalled, repaired or replaced as required

- Alignments for paving and edging shall be maintained and be flush when necessary to prevent tripping hazards.

Universal Guidelines:

- Elements shall be repainted and/or recoated as necessary.

- Maintenance manuals should be provided for the following elements/systems:

- Water features

- Irrigation systems

6.614 HARDSCAPE OPERATIONS & MAINTENANCE

> Standards:

S1. All pervious paving shall be designed to properly support required loads

> Guidelines:

G1. Sand swept joints should be replenished as necessary.

6.615 WATER FEATURES OPERATIONS & MAINTENANCE

> Standards:

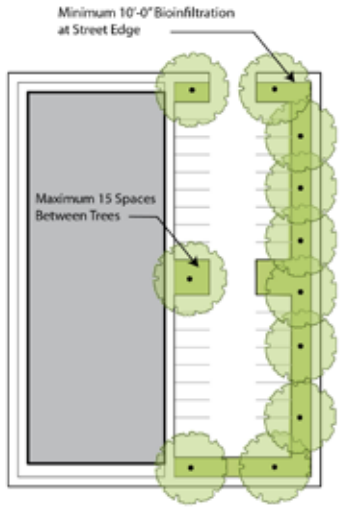
S1. Water feature material selections and design shall respond to the surrounding architecture and shall reinforce and define the open space within the site.

S2. Maintenance programs shall be developed and in place for perpetuity for water features within the private common open space.

> Guidelines:

G1. Biological mosquito controls such as Mosquito fish, Goldfish, and Koi are permitted in water features.

Surface lot parking
Single drive aisle



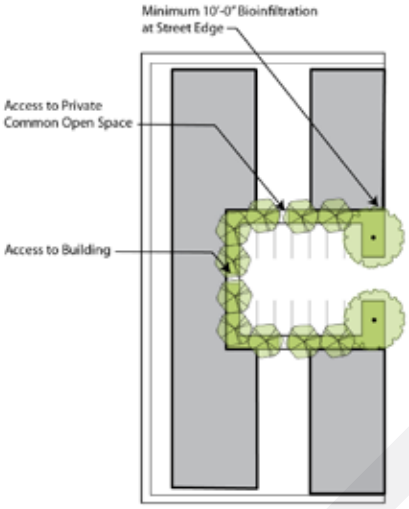
SINGLE DRIVE AISLE

25% Minimum Shading of Pavement

3:1 Maximum Ratio of Impervious Surface Area to Biofiltration Area

Minimum On-Site Stormwater Treatment: 50% of a 2" Storm

Surface lot parking
Single drive aisle (interior block)



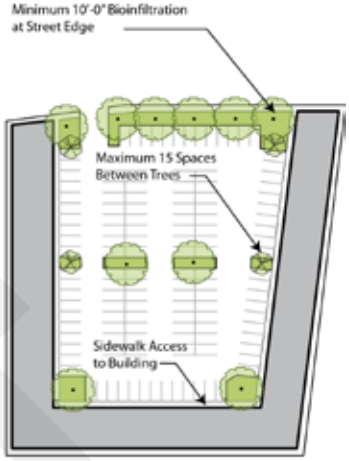
SINGLE DRIVE AISLE - INTERIOR BLOCK

25% Minimum Shading of Pavement

3:1 Maximum Ratio of Impervious Surface Area to Biofiltration Area

Minimum On-Site Stormwater Treatment: 50% of a 2" Storm

Surface lot parking
Multiple drive aisles



MULTIPLE DRIVE AISLES

10% Minimum Shading of Pavement

4:1 Maximum Ratio of Impervious Surface Area to Biofiltration Area

Minimum On-Site Stormwater Treatment: 35% of a 2" Storm

Figure 6.610b Parking Lot Travel Lanes

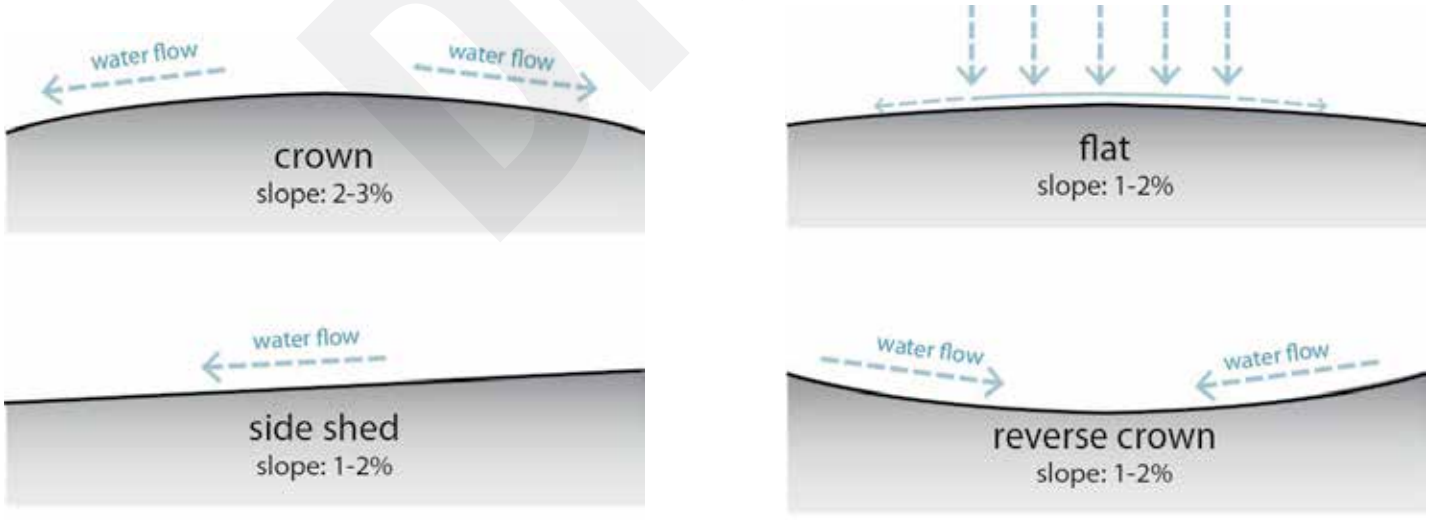


Figure 6.6 Paved Surface Slope Types

PLANTING

Intent & Objectives

6.71 OVERVIEW

The botanical setting for Napa Pipe is rich and varied, both naturally and culturally. Nature has given this part of California a wide variety of native plants that are quite ornamental while also providing ecosystem services such as habitat, food, nesting materials, and erosion control. An extensive list of imported but well-behaved Mediterranean plants also grow in this area without being invasive or displacing native flora. The historical agriculture in the valley, culminating in the supremacy of the wine grape, adds another layer of botanical richness and diversity not only to the plant palette but also to its design expression. All of these strains of plantings can find expression somewhere in the Napa site, depending on the situation. Native plants should be used extensively in the wild areas and parklands, but are also appropriate in residential, retail, office, and light industrial settings. Other ornamentals and plants from the agricultural heritage can be used very selectively in parks, but are more appropriate as plantings in residential, retail, office and light industrial settings. Street trees will come from both native and imported tree palettes. The operative philosophy in all the plantings is: “Right Plant / Right Place.”

	SETBACKS (FRONT)	SETBACKS (SIDE)	SETBACKS (REAR)	PRIVATE COMMON OPEN SPACE	SHARED DRIVEWAY R.O.W.	SURFACE PARKING
RESIDENTIAL	25% min. landscape	15% minimum landscape OR 100% pervious paving	Hardscape min. required for access and circulation. 100% of the remaining area is landscape.	Linear Garden: 50% min. landscape Square/Enclosed Garden: 25% min. landscape and 50% min. pervious area	25% min. pervious area	See sustainability requirements
LOCAL RETAIL	None recommended.	None recommended.	None recommended.	N/A	N/A	See sustainability requirements
OFFICE	Hardscape min. required for access and circulation. 75% of the remaining area is landscape.	Hardscape min. required for access and circulation. 75% of the remaining area is landscape.	Hardscape min. required for access and circulation. 75% of the remaining area is landscape.	N/A	N/A	See sustainability requirements
LIGHT INDUSTRIAL	Hardscape min. required for access and circulation. 100% of the remaining area is landscape.	Hardscape min. required for access and circulation. 100% of the remaining area is landscape.	25% min. landscape	N/A	N/A	See sustainability requirements
GARAGE	None recommended.	None recommended.	Hardscape min. required for access and circulation. 100% of the remaining area is landscape.	N/A	N/A	See sustainability requirements

Figure 6.7 Landscape & Hardscape Ratios by Typology

STANDARDS MATRIX

LANDSCAPE	Planting	1. A minimum 25% and maximum 75% of front setback area shall be planted 2. Plantings shall not directly obscure building windows 3. Planting screens in front setbacks shall not be taller than 4' unless not obstructing windows 4. Landscape screening in setback areas shall comply with the planting palette 5. Plantings prohibited in setback areas include large trees, medium trees, and turf 6. All trees are prohibited in side setbacks 7. Rear setbacks less than 10' deep may not have trees
	Hardscape	1. All hardscape materials shall be complementary and coordinate with architecture style 2. Hardscape run-off shall be directed into landscaped areas 3. 25% of side setback areas shall be permeable 4. Planting minimums shall be met 5. Pedestrian access between unit entries and the adjacent street, shared driveway or open space shall be provided in the front setback 6. Walkways leading to units within setback areas, and in private common open spaces, shall be minimum 3' wide with maximum 5% slope and maximum 2% cross-slope 7. Side setbacks shall have a minimum 18" clear and paved path of travel, except for end lots 8. To the extent possible, paved connections to individual units shall be staggered from the opposite side [illegible] 9. Paved driveways in rear setbacks shall provide access to all private garages 10. Pedestrian access between entries and [illegible] driveway/open space shall be provided 11. Hardscape paving in rear setbacks must have maximum 5% slope, maximum 2% cross slope
	Fences & Walls	1. Public acces to private common open space and shared driveways shall be maintained, and gates, fences, walls or other structures limiting public access are prohibited 2. Fences/walls are not permitted in shared driveway right-of-ways 3. Fence/wall materials shall complement building architectural style, material, color 4. Privacy fences/walls are prohibited in front yards: fences and walls shall be maximum 36" tall 5. Any fence/wall in a side or rear setback shall be a maximum of 8' tall 6. For fences along slopes, equal increment level fence steps must be used to ensure all vertical pickets remain vertical 7. Fences/walls in the front setback shall run the full length, and parallel to, the property line 8. Fences/walls along shared property line must be shared; two parallel fences not permitted 9. Any fence/wall shall run along the property line except where it returns to the building 10. Fences/walls in front setbacks that return to building must terminate at right angle to front facade 11. Gates, where used, shall swing into the property rather than onto sidewalk/open space 12. All fence/wall screening must be in accordance with screening standards in material palette
	Furnishings	1. All site furnishings shall complement the architectural style, material and color 2. Furnishings in private common open space shall be ADA compliant 3. Prohibited in front setbacks: trash/recycling receptacles, ganged mailbox, utility units/meters 4. Mailboxes shall be located in accordance with the US Postal Service regulations 5. Prohibited site elements include but not limited to: bicycle racks, bollards, free-standing flagpoles and playground equipment

TO BE UPDATED, PENDING FINAL STANDARDS

Furnishings con't	6. Fixed benches, chairs and tables, as well as handrails, are not permitted in shared driveways 7. Bollards are permitted at ends of shared driveways, if perpendicular to travel direction, to control vehicular access, provided fire access is not required, and bollards are not permitted in shared driveway interiors or parallel to path of travel 8. Handrails are not permitted in side setbacks
Structures & Enclosures	1. Structures include elements such as: arbors, trellises and pergolas, and enclosures include elements such as: maintenance or storage sheds 2. Strucutres and enclosures are not permitted in the shared driveway right-of-way 3. Greenhouses and storage sheds are not permitted in the front or side setback 4. Detached structures or enclosures in setback areas shall not obstruct more than 25% of front building facade, or cover more than 20% of setback area or obstruct windows 5. Side or rear setbacks less than 5 feet deep may not have structures 6. Structures and enclosures shall complement the architectural style, material, color 7. Walk-in structures and enclosures, or those made of plastics, are not permitted in setbacks 8. Greenhouses and plastic structures/enclosures not permitted in private common open 9. In private common open spaces, permitted structures shall be maximum of 10' high, and permitted enclosures shall be maximum 8' high and maximum 20 sq. ft. footprint
Planting for Private Common Open Spaces	1. A minimum of 40% of landscape area shall be shaded by canopy trees 2. A minimum of 70% of landscape area shall be permeable in multi-family typologies 3. A minimum of 20% of landscape area shall be permeable in typologies that are not multi-family 4. Of total planted area, 60% shall be planted with shrubs and 40% with groundcover or turf 5. Large tress shall be placed a minimum of 12' from the buildings 6. At the time construction is completed, any bare soil on a lot shall be convered by shrubs, groundcover or mulch 7. Prohibited materials include but are not limited to artificial turf
Shared Driveways	1. Shared driveways shall have 25' wide right of way 2. Plantings/furnishings are permitted as specified in the right of way, if a minimum 18' clear travel lane is maintained for emergency and fire access 3. Entrances to shared driveways shall be curb cuts rather than at grade intersections 4. Vehicular access to private garages shall be provided, if planting or other elements installed adjacent to building face/setback, a clear zone at least garage/driveway width must be provided 5. A minimum 50% of the total shared driveway area shall be permeable 6. Planting beds shall be a maximum 7' in width 7. Trees are permitted only in planters a minimum 5' width 8. Turf and artificial turf are prohibited 9. In shared driveways parallel to primary roads, traffic calming measures shall be installed
Lighting	1. All lights shall complement the architectural style, material, color 2. The following light types are prohibited: vehicular-rated bollard, free-standing floor, light attached to trees, overhead string lights, vehicular pole lights 3. Decorative pedestrian pole lights in front setback shall be minimum 3'-6" and maximum 8' tall 4. No more than 1 decorative pole light is permitted within the front setback 5. Decorative pole lights are not permitted in side setbacks

TO BE UPDATED, PENDING FINAL STANDARDS

6.72 PALETTE

Plant selection influences not only practical concerns like maintenance, but the character and identity of Napa Pipe. Plant selection - particularly tree selection - should consider longevity, ease of management, and adaptability to site conditions. Planting choices should be compatible with individual site characteristics like topography, soil, drainage patterns, and sun exposure. In addition to these site-specific factors, plant selections should reinforce street hierarchy and block organization through species character, identity, and function.

Landscape selections as shown are preliminary and do not constitute final street tree selections. Additional species may be added at time of final design.

Universal Standards:

- Landscape trees and plantings must comply with the approved planting lists that are part of the Napa County plan, as well as these guidelines.
- Minimum rootball sizes shall follow recommended California nursery standard.
- Landscape planting is required for all the private development.
- Planting selections shall be based on year-round interest, the ecology of the site, the need to define spaces, hierarchy of plant material, and the theme of the design.
- All plants shall be non-invasive as defined by the state of California.
- Plantings shall contribute to the creation of nurturing habitats for birds and other wildlife.
- Plantings other than street trees shall be approximately 50% - 75% evergreen to assure a year-round framework for planting areas and visual interest.
- To the extent possible, regional/endemic species are to be integrated into the planting designs, particularly in the more "natural" areas of the site.
- There shall be a diverse mix of plant species to avoid monoculture and ensure seasonal interest.
- Non-native plant species shall be a maximum 60% of the total planting palette, with the exception of orchards, vegetable gardens, and herb gardens.
- Plant species shall be grouped together based on their water and lighting needs. A mix of high-water use plants with low-water use plants shall be avoided, as shall mixing of sun-loving plants with those requiring shade.
- Plant palette shall have low water demand.
- The minimum soil depth for plantings shall be:

Trees	30"
Palm Trees	30"
Shrubs	18"
Vines	18"
Groundcover	12"
Lawn	12"

- Minimum planting size varies depending on visibility and use of planting area. Plantings shall be installed at the following minimum sizes to ensure good initial appearance. See Table 6.72a for plant sizes and Table 6.72b for plant size definitions.

Universal Guidelines:

- To the extent possible, landscape material should conform to the Napa County Tree Manual and "Native Plants for Northern California Landscapes" by the California Cooperative Extension.
- Landscape planting may include deciduous or evergreen trees, shrubs, groundcovers, perennials, and seasonal color (annuals).
- Landscape plantings for individual homes should consist of a limited variety of trees, shrubs and groundcovers to create an attractive, well designed, cohesive landscape.
- Plants should be selected based upon their ultimate height, width, growth habit and irrigation demand in relation to the space where they will be planted.
- Native and Mediterranean climate-adapted plantings are encouraged.
- Shrubs and groundcovers shall be planted in masses of a single species or cultivar to create beds or drifts of plants.
- All biofiltration plantings should be selected to withstand both saturation and drought.

	TIER 1 LARGE INSTALLATION	TIER 2 MEDIUM INSTALLATION	TIER 3 SMALL INSTALLATION
	- Front setbacks - Common open space	- Shared driveway entrances and mid-block - Side setbacks at end or corner units	- Side setbacks - Rear setbacks
TREES			
SHADE TREES	3' min. box	2' min. box	2' min. box
ORNAMENTAL / FLOWERING TREES	2' min. box	2' min. box	2' min. box
EVERGREEN TREES	3' min. box	2' min. box	2' min. box
SHRUBS & GROUNDCOVERS*			
LARGE SHRUB	36" min. height	24" min. height	24" min. height
MEDIUM SHRUB	24" min. height	18" min. height	18" min. height
SMALL SHRUB	15" min. height	12" min. height	12" min. height
GROUNDCOVERS	3" pot	3" pot	plugs

*Pot sizes as per industry standards for shrubs and groundcovers.

NOTE: Size height is measured from the ground, at the time of installation.

Table 6.72a Minimum Plant Sizes

	MATURE HEIGHT	MATURE SPREAD
TREES		
LARGE	40' and larger	30' and wider
MEDIUM	20' to 40'	20' to 30'
SMALL (ORNAMENTAL)	20' and smaller	20' and narrower
SHRUBS		
LARGE	5' to 15'	varies
MEDIUM SHRUB	30" to 5'	varies
SMALL SHRUB	12" to 30"	varies

Table 6.72b Plant Size Definition

6.73 URBAN TREES

The list of trees below is a master list from which selections of trees for front setbacks, parks, and certain smaller open spaces may be selected.

Recommended street tree species for non-biofiltration areas include:

Acer pseudoplatanus
Arbutus 'Marina'
Ceratonia siliqua
Cercidiphyllum japonicum
Cinnamomum camphora
X Chitalpa tashkentensis
Eriobotrya deflexa
Ginko biloba (male clones)
Koelreuteria bipinnata
Koelreuteria paniculata
Lagerstroemia indica hybrids e.g. 'Natchez'
Liriodendron tulipifera
Melaleuca quinquenervia
Metasequoia glyptostroboides
Pistacia chinensis
Podocarpus gracilior
Quercus acutissima (Q. serrata)
Quercus macrocarpa
Quercus robur
Quercus rubra
Quercus suber
Rhaphiolepis 'Majestic Beauty'
Robinia x ambigua 'Idahoensis'
Tilia americana
Tilia x euchlora
Zelkova serrata

Recommended urban tree species for biofiltration areas include:

Acer rubrum
Alnus rhombefolia
Liquidambar styraciflua vars. 'Burgundy', 'Cherokee', 'Festival'
Platanus x acerifolia var. 'Columbia'
Platanus racemosa
Taxodium distichum
Taxodium mucronatum

6.74 OTHER TREES

"Other trees" are those that are not planted along a street in the neighborhood. These trees may be planted in setbacks, yards, parks, greens, squares, and plazas, and may include both native and non-native species. These aforementioned open spaces will be more urbane, more cultivated, and more garden-like than the larger naturalistic parks and can comfortably accommodate non-invasive, exotic and decorative tree species that provide attributes (flowers, fragrance, fruit, bark, foliage) that the strictly native palette cannot provide, as well as wider environmental tolerances to poor soil, drought, air pollution, and vibration at the root zones that one finds in town neighborhoods. The shrubs and herbaceous pallets for these smaller outdoor spaces shall be selected for visual compatibility (flowers, fragrance, fruit, bark, foliage, size and shape) and horticultural compatibility (soils, irrigation, sun exposure) with the trees.

6.74 OTHER TREES CON'T

Recommended tree species for plazas, greens, squares, pocket parks and courtyards:

Acer pseudoplatanus
Acer rubrum
Arbutus 'Marina'
Arbutus unedo
Cedrus atlantica
Cedrus deodara
Cedrus libani
Ceratonia siliqua
Cercidiphyllum japonicum
Cercis occidentalis
Cercis reniformis
Cercis siliquastrum
Cinnamomum camphora
X Chitalpa tashkentensis
Eriobotrya deflexa
Eriobotrya japonica
Ginko biloba (male clones)
Koelreuteria bipnnata
Koelreuteria paniculata
Lagerstroemia indica hybrids e.g. 'Natchez'
Liquidambar styraciflua vars. 'Burgundy', 'Cherokee', 'Festival'
Liriodendron tulipifera
Melaleuca quinquenervia
Metasequoia glyptostroboides
Michelia doltsopa
Phoenix canariensis
Pistacia chinensis
Platanus x acerifolia var. 'Columbia'
Platanus racemosa
Podocarpus gracilior
Prunus cerisifera varieties
Prunus serrurlata varieties
Prunus x subhirtella 'Autumnalis'
Prunus x yedoensis
Quercus acutissima (Q. serrata)
Quercus agrifolia
Quercus coccinea
Quercus frainetto
Quercus lobata
Quercus macrocarpa
Quercus palustri
Quercus robur
Quercus rubra
Quercus suber
Rhaphiolepis 'Majestic Beauty'
Robinia x ambigua 'Idahoensis'
Taxodium distichum
Taxodium mucronatum
Tilia americana
Tilia x euchlora
Trachycarpus fortunei
Zelkova serrata

Recommended tree species for bio-filtration in natural areas but not along streets:

Acer negundo
Alnus rhombefolia
Fraxinus latifolia
Platanus racemosa
Populus fremontii
Salix lasiandra
Salix lasiolepis
Salix laevigata

6.75 EXCAVATION & SOIL

Proper installation of plant material allows for optimal growth and performance; potentially extending its life-span.

> Standards:

S1. Erosion and sediment control plans shall be developed prior to construction.

S2. Erosion and sediment control devices shall be present at the time of plant installation.

S3. All tree planting wells shall be fully excavated and backfilled with clean, debris-free soil planting mix.

S4. Backfill shall be free of hardpan, ashes, concrete, or any other undesirable material that would negatively impact the health of installed plants.

S5. Installation of trees and utilities shall be carefully coordinated.

S6. Trees shall maintain a minimum of 10'-0" from water and sewer lines.

S7. Tree shall maintain a minimum of 4'-0" from gas lines.

S8. The grade of imported soil shall be 1" below the desired finished grade to allow for a mulch layer and soil settlement.

>Guidelines:

G1. In order to minimize soil compaction, excavation should not occur in soils that are wet or saturated.

G2. The extent of excavation should be a minimum of 3 times greater than the rootball diameter.

6.76 PLANT INSTALLATION

Refer to planting details at the end of this section for additional standards.

> Standards:

S1. Minimum rootball sizes shall follow recommended California nursery standard.

S2. Minimum plant sizes shall be in conformance with the Minimum Plant Sizes table.

S3. Trees shall have a 3' clear zone around the base of the trunk.

S4. Additional plantings in tree wells shall consist of evergreen shrubs and/or seasonal color.

S5. Proper drainage shall be provided.

S6. Trees shall be healthy, vigorous, free of infestations.

S7. Loose, broken, or damaged rootballs are unacceptable.

S8. The subgrade below tree rootballs shall be compacted slightly to prevent soil settlement. Refer to the standard tree detail.

S9. All tree trunk flare shall be exposed and be level with the adjacent finish grade.

S10. Backfill soil shall be loose and friable. It shall be installed in 6"-8" layers and settled with water.

S11. All nursery tags and protective wrapping shall be removed after substantial completion.

S12. Stormwater planters shall be temporarily protected from stormwater runoff until plants have been installed and established in order to protect new soil.

>Guidelines:

G1. Large and medium trees should be planted a minimum 12'-0" feet from the building façade.

G2. In order to minimize soil compaction, plant material should not be installed in soils that are wet or saturated.

G3. Optional utility connections (such as outlets for tree lights and decorations) may be provided in tree wells.

G4. Excess soil from the top of the rootball may need to be removed in order to expose trunk flare.

G5. Trees in tree grates should be planted as high as possible to minimize trash accumulation below grate.

6.77 TREE STABILIZATION

> Standards:

S1. The use of rubber hose for protection from guy wires is prohibited; Nylon webbing shall be used at a 1" minimum width.

S2. Guys shall not be in high tension, and shall sag visibly.

S3. Metal guy wire shall not have direct contact with the tree.

S4. Staking & guying elements (wires and straps) shall be removed after establishment and any holes left by the stakes shall be filled with backfill mix.

>Guidelines:

G1. Tree staking and guying is not recommended for all trees. Staking should only be used in areas with high winds (e.g. wind tunnels) and should be removed after tree establishment.

G2. Stakes should allow the tree to move 3"-4" in all directions to encourage a strong root system.

G3. Stakes fronting a street or shared driveway should be parallel to the traffic lane.

G4. Stakes should be dated with a marker identifying the date the stakes were placed. (SWDG)

G5. Staking and guying should not be left on more than 1 year.

6.78 INITIAL PRUNING

> Standards:

S1. Pruning shall be done with sharp pruning tools in order to produce clean cuts.

S2. No structural pruning shall be done within the establishment period.

S3. Pruning cuts shall be made outside the branch bark collar to prevent damage to the branch collar or bark of the stem.

S4. Crowns or main leaders of trees shall not be cut.

>Guidelines:

G1. Only rubbing, broken or damaged branches should be removed with pruning.

G2. Trees in grates or in conflict with pedestrian circulation may be limbed up in order to obtain a minimum of 6'-7' clear zone under the tree canopy.

6.79 IRRIGATION INSTALLATION

> Standards:

S1. Irrigation shall be provided for all plantings until establishment (3-5 years). After this time plantings shall survive from local rainfall except in extreme heat conditions.

S2. Irrigation elements shall be coordinated carefully in order to avoid conflict with plantings.

S3. Irrigation zones shall respond to planting water requirements.

S4. Irrigation backflow preventers shall be screened with planting or an enclosure.

S5. Irrigation boxes (like valve boxes) shall be the smallest size required and be of a neutral color that masks their location.

S6. Irrigation sleeves shall be coordinated and placed prior to hardscape installation.

S7. Once installed, all irrigation heads shall be tested and adjustments shall be made to ensure water is applied consistently and components match manufacturer's standards.

S8. Head-to-head water coverage shall be met.

S9. The irrigation design shall not overwater or over spray onto pavement.

S10. Efficient irrigation systems, such as rain or moisture sensors and soil tensiometers, shall be used.

S11. Any cisterns or water harvesting tanks deeper than 6" shall be covered securely.

>Guidelines:

G1. Hose bib should be located in planted areas at accessible yet screened locations.

G2. Any irrigation components that fail to meet manufacturer's standards should be rejected, replaced and tested until they meet the manufacturer's standards.

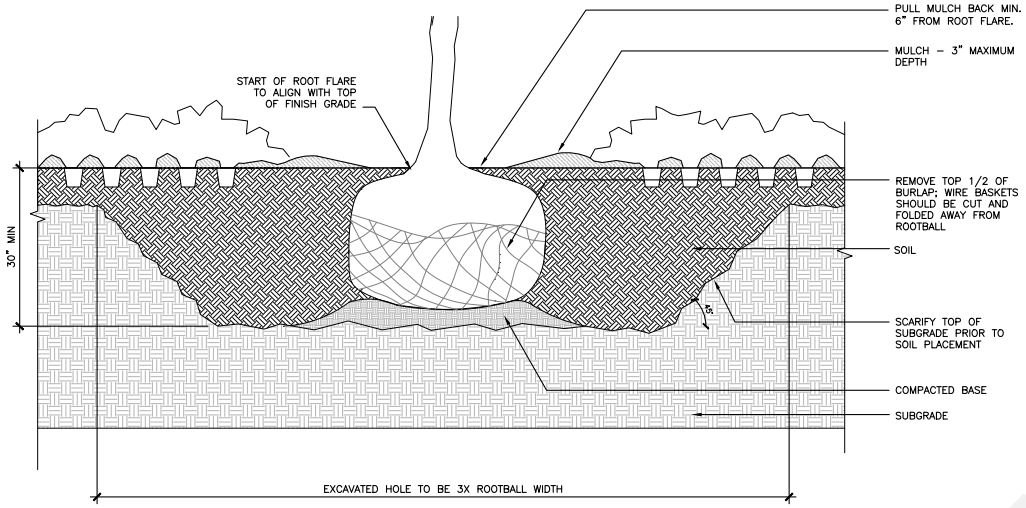
G3. Grey water and rain water collection may be used for landscape irrigation.

G4. Alternatives to the traditional sprinkler heads with lower water use should be considered; these may include: drip or subsurface irrigation.

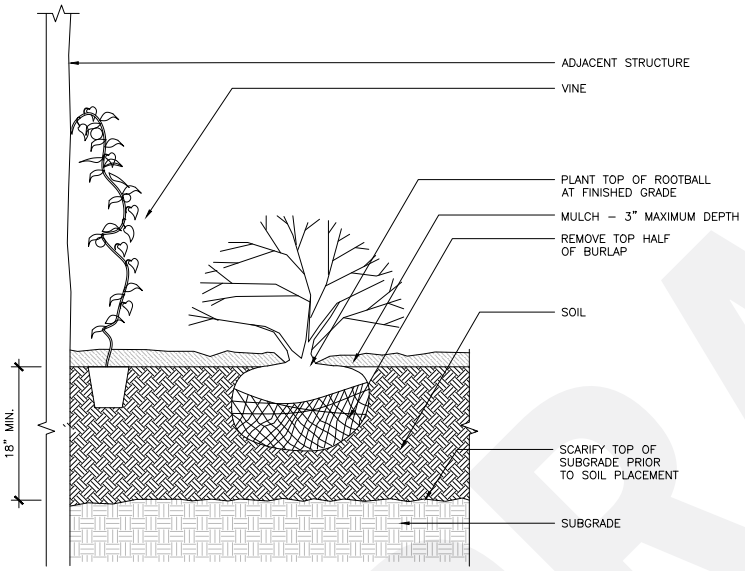
G5. Installation of cisterns and rain water harvesting tanks are allowed.

G6. Any cisterns or water harvesting tanks should have a maintenance plan that addresses potential clogging by leaves or other debris.

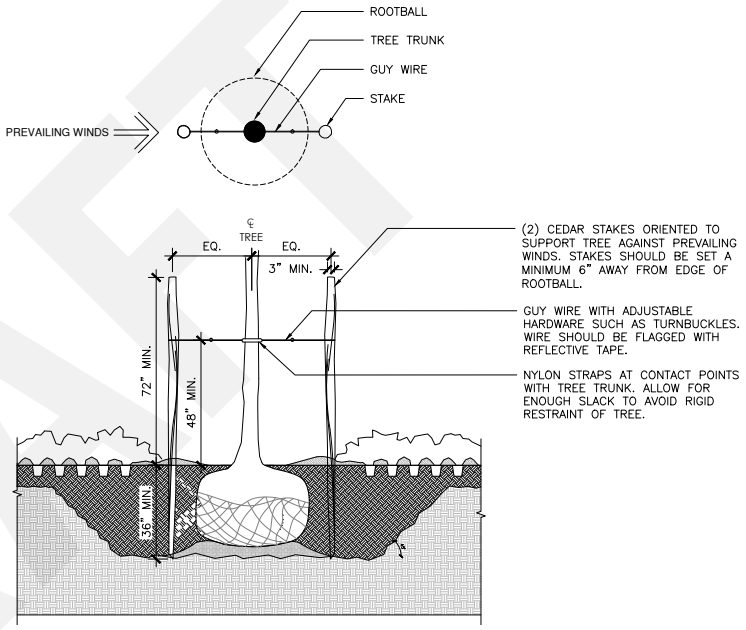
G7. Disconnected leaders that lead roof water into planters or cisterns is allowed and is encouraged on over podium conditions.



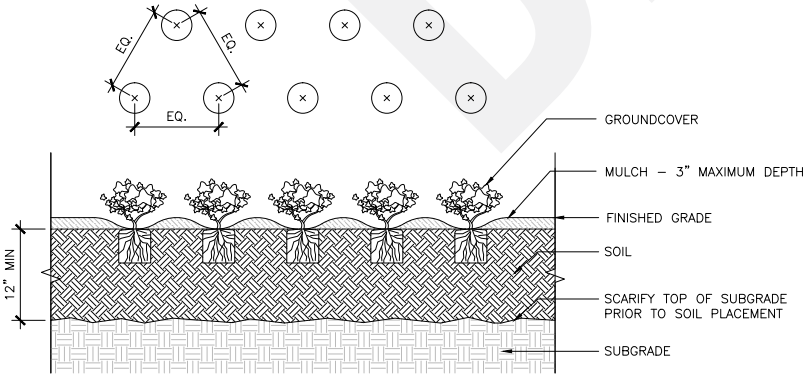
Tree Detail



Shrub & Vine Detail



Tree with Staking Detail



Groundcover Detail

Figure 6.7 Standard Planting Details

6.710 GENERAL OPERATIONS & MAINTENANCE

Proper operations and maintenance practices benefit the community, the users, the owner, and the environment. The long-term importance can equate to significant cost savings in plant replacement, irrigation, waste management, fuel/equipment, fertilizer and herbicide use.

6.711 INITIAL WATERING OPERATIONS & MAINTENANCE

> Standards:

S1. At the time of installation (once planted), the soil around the base of plantings shall be saturated.

S2. Sufficient watering shall take place throughout the guarantee period to ensure proper plant establishment.

>Guidelines:

G1. Watering should be applied in a manner that does not damage the plants, stakes, or adjacent areas.

6.712 PLANTING OPERATIONS & MAINTENCE

> Standards:

S1. All biofiltration elements shall have a maintenance plan that addresses regular management and inspections to remove excess sediment, trash, and debris. The maintenance plan shall also address pruning.

S2. A planting maintenance plan shall be developed for the setback areas, private common open space, the shared driveways, and the surface areas.

>Guidelines:

G1. High maintenance plants should be avoided.

G2. The maintenance plan should minimize or eliminate the failure of bio-filtration devices by addressing sediment build up.

G3. Biofiltration elements should have flow control devices (eg. check dams).

G4. Check dams may be constructed from: concrete, earth, rock/stone, wood.

G5. Planting maintenance should include, but not be limited to, the following actions: weeding, cultivating edging, control of pests, fungi and diseases, pruning, repair of stakes/wires, repair of washouts, soil replacement.

6.713 IRRIGATION OPERATIONS & MAINTENCE

> Standards:

S1. Irrigation shall be provided for all plantings until establishment (3-5years). After this time, irrigation shall only be used in conditions of extreme heat or drought.

S2. Seasonal variations, time of day, and weather conditions shall be considered when designing an irrigation system.

S3. Automatic rain sensors shall be installed with every irrigation system in order to minimize over-irrigating.

S4. Irrigation zones shall correspond to the water needs of the specific plant material.

S5. All irrigation equipment, valves, pipe, and fittings shall be cleaned of grease, metal cuttings, and accumulated sludge.

>Guidelines:

G1. Recycled rainwater or grey water for irrigation use is recommended when available and practical.

G2. Rainwater harvesting is encouraged.

G3. Consider the use of efficient irrigation technology such as rain or moisture sensors, soil tensiometers, and low flow systems.

G4. Irrigation systems should provide complete coverage.

G5. Irrigation components should be protected from mowing and maintenance operations.

6.714 MULCHING OPERATIONS & MAINTENCE

> Standards:

S1. Mulching shall be applied to the surface of all planting beds; no soil shall be left exposed.

S2. Mulch is required in all landscape areas at a maximum of 3" depth.

S3. Mulching shall be distributed uniformly and create a level cover over exposed soil.

S4. Mulch shall be held back a minimum of 6" from a tree's trunk flare in order to minimize moisture that could encourage disease or roots from wrapping around the trunk.

S5. The finished grade of mulch shall not interfere with water flow in stormwater management techniques.

S6. Prohibited mulch colors include: red and any dyed or unnatural color.

>Guidelines:

G1. Mulch can be made of organic or inorganic material.

G2. Planters with stormwater management techniques should utilize rock mulch instead of bark mulch.

G3. Allowable mulch types include, but are not limited to: rock mulch, wood mulch or other organic much like compost mulch.

6.715 GUARANTEE & TREE PLACEMENT OPERATIONS & MAINTENCE

> Standards:

S1. The applicant shall provide a guarantee for all installed trees, shrubs, and planted areas in accordance with the plans approved by the applicable subdivision board for the period commencing after the completion and final acceptance of work.

S2. Standard written manufacturer's guarantee of all materials shall be obtained by the applicant.

S3. In addition to manufacturer guarantees, the applicant shall warrant the entire irrigation system (both parts and labor) for one year from the date of acceptance.

S4. Any planting that is dead or in an unhealthy/ unsightly condition due to dead branches, improper/ inadequate pruning, or maintenance prior to the end of the guarantee period shall be replaced.

>Guidelines:

G1. Any required planting replacement shall occur in the next appropriate planting season, even if it falls outside of the guarantee period.

PHASING

Intent & Objectives

6.81 OVERVIEW

Private landscape areas shall be constructed in conjunction with building construction. Schedules shall be coordinated and have the same completion date as the building construction. All landscape elements shall be in place at the time the units are ready to be marketed.

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Figure 6.8 Permeable paving for parking areas reduces stormwater, increases groundwater recharge, and has attractive texture.