City of Piedmont

Multi-family Objective Design Standards

Hearing Draft | October 2022

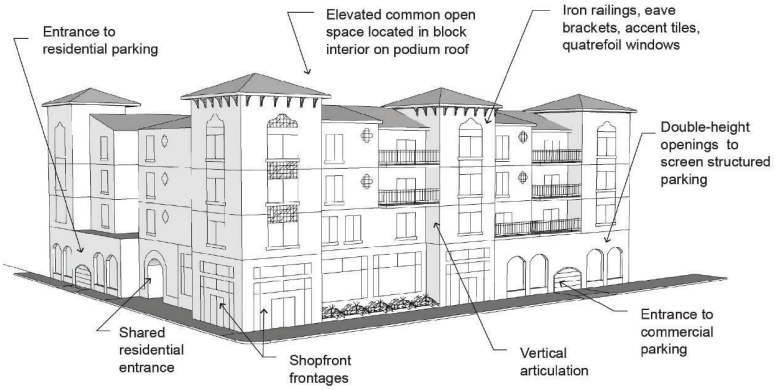

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Table of Contents

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1 Overview

In the fall of 2020, the City of Piedmont initiated the **Piedmont Multi-family Objective Design Standards and ADU Incentives** programs project. Funded by an SB 2 Planning Grant, these programs are part of the larger City-led "Piedmont is Home" campaign to reach out the community, to consider creative ways the City can help address the region's housing crisis, and to make Piedmont an even more inclusive place to call home.

The **Multi-family Objective Design Standards and Accessory Dwelling Units (ADU) Incentives** programs seek to aid this effort by removing barriers for multi-family and ADU development in Piedmont. The programs support the equitable distribution of affordable units across the City and ensures that future multi-family and ADU development will preserve and enhance community character. Specifically, the programs address design and feasibility of multi-family residential and residential mixed-use development, accessory dwelling units (ADUs), and Junior ADUs (JADUs) through community-informed design standards and prototype plans. Following a community outreach campaign in the spring of 2021 that included a community-wide survey and two public meetings, the City and consulting team developed material for public review. Following public review, the planning team developed the material in this document for review by the City's decision-making bodies.

In This Document

This document includes the following parts:

- **Part 2, Objective Design Standards,** includes two sections: recommended design standards for multi-family development and recommended design standards for residential mixed-use development. The new sections establish design requirements to ensure that development is consistent with the character of, and compatible in scale with, existing Zone C and Zone D neighborhoods. To reflect the community's design priorities and support predictability of design, the standards promote development in a generally preferred design. Consistent with State housing legislation, projects that comply with the Code's objective development and design standards may undergo administrative review only. As an exception to the process, any projects that do not comply with the objective design standards may voluntarily choose a discretionary Design Review process.
- **Part 3, Test Site Studies** shows the objective design standards on two hypothetical Zone D "test sites" – one in the Grand Avenue Subarea and one in the Civic Center subarea. The test site massing studies represent just one possible expression of the objective design standards on each test site. Following the massing studies, Chapter 3 provides a summary of the economic feasibility of the two massing studies under three scenarios:

  - A base case scenario;
  - A density bonus scenario; and
  - A project that includes 50 percent affordable housing units.

  The focus of the test site studies is the design (aesthetic) standards; however, the test site massing also shows possible changes to basic Zone D development standards such as height, FAR, and density. While the visualizations and feasibility study assume that such changes to the basic development

standards will be needed to achieve the City's goal of facilitating housing affordability, those changes are for future study only.

The ADU prototype plans and the recommended incentives to facilitate equitable distribution of affordable units across the City through the construction of ADUs and Junior ADUs are provided separately.

Next Steps

Review and adoption of the Multi-family Objective Design Standards is anticipated in the fall/winter of 2022.

The work of this project will inform the ongoing efforts as Piedmont updates the Housing Element of the City's General Plan to meet the requirements of State law. The findings of the Piedmont Multi-family Objective Design Standards and ADU Incentives programs project will be used in consideration and identification of suitable sites for housing in the City.

These recommendations will ultimately allow for a streamlined approval of housing that is affordable to both owner and renter households at all income levels on a range of sites throughout the City. This includes all sites that are zoned to allow residential uses; sites that are publicly-owned; and vacant parcels. In conjunction with the Housing Element update, State law mandates that the City must support and actively facilitate affordable multi-family development on sites that are between 0.5 acres and 10 acres in size that permit residential uses at a density of at least 20 du/ac. These objective standards will assist Piedmont in meeting this mandate.

2 Objective Design Standards

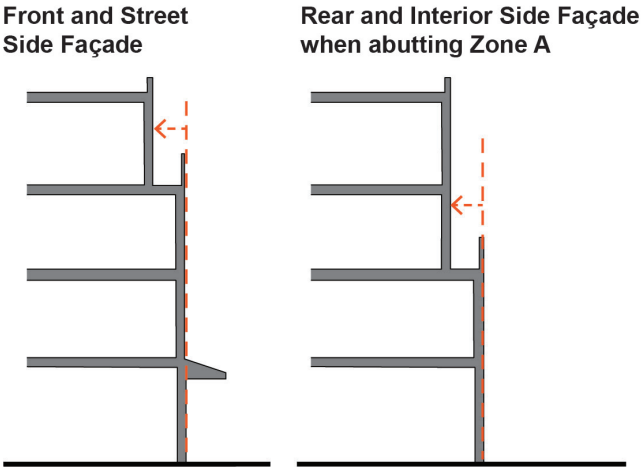
Multi-family Residential Design Standards

A. **Building Envelope Design.**

1. **Upper-story Step-backs.**

a. Along the front and street side façade, the fourth story must be stepped back a minimum 5 feet from the ground floor façade.

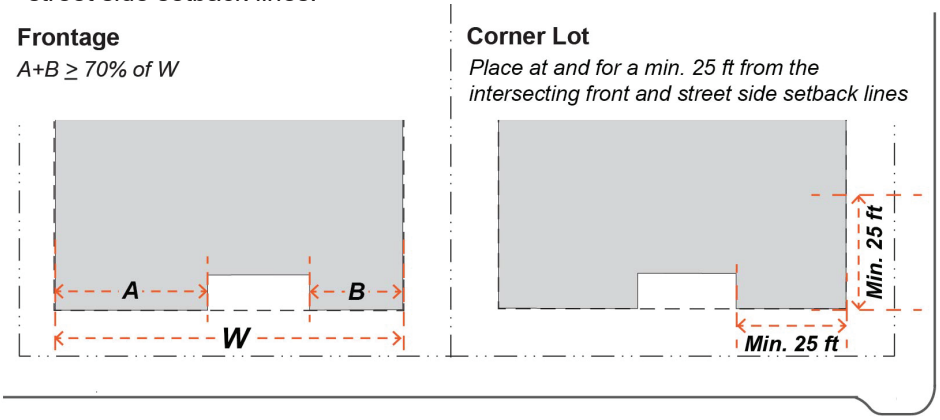
b. Along the interior side and rear façade, when abutting Zone A, the third and fourth story, or more, must be stepped back a minimum 5 feet from the ground floor façade.



2. **Building Placement.**

a. *Frontage.* A minimum 70% percent of ground-floor building frontage must be built at or within 18 inches of the front setback to create a continuous street wall.

b. *Corner Lot.* At street corners, buildings must be placed at the street yard setback lines and for a minimum 25 feet distance from the intersecting front and street side setback lines.



3. **Building Massing Abutting Zone A.** Building façade planes facing and abutting properties in Zone A may not exceed 35 feet in width without a break a minimum 6 feet depth.

4. **Privacy.**

a. *Outdoor Habitable Space.* Balconies, decks, and other habitable outdoor spaces are not allowed on any upper-story facades facing and abutting lots in Zone A.

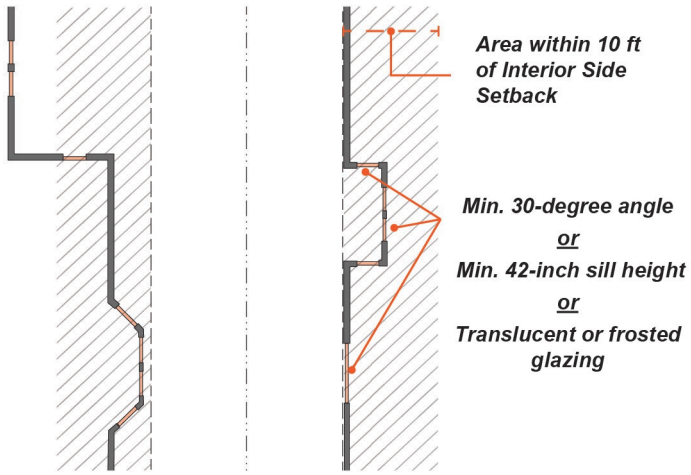
b. *Balcony and Deck Placement.* Primary living spaces located along a side setback shall orient balconies and decks towards the front and rear of the building.

c. *Privacy and Window Placement.* Windows to primary living spaces within 10 feet of or facing a side setback or within 25 feet of and facing another unit on-site must:

i. Be angled away from the adjacent side setback line a minimum of 30 degree, measured from a line perpendicular to the side setback line;

ii. Have a minimum sill height of 42 inches from the finished floor; or

iii. Use permanently translucent or "frosted" glazing.



B. **Building Design.**

1. **Street-Facing Building Articulation and Façade Bays.**

a. *Vertical Articulation.*

i. Building facades up to 45 feet in length along a public right-of-way must incorporate one of the following:

(a) Window bays a minimum 2 feet in depth from building façade every 10 horizontal feet.

(b) Recesses a minimum 2 feet in depth from building façade every 10 horizontal feet.

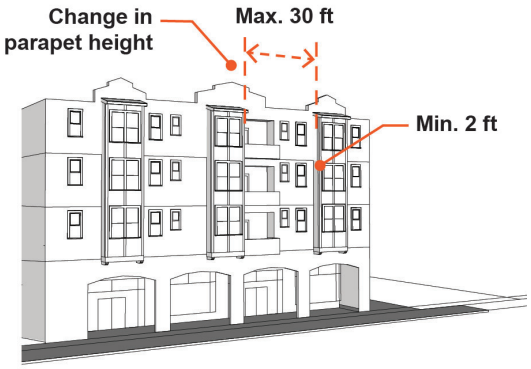
(c) Porches or decks over a minimum of 25 percent of the façade.

ii. When a building façade exceeds 45 feet in length along a public right-of-way, it must be separated into façade bays no greater than 30 feet in width defined by a recess a minimum of 2 feet in depth and at least one of the following strategies:

(a) Change in roof parapet height or shape of at least 6 feet.

(b) Change in roof form and type (e.g. flat pitch roof to gable).

(c) Change in building height, minimum 8-foot difference



Building façade > 45 ft

b. *Bay Articulation.* The eave or roof form of a recessed façade bay shall be no higher than the those of bays not recessed.

c. *Townhouses/Rowhouses.* In townhouse and rowhouse development types, facades of adjacent attached units must be staggered or off-set a minimum of 12 inches to avoid monotony in design.

2. **Roof Form and Design.**

a. *Allowed Roof Forms.* Roof forms shall be limited to:

i. Hipped

ii. Gable

iii. Dormers, which may not exceed 8 feet in length.

iv. Parapet and flat membrane roofing. Parapet segments may not exceed 25 feet in length without interruption in height or form.

v. Roof decks that are enclosed on the sides and rear, either partially or completely, provided the deck and deck occupants are not visible from the right-of-way or adjacent single-family property within 300 feet.

b. *Pitch.* The pitch of the roof must be 3:12 to 5:12 ratio. Flat roofs with parapet are also permitted.

c. *Eaves.* Where eaves exceed 18 inches in depth, exterior brackets or beams are required.

d. *Form and Design.* Solar roofs and other Building Integrated Photovoltaic (BIPV) roof designs are exempt from these roof form standards if needed to achieve a net zero energy consumption result on site.

3. **Building Entries.**

a. *Ground Floor Entrances.*

i. Shared entrances must be located on the front of the building and must face a public right-of-way. Entrances are limited to a maximum of 2 per facade in Zone D.

ii. Individual entrances must face either a public right-of-way, an internal access drive, or a shared forecourt.

b. *Upper Floor Entrances.* Exterior stairs to entrances to upper floor units above the second floor are not permitted.

c. *Frontage Types.* Building frontages must take one of the following forms:

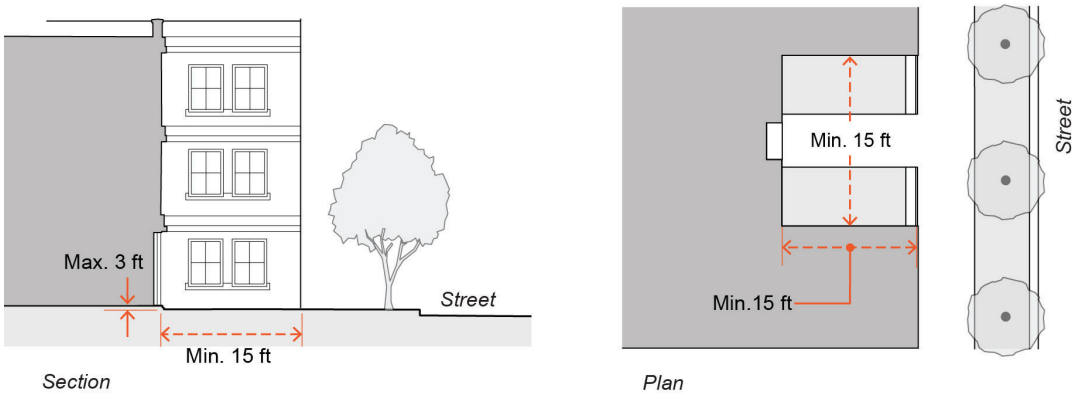
i. Shared landscaped forecourt with dimensions as indicated below:

(a) Forecourt depth: Minimum 15 feet

(b) Forecourt width: Minimum 15 feet

(c) Ratio of forecourt width-to-height: Maximum 2:1

(d) Entrance maximum 3 feet above level of forecourt.



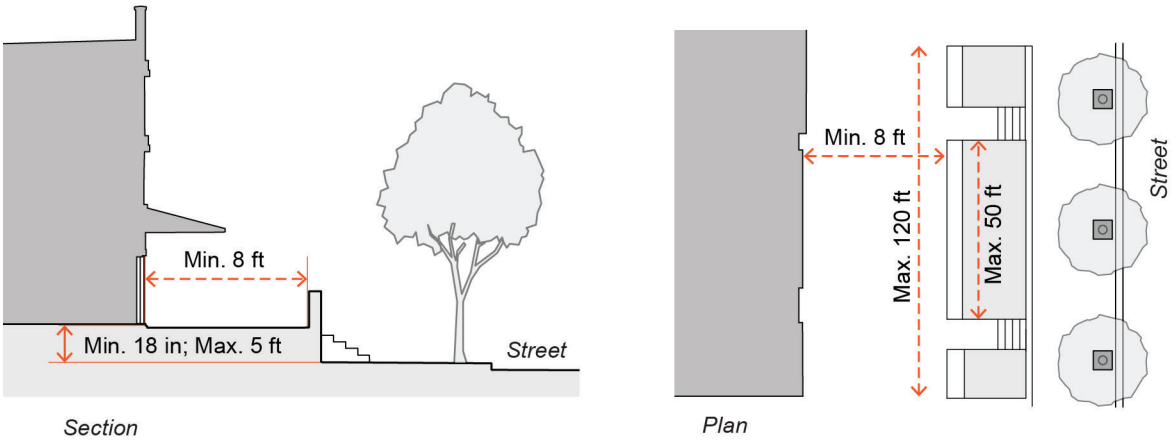
ii. Shared entrance forecourt level above or below sidewalk: Shared or individual terrace frontage with dimensions as indicated below:

(a) Terrace depth: Minimum 8 feet

(b) Terrace width: Minimum 15 feet. Maximum 120 feet

(c) Distance of terrace between stairs: Maximum 50 feet

(d) Terrace level above sidewalk: Minimum 18 inches, maximum 5 feet



iii. Entrances for individual units with covered dooryard frontages with dimensions as indicated below:

(a) Dooryard width: Minimum 6 feet

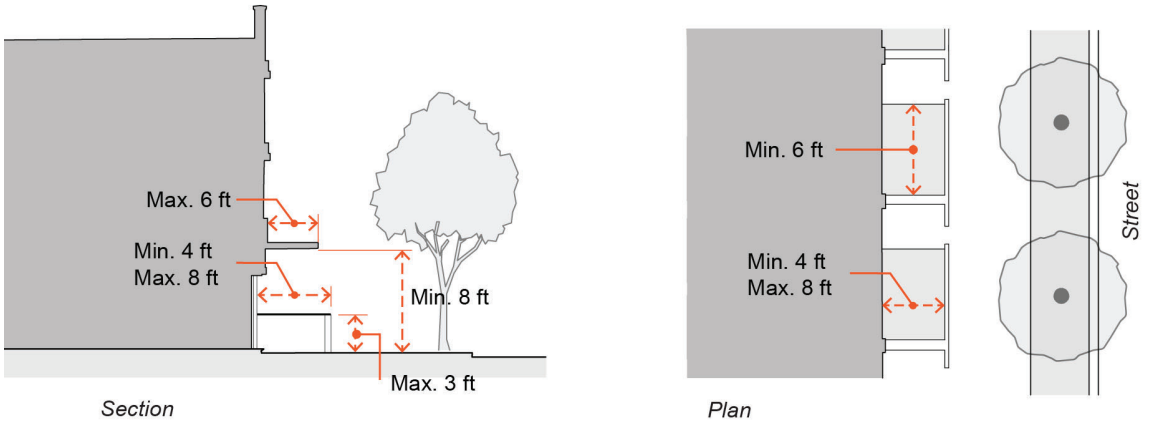
(b) Dooryard depth: Minimum 4 feet, maximum 8 feet

(c) Dooryard overhead projection depth: Maximum 6 feet

(d) Dooryard clear height: Minimum 8 feet

(e) Dooryard wall/planter/fence height: Maximum 3 feet

(f) Not permitted in Zone D.



iv. Individual covered stoop frontages with dimensions as indicated below:

(a) Stoop clear height: Minimum 8 feet

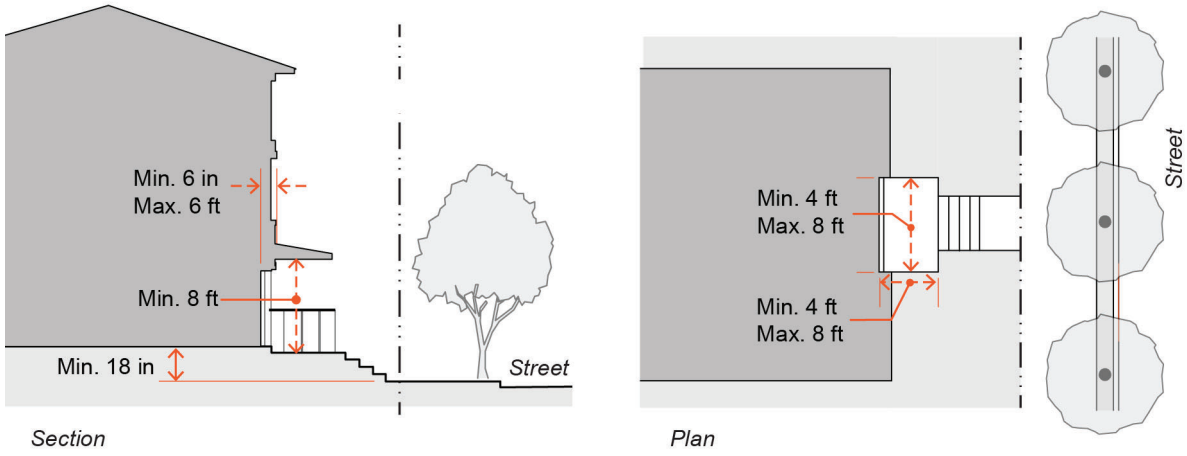
(b) Stoop height above sidewalk: Minimum 18 inches

(c) Stoop width: Minimum 4 feet, maximum 8 feet

(d) Stoop depth: Minimum 4 feet, maximum 8 feet

(e) Stoop entry recession: Minimum 6 inches, maximum 6 feet.

(f) Not permitted in Zone D.



d. *Forecourt.* Forecourts must:

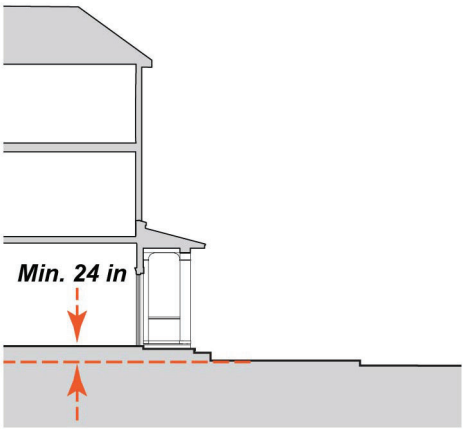
i. Be visible from and linked to abutting public rights-of-way by a clear, non-combustible accessible path of travel;

ii. Be enclosed on at least three sides by buildings; and

iii. Remain open to the sky (arbors and trellises are allowed).

di. *ADA Accessibility.* All frontages must comply with ADA accessibility requirements.

4. **Ground Floor Finish Floor Elevation.** The ground floor finish floor elevation must be minimum 18 inches above sidewalk elevation.



5. **Window and Door Design.**

   a. *Window Shape.* Primary windows may be square, vertically-oriented and rectangular, or vertically-oriented and arched. Secondary windows must be smaller in size than primary windows and may be square, vertically-oriented and rectangular, or vertically-oriented and arched.

   b. *Window Recess and Trim.* All windows must:

      i. Include trim at least 2 inches in width (foam or vinyl trim not permitted); or

      ii. Be recessed a minimum of 2 inches from the outer wall surface.

   c. *Windows Material.* Vinyl is not a permitted window material.

   d. *Divided Lites.* Simulated divided-lite grilles are acceptable only if they are located on both the outside and inside faces of the window, have spacer bars between the double panes of glass, and a thickness of at least 1/2 inch on each side of the window. 50 percent of windows must have a divided lite design.

   e. *"360-Degree" Design.* All primary windows on each floor of each façade must be the same design, proportions, trim, material, and color.

   f. *Glazing.* All glazing types are permitted except reflective or opaque tinting of glazing, which are prohibited.

   g. *Residential Signifiers.* Residential facades shall incorporate at least one of the following elements that signal habitation: window bays, usable balconies, or horizontal cornices or string courses at every floor.

6. **Residential Unit Design.**

   a. *Affordable Unit Design.* Affordable units and market-rate units in the same development shall be constructed with the same exterior materials so that the units are not distinguishable.

   b. *Private Open Space.*

      i. Minimum 100 square feet per unit.

      ii. Private open space may be at-grade or elevated.

   c. *Common Open Space.*

i. Minimum 500 square feet per lot or 25 square feet per unit, whichever is greater.

ii. Minimum dimension 15 feet.

iii. Shared open space may be at-grade, elevated, or rooftop.

iv. Where required common open space abuts private open space, an access drive, or the public right-of-way, then a minimum 2-foot-wide buffer is required. The buffer must be planted or otherwise designed to be screened from view from the private open space.

7. **Parking and Driveway Design.**

a. *Parking Design.* Parking must be located in:

i. Tuck-under individually secured garages on the ground level of a structure in Zone C; or

ii. Shared garage (podium or underground) in Zone C or D.

b. *Driveway Width.* Driveways may not exceed 20 feet in width.

c. *Parking Visibility.* Street-facing structured parking levels are not permitted at the ground-level unless the parking level exterior matches that of the living area.

d. *Garage Doors.*

i. All garage doors must be motorized.

ii. Controlled entrances to shared parking facilities (gates, doors, etc.) shall be located a minimum 10 feet from the back of sidewalk and may not exceed 20 feet in width.

e. *Long-term Bicycle Parking.*

i. A minimum of one long-term bicycle parking space shall be provided for every 4 residential units.

ii. Long-term bicycle parking must be located on the same lot as the use it serves and:

(a) In a parking facility;

(b) In an enclosed bicycle locker; or

(c) In a fenced, covered, and locked bicycle storage area.

f. *Bicycle and Auto Parking Clearance.* 5 feet of vertical clearance shall be provided between vehicle and bicycle parking spaces. 2 feet of vertical clearance shall be provided between bicycle parking spaces and adjacent walls, poles, landscaping, street furniture, drive aisles, and pedestrian walkways.

8. **Equipment Screening.**

a. *Solar Equipment.* Rooftop solar panels shall have a low-profile, flush-mounted design, with a maximum of 6-inch gap between the solar panel and the roof material unless the roof is flat. If solar panels are mounted on a flat roof and are tilted or angled to maximize solar energy production, building parapets or other architectural elements shall provide screening from view from the public right-of-way and from adjacent single-family uses within 300 feet. Screening shall be architecturally continuous with the building in color, material, and trim cap detail.

b. *Height of Roof-mounted Equipment.* Roof mounted equipment greater than 12 inches above the roof line, except for roof exhaust vents, plumbing vents, and solar panels on pitched roofs, shall be screened from being viewed from the public right-of-way and from adjacent single-family uses within 300 feet.

c. *Location of Ground-mounted Equipment.* Neither mechanical nor electrical equipment is allowed in street-facing setbacks or interior side setbacks facing and abutting single-family uses on lots in Zone A.

d. *Visibility of Ground-mounted Equipment.* Site-and ground-mounted mechanical or electrical equipment shall be screened using plant materials, fencing, or walls from public right-of-way. Conduits shall not be exposed on exterior walls and shall be embedded in walls or within a chase designed for such use.

e. *Screening Height.* All screen devices shall be as high as the highest point of the equipment being screened.

f. *Drain-Waste-Vent System.* Supply, exhaust and venting plumbing, conduits, and flues shall be concealed within the walls of a building.

9. **Additions and Remodels.** In order to ensure that proposed additions and remodels match the existing building, any remodels and additions must incorporate only the architectural design elements, proportions, materials, and details that are already on the existing building.

C. **Façade Design.**

1. **Blank Walls.**

a. *Limit on Blank Walls.* Blank walls on any floor may not exceed 12 horizontal feet.

b. *Enhancement on Blank Walls.* Blank walls at the ground level must include one or more of the following:

i. A pattern of motifs or insets in tile or stucco;

ii. A base or water table at least 2.5 feet in height and a cornice at the top of the ground level;

iii. Landscaping that, at maturity, obscures a minimum 50 percent of the wall area, and that is guaranteed for a period of 10 years, minimum; or

iv. Landscaped trellises or lattices over a minimum 50 percent of the wall area that is guaranteed for a period of 10 years, minimum.

2. **Building Materials, Colors, and Finish.**

a. *Primary Building Materials.* A primary building material shall mean a material that covers 60 percent or more of a façade surface area excluding transparent surfaces. When there is a change in exterior building material, the material change must occur at the inside corner of a building form, or a minimum of 8 feet beyond an outside corner. The following primary cladding materials are allowed:

i. Stucco (minimum 2-coat)

ii. Stone (must extend vertically to the foundation)

iii. Stone-colored brick (must extend vertically to the foundation)

iv. Exterior insulation finishing system (EIFS) panels

b. *Secondary Building Materials.* A secondary building material shall mean a material that covers less than 40 percent of a façade surface area excluding transparent surfaces. The following secondary cladding materials are allowed:

i. Metal (wrought iron, copper, bronze) with a non-reflective finish

ii. Wood

iii. Split-face Concrete Masonry Unit (CMU)

iv. Terra cotta tile

v. Brick or brick veneer

vi. Glazed tile

c. *Building Colors.* A maximum of four colors shall be applied to be the building façade:

i. Primary color comprising 60 percent or more of the façade.

ii. Secondary color comprising no more than 30 percent of the façade.

iii. Tertiary color comprising no more than 10 percent of the façade.

iv. Accent color for use on trim and architectural details.

Materials with naturally occurring colors such as wood or stone, materials with prefinished color such as stucco, and colorized metal shall constitute a color for this requirement.

d. *Porches, Balconies, Decks, and Exterior Stairs.* Porches, balconies, decks, and exterior stairs must be stucco or wood. Railings must be stucco, wood or metal.

e. *Timber Protection.* Exterior timber shall be protected from decay by stain and sealant.

f. *Ferrous Material Protection.* Exterior ferrous metals shall be protected from corrosion either through the use of galvanized, stainless, or weathering steel.

g. *Roof Materials.* Roof materials must be:

i. Composition shingle (Timberline Lifetime Architectural), brown or brown-red in color;

ii. Spanish barrel tile, regularly or irregularly laid, and brown or brown-red in color;

iii. Standing seam metal in a nonreflective dark brown or dark bronze color;

iv. Concrete roof tiles; or

v. Cool roof membrane roofing, non-reflective and medium gray color.

3. **Architectural Details.**

a. *Structural Elements.* Structural elements visible on the building exterior (e.g. rafters, purlins, posts, beams, balconies, brackets, trusses, columns, arches, etc.), even when ornamental, shall be placed to frame building apertures and bays.

b. *Parapet Design.* Patterns of steps, angles, and/or curves must be symmetrical within each segment or establish symmetry across the building façade.

c. *Gutters.* All gutters shall contain features to direct rainwater away from exterior walls including one or more of the following:

i. Projecting eaves (minimum 12-inch projection)

ii. Scuppers (minimum 12-inch projection if no downspouts are used)

iii. Gutters with downspouts

d. *Street Address Number.* Street address numbers must be metalwork or tiled.

e. *Ornamental Features.* Buildings must exhibit at least two of the following ornamental features over 15% or more of each facade:

i. Patterned accent tiles applied consistently across all street-facing building facades

ii. A pattern of carved insets with grilles on all street-facing building facades

iii. A pattern of stucco motifs or tile motifs or vents on all street-facing building facades

iv. Terra-cotta tile chimney top (enclosing equipment or not)

f. *Exceptions.* All building façades must comply with applicable standards with the following exceptions:

i. Materials used for the building base or podium need not be repeated.

ii. Where a building is designed to appear as separate buildings, each portion that appears as a separate building shall be subject to the Building Design and Façade Design standards separately.

4. **Additions and Remodels**. Notwithstanding the design standards of this Chapter, new or replacement windows or doors in an existing wall must have the same design, detail, and placement of existing windows or doors on the building.

D. **Site Design.**

1. **Walls and Fences.**

a. *Fences and Walls.* Fences and walls shall be the same materials and color with that of the primary or secondary building materials.

b. *Retaining Walls.* The design of new retaining walls that are visible from the abutting public right-of-way, as well as those that are within the side and rear yard areas, shall be constructed in a stepped or terraced fashion with the maximum height for any single wall no more than 4 feet unless an engineering assessment finds that physical limitations do not make such terracing feasible. If the change in grade is greater than 4 feet, a series of retaining walls, interspersed by planting areas in a stepped or terraced fashion shall be constructed to minimize the retaining walls visual prominence and avoid a monolithic appearance. A minimum 6 foot masonry wall must be provided on property lines shared with single-family uses on lots in Zone A.

c. *Retaining Wall Design.*

i. Retaining walls shall provide visual interest through the use of form, texture, detailing and planting. When a retaining wall contains an entry stairway to the residence, the design of the wall shall include the following features that emphasize the entryway: plantings or design features that match those of the primary building.

ii. Retaining wall material shall be concrete or CMU covered with plaster stucco a minimum of 2 inches thick.

d. *Screening of Retaining Walls.* Where a single large retaining wall is used, its design shall incorporate a planting strip and irrigation system at its toe strip to allow for the planting of screening vegetation and/or a planting strip with irrigation system at the top of the wall. Planting strip must be a minimum 12 inches wide.

e. *Gates.* Residential security gates, when installed, shall be the same color as the secondary building materials and be no more than 50 percent opaque.

2. **Landscaping.**

a. *Landscape Design.*

i. Landscape species must be native, low-water usage, and low maintenance, meeting Water Efficient Landscape Ordinance requirements.

ii. Landscaping shall be placed according to sunlight needs.

iii. Landscaping shall be located to cover the entire development site and provide shade in south-facing and west-facing areas.

iv. Plant size at maturity must not exceed:

(a) 30 inches within 10 feet of a sidewalk or driveway

(b) The height of any building aperture within 10 feet of the aperture.

v. Existing mature trees shall be preserved and incorporated as part of the overall landscape design.

b. *Required Landscaping.*

i. Ground cover must be planted a maximum of 1 foot on center.

ii. The following does not count toward the required landscape area:

(a) Artificial turf; and

(b) Any area with a minimum dimension less than 30 inches.

c. *Prohibited Species and Materials*. Plant species that are listed by California Invasive Plant Council (Cal-IPC) as invasive are prohibited, as is flammable mulch.

d. *Frontage Landscaping*.

i. The required street setback area must be landscaped except for areas of ingress and egress.

ii. Landscaping may include container plantings, groundcover, turf, climbing vines, shrubs, low hedges, and trees.

iii. A maximum of 20 percent of the required front setback area may be turf. Such turf area may not be counted toward the required landscaped area.

e. *Interior Side and Rear Setback Landscaping*.

i. Landscaping within side and rear setback areas shall be located to delineate property lines.

ii. All interior side and rear setbacks on lots which abut Zone A shall be planted with a mix of trees and shrubs. At least one tree of at least 15-gallon size shall be planted per 20 linear feet or as appropriate to create a tree canopy over the required setback. In addition, at least three shrubs shall be planted per 20 linear feet.

f. *Grading*. To minimize impacts on existing terrain, the maximum amount of cut shall not exceed 5 feet below the natural grade and the amount of fill shall not exceed 3 feet above the natural grade.

g. *On-site Drainage.* Drainage shall be provided on-site using natural drainage channels, bioretention areas, or other landscape areas that filter surface water run-off before it enters the storm drain system.

h. *Backflow Preventer and Public Utilities*. Any backflow preventer or public utility, such as panels and meters, must be screened with landscaping as high as the equipment and landscaping must be guaranteed for a period of 10 years. Public utility connections must be installed in underground vaults and conduit.

3. **Site Circulation.**

a. *Hardscape Materials.* On-site hardscape material shall be permeable or pervious and grey or light gray in color with a higher solar reflective index.

b. *Paving within Setback Area.* Paving within required setback areas shall be distinct from the adjacent public sidewalk in color, design, or texture.

c. *Curb Cut Frequency.* A maximum of one curb cut for driveway access may be permitted per street frontage per development project site.

4. **Refuse and Recycling Areas.**

a. *Location.* Common refuse and recycling containers shall not be located:

i. Within any required street-facing setback;

ii. Any required parking and landscaped areas; or

iii. Any other area required to remain unencumbered, according to Fire and other applicable Building and Public Safety Codes.

b. *Visibility.* Common refuse and recycling containers shall not be visible from the public right-of-way and shall be screened by landscaping. Fences or walls may be used if located outside a required setback.

c. *Enclosure and Container Materials*.

i. Enclosure materials shall be the same as those of the primary building.

ii. Containers used for the collection and storage of refuse and recyclable materials shall meet the standards of the waste collection company and be:

(a) Constructed of a durable waterproof and rustproof material;

(b) Enclosed and covered when the site is not attended;

(c) Secured from unauthorized entry or removal of material; and

(d) Shall be sized to accommodate the volume of materials collected between collection schedules.

d. *Clear Zone.* The area in front of and surrounding all enclosure types shall be kept clear of obstructions and accessible.

e. *Drainage.* The floor of the enclosure shall have a drain that connects to the sanitary sewer system.

5. **Lighting.**

a. *Entrance Lighting.* Light fixture(s) at all building entries are required.

b. *Façade Lighting.* Lights on the building façade shall be incorporated into façade design for all facades. Fixtures shall be:

i. Fully shielded and directed downward onto the building façade and onto paving of entrance areas; and

ii. The same materials as the building trim/accent.

c. *Low-level Lighting.* Low-level lighting shall be provided to ensure entry paths, entry stairs and driveways, garage and building entries are illuminated.

6. **Energy Efficiency.**

a. All appliances must meet the applicable adopted Reach Codes.

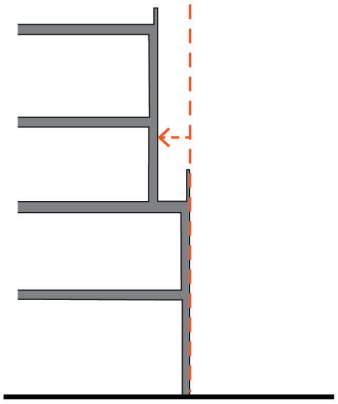
b. All appliances, HVAC and lighting shall be electric and energy-efficient.

Commercial and Mixed-Use Design Standards

A. **Building Envelope Design.**

1. **Upper-story Step-backs.** Along the interior side and rear façade facing and abutting single-family uses on lots in Zone A, the third and fourth story must be stepped back a minimum 5 feet from the ground floor façade.

Rear and Interior Side Façade when abutting Zone A

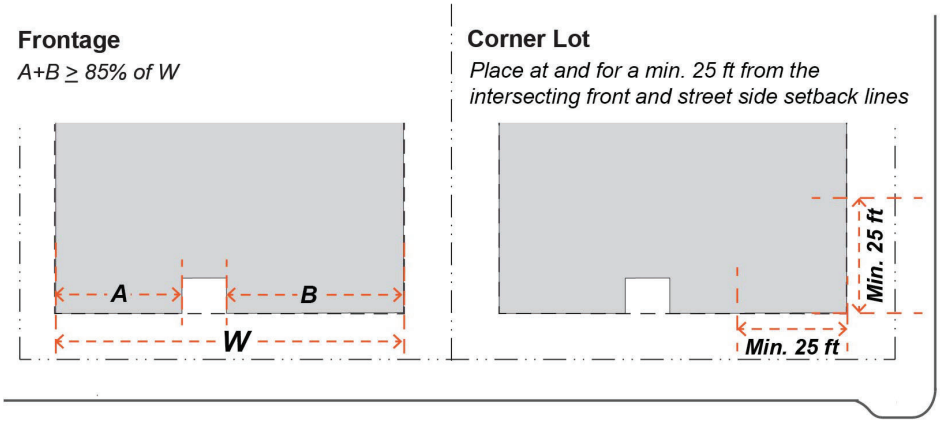


3rd and 4th story stepped back from ground floor by 5 ft

2. **Building Placement.**

   a. *Frontage.* A minimum 85 percent of ground-floor building frontage must be built at or within 18 inches of the front setback to create a continuous street wall.

   b. *Corner Lot.* At street corners, buildings must be placed at street yard setback line, and for a minimum 25 feet distance from, the intersecting street yard setback lines.



3. **Building Massing Abutting Zone A.** Building façade planes facing and abutting single-family uses on lots in Zone A may not exceed 40 feet in width without a break in massing minimum 6 feet in depth.

4. **Privacy.**

   a. *Outdoor Habitable Space:* Balconies, decks and other habitable outdoor spaces facing and abutting single-family uses on lots in Zone A are not allowed on upper-story facades or roofs.

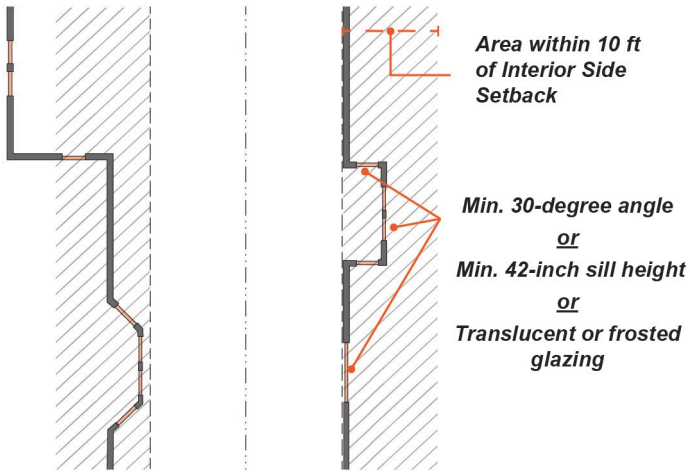
b. *Balcony and Deck Placement.* Development shall place and orient balconies and decks accessed from the living room of each unit toward the street yards of a building.

c. *Window Placement.* Windows to primary living spaces within 10 feet of and facing an interior side setback must be:

i. Be angled away from the adjacent side setback line a minimum of 30 degree, measured from a line perpendicular to the side setback line;

ii. Have a minimum sill height of 42 inches from the finished floor; or

iii. Use permanently translucent or "frosted" glazing.



B. **Building Design.**

1. **Street-Facing Building Articulation and Façade Bays.**

a. *Vertical Articulation.*

i. Building facades up to 65 feet in length along a public right-of-way must incorporate at least one of the following:

(a) Window bays a minimum 3 feet in depth from building façade

(b) Recesses a minimum 3 feet in depth from building façade

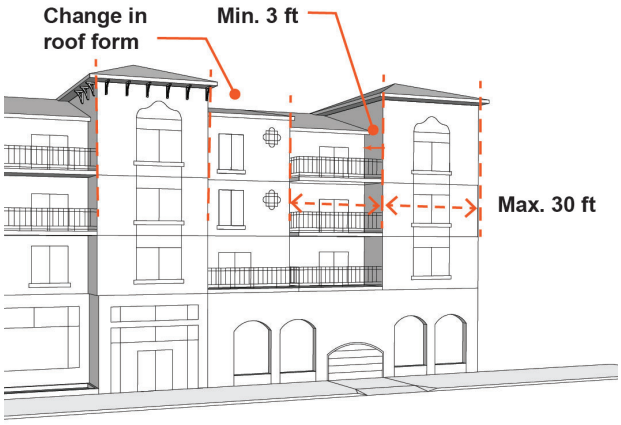
(c) Porches or decks over a minimum 25 percent of the façade length.

ii. When a building façade exceeds 65 feet in length along a public right-of-way, it must be separated into façade bays no greater than 30 feet in width defined by a recess a minimum of 3 feet in depth and at least one of the following features:

(a) Change in roof parapet height or shape a minimum of 6 feet

(b) Change in roof form and type (e.g. gable roof to flat roof)

(c) Change in building height, minimum 8-foot difference



Building façade > 65 ft

b. *Bay Articulation.* The eave or roof form of a recessed façade bay shall be no higher than those of the façade bay located at the setback line.

c. *Corner Design.* Development must accentuate building massing at roadway intersections with one of the following elements:

i. A tower element at least 80 square feet in area;

ii. A decorative parapet; or

iii. A rounded corner and plaza.

2. **Roof Form and Design.**

a. *Allowed Roof Forms.* Roof forms shall be limited to:

i. Hipped

ii. Gable

iii. Dormers, which may not exceed 8 feet in length

iv. Parapet. Parapets segments may not exceed 20 feet in length without interruption in height or form.

v. Roof decks that are enclosed on the sides and rear, either partially or completely, provided the deck and occupants are not visible from the public right-of-way or adjacent single-family uses within 300 feet.

vi. Dentilled cornice minimum 3 feet high and continuous at roof line on all building facades

b. *Pitch.* The pitch of the roof must be 3:12 to 5:12 ratio. Flat roofs are also permitted.

c. *Eaves.* Eaves shall exceed 18 inches in depth and exterior brackets or beams are required wherever building height exceeds 30 feet.

d. *Form and Design.* Solar roofs and other Building Integrated Photovoltaic (BIPV) roof designs are exempt from these roof standards if needed to achieve a net zero energy consumption result on site.

e. *Roof Decks*. Roof decks are limited to a maximum of 30 percent of the building footprint.

3. **Building Entries**

a. *Ground Floor Entrances.*

i. Entrances to non-residential ground floor uses must be located on the front of the building and must face a public right-of-way. Entrances are limited to a minimum 2 per facade facing and abutting the public right-of-way or 1 for every 20 housing units per facade facing the public right-of-way, whichever is greater, in Zone D.

ii. Any shared or individual entrance to residential unit must be a minimum 8 horizontal feet from any entrances to non-residential uses.

iii. Shared entrances to residential units must have a roofed projection or recess with a minimum depth of 4 feet and a minimum horizontal area of 40 square feet.

b. *Upper Floor Entrances.* Exterior stairs to upper floor units above the second floor are not permitted.

c. *Frontage Types.* Building frontages must take one of the following forms:

i. Shopfront frontage with dimensions as indicated below:

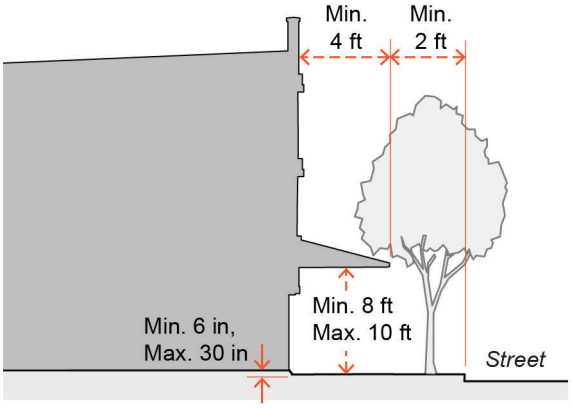
(a) Shopfront covered projection depth: Minimum 4 feet

(b) Shopfront covered projection distance from curb: Minimum 2 feet

(c) Shopfront covered projection height: Minimum 8 feet, maximum 10 feet

(d) Shopfront finish floor level above sidewalk: Minimum 6 inches, maximum 30 inches

(e) Shopfront bay width: Minimum 6 feet, maximum 20 feet



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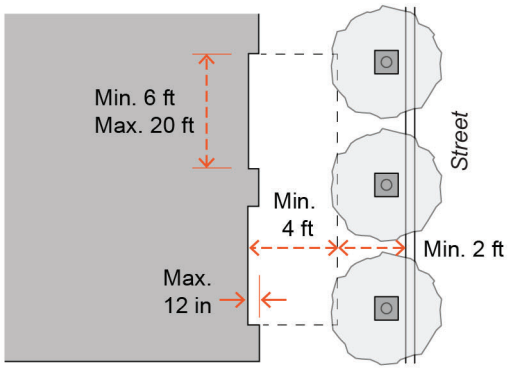


Plan

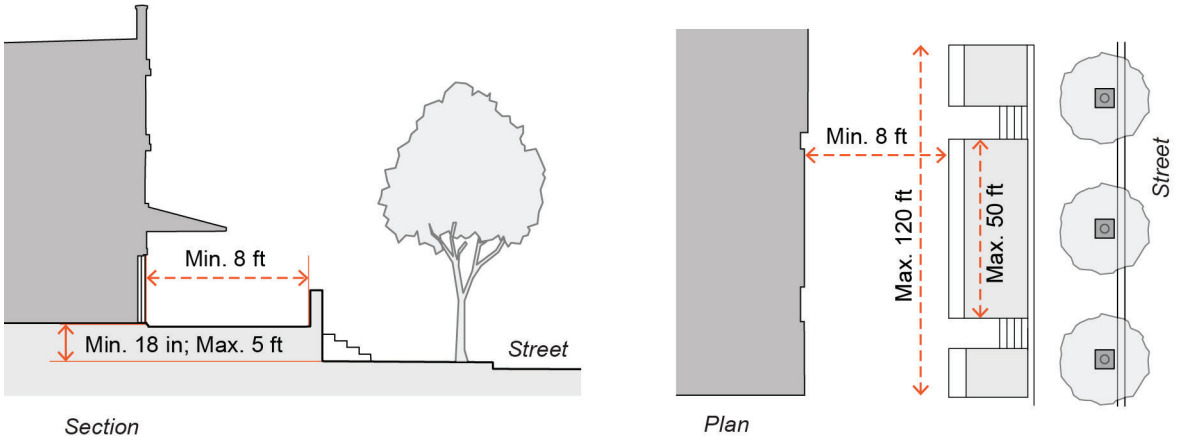
ii. Terrace frontage with dimensions as indicated below:

(a) Terrace depth: Minimum 8 feet

(b) Terrace width: Maximum 120 feet

(c) Distance of terrace between stairs: Maximum 50 feet

(d) Terrace level above sidewalk: Minimum 18 inches, maximum 5 feet



iii. Covered arcade frontage with dimensions as indicated below:

(a) Arcade clear height: Minimum 12 feet, maximum 16 feet

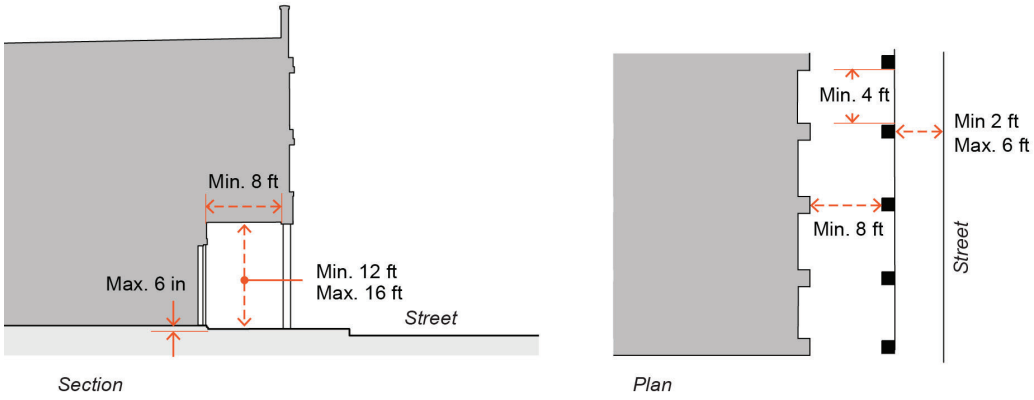
(b) Arcade clear depth: Minimum 8 feet, must be consistent for the length of the arcade.

(c) Arcade column spacing: Minimum 4 feet clear between columns and maximum 12 feet between columns or as aligned with building bay architectural elements above.

(d) Arcade column height: Minimum 4 times column width, maximum 6 times column width

(e) Finish floor level above arcade floor: Maximum 6 inches

(f) Arcade distance from curb (encroachment permit may be required): Minimum 2 feet, maximum 6 feet



d. *Shopfront Design.* On buildings on lots with street frontages that exceed 50 feet, shopfront and terrace frontages must incorporate:

i. A building recess of a maximum depth of 4 feet and minimum width of 6 feet to provide additional window display space; and

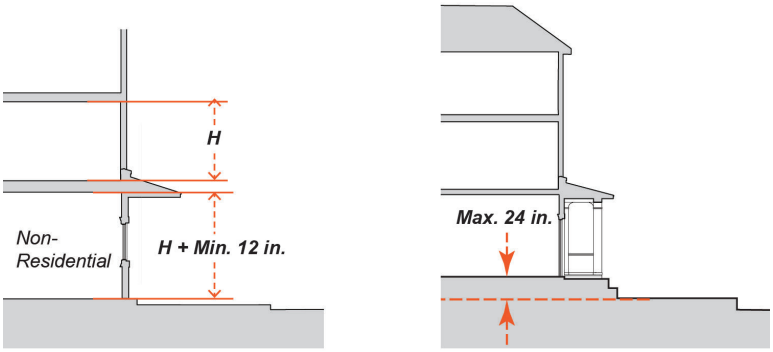
ii. Variations in bulkhead, awnings, materials and/or color to visually articulate the shopfront into bays a maximum of 20 continuous feet wide.

e. *ADA Accessibility.* All frontages must comply with ADA accessibility requirements.

4. **Ground Floor Design.**

a. *Ceiling Height.* The ground floor ceiling height must be a minimum 12 feet in the Grand Avenue subarea and 15 feet in the Highland Avenue subarea and a minimum 12 inches taller than upper floor levels' floor-to-ceiling height.

b. *Finish Floor Elevation.* The ground floor finish floor elevation may be a maximum 24 inches above sidewalk elevation.



5. **Window and Door Design.**

a. *Residential Window Shape.* Primary windows may be square, vertically-oriented and rectangular, or vertically-oriented and arched. Secondary windows must be smaller in size than primary windows and may be square, vertically-oriented and rectangular, or vertically-oriented and arched.

b. *Window Recess and Trim.* All windows must:

i. Include trim at least 2 inches in width (foam or vinyl trim not permitted); or

ii. Be recessed a minimum of 2 inches from the outer wall surface.

c. *Windows Material.* Foam and vinyl are not permitted window materials.

d. *Divided Lites.* Simulated divided-lite grilles are acceptable only if they are located on both the outside and inside faces of the window, have spacer bars between the double panes of glass, and a thickness of at least 1/2 inch on each side of the window. Residential primary windows must be a divided lite design.

e. *Ground Floor Commercial Windows.* Ground floor windows must be horizontal or square in proportion rather than vertically oriented.

f. *"360-Degree" Design.* All upper-story primary windows on each floor of each façade must have the same design, including proportions, trim, material, and color.

g. *Glazing.* All glazing types are permitted except reflective or opaque tinting of glazing, which are prohibited.

h. *Residential Signifiers.* Residential facades shall incorporate at least one of the following elements that signal habitation: window bays, usable balconies, or horizontal cornices or string courses at every floor.

6. **Residential Unit Design.**

a. *Affordable Unit Design.* Affordable units and market-rate units in the same development shall be constructed of the same exterior materials and details such that the units are not distinguishable.

b. *Private Open Space.* Minimum 100 square feet per unit. May be at-grade or elevated.

c. *Common Open Space.*

i. Minimum 400 square feet per lot or 20 square feet per unit, whichever is greater

ii. No dimension (length, width, or diameter) may be less than 15 feet.

iii. May be at-grade, elevated or rooftop.

iv. Where required common open space abuts private open space, access drive, or public right-of-way a minimum 2-foot buffer is required. The buffer must be planted or otherwise designed to be screened from view from the private open space.

7. **Parking and Driveway Design.**

a. *Parking Design.* Parking may be located in:

i. A shared garage (podium or underground)

ii. An above-ground parking structure enclosed with street-facing residential or retail uses. This configuration is known as a “wrap” or “lined” building.

b. *Driveway Width.* Driveways to shared garages may not exceed 30 feet in width.

c. *Parking Visibility.* Visible structured parking must be screened from view from the right-of-way by:

i. Regular punched openings designed to resemble windows of habitable spaces; or

ii. Trellis/living wall surfaces.

d. *Parking Separation.* Parking for residential units shall be separated from parking for non-residential uses through a controlled fence, gate, or other barrier.

e. *Garage Doors.*

i. All garage doors must be motorized.

ii. Controlled entrances to shared parking facilities (gates, doors, etc.) may not exceed 20 feet in width.

f. *Short-term Bicycle Parking.*

i. Short-term bicycle parking must be provided at a rate of 10 percent of required vehicular spaces or housing units, whichever is greater.

ii. Short-term bicycle spaces must be a stationary, securely anchored bicycle rack to which a bicycle frame and one wheel (two points of contact) can be secured if both wheels are left on the bicycle. One such bicycle rack may serve multiple bicycle parking spaces.

g. *Long-term Bicycle Parking.*

i. Required long-term bicycle parking shall be provided as follows:

(a) Residential Uses: A minimum of one bicycle parking space for every 4 residential units.

(b) Other Uses: 15 percent of required vehicular spaces.

ii. Long-term bicycle parking must be located on the same lot as the use it serves in: a parking facility; an enclosed bicycle locker; a fenced, covered, and locked bicycle storage area; or another secure area approved by the Planning Director.

h. *Bicycle and Auto Parking Clearance.* 5 feet of vertical clearance shall be provided between vehicle and bicycle parking spaces. 2 feet of vertical clearance shall be provided between bicycle parking spaces and adjacent walls, poles, landscaping, street furniture, drive aisles, and pedestrian walkways.

8. **Equipment Screening.**

a. *Solar Equipment.* Rooftop solar panels shall have a low-profile, flush-mounted design, with a maximum of 6-inch gap between the solar panel and the roof material or on a flat roof. If solar panels are mounted on a flat roof and are tilted or angled to maximize solar energy production, building parapets or other architectural elements shall provide screening from view from the right-of-way and from adjacent single-family uses within 300 feet. Screening shall be architecturally continuous with the building in color, material, and trim cap detail.

b. *Height of Roof-mounted Equipment.* Roof mounted equipment greater than 12 inches above the roof line, except for roof exhaust vents, plumbing vents, and solar panels on pitched roofs, must be screened from being viewed from the public right-of-way and from adjacent single family uses within 300 feet.

c. *Location of Ground-mounted Equipment.* Mechanical and electrical equipment is not allowed in setbacks.

d. *Visibility of Ground-mounted Equipment.* Site-and ground-mounted mechanical or electrical equipment shall be screened using plant materials, fencing, or walls from public right-of-way. Conduits shall not be exposed on exterior walls and shall be embedded either in walls or in a chase designed for such use.

e. *Screening Height.* All screen devices shall be as high as the highest point of the equipment being screened.

f. *Drain-Waste-Vent-System.* Supply, exhaust and venting plumbing, conduits, and flues shall be concealed within the walls of a building.

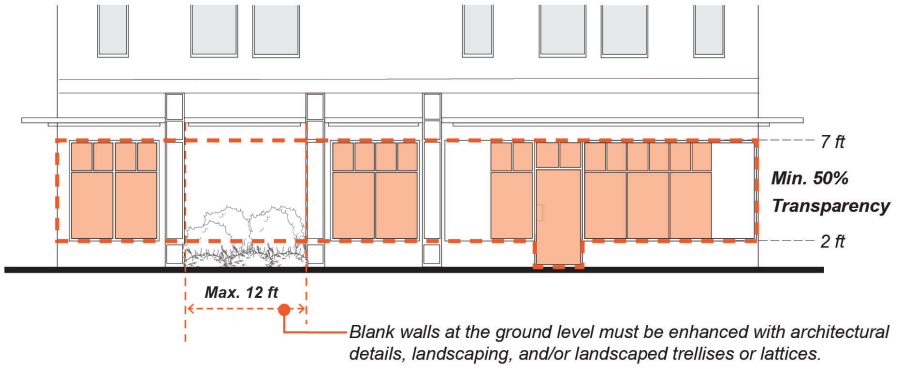
9. **Additions and Remodels.** In order to ensure that proposed additions and remodels match the existing building, any remodels and additions must incorporate only architectural design elements, proportions, materials, and details that are already on the existing building.

C. **Facade Design**

1. **Transparency and Blank Walls.**

a. *Required Ground-Floor Transparency.*

i. A minimum 50 percent of commercial ground floor street-facing facades between 2 and 7 feet in height shall be transparent window surface with unobstructed views to the interior commercial spaces.



ii. Ground floor leasable commercial space shall have a minimum interior floor-to-ceiling height of 14 feet.

iii. Ground floor leasable commercial space shall have a minimum depth of 50 feet for at least 50 percent of the length of the building.

iv. Opaque, reflective, or dark tinted glass is not allowed.

b. *Limits on Blank Walls.* The maximum length of blank walls is 12 feet on any floor.

c. *Enhancement on Blank Walls.* Blank walls at the ground level must include one or more of the following or 15% of all building facades:

i. A pattern of insets, tiles, or stucco motifs;

ii. A base or water table at least 2.5 feet in height and a cornice at the top of the ground level;

iii. Landscaping that, at maturity, obscures a minimum 50 percent of the wall area, and that is guaranteed for a minimum of 10 years; or

iv. Landscaped trellises or lattices over a minimum 50 percent of the wall area and that is guaranteed for a minimum of 10 years.

2. **Building Materials, Colors, and Finish.**

a. *Primary Building Materials.* A primary building material shall mean a material that covers 60 percent or more of a façade surface area excluding transparent surfaces. The following primary cladding materials are allowed:

i. Stucco (minimum 2-coat)

ii. Stone (must extend vertically to the foundation)

iii. Stone-colored brick, tan in color (must extend vertically to the foundation)

iv. Exterior insulation and finish system (EIFS) panels

b. *Secondary Building Materials.* A secondary building material shall mean a material that covers less than 40 percent of a façade surface area excluding transparent surfaces. The following secondary cladding materials are allowed:

i. Metal (wrought iron, copper, or bronze) with a non-reflective finish

ii. Wood

iii. Split-face Concrete Masonry Unit (CMU)

iv. Terra cotta tile

v. Brick or brick veneer

vi. Glazed tile

c. *Building Colors.* A maximum of 4 colors shall be applied to be the building façade:

i. Primary color comprising 60 percent or more of the façade

ii. Secondary color comprising no more than 30 percent of the façade

iii. Tertiary color comprising no more than 10 percent of the façade

iv. Accent color for use on trim and architectural details.

Materials with naturally occurring colors such as wood or stone, materials with prefinished color such as stucco, and colorized metal shall constitute a color for this requirement.

d. *Porches, Balconies, Decks, and Exterior Stairs.* Porches, balconies, decks, and exterior stairs must be stucco or wood. Railings must be stucco, wood or metal.

e. *Change in Exterior Building Material.* When there is a change in exterior building material, the material change must occur at the inside corner of a building form, or a minimum of 8 feet beyond an outside corner.

f. *Timber Protection.* Exterior timber shall be protected from decay by stain and sealant.

g. *Ferrous Material Protection.* Exterior ferrous metals shall be protected from corrosion either through the use of galvanized, stainless, or weathering steel.

h. *Roof Form and Materials.* Roof form shall be gable, hipped, or a flat roof. Flat roof must have a continuous parapet or cornice a minimum of 3 feet high. Roof materials must be:

i. Composition shingle (Timberline Lifetime Architectural), brown or brown-red in color;

ii. Spanish barrel tile, regularly or irregularly laid, and brown or brown-red in color;

iii. Standing seam metal in a non-reflective dark brown or dark bronze color;

iv. Concrete roof tiles;

v. Cool roof membrane roofing, in a non-reflective medium gray.

3. **Architectural Details.**

a. *Structural Elements.* Structural elements visible on the building exterior (e.g. rafters, purlins, posts, beams, balconies, brackets, trusses, columns, arches, etc.), even when ornamental, shall be placed to frame building apertures and bays.

b. *Parapet Design.* Parapets longer than 12 feet in length shall exhibit a combination of steps, angles, and/or curves. Patterns of steps and curves must be symmetrical within each segment or establish symmetry across the building façade. If parapets terminate with coping, the coping must be stone, concrete, tile, or molded stucco.

c. *Gutters.* Features to direct rainwater away from exterior walls shall include one or more of the following:

i. Projecting eaves (minimum 12-inch projection)

ii. Scuppers (minimum 12-inch projection if no downspouts are used)

iii. Gutters with downspouts.

ci. *Street Address Number.* Street address numbers must be metalwork or tiled.

cii. *Ornamental Features.* Buildings must exhibit at least two of the following ornamental features over a minimum 15% of building facades:

i. Patterned accent tiles applied consistently across all street-facing building facades

ii. A pattern of carved insets with grilles on all street-facing building facades

iii. A pattern of stucco motifs or tile decorative vents on all street-facing building facades

iv. Terra-cotta tile chimney top (enclosing equipment or not)

ciii. *Exceptions.* All building façades must comply with applicable standards with the following exceptions:

i. Materials used for the building base or podium need not be repeated.

ii. Where a building is designed to appear as separate buildings, each portion that appears as a separate building shall be subject to the Building Design and Façade Design standards separately.

4. **Additions and Remodels.** Notwithstanding the design standards of this Chapter, new or replacement windows or doors in an existing wall must have the same design, detail, and placement of existing windows or doors on the building.

D. **Site Design.**

1. **Walls and Fences.**

a. *Fences and Walls.* Fences and walls shall have the same materials and color as that of the primary or secondary building materials.

b. *Retaining Wall Height.* The design of new retaining walls that are visible from the abutting public right-of-way, as well as those that are within the side and rear yard areas, shall be constructed in a stepped or terraced fashion with the maximum height for any single wall no more than 4 feet, unless an engineering assessment finds that physical limitations do not make such terracing feasible. If the change in grade is greater than 4 feet, a series of retaining walls, interspersed by planting areas in a stepped or terraced fashion shall be constructed to minimize the retaining wall's visual prominence and avoid a monolithic appearance. A minimum 6 foot masonry wall must be provided on shared property lines with single-family uses on lots in Zone A.

c. *Retaining Wall Design.*

i. In order to provide visual interest, retaining walls shall incorporate one or more of the following: use of form, texture, detailing, and/or planting. When a retaining wall contains an entry stairway to the building, the design of the wall shall include features that emphasize the entryway, such as plantings or design features that match those of the primary building.

ii. Retaining wall material shall be concrete or CMU covered with plaster stucco a minimum of 2 inches thick.

d. *Screening of Retaining Walls.* Where a single large retaining wall is used, its design shall incorporate a minimum one foot deep planting strip and irrigation system at its toe strip for the length of the wall to allow for the planting of screening vegetation and/or a planting strip with irrigation system at the top of the wall. Landscape screening shall be guaranteed for a minimum of 10 years.

e. *Gates.* Residential security gates, when installed, shall be the same color as the building materials and be no more than 50 percent opaque.

2. **Landscaping.**

a. *Landscape Design.*

i. Landscape species must be native, low-water usage, and low maintenance, meeting Water Efficient Landscape Ordinance requirement.

ii. Existing mature trees shall be preserved and incorporated as part of the overall landscape design.

b. *Required Landscaping.* Landscape plantings must cover all unbuilt areas of a lot.

i. Required landscaping coverage is 30 to 20 percent of the area of a lot in Zone C and 10 percent of a lot in Zone D.

ii. Ground cover must be planted a maximum of 1 foot on center.

iii. The following may not count toward the required landscape area:

(a) Artificial turf

(b) Any area with a minimum dimension less than 30 inches

c. *Prohibited Species and Materials.* Plant species that are listed by California Invasive Plan Council (Cal-IPC) as invasive prohibited, as is flammable mulch.

d. *Frontage Landscaping.*

i. *Civic Center Subarea:* Planter beds, window boxes, and/or container plantings are required at all façade insets, niches, and entries.

ii. *Grand Avenue Subarea:* The required street yard setback area must be landscaped except for seating areas, on-site plazas, and areas of ingress and egress. Landscaping may include container plantings, planter beds, groundcover, climbing vines, shrubs, low hedges, and trees.

e. *Interior Side and Rear Setback Landscaping.*

i. Landscaping within side and rear setback areas shall delineate property lines.

ii. All interior side and rear yard setbacks abutting Zone A shall be planted with a mix of trees and shrubs. At least one tree of at least 15-gallon size shall be planted per 20 linear feet or as appropriate to create a tree canopy over the required setback. In addition, at least three shrubs shall be planted every 20 linear feet.

f. *Grading.* To minimize impacts on existing terrain, the maximum amount of cut shall not exceed 5 feet below the natural grade and the amount of fill shall not exceed 3 feet above the natural grade.

g. *On-site Drainage.* Drainage shall be provided on-site using natural drainage channels, bioretention areas, or other landscape areas that filter surface water run-off before it enters the storm drain system.

h. *Backflow Preventer and Public Utilities*. See design standards for Multi-family development.

3. **Site Circulation.**

a. *Hardscape Materials.* On-site hardscape material shall be permeable or pervious and grey or light grey in color with a higher solar reflective index.

b. *Paving Within Setback Area.* Plazas or outdoor seating areas located within street-facing setbacks must be separated from the sidewalk by landscaping or raised planters. Paving within required setback areas shall be different from the adjacent public sidewalk and consist of individual paving blocks.

c. *Curb Cut Frequency.* A maximum of one curb cut for driveway access may be permitted per street frontage per lot.

4. **Refuse and Recycling Areas.**

a. *Location.* Common refuse and recycling containers shall not be located:

i. Within any required street-facing setback;

ii. Any required parking and landscaped areas; or

iii. Any other area required to remain unencumbered, according to Fire and other applicable Building and Public Safety Codes.

b. *Visibility.* Common refuse and recycling containers shall not be visible from the public right-of-way or from adjacent residential uses and shall be screened by landscaping. Fences or walls may be used if located outside a required setback.

c. *Enclosure and Container Materials*.

i. Enclosure materials shall be the same as those of the primary building.

ii. Containers used for the collection and storage of refuse and recyclable materials shall meet the standards of the waste collection company and be:

(a) Constructed of a durable waterproof and rustproof material;

(b) Enclosed and covered when the site is not attended;

(c) Secured from unauthorized entry or removal of material; and

(d) Shall be sized to accommodate the volume of materials collected between collection schedules.

d. *Clear Zone.* The area in front of and surrounding all enclosure types shall be kept clear of obstructions and accessible.

e. *Drainage.* The floor of the enclosure shall have a drain that connects to the sanitary sewer system.

5. **Lighting.**

a. *Entrance Lighting.* Light fixture(s) at all building entries required.

b. *Façade Lighting.* Lighting on facades shall be incorporated into façade design for all facades. Fixtures shall:

i. Be shielded and directed downward onto the building facade and onto entry paving.

ii. Exhibit the same architectural style, design, and character as the primary building.

c. *Low-level Lighting.* Low-level lighting shall be provided to ensure entry paths, entry stairs and driveways, garage and building entries are illuminated.

6. **Energy Efficiency.**

a. All appliances must meet the applicable adopted Reach Codes.

b. All appliances, HVAC and lighting shall be electric and energy-efficient.

7. **Parking Reductions.** One of the following parking reductions may be taken per development proposal:

   a. *Shared Parking Reductions.* Where a parking facility serves more than one non-residential use, the required parking spaces for both the residential and non-residential uses may be reduced up to 40 percent if:

      i. The peak hours of use do not overlap or coincide by more than 2 hours; or

      ii. A parking demand study prepared by an independent traffic engineering professional, approved by the City, finds that a proposed reduction will meet the development's projected parking demand.

   b. *Transportation Demand Management (TDM) Parking Reductions.* The required parking for non-residential uses that incorporate one or more of the following Transportation Demand Measures may be reduced by 40 percent:

      i. A minimum of three designated car-share, vanpool, or carpool parking spaces;

      ii. On-site showers and lockers; or

      iii. Transit subsidies or reimbursement offered to all to residents and employees.

3 Terms

Arched Window. Window that is rounded at the top.

Blank Wall. A portion of a façade on any floor of a building that does not include a transparent window or door between the level of the finished floor and the level of the ceiling.

Common Open Space. Courtyards, sport courts, play areas, gardens, landscaped plaza, or other open spaces for communal use within a development and accessible by all residents of the development.

Dentilled Cornice. A dentil, or small block, used as a repeating ornament under a cornice.

Divided Lites. A window with individual panes of glass separated by muntins, typically arranged in a grid. Simulated divided lite windows are made from a single, large pane of glass with a grid attached to both sides.

Façade Bay. A section of a building between vertical lines or planes, as defined by columns, pilasters, bay windows, or other horizontal projections or recesses, such as the space between two adjacent and vertical structural supports. Window bay is a type of façade bay that groups and organizes a series of windows in a vertical arrangement, aligned with other architectural features.

Finished Floor. The top layer of flooring.

Forecourt. A type of frontage with a portion of the façade set back from the primary façade creating a small landscaped courtyard space. The courtyard may be used as an entry court or as shared garden space for apartment buildings, or as an additional shopping or restaurant seating area within retail and service areas.

Private Open Space. A yard, patio, porch, or balcony directly accessible from the dwelling unit for which the open space provides an opportunity for private outdoor recreation and relaxation of the resident(s) of the associated dwelling unit.

Rowhouse. A single-family dwelling that shares a party wall with another of the same type placed side-by-side with individual entries along the front and dedicated private open space for each unit typically located in the rear. Each unit has its own front access at the ground floor. Also known as a townhouse or townhome. Each rowhouse facade is differentiated by a change in wall plane of at least 12 inches.

Shared Garage. A structured parking area that is shared by multiple residential units or commercial spaces.

Shopfront. A type of frontage, typically for commercial and retail use, where the façade is aligned close to the frontage line with the building entrance at the level of the sidewalk and which features windows to the interior of the commercial or retail use.

Townhouse. See Rowhouse.

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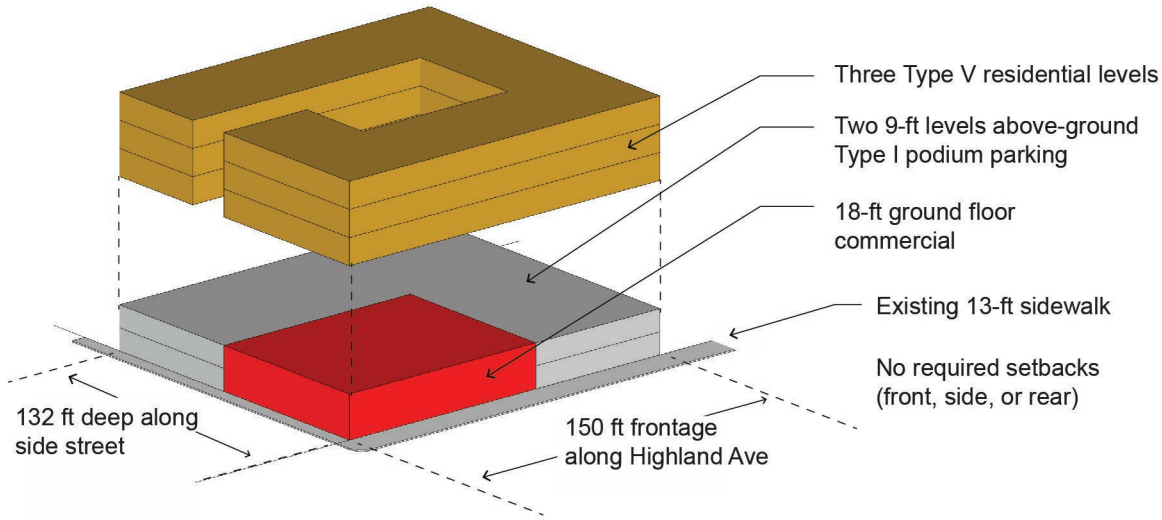
The following section has not been revised since the October 21, 2021 community workshop.

4 Test Site Massing Studies

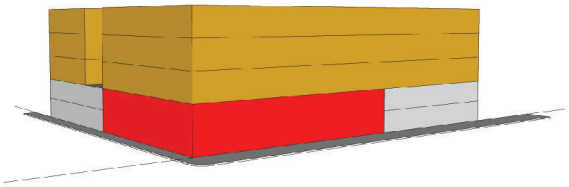
Zone D Civic Center Subarea Test Site

This hypothetical test site is located on a corner parcel in the Civic Center subarea of Zone D. The sample site is 150 feet wide and 132 feet deep, with frontage along Highland Avenue. This program for this project provides 15% affordable units and would be eligible for a concession for building height above 40 feet.

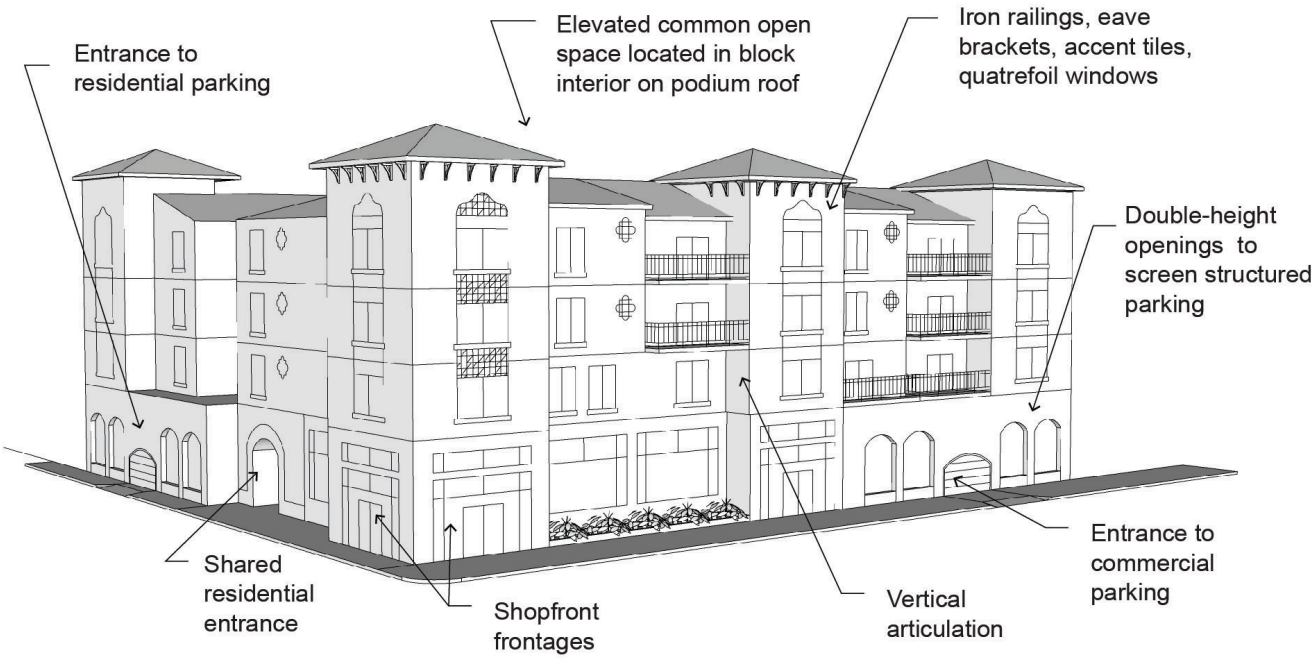


"Exploded" axonometric

Zone D Civic Center Subarea Test Site		
Site area	19,800 sq ft; 0.45 acres	
Residential levels	3	*Assumes height concession*
Total residential floor area	45,780 sq ft	*Each level approx. 15,260 gross sq ft*
Units (15% affordable)	37	*Assumes 1,250 gross sq ft per unit*
Density	81 du/ac	
Commercial area	6,476 sq ft	*Accommodates two small/medium spaces (e.g., a café and a clothing boutique)*
Total Floor Area	52,250 sq ft	
Total FAR	2.6	
Podium parking levels	2	*Both levels above-ground*
Total parking area	26,600	*Each level 13,300 gross sq ft*
Total spaces	66	*Assumes 400 gross sq ft per space*
Commercial parking spaces	12	*Approx. 2 per 1,000 sq ft*
Residential parking spaces	54	*1.5 spaces per unit*



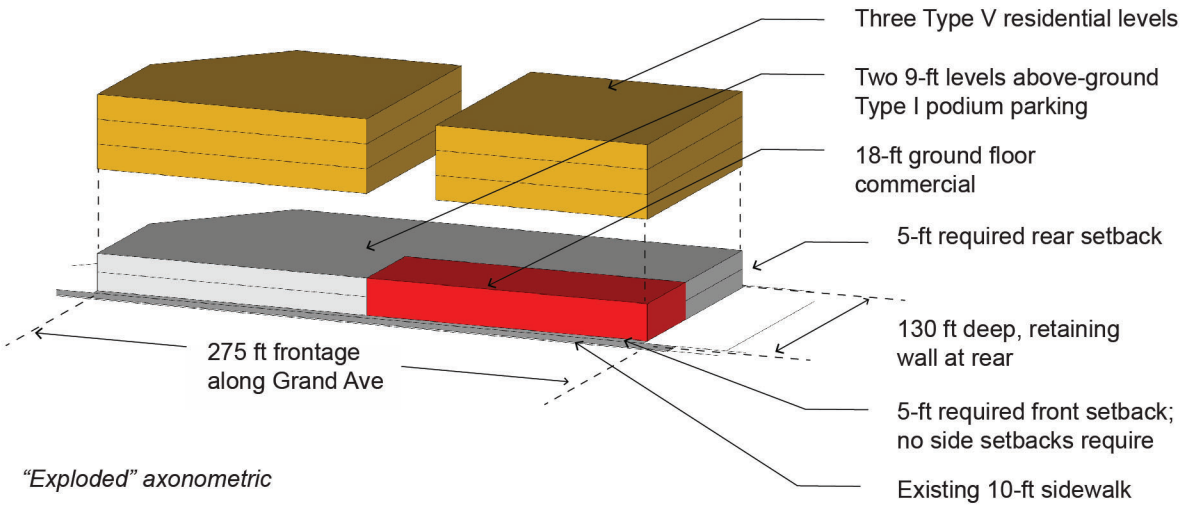
Perspective massing diagram



Partial illustrative design concept

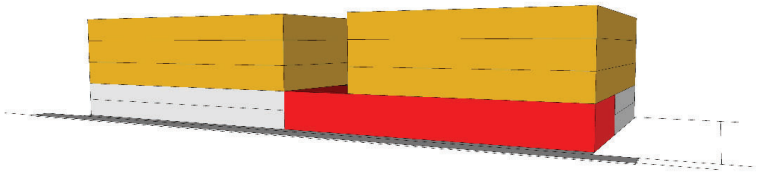
Zone D Grand Avenue Subarea Test Site

This hypothetical test site is located on a mid-block parcel on Grand Avenue in the Grand Avenue subarea of Zone D. The site is approximately 275 feet wide and 125 feet deep. This study assumes the project provides 15% affordable units and is therefore eligible for a concession to allow building height above 35 feet.

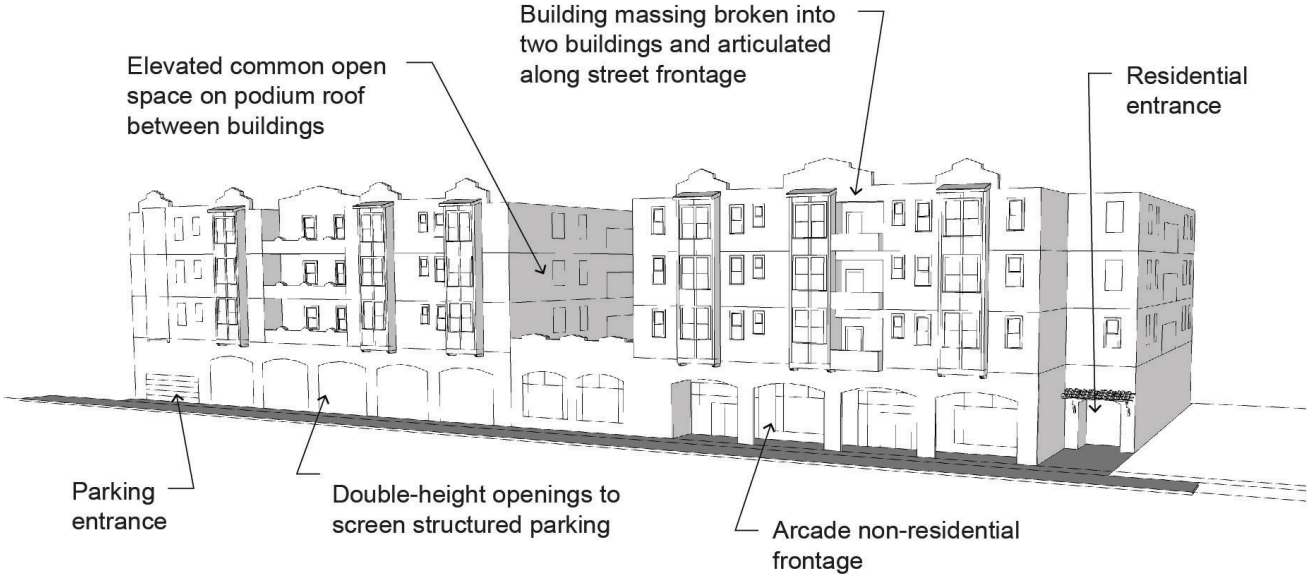


"Exploded" axonometric

Zone D Civic Center Subarea Test Site		
Site area	34,630 sq ft; 0,79 acres	
Residential levels	3	*Assumes height concession*
Total residential floor area	82,800 sq ft	*Each level approx. 27,600 gross sq ft*
Units (15% affordable)	66	*Assumes 1,250 gross sq ft per unit*
Density	83 du/ac	
Commercial area	6,820 sq ft	*Accommodates two small/medium spaces (e.g., a small office and a hardware store)*
Total Floor Area	89,620 sq ft	
Total FAR	2.6	
Podium parking levels	2	*Assumed to be above-ground*
Total parking area	49,800 sq ft	*Each level 24,400 gross sq ft*
Total spaces	125	*Assumes 400 gross sq ft per space*
Commercial parking spaces	14	*Approx. 2 per 1,000 sq*
Residential parking spaces	111	*1.7 spaces per unit*



Perspective massing diagram



Partial illustrative design concept

Test Site Feasibility

Below is a summary of the economic feasibility of the two test massing studies under the following three scenarios:

1) A base case scenario where development and design standards permit the building envelope shown above.
2) A density bonus scenario that incudes affordable units in exchange for additional density and relaxation of height restrictions; and
3) A project that includes a 50 percent affordable housing that would allow for the project to qualify for permit streamlining under SB 35, and incudes additional density.

A static development pro forma was created to test the potential return on investment of each of the three scenarios at the two Zone D test sites (the Civic Center Subarea site and Grand Avenue Subarea site).

Key Assumptions

A set of common assumptions were used across the analysis for all three scenarios on both sites. Key assumptions, sourced from RS Means, include:

Project Development

- *Land costs:* $240 per sq. ft.
- *Hard construction costs, residential:* $195 per sq. ft
- *Hard construction costs, retail:* $210 per sq. ft.
- *Parking costs:* Assumes podium and excavated spaces at $45,000 per space
- *Soft costs:* 12% of total project costs
- *Financing costs:* Assumes construction and permanent loan financing

Project Income

- *Residential rents market rate:* $2.47 per sq. ft. for 2-bedroom units
- *Residential rents affordable units:* Based on Alameda County Area Median Income (AMI) limits. Low income capped at $2,512
- Retail rents: $2.40 per sq. ft.

Feasibility

Three measures of feasibility were used to determine if the projects would be able to attract private investment given the development costs and anticipated net operating income (NOI) forecasted for each of the three scenarios.

- *Developer Profit:* This measures the capitalized value (cap rate) of the NOI minus the total project *development* cost. The residual is the developer's profit at a notional sale. This profit is expressed as a percentage of total project costs. A hurdle rate of 12.5 percent is used as in indicator of feasibility. This method is used as an indicator of the potential profitability for a private developer.

- *Return on Cost:* This measures the relative value of the NOI compared to the project's cost, relative to the cap rate. A return on cost that exceeds the cap rate by one percent is considered feasible. An alternative *measure* is the relative value of the investment which would have a hurdle rate of 8 percent. The return on cost is a measure of the relative "investment value" of the project.

Key Findings

The projects developed under the three scenarios generated the following estimated returns:

Table 1: Developer Profit

	Civic Center Subarea Test Site	Grand Avenue Subarea Test Site	Feasible
Base Scenario	13.2%	13.9%	Yes
Density Bonus Scenario	17.5%	17.4%	Yes
SB 35 Scenario	5.0%	3.1%	No

Table 2: Return on Cost

	Civic Center Subarea Test Site	Grand Avenue Test Site	Feasible (Cap rate +1%)	Feasible (8% ROI)
Base Scenario	5.3%	5.3%	No	No
Density Bonus Scenario	5.5%	5.5%	Yes	No
SB 35 Scenario	4.8%	4.7%	No	No

These findings indicate that the Density Bonus scenario would be attractive to private investment and would be considered to be a feasible development opportunity. The Base scenario would also be attractive for a developer but would be of marginal interest for conventional financing. The SB 35 scenario would not produce attractive returns for a developer nor would it be able to attract financing.


LWC