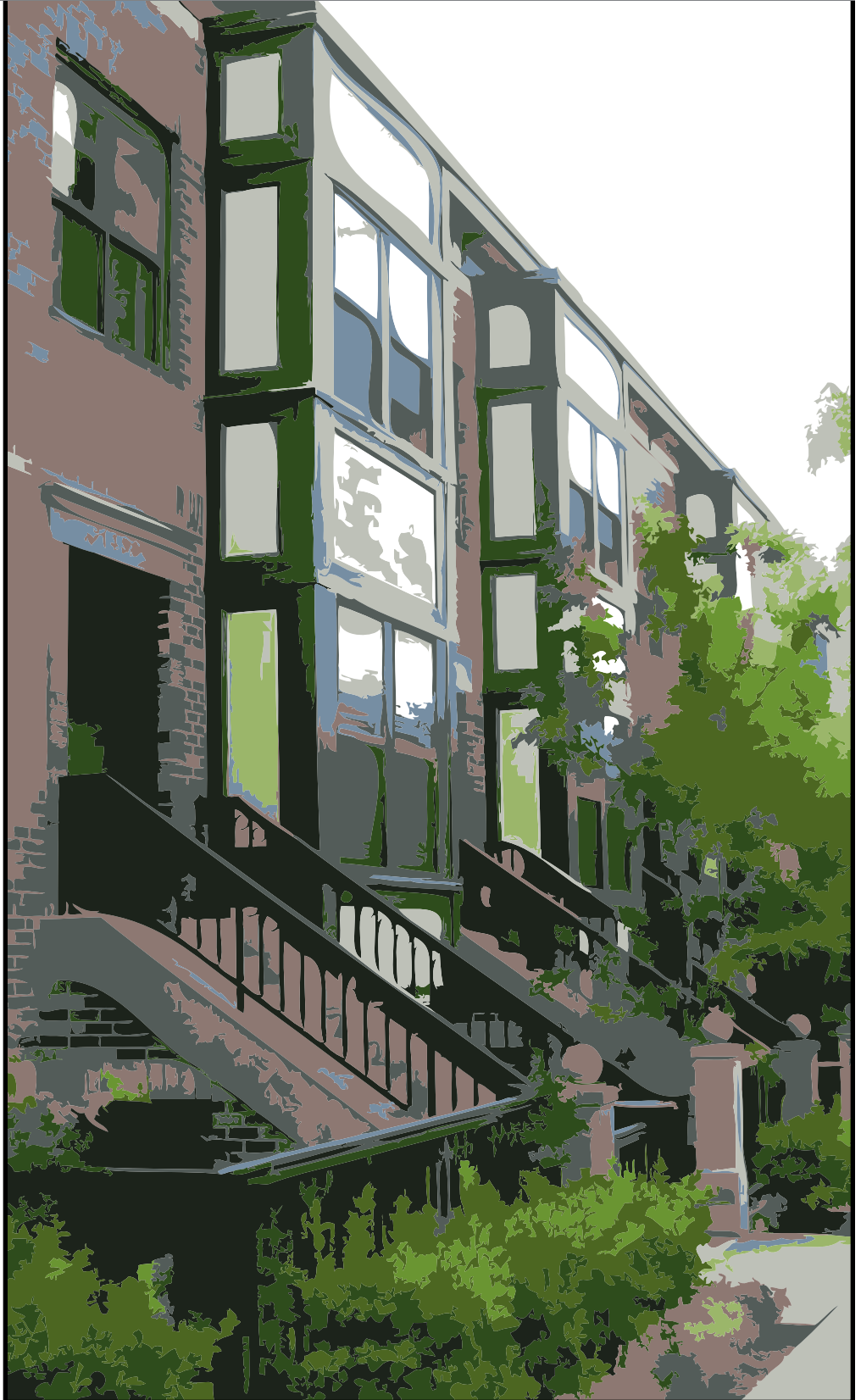


MULTI-FAMILY DESIGN GUIDELINES AND STANDARDS

CITY OF GRESHAM

SECTION 7.0100

ADOPTED APRIL 2010



7.0101 Two or More Units, Elderly Housing and Mixed-Use Development (Residential) Design Guidelines and Standards

a. **Applicability:**

This section shall apply to developments containing three or more dwelling units on a single lot (multi-family), residential facilities, elderly housing and the residential component of mixed-use developments in all residential, Civic Neighborhood, Pleasant Valley, Springwater and Corridor districts except as provided in **Section 7.0002** or as excepted within the text of the Code. This section shall apply to duplexes in the Downtown Design District.

Existing Development: Guidelines and standards in **Section 7.0103(A)** shall apply as determined by the Manager or Design Commission when the standards can reasonably apply to existing development. For example, landscaping guidelines and standards may apply when new landscaping is being added. Guidelines and standards in **Section 7.0103(B)** shall apply to buildings constructed prior to April 20, 2010, for the following sections as determined by the Manager or Design Commission: **Sections 7.0103(B)(2)** and **7.0103(B)(5)**. In **Sections 7.0103(A)** and **(B)**, site and building modifications needed to comply with **Section 8.0200** shall comply with applicable guidelines and standards.

b. **Purpose:**

These Design Review Design Criteria, Guidelines and Standards help facilitate the development of attractive, innovative, high-quality, sustainable multi-family housing; encourage multi-modal transportation; and promote livability, public safety and a sense of community throughout the City.

The regulations identify characteristics of good site and building design, which contribute to livability, safety, and sustainability, help create a stronger community and foster a quality environment for people utilizing the development and surrounding neighborhood.

c. **Design Review Process:**

New multi-family developments, additions and remodels (as noted in **Section 3.0100** Definitions of Design Districts and Article 11) are subject to design review for determination of consistency with the criteria, guidelines and/or standards contained in this Code. Projects subject to design review are either brought before the Design Commission or administered by City staff. Either the Commission or staff shall make findings and decisions concerning conformance with the criteria, guidelines and standards based on which review process is selected. For more detailed process information, see Article 11 Procedures.

d. **How to Use this Code:**

1. Review:

The Multi-Family Design Criteria, Guidelines and Standards offer two alternative Design Review processes:

- a. The Discretionary Process: In the discretionary process, the Design Commission will review the application primarily using the Design Guidelines and Design Principles to guide their decision. The Design Commission may waive a Guideline to achieve the flexibility necessary to support a particularly creative proposal. Approval requires the applicant to demonstrate to the Design Commission that the waiver from the Guideline would result in a development that better meets the applicable Design Principles and the Intent Statement preceding the Guidelines. In the discretionary process, the Design Commission will also look at the Standards to determine that the intent of the relevant Standard is being met or exceeded. In the clear and objective process, clear, objective,

and measurable Design Standard requirements and Design Principles are used to review the development application.

- b. **The Clear and Objective Process:** The Clear and Objective Process includes measurable Standards to meet the desired urban form. In the Clear and Objective Process the applicant must meet all development Standards. A decision on approval will come from the Manager or Design Commission, depending on the scale of the proposed development. Deviation from any of the Standards or referenced Standards in Article 7 will require the applicant to follow the Discretionary Process.

2. Layout:

The multi-family design Criteria, Guidelines and Standards are divided into two primary categories:

- a. **Site Design.**

Site Design Guidelines and Standards address the organization and arrangement of a development's components. They deal with the location of buildings and site features such as open space, landscaping, parking and service areas. Good site planning should minimize a project's impacts on its neighbors, improve the quality of the streetscape, relate to or establish desirable development patterns, promote sustainability and improve neighborhood connectivity.

- b. **Building Design.**

Building Design Guidelines and Standards address the massing and exterior architectural elements of buildings – components that define the scale, quality and character of a building, such as roofs, entries, windows, materials and details. Excellent building designs enhance the quality of life for residents by improving the appearance of the City, by establishing a sense of community, and by improving the long-term economic value of the properties.

3. Images:

Most images, including photographs and illustrations, are not part of the Development Code and do not act as Guidelines or Standards. These images are provided to assist readers in envisioning the intent and potential outcomes of the Guidelines and Standards. Images that are not part of the Development Code are labeled as figures. Images that are part of the Development Code will be labeled with Development Code section numbers.

4. Code Compliance:

Compliance with other Code sections including but not limited to Articles 4, 5, 9 and 11 is required.

5. Architectural Vocabulary and Education:

The following section consists of annotated diagrams, photographs and text that are intended to educate and inspire architects, designers, urban designers, developers and in general advocates of the built environment to meet the City's goal of being a City of innovation where creativity is welcome.

5. Architectural Vocabulary and Education:



a. Repetition. A recurring pattern helps organize a façade by creating a clear and understandable pattern. Elements that repeat themselves in a rhythmic manner create a sense of architectural intention and importance. Repetitious building elements include architectural bays, window and door patterns, roof pitches, wall planes and detail elements such as ground floor wall-lights and sconces, transom windows, and signage.



b. Hierarchy. Distinctions between functions, importance, and symbolic roles are emphasized when an architectural composition exhibits hierarchy of form. This hierarchy can be articulated using a combination of unique shapes, size differentials, and through the location of prominent architectural features such as a corner building turret.



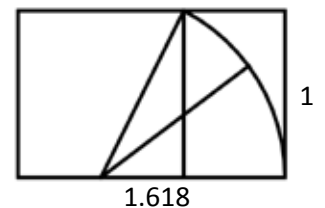
c. Symmetry. A balanced separation and distribution of elements about a central point, such as an entry doorway, window or portal results in a comfortable and harmonious whole. Symmetrical facades are rooted in classical architecture and the work of Andrea Palladio, whose work embraces symmetry, perspective and values of the formal classical temple architecture of the ancient Greeks and Romans.



d. Datum. Horizontal and linear elements on the facade of the building serve to unify the building. Architectural datums are typically a line or a plane. Examples of datums include projected windowsills and headers, building materials such as a soldier brick course and roof forms. More subtle examples of datums include window mullions, ground floor awnings and a belt course or sign band.



e. Golden Rectangle. A golden rectangle is a rectangle where the ratio of the length of the short side to the length of the long side is proportional to the ratio of the length of the long side to the length of the short side plus the length of the long side. (Approximately 1:1.618) This proportion system is considered aesthetically pleasing. The golden rectangle (also referred to as the golden section and golden spiral) is found in paintings, music and architecture.



f. Interlocking. The creation of overlapping, interpenetrating spaces has been a major theme of architecture throughout history. In many cases, the interlocking of spaces is articulated in section. However, elevations can also be interlocked or be articulated in a manner to show how façade elements such as wall-planes or materials “fit together.”



g. Portal. A portal is a general term that describes an opening in a wall. In Medieval times, the portal was the gate to the fortification. In contemporary architecture, the portal is typically the primary entry to the structure or shared space. From an urban design point of view, the portal is a unique pedestrian-oriented element that defines the threshold between the public and private realm without being wall-like.



h. Scale. Scale considers the relationship of one thing to another. At the human scale, building elements such as doorknobs, stairs and handrails relate to the human body size. At the building scale, multiple scales exist within a single building façade in order to achieve a higher level of visual complexity. Scale is the relationship in size and proportion of one part of a building to another part, or between buildings on a site.



i. Solid and Void. The contrast between solid and void elements can be used to provide functionality to a building while contributing to the overall composition of a facade. The characteristic of a void is that it has the appearance of being a portion of the solid which was removed, creating a sculptural appearance, visual interest, and light/shadow compositions.



j. Layering. Layering along the façade is created by the incorporation of separate or distinct planes that are suspended from or separate from the primary façade and load-bearing wall. In traditional buildings, pilasters, columns and wood panels extend from the front façade to provide visual relief. This technique is especially effective when coupled with recessed windows and doors that create a sense of shadows that implies “wall” thickness and permanence. More contemporary layering techniques may create hierarchy in the facade and between public, semi-public, and private zones.



6. Description of Housing Types:

The purpose of this section is to describe the general types of housing developments that may have specific criteria, guidelines or standards associated with them. The housing types are not the same as the uses defined in Article 3. Illustrative multi-family housing examples are as follows:

- a. Duplex Style: A residential building consisting of two dwelling units on a single lot that share a common wall, floor, or ceiling.
- b. Townhouse Style: This building type, for multi-family code purposes, consists of two or more units on a single lot that are at least two stories in height and are attached vertically via a shared wall. Typically ranging between 16 and 25 feet, townhouses are an efficient construction type due to shared walls and smaller lots. Well-designed townhouses consist of bay windows, porches and balconies that break down the mass of repetitive units.
- c. Big House or Multi-Plex Style: Whereas townhouses are side by side, big houses or multi-plexes are usually stacked one on top of the other and consist of usually 8 units or less. Because of their house-like quality, big houses blend well into new and established single family detached neighborhoods. Successful big houses are compatible with existing single-family residential buildings through the incorporation of similar windows, comparable roof forms and landscaping. They often assume a setback consistent with adjacent single-family residences.
- d. Apartment Building Style: Typically multi-story buildings consisting of three or more units on a single lot. Apartment building styles may be either for rent or for sale condominium units.
- e. Mixed-Use Style: A mixed-use style development is the combination of residential uses with commercial or institutional uses. The most traditional form of a mixed-use building style consists of ground floor retail or service uses with housing above. The success of a mixed-use building is dependent on good design and near-by residential units that are within walking distance.



Duplex Style



Townhouse Style



Big House/Multi-Plex Style



Apartment Building Style



Mixed-Use Style

7.0102 Approval Criteria: Two or More Units, Elderly Housing and Mixed-Use Development (Residential) Design Principles

Site Design Principles

- a. **Site Planning:**
Site buildings in a manner that fosters community and stewardship, as well as provides a sense of separation and transition between public and private spaces.
- b. **Sustainability:**
Implement measures that promote the efficient use of land and resources by conserving and protecting trees, water and topography; reducing chemical use; increasing surface water infiltration; promoting energy conservation and other sustainability measures.
- c. **Safe Design:**
Integrate the principles of Crime Prevention through Environmental Design (CPTED) into multi-family developments in order to provide a safe, comfortable, livable and attractive environment for people.
- d. **Open Spaces:**
Provide functional public, semi-public and private open spaces for all residents of multi-family developments with recognizable transitions between the places.
- e. **Landscaping:**
Incorporate trees, shrubs, and groundcover into a sustainable landscaping plan that reinforces the architecture, softens the building scale, and creates an attractive setting for the multi-family developments.
- f. **Street Orientation:**
Orient new multi-family developments, including attached dwellings on a single lot, to the street to create eyes on the street and encourage interaction between neighbors and friends while responding to the street traffic volume.
- g. **Transportation Mode Provisions:**
Construct a residential environment that is comfortable for pedestrians and encourages transportation by modes such as walking, biking and mass transit.

Building and Architectural Design Principles

- h. **Design Excellence and Architectural Expression:**
Create aesthetically pleasing architecture for multi-family developments that contributes to the sense of place, neighborhood and pride in the City.
- i. **Sustainable Architectural Design:**
Promote sustainable architectural design and practices with durable construction and materials that conserve resources and minimize life cycle costs.
- j. **High Quality Materials:**
Utilize building materials that are high-quality, visually attractive, compatible, durable, and which add a sense of richness and character to the City.

1. Integrated Site Design

- a. **Intent:** To enhance the existing built and natural environment by incorporating site and landscaping practices that recognize the inherent relationships of the proposed building to the site, surrounding buildings, the street and the surrounding neighborhood.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - A. Site Planning
 - C. Safe Design
 - E. Landscaping
 - F. Street Orientation
 - G. Transportation Mode Provisions
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. **Building Orientation.** Buildings shall be located with the principal façade oriented to the street or a street-facing open space such as a courtyard.
 2. **Pedestrian Circulation.**
 - a. Site design shall promote safe, attractive and usable pedestrian facilities and a direct pedestrian connection between the street and buildings on the site.
 - b. Pedestrians shall have direct access into the building from the sidewalk.
 - c. Parking, loading service and vehicular circulation areas shall be located so as to allow primary uses and activities to face the street and to support pedestrian-oriented uses.
 - d. Residential units that occupy the ground floor shall incorporate elements such as gardens, stoops, and porch railings to create a transition between public and private spaces.
 - e. Architecture and landscape architecture features shall be used to further enhance the pedestrian experience of all multi-dwelling and mixed-use projects such as:
 - i. Special paving;
 - ii. Enhanced landscaping;
 - iii. Lighting such as lighted bollards along the walkway and accent lighting on abutting structures;



Fig. A.1.c.1 (1) Multi-family townhouse configuration with the principal façade oriented to the street.



Fig. A.1.c.1 (2) Multi-family configuration with the principal façade oriented to the central courtyard.

1. Integrated Site Design, continued



Fig. A.1.c.2.a. Pedestrian access features enhanced landscaping, providing direct, safe, and attractive entrance from street to the courtyard.



Fig. A.1.c.3. An inviting outdoor private space is provided here.

- iv. Trellis; or
- v. Other features.

3. Outdoor Private Space. Developments shall include functional open space. The required private open space square footage can be added to the public open space.
4. Transitions and compatibility between attached dwellings on a single lot and LDR-5/LDR-7/TLDR/TR Development. The criteria of Standard 7.0103(A)(1)(d)(4)(a) and (b) are required without exception for all residential buildings, any portion of which is within 50 feet of an abutting LDR-5, LDR-7, TLDR or TR District.
5. Illumination. The site shall be designed to achieve uniform illumination levels with a minimum glare to adjacent properties in order to create a comfortable and safe environment in harmony with the character of the surrounding area.
6. Grading. The site shall be graded in a manner that respects and supports the contours and slope of the surrounding topography.
7. Waste. Except for Duplexes no exterior waste collection and recycling area shall be located within twenty-five (25) feet of property lines abutting LDR-5, LDR-7, TLDR or TR designated property.

Duplexes and Townhouse Style Developments:
Duplex and Townhouse style developments shall also comply with the following requirements:

8. The impact of street facing garages on the pedestrian environment shall be diminished.

1. Integrated Site Design, continued

d. **Design Standards:** All developments shall comply with the following requirements.

1. **Building Orientation:** Any building abutting a public street right-of-way shall be oriented to the street. The building orientation is met when the following criterion are satisfied:

a. For buildings without a courtyard:

- i. The primary entry or entries for all ground-floor units abutting the street shall open directly onto the street right-of-way, not to the interior of the site or to a parking lot. Secondary entrances may face parking lots or other interior site areas. Non-residential buildings, such as recreation or community centers, which abut a public street right-of-way shall have at least twenty percent (20%) of the ground floor wall area facing the street in windows, doorways, or display areas, including an entry opening directly onto the abutting street. The primary entry for dwellings with frontage on both a public street and an alley shall be oriented to the street, not to the alley.
- ii. At least fifty percent (50%) of the site's frontage (not including access driveways) on any street shall be occupied by buildings oriented to the abutting street. Where a site has less than seventy (70) feet of street frontage, this standard may be modified as needed to accommodate a driveway meeting Code standards.
- iii. Except for individual driveways for Duplex and Townhouse Style units, on-site surface parking areas, garages, and vehicular circulation areas shall not be located between a building and an abutting street right-of-way.
- iv. The Manager may require that a building that will abut a future street right-of-way, as shown on an approved future street plan or neighborhood

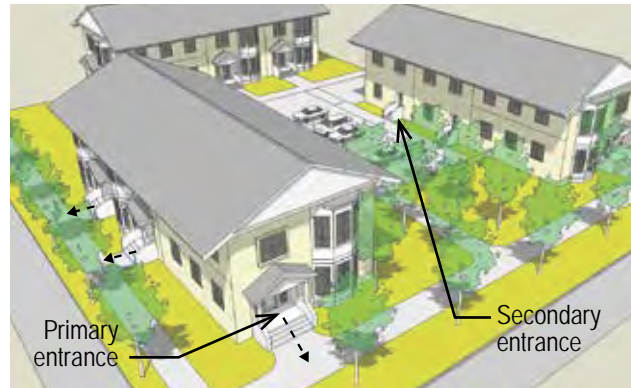


Fig. A.1.d.1.a.i. (1) Primary entries open directly to street right-of-way. Secondary entrances face parking lots.



Fig. A.1.d.1.a.i. (2) Primary entries open directly to street right-of-way.

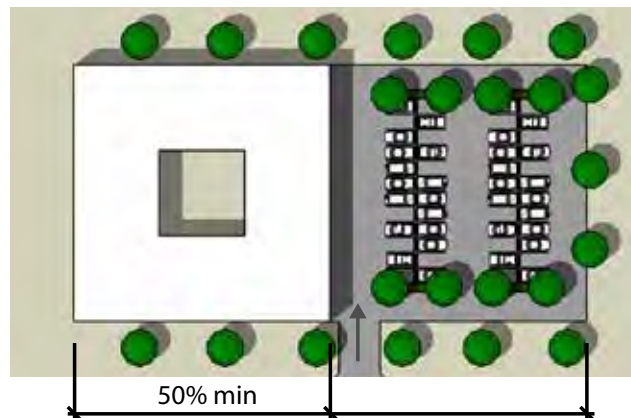


Fig. A.1.d.1.a.ii. Minimum street frontage for buildings without a central courtyard.

1. Integrated Site Design, continued



Fig. A.1.d.1.b.i. (1) Primary entries open directly to central courtyard.



Fig. A.1.d.1.b.i. (2) Primary entries open directly to central courtyard.

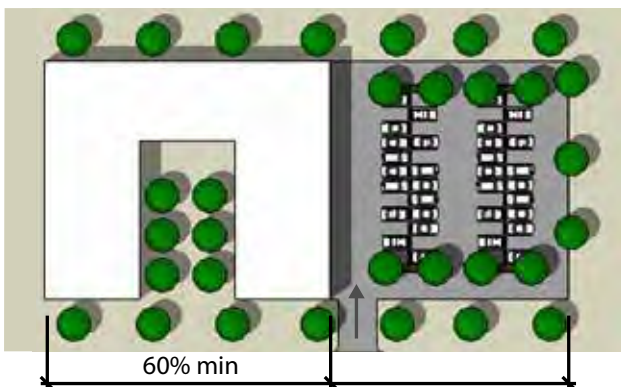


Fig. A.1.d.1.b.ii. Minimum street frontage for buildings with a central courtyard.

circulation plan, be oriented to that future right-of-way.

- v. Where a building is on a corner lot that fronts two abutting streets, a dwelling unit at the corner of the building needs to be oriented to a minimum of one of the streets. However, if one of the abutting streets is a Design Street, a corner dwelling unit shall be oriented to the Design Street.
- b. For buildings with a central courtyard space, the following shall apply:
 - i. The primary entry or entries for all ground-floor units abutting the street or courtyard shall open directly onto the street right-of-way or onto a central courtyard. Secondary entrances may face parking lots or other interior site areas. Secondary entrances facing the street right-of-way shall present the same finished appearance as the front, and shall not include rear patios or sliding glass doors.
 - ii. Non-residential buildings, such as recreation or community centers, which abut a public street right-of-way shall have at least twenty percent (20%) of the ground floor wall area facing the street in windows, doorways, or display areas, including an entry opening directly onto the abutting street.
 - iii. At least sixty percent (60%) of the site's frontage (not including access driveways) on any street shall be occupied by buildings or central courtyard. Where a site has less than seventy (70) feet of street frontage, this standard may be modified as needed to accommodate a driveway meeting **Appendix A5.503**.

1. Integrated Site Design, continued

- iv. Except for individual driveways for Duplex and Townhouse Style units, on-site surface parking areas, garages, and vehicular circulation areas shall not be located between a building and an abutting street right-of-way.
2. Pedestrian Circulation: The site design shall promote safe, attractive and usable pedestrian facilities and a direct pedestrian connection between the street and buildings on the site by providing an on-site, continuous pedestrian circulation system that meets the following criteria:
 - a. The on-site pedestrian circulation system shall consist of hard surfaced, minimum five (5) foot wide walks. Walkways through multi-family projects (more than one building per site) shall incorporate lighting for pedestrian safety as indicated in **Table 7.0103(A)(1) (A)**. A seven (7) foot walk shall be provided when the walk abuts the head of the vehicle parking spaces unless wheel stops are used to ensure a minimum five (5) foot wide, clear walk.
 - b. Walks shall be separated from auto parking and maneuvering areas, except for individual unit driveways, through physical barrier features such as planter strips, raised curbs, or bollards.
 - c. Where walks cross through driveway or parking areas except for individual unit driveways, they shall be paved with a material that is different and visually contrasting from the pavement material in the auto area.
 - d. The on-site pedestrian circulation system shall be continuous and connect the following: streets abutting the site; ground level entrances to individual units; common building entrances; common buildings such as laundry and recreation facilities; parking areas; shared open spaces; children's playground areas; abutting transit facility; bicycle parking; storage areas; and any pedestrian amenities such as plazas, resting areas and viewpoints. There shall be at least



Fig. A.1.d.2.a. On site pedestrian circulation system consists of hard surfaced walks.



Fig. A.1.d.2.d. On site pedestrian circulation system is continuous, connecting streets, ground level entrances, common buildings, shared open space, and shared pedestrian amenities.

1. Integrated Site Design, continued



Fig. A.1.d.3.a. Private outdoor space at the ground level and at the primary entrance is not screened.



Fig. A.1.d.3.b. (1) Private outdoor space is provided for units above the ground level.

one walk connection to an abutting street frontage for each two hundred (200) linear feet or portion of street frontage.

- e. The on-site shared pedestrian circulation system for all developments and duplexes shall be designed to meet the accessibility standards of the Building Code.
3. Outdoor Private Space.
 - a. Each ground level dwelling unit shall have an attached directly accessible outdoor private space of no less than eighty (80) square feet in area. The minimum dimension(s) of such space shall be as determined by the Manager to guarantee space functionality. The area shall be designed to provide privacy for unit residents with elements such as walls, fences or shrubs. Required outdoor private space may be located at the primary entrance for ground level units. Where this is the case, the outdoor private space shall not be screened. (Elderly housing developments that are assisted living developments need not comply with this requirement. Independent retirement housing shall comply with this requirement.) This required square footage of outdoor private space may also be added and incorporated into the required central courtyard.
 - b. Dwelling units above ground level shall have attached a directly accessible outdoor private space of not less than eighty (80) square feet in area. The area shall be enclosed, screened or otherwise designed to provide privacy from adjacent units. This required square footage of outdoor private space may be added and incorporated into the required central courtyard.
 4. Transitions and Compatibility between attached dwellings on a single lot and LDR-5/LDR-7/TLDR/TR Development. The following criteria apply to all residential buildings, any portion of which is within fifty (50) feet of an abutting LDR-5, LDR-7, TLDR or TR District:
 - a. The residential building shall contain no more than twelve (12) dwelling units.
 - b. The Height Transition standards of **Section**

1. Integrated Site Design, continued

9.0610(A) shall apply.

- c. Minimum spacing distance between buildings on site shall be fifteen (15) feet. However, where a building exceeds one hundred (100) feet in length the minimum spacing distance between buildings shall be twenty (20) feet.
5. Illumination. The site shall be designed to achieve uniform illumination levels with a minimum glare to adjacent properties in order to create a comfortable and safe environment.
 - a. The following areas shall be illuminated during the hours of darkness: driveways; open parking lots and carports; on-site pedestrian circulation walks; and entries to common buildings.
 - b. The following illumination levels plus those stated in the following table shall act as minimum standards for all exterior lighting. Maximum average lighting will be governed by the six to one (6:1) ratio of maximum average to minimum illumination of the surface being lit as stated in the following table. Generally maximum illumination at the property line shall not exceed one-half (0.5) foot candle. However, where a site abuts a non-residential district, maximum illumination at the property line shall not exceed one (1) foot candle. Average foot candles shall be the average amount of light at 3 foot height above a surface as determined using a photometric plan with 1 foot grid spot foot-candle readings. The Manager may modify these levels if such modifications are deemed necessary and appropriate for the use and surrounding area.
 - c. Developments shall use full cut-off lighting fixtures to avoid off site lighting, night sky pollution and shining lights into residential units. The Manager may choose to waive or alter cut-off requirements of this section when appropriate historic or decorative fixtures are proposed (e.g. use of decorative up-lighting to illuminate the underside of a canopy or columns on a facade, where a canopy or roof projection restricts the projection of the light into the night sky or bollards). Weather- and vandalism-resistant



Fig. A.1.d.5.a. Site lighting achieves uniform lighting to create a comfortable and safe environment.

1. Integrated Site Design, continued

covers shall protect lighting devices.

Table 7.0103(A)(1)(A)

Use	Illumination* (Foot-candles)
Parking Areas	0.5 minimum
Loading and Unloading Areas	0.5 minimum
Walkways	0.5 minimum with an average of 1.5
Building Entrances - Frequent Use	1.0 minimum with an average of 3.5
Building Entrances - Infrequent Use	1.0 minimum with an average of 2.0

*The minimum light measured in foot-candles at the point of least illumination when measured at three (3) feet above ground level.

- i. Light fixtures shall not exceed twenty-five (25) feet in height.
 - ii. Fixtures shall have a cut-off angle of ninety (90) degrees as measured perpendicular to the ground.
 - iii. No direct light source shall be visible at the property line (adjacent to residential) at ground level.
6. Grading. The grading and contouring of the site considers on-site surface drainage and site storage of surface water facilities when necessary so there is no adverse effect on neighboring properties, public rights-of-way or the public storm drainage system (refer to **Section 9.0500** – Grading and Drainage Requirements, and **Appendix A5.205** – Drainage Management Practices).



Fig. A.1.d.5.c. Full cut-off light fixture avoids off-site lighting.

1. Integrated Site Design, continued

7. Waste. Except for Duplexes no exterior waste collection and recycling area shall be located within twenty-five (25) feet of property lines abutting LDR-5, LDR-7, TLDR or TR designated property.

Duplexes and Townhouse Style Developments:

Duplex and Townhouse style developments shall also comply with the following requirements:

8. Street-facing garages associated with duplexes and multi-family townhouse configuration shall have a maximum width of fifty percent (50%) of the overall building width.



Fig. A.1.d.7. Street-facing garages associated with duplexes and multi-family townhouses shall have a maximum width of fifty percent (50%) of the overall building width.

7.0103 Two or More Units, Elderly
Housing and Mixed-Use (Residential)
Design Guidelines and Standards
A. Site Design

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2. Sustainable Site Design

- a. **Intent:** To create designs which enhance the natural environment by reducing water use, providing habitat for beneficial wildlife, minimizing pollution and maximizing the project's positive impact on the built and natural environment.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - B. Sustainability
 - E. Landscaping
 - G. Transportation Mode Provisions
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. Developments shall utilize strategies that reduce water and energy usage attributed to site and building development, building use, and the transportation of building users while not detracting from good site and building design. Healthy and sustainable communities shall be created that incorporate "best practices" such as LEED™ for Neighborhood Development to conserve natural resources, reduce carbon emissions and promote interaction between residents.
 2. Landscape practices and strategies that reduce wasteful water practices shall be included in all developments in a creative way.
 3. Open spaces (trails, parks, habitat areas and wildlife corridors) shall be designed to be contiguous through the site and, where possible, to adjacent sites.
 4. Hardscapes shall be shaded as a means of reducing energy costs (heat island effect), improving stormwater management and improving the overall aesthetic quality of the built environment.
 5. Site furnishings or some of the visible site elements shall be constructed of sustainable materials.
 6. Recycled materials shall be used in hardscape.



Fig. A.2.c.1. Sustainable landscape reduces harmful stormwater runoff.



Fig. A.2.c.5. and A.2.c.6. Recycled materials are featured in recycled metal site furnishing and recycled hardscape material content.

2. Sustainable Site Design, continued



Fig. A.2.d.1.c. The long axis of the building is oriented to the south, with unobstructed solar access.



Fig. A.2.d.1.f. (1) A green eco-roof reduces stormwater runoff.



Fig. A.2.d.1.f. (2) A green eco-roof reduces energy use.

d. **Design Standards:** All developments shall comply with the following requirements.

1. Energy conservation in site development shall be promoted through a minimum of two (2) of the following:
 - a. Include protected double door lock entry doors on the north and east sides of the structure or add an effective windbreak such as a wall;
 - b. Orient the long axis of the building east and west, with unobstructed solar access to the south wall and roof;
 - c. Locate the windows to take advantage of passive solar collection and include architectural shading devices (such as window overhangs) that reduce summer heat gain while encouraging passive solar heating in the winter;
 - d. Include solar energy panels on the roof of the building, garage or car port that generate at a minimum 10% of the typical energy usage for the building in renewable energy. The typical energy model for the building shall be determined by referencing the LEED™ standards. The location and configuration of solar energy panels shall be approved by the Manager or Design Commission depending on the procedure type only as permitted in **Article 4** and **Section 10.0900**. Solar panels shall be integrated into the building design or shall be screened from view at street level with materials that are consistent with the building design and yet do not interfere with the purpose of the solar panels;
 - e. Plant a vegetated eco-roof on top of the building or carport that covers 20% of the building footprint;
 - f. Source sustainable and local materials that are within 500 miles of the development site or provide 20% sustainably harvested Forestry Stewardship Council (FSC) rating construction materials; and
 - g. Preserve 50% of existing regulated major trees on site. Major trees must be healthy as determined by a consulting arborist, a qualified arborist or a registered consulting

2. Sustainable Site Design, continued

arborist.

2. Water conservation and treatment shall be promoted through a minimum of two (2) of the following:
 - a. The irrigation system shall minimize water usage by incorporating at least one (1) of the following:
 - i. A rain sensor to prevent watering during a rain event;
 - ii. Rotor irrigation heads; or
 - iii. A drip irrigation system.
 - b. On-site rain gardens and stormwater facilities shall be incorporated and designed in accordance with Gresham Green Development Practices for Stormwater Management.
 - c. Rainwater shall be used in public spaces to activate the space via art elements, water features, etc.
3. A contiguous wildlife habitat corridor shall be created through natural open spaces that connect to City designated conservation areas.
4. After 5 years, a minimum of thirty percent (30%) shading on hardscape shall be provided. Determination shall be based upon expected growth of the selected tree.
5. Site furnishings such as play structures, fences, gazebos, trash receptacles, benches and tables shall be constructed with twenty percent (20%) sustainably harvested materials, such as Forestry Stewardship Council (FSC)-certified wood and recycled content materials, excluding plastics. The intent of this standard can also be achieved through the use of locally sourced materials, originating within 500 miles of the site.
6. A minimum of twenty percent (20%) recycled content pavement or pavement base, such as concrete grindings for base materials or blast furnace slag additives or asphalt with glass for hardscape elements such as streets, sidewalks, paths, parking areas and courtyards shall be provided.



Fig. A.2.d.2.b. Landscape reduces harmful stormwater runoff and irrigation needs



Fig. A.2.d.2.c. An onsite raingarden and stormwater facility increases site sustainability.

A. Site Design

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3. Safe Design

- a. **Intent:** To use design to improve the quality of life of residents through the creation of safe and secure places.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - A. Site Planning
 - C. Safe Design
 - D. Open Space Places
 - F. Street Orientation
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 - 1. The front door and windows shall be oriented to the street which the dwelling faces or to a central courtyard and shall maximize visual surveillance of the front door.
 - 2. Communal gathering areas shall be in a central location that provides for community surveillance and access control.
 - 3. Addressing System. The standard in **Section 7.0103(A)(3)(d)(3)** is required without exception.
 - 4. Crime Prevention Through Environmental Design (CPTED) Principles shall be incorporated:
 - a. Natural Surveillance (See and be Seen) - Areas where people and their activities can be readily observed help to ensure the safety of a space.
 - b. Natural Access Control - The physical guidance of people coming and going from a space through the careful placement of entrances, fences, landscaping, and lighting.
 - c. Territorial Reinforcement (Sphere of Influence) - The promotion of social control through increased definition of space and improved proprietary concern.
 - d. Maintenance (Broken Window Theory) - The maintenance of the property by people who have a vested ownership serves as a deterrent to unwelcome behavior.



Fig. A.3.c.1. Front door and windows are oriented to street.



Fig. A.3.c.2. Communal gathering area is visible from living area windows and entry areas.



Fig. A.3.c.4.c. Territorial reinforcement is created by defining space between public and private realm.

3. Safe Design, continued

d. **Design Standards:** All developments shall comply with the following requirements.

1. **Visible Dwelling Front.** The front entry to a building on a street or on a courtyard shall be oriented towards the street which the dwelling faces or towards a central courtyard. For all developments on a principal or major arterial street, developments shall be oriented toward a central courtyard. At least seventy percent (70%) of the street or courtyard frontage shall be visible from 1) the front door; or 2) a ground floor window in a frequently used room such as a living room, dining room, kitchen or bedroom (but, for example, not a window to a garage, bathroom or storage area); or 3) a second story window except a bathroom window placed no higher than three (3) feet six (6) inches from the floor to the bottom of the window sill. This section allows portions of the front of a dwelling to protrude forward of other portions, as long as the visibility standard is satisfied.
2. For all complexes, all outdoor common areas and streets shall be visible from fifty (50%) percent of the units that face it. Common areas include but are not limited to shared open spaces, laundry rooms, recreation, pool and similar common facilities, children's play areas, walkways and parking areas. A unit meets this criterion when at least one (1) window of a frequently used room, such as a kitchen, living room and dining room, but not bedroom or bathroom, faces the common area.
3. An addressing system shall be provided and shall consist of the following:
 - a. Individual multi-family building addresses shall be clearly visible (as determined by the Fire Marshal) from the abutting public street right-of-way or from the abutting driveway or private street; shall be at least six (6) inches in height; shall be of a contrasting color to the background; and shall be illuminated with a minimum of one (1.0) foot-candle so as to be visible during the hours of darkness. Building addresses (including any building identification letters) shall be clearly visible on all sides of the buildings.
 - b. For complexes of twelve (12) or more units an illuminated map of the complex showing the location of the visitor and



Fig. A.3.d.1. Dwelling front is visible from the street and oriented toward the street.



Fig. A.3.d.3.a. (1) Building address is illuminated and clearly visible.



Fig. A.3.d.3.a. (2) Building address is clearly visible.



Fig. A.3.d.3.a. (3) Building address is clearly visible.

3. Safe Design, continued

the unit designations within the complex shall be positioned at each driveway. The illumination shall be a minimum of one (1.0) foot-candle. The directory sign(s) shall be free-standing, shall have a three (3) foot to five and one-half (5.5) foot height, a seven (7) to thirty-two (32) square foot area, and shall be located at least twenty (20) feet back from the property line at the street access point.

- c. Each individual unit within a multi-family complex shall display a unit number that shall be at least four (4) inches in height and illuminated during the hours of darkness with a minimum of one (1.0) foot-candle. Each breezeway shall also be posted with appropriate unit numbers and, when applicable, with appropriate building addresses or letters for the breezeway.
 - d. The numbering of the parking spaces shall not directly correspond to the unit numbers, for security purposes.
4. The area of the railings on stair landings shall be a minimum of fifty percent (50%) transparent. The area of railing is the height of the railing multiplied by the length of the railing.



A.3.d.4. Stair railings are transparent.

A. Site Design

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A. Site Design

4. Inviting and Usable Public and Semi-Public Open Spaces

- a. **Intent:** To create active public and semi-public spaces that are functional, visually pleasing and comfortable, thereby enhancing the resident and visitor's experience.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - A. Site Planning
 - C. Safe Design
 - D. Open Space Places
 - E. Landscaping
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. Sufficient open space shall be provided for the purpose of outdoor recreation, scenic amenity or shared exterior space for people to gather.
 2. A shared open space is defined in **Section 7.0103(A)(4)(d)(2)**.
 3. Children's play areas shall be designed to promote safety, creative play and exercise and shall be adequate for the number of units in the development.
 4. Deed Restrictions. The standard **Section 7.0103(A)(4)(d)(4)** is required as determined by the Manager.



Fig. A.4.c.1. Sufficient open space for outdoor recreation and gathering is provided.



Fig. A.4.c.3. Children's play areas are adequately sized, provide various play opportunities, and promote community interaction.

A. Site Design

4. Inviting and Usable Public and Semi-Public Open Spaces, continued.

d. **Design Standards:** All developments shall comply with the following requirements.

1. For dwelling structures containing four (4) or more units, a minimum of four percent (4%) of the gross site area but not less than one thousand (1,000) square feet shall be shared open space for sites twenty thousand (20,000) square feet and above in gross site area.

For sites under twenty thousand (20,000) square feet in gross site area, a minimum of 4 percent (4%) of the gross site area but not less than five hundred (500) square feet shall be shared open space. The minimum dimensions for any shared open space shall be twenty (20) feet in length and width.

2. A shared open space may be any of the following: recreational facilities such as tennis, racquetball and basketball courts, recreation building (not including office space), swimming pools and spas; gathering spaces such as courtyards, gazebos, picnic and barbecue areas; gardens; preserved natural areas; lawns; dual use areas (such as a basketball court that doubles as a loading space); children's play areas; and other recreational facilities as approved by the Manager. The shared open space may not be within any buffer or yard setback area unless the open space includes preserved natural areas.

3. Children's Play Area.

- a. A minimum of fifty percent (50%) of the above minimum required shared open space shall be a children's play area. (Elderly Housing need not comply with the children's play area requirement but shall provide the specified shared open space in **Section 7.0103(A)(4)(d)(1)** above). However, the minimum dimensions for any children's play area shall be twenty (20) feet in length and width, and be a minimum of five hundred (500) square feet in size for sites with a gross site area of twenty thousand (20,000) square feet and greater.



Fig. A.4.d.1. Shared open space is well maintained and inviting.



Fig. A.4.d.3. Children's play area is centrally located and enclosed in an acceptable manner.

A. Site Design

4. Inviting and Usable Public and Semi-Public Open Spaces, continued.

For sites with a gross site area of under twenty thousand (20,000) square feet, the children's play area must include a minimum length and width dimension of twelve (12) feet with a minimum total area of two hundred fifty (250) square feet.

- b. The children's play area shall have a minimum of three (3) types of play equipment such as slides, swings, towers, jungle gyms and other natural play elements as approved by the Manager. A Landscape Architect or a playground recreation expert shall design the children's play area, including selection of the play equipment to ensure that the equipment is compatible, fun and promotes some form of exercise or movement.
 - c. The children's play area shall be centrally located where it is visible from fifty (50%) percent of the abutting units that front the space. Children's play areas shall be outside of the required yard setbacks and buffer areas.
 - d. The children's play area(s) shall be enclosed by any or a combination of any of the following: a two and one-half (2.5) feet to three (3) feet high wall, planter, decorative fence; or by eighteen (18) inch high benches or seats; or by other means acceptable to the Manager.
4. The Manager may require that deed restrictions be recorded to ensure that where project amenities such as swimming pools, community centers, and shared open spaces are on separate parcels within the same development and that all residents of the development will have on-going access to those amenities and facilities.



Fig. A.4.d.5. (1) The internal walkway system shall provide pedestrian access to all buildings and ultimately connect to the public sidewalk.



Fig. A.4.d.5. (2) The internal walkway system shall provide pedestrian access to all buildings and ultimately connect to the public sidewalk.

A. Site Design

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5. Landscaping

- a. **Intent:** To integrate landscaping into open spaces, parking areas, and general site design to contribute to an attractive and sustainable development that respects and enhances the landscape character.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - A. Site Planning
 - B. Sustainability
 - C. Safe Design
 - E. Landscaping
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. **Licensed Design Professional.** The landscape plan shall be created by a licensed design professional such as a Landscape Architect, Architect or Civil Engineer. The landscape plan shall exhibit the following characteristics:
 - a. The overall design of the site and the design of the proposed landscape materials shall achieve unique, attractive and significant landscaping on the site as a whole;
 - b. The proper type, spacing, height, placement and location of plant materials shall be provided to ensure that the intent of this ordinance is met;
 - c. The choice and selection of plant materials shall insure that root systems will not interfere with public utilities and so that fruit and other debris, except leaves, will not constitute a nuisance within public rights-of-way or to abutting property owners;
 - d. The choice and selection of plant materials shall ensure that the type of plantings selected will be of a type that will survive and thrive in the area in which they are to be located; and
 - e. The proper relationship between deciduous and evergreen plant materials shall exist so as to ensure that the desired buffering effect will be accomplished.
 2. **Minimum Landscape Area.** Sufficient landscape shall be provided to contribute to an attractive, green and sustainable development.
 3. **Drought resistant landscaping** shall be incorporated into the landscape design in a manner that contributes to a reduction in the irrigation water needed.



Fig. A.5.c.3. Drought resistant landscape is incorporated into an architectural facade composition.



Fig. A.5.c.4. A mixture of canopy trees, shrubs, perennials, ornamental grasses, perennials, groundcovers and annuals provides color and interest.



Fig. A.5.c.5. Landscape trees in setback area create an attractive buffer area.

5. Landscaping, continued



Fig. A.5.c.6. Landscape trees in setback area create attractive buffer area.



Fig. A.5.c.14. Utilities are screened from public view with wood fence and vegetation.

4. Landscaping that offers variety in scale, color and interest shall be provided using canopy trees, shrubs, perennials, ornamental grasses, groundcovers and annuals.
5. Ground Floor Units. The street-facing front yard shall be landscaped.
6. Setback Landscape Trees. The landscape plan shall provide sufficient vegetation including trees in the setback areas to create an attractive site and to buffer uses.
7. Site Landscape Trees. The landscape plan shall provide sufficient vegetation, including trees on the interior of the site, to create an attractive site.
8. Interior Drive Trees. The landscape plan shall provide trees along interior drives in order to reduce heat gain and provide an attractive drive and walk experience.
9. Staking. Plants need to be secure upon installation to avoid toppling and damage from strong winds.
10. Irrigation. Plants shall be properly watered to ensure their viability.
11. Plant Sizes. The landscape plan shall be designed to provide a more mature appearance at installation.
12. Mulch. Mulch shall be provided as a supplemental element of the overall landscape planting design to help insulate the plant materials and retain moisture.
13. Landscape Maintenance. The standard **Section 7.0103(A)(5)(d)(13)** is required without exception.
14. Buffering and Screening. The standard **Section 7.0103(A)(5)(d)(14)** is required without exception.

Duplexes and Townhouse Style Developments:
Duplex and Townhouse style developments shall also comply with the following requirements:

15. Landscaping between Driveways. Landscaping or other treatments between driveways shall be utilized to break up continuous pavement and provide rainwater infiltration.

A. Site Design

5. Landscaping, continued

- d. **Design Standards:** All developments shall comply with the following requirements.

All areas of the lot not occupied by the structures or paved areas shall be landscaped in an attractive and functional manner by complying with the following:

1. A professional licensed Landscape Architect shall complete and stamp the landscape plan for the development.
2. A minimum of twenty percent (20%) of the net site shall be landscaped. Required buffer (**Section 9.0100**) landscaping shall be credited toward the minimum standard. A paved pedestrian walk, when integrated within the landscaped area, may satisfy up to five percent (5%) of this requirement. All landscaped setback areas, landscaped common open spaces, eco-roofs, preserved natural areas and planter areas can be credited toward the minimum landscape standard.
3. At least twenty percent (20%) of the landscape area shall be planted with drought resistant canopy trees, shrubs, groundcovers, perennials and grasses.
4. Landscaping shall be included that provides interest by including a minimum of two (2) of the following:
 - a. Variety in scale;
 - b. Variety in color;
 - c. The use of canopy trees, shrubs, perennial grasses, groundcovers and annuals.
5. In front of all ground floor units, a minimum of sixty percent (60%) of the street-facing front yard shall be landscaped.
6. All yard setbacks shall be landscaped and shall have at least 5 deciduous shade trees per one hundred (100) lineal feet. Such trees shall be capable of at least twenty-five (25) feet in height and spread at maturity and be not less than ten (10) feet in height and two and one-half (2.5) inches in caliper size at the time of planting. New evergreen trees may substitute for the required deciduous shade trees on a one-for-one basis, provided the trees are capable of at least twenty-five (25) feet in height and are at least eight (8) feet in height at the time of



Fig. A.5.d.2. (1) Lot areas not occupied by structures shall be landscaped in a functional manner.



Fig. A.5.d.2. (2) Lot areas not occupied by structures shall be landscaped in a functional manner.



Fig. A.5.d.4. Landscaping shall provide color and interest using canopy trees, shrubs, ornamental grasses, perennials, groundcovers and annuals.

A. Site Design

5. Landscaping, continued



Fig. A.5.d.3. Drought resistant planting can provide visual interest.



Fig. A.5.d.4. This deciduous tree planting creates privacy and shade.

planting. Existing regulated major trees may be counted on a two trees provided for one tree required basis. Existing trees to be counted toward this requirement must be confirmed by either a Consulting Arborist, Qualified Arborist or a Registered Consulting Arborist to be healthy trees. Where the yard abuts a required buffer, the yard setback trees may be credited towards any tree required for the buffer.

7. Site trees shall be required at a rate of one (1) tree per three thousand (3,000) square feet of gross site area and shall be distributed throughout the site where feasible. Buffer, yard, drive and parking lot tree requirements may count toward the site tree requirement. Site trees must be capable of a height of twenty-five (25) feet. Ornamental, dwarf and other similar species may be permitted where larger sized trees are not appropriate as determined by the Manager.
8. One (1) deciduous canopy tree shall be placed every thirty-five (35) lineal feet along interior drives. In case of overhead utility lines, lower growing sub-canopy trees can be substituted for deciduous canopy trees. Trees shall be selected from the Recommended Street Tree list. The requirement is intended to indicate a quantity of trees and not necessarily the placement.
9. Newly planted trees shall be supported (by use of stakes, wire, or similar material) to prevent damage by the strong winds.
10. All landscaped areas shall be irrigated by an underground system except for dwelling structures containing less than 3 units. See **Section 7.0103 (2)(d)(2)** Sustainable Site Design for additional irrigation requirements.
11. New landscape planting sizes at planting are as follows:
 - a. Deciduous canopy trees shall be a minimum of two and one-half (2.5) inches caliper size and shall be balled and burlapped or container stock;
 - b. Deciduous ornamental trees shall be a minimum of two (2.0) inches caliper size and shall be balled and burlapped or container stock;
 - c. Evergreen trees shall be a minimum of six (6) feet in height and shall be balled and burlapped or container stock;
 - d. Evergreen and deciduous shrubs, with the exception of dwarf shrubs such as boxwood,

A. Site Design

5. Landscaping, continued

must be a minimum of twenty-four (24) inches high from finished grade and a minimum of one (1) gallon size at planting;

- e. Perennials shall be a minimum of one (1) gallon size; and
- f. Ground covers shall be well rooted in either flats or a minimum of one (1) gallon pots.

12. Natural colored mulches such as shredded hardwood bark, oyster shells, stones and bark chip mulches are only allowed as filler until required groundcovers and shrub materials mature and spread. Artificially colored mulches are prohibited. Mulches are not permitted as a substitute for living plant materials.

13. Landscape Maintenance. Compliance with the following criteria is required:

- a. Inspections. A City representative will perform a final landscape inspection to ensure that the landscape demonstrates equivalent compliance with the approved landscape plan upon completion of the project and before issuance of a Temporary or Final Certificate of Occupancy following a request from the developer.

The inspection time period is from March 1 to November 15.

If an inspection is requested between November 16 and the last day of February and the landscaping is not complete, or if the applicant requests a Temporary Certificate of Occupancy to occupy one or more buildings on site prior to the landscaping being completed, a financial guarantee is to be provided based on one hundred and ten percent (110%) of the estimated cost of plant materials and labor for the total landscape plan as indicated in a landscape cost estimate. Beginning March 1, the Applicant has one hundred and eighty (180) days to complete the items or the City will cash in the amount being held and finish the landscape job.

- b. Establishment Period. The establishment period for the plant material guarantee will begin at the Final Certificate of Occupancy inspection approval to two (2) years from that date. All plantings shall be properly planted as to be in a healthy, growing condition at commencement of the establishment period. At the end of the establishment period, any plantings which



Fig. A.5.d.13.c. (1) Well-maintained landscape areas present a healthy, neat, orderly appearance, free from refuse and debris.



Fig. A.5.d.13.c. (2) A well-maintained landscape area presents a healthy, neat, orderly appearance, free from refuse and debris.

A. Site Design

5. Landscaping, continued



Fig. A.5.d.15. Driveways and walkways are separated by landscaping.

are 20 percent (20%) dead or greater shall be replaced.

c. Maintenance.

i. Maintenance of required plantings by the owner shall be carried out so as to present a healthy, neat and orderly appearance, free from refuse and debris.

ii. To insure proper maintenance and as a condition of Final Site Plan approval, the property owner shall enter into and record with the City a Landscape Maintenance Agreement, or include such provisions as part of the condominium master deed, each of which shall be approved by the City Attorney. Such instrument shall identify the minimum plan of maintenance, the person or entity responsible for maintenance, and shall provide the procedure, authority and finance for City cure of breaches by the responsible entity. Such instrument shall also include:

provisions that all unhealthy and dead material shall be replaced within one (1) year, or the next appropriate planting period, whichever occurs first; all landscaped areas shall be provided with an operable irrigation system; tree stakes, guy wires and tree wrap are to be removed after one (1) winter season; and plantings shall be guaranteed for two (2) years after the Final Certificate of Occupancy inspection approval.

d. Responsibility and Certificates of Occupancy. The owner of the property subject to the requirements of this Section shall be responsible for installing and maintaining landscaping per the approved final landscape plan as specified in this Section. Where a person other than the owner occupies the property, the occupant shall also be responsible for maintenance.

14. For Buffering and Screening see **Section 9.0100**.

Duplexes and Townhouse Style Developments:

Duplex and Townhouse style developments shall also comply with the following requirements:

15. Landscaping shall be utilized in the space between the driveways to separate shared dwelling units and driveways and reduce impervious surfaces.

6. Public and Private Space Transitions

- a. **Intent:** To create a visually pleasing and cohesive space between the public realm (the street) and the private realm (the building) that fosters a sense of community.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - A. Site Planning
 - D. Open Space Places
 - E. Landscaping
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. Adequate separation between multi-dwelling units, including duplexes and townhouses, should allow for sun, light and air as a means of reducing shadows on public and semi-public open spaces.
 2. First Floor Privacy. The development shall provide a sense of privacy for the residents.
 3. Transitions. The development shall provide a sense of privacy for the residents and a distinction between the public sidewalk realm and the private unit realm.



Fig. A.6.c.1. Adequate separation between dwelling units allows for light and air in public and semi-public open spaces.



Fig. A.6.c.3. Transitions provide a sense of privacy and a distinction between the public and private realms.

6. Public and Private Space Transitions, continued



Fig. A.6.d.2 Elements such as front stoops, landscape buffers, and decorative fencing, enhance ground floor privacy.



Fig. A.6.d.2.d. An 80 square foot ground floor porch area and transparent fencing enhances a sense of privacy.



Fig. A.6.d.2 and 3. Decorative, transparent, wood fencing creates a sense of transition from public to private realm.

d. **Design Standards:** All developments shall comply with the following requirements:

1. Where more than one (1) multi-family building on a site faces one another, a minimum separation of twenty (20) feet shall be required between front building facades, inclusive of setbacks. The separation area shall include at minimum a shared pedestrian walkway and landscaping.
2. Where a residential unit occupies the ground floor, fronts and accesses the street, at least one (1) of the following elements shall be incorporated between the ground floor of the unit and the street level as a means of creating a sense of privacy:
 - a. A change in elevation grade separation of a minimum of 6" via a front porch or stoop to the entry door;
 - b. Five (5) to fifteen (15) feet width of landscaping between the unit and the street;
 - c. A minimum of five (5) feet width of landscaping on both sides of the pedestrian connection between the unit and the street;
 - d. Decorative, transparent fencing made of metal or wood or a stone wall. Fencing or the stone wall shall not exceed thirty (30) inches height when placed between the front of the building and the street unless approved by the Manager, and shall include a minimum of one and one-half (1.5) feet of landscaping between the fence or wall and the street-facing sidewalk. There shall also be a minimum separation between the building and the fence or wall of five (5) feet.
3. Transition between public, semi-public, and private areas shall be identified in a minimum of one (1) of the following ways:
 - a. Changes in paving material;

6. Public and Private Space Transitions, continued

- b. Changes in paving color;
- c. Changes in paving pattern or texture;
- d. Changes in elevation; or
- e. Landscaping.



Fig. A.6.d.3. Transition between public and private zones is created with material and grade changes.



Fig. A.6.d.3. Transition between public and private zones is created with elevation, grade, and material changes.

A. Site Design

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7. Pedestrians, Bikes and Transit

- a. **Intent:** To site multi-family housing on streets that serve pedestrians, bicycles and public transit as well as the automobile.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - B. Sustainability
 - G. Transportation Mode Provisions.
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. Pedestrian-friendly ground floor entries shall include protection from rain and sun.
 2. The proposed development will incorporate facilities for people to ride their bikes or walk.
 3. Transit Connections. Developments shall create a physical and/or visual link to public transit and shall consider connections to pedestrian activity centers such as transit facilities, businesses, public buildings and parks, etc.



Fig. A.7.c.1. Pedestrian friendly entrance provides protection from the rain and sun.



Fig. A.7.c.2 Covered bike parking in addition to required garage bike parking.

A. Site Design

7. Pedestrians, Bikes and Transit, continued

- d. **Design Standards:** All developments shall comply with the following requirements.
1. All building entrances shall incorporate arcades, roofs, porches, alcoves, porticoes, and awnings that protect pedestrians from the rain and sun to a minimum depth of four (4) feet.
 2. Bike parking shall be in accordance with **Table 9.0851** and shall be accommodated within the building. Bike storage is to be in addition to the required storage space per unit. Visitor bike parking is encouraged.
 3. Transit Connections.
 - a. Ground floor windows on the street facing facade shall orient to the street; and
 - b. Primary building and entry orientation(s) shall be to streets with public transit (bus and/or a light rail station) or to a central courtyard that opens to the street rather than to a parking lot. Buildings shall have at least one (1) of their primary entrances oriented toward a Design Street.



Fig. A.7.d.1 & 2. This building entrance incorporates a covered porch to protect pedestrians from the rain and sun. Visitor bike parking is provided in addition to required internal bike parking requirements.



Fig. A.7.d.1 & 3. Building entrance incorporates a porch. Ground floor windows are oriented toward the street.

8. Vehicular Circulation and Off-Street Parking

- a. **Intent:** To develop a parking strategy to accommodate vehicles associated with the residential units while reducing the visual impact of parking on the public realm.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - A. Site Planning
 - C. Safe Design
 - E. Landscaping
 - F. Street Orientation
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. Vehicular Circulation. The standard **Section 7.0103 (A)(8)(d)(1)** is required at the discretion of the Fire Chief or Fire Marshall.
 2. Parking. Parking, loading service and vehicular circulation areas shall be integrated into the site design in a manner that does not detract from the design of the building, the street frontage or the site.

Mixed-Use Style Developments:

Mixed-Use Style Developments shall also comply with the following requirements.

3. Garage entrances. The standard **Section 7.0103 (A)(8)(d)(3)** is required without exception.

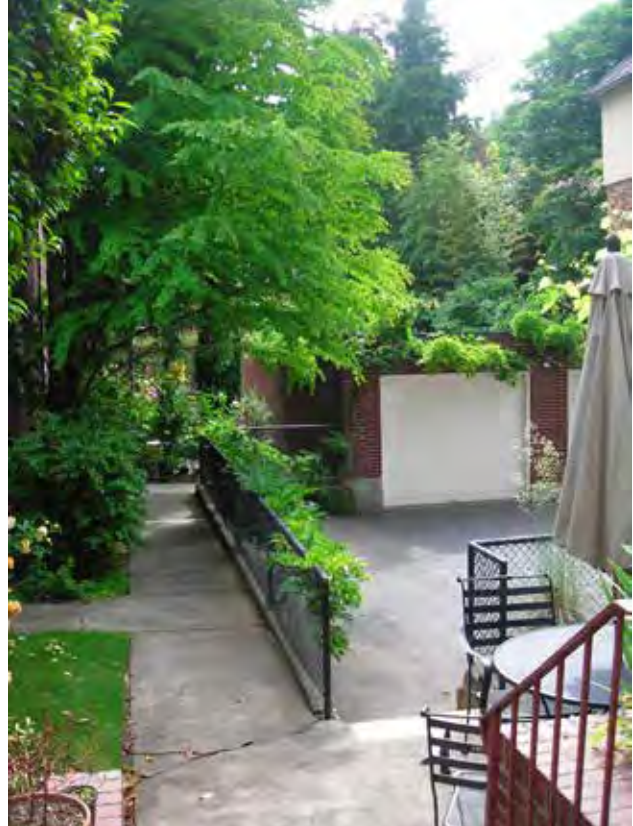


Fig. A.8.c.2. Parking is integrated into the rear of the site.

8. Vehicular Circulation and Off-Street Parking, continued

d. **Design Standards:** All developments shall comply with the following requirements.

1. Vehicular Circulation. Vehicular circulation and parking shall be provided in accordance with the following standards:
 - a. Public streets shall be dedicated within the site and connected to adjacent streets as required to create blocks and street intervals that are consistent with **Section A5.402(D)**. The names of any such streets dedicated by deed, without a plat, shall be reviewed by and approved by the Manager prior to recording. Where public streets are required, the Manager may require that traffic-calming features such as speed bumps, curb extensions, and enhanced pedestrian crosswalks be included in the design and construction of the streets.
 - b. Where new parcels or blocks are created within a development site as a result of required public street dedications, individual parcels or blocks need not meet minimum residential density standards for the district, provided the development as a whole meets the standard.
 - c. Based on the anticipated vehicular and pedestrian traffic generation and the policies of the Community Development Plan, adequate right-of-way and improvements to abutting streets shall be provided by the applicant and shall meet the street standards of the City. This may include, but is not limited to, improvements to the right-of-way, such as installation of lighting, signalization, turn lanes, paving, curbs, sidewalks, bikeways, dual street name, quadrant, and/or neighborhood signage, and other facilities needed because of anticipated vehicular and pedestrian traffic generation.
 - d. In designing accesses for multi-family residential developments, efforts shall be made to mitigate adverse traffic impacts on adjacent, low-density residential neighborhoods. In assessing such impacts, the typical daily street volumes specified in **Appendix A5.501** shall be considered.



Fig. A.8.d.2.a. (1) Parking is integrated into the overall design and is not visible from the street.



Fig. A.8.d.2.a. (2) Parking and garage doors are located below grade and interior to the site.

8. Vehicular Circulation and Off-Street Parking, continued

- e. Private Driveway Accesses: When private driveway accesses are provided for multi-family developments such as condominiums and apartments, they shall be designed as follows:
- i. Dead-end private driveway accesses shall not exceed six hundred (600) feet in length nor serve more than one hundred (100) dwelling units. Dead-end private driveway accesses that exceed one hundred-fifty (150) feet in length shall be provided with an approved turn-around.
Dead-end private driveway accesses that serve more than twenty-five (25) units shall be designed as follows:
 - a. A driveway width of not less than thirty-two (32) feet; and
 - b. No segment of the driveway will be in excess of four hundred (400) feet in length before there is a Fire Department approved turn-around (including a looped driveway) or turnout.
 - ii. For dead-end private driveway accesses, "PRIVATE ACCESS ONLY" signage and driveway approach shall be placed at the intersection with the public street to clearly identify the private driveway access.
 - iii. Private maintenance of private driveway accesses shall be provided by a Homeowners' Association or other appropriate entity. Maintenance shall ensure continual emergency access at all times.
 - iv. Location of private driveway accesses shall meet the Oregon Uniform Fire Code and shall be consistent with **Appendix A5.501 (G)(4) and A5.503.**



Fig. A.8.d.2.b. (1) Required off-street parking is located to the rear the dwelling structure.



Fig. A.8.d.2.b. (2) Required off-street parking is located beneath the dwelling structure.

8. Vehicular Circulation and Off-Street Parking, continued



Fig. A.8.d.2.d. Parking is connected to site via recognizable transition points such as a sidewalk.

2. Parking

- a. Parking areas shall be integrated into the overall design of the site and shall be screened from the street per **Section 9.0823**. Duplexes and townhouse style buildings with front entry garages are exempt from this standard.
- b. Required off-street parking, loading service and vehicular circulation areas shall be located to the rear, interior, side or beneath the dwelling structure. Parking located to the side of the building shall be limited to fifty percent (50%) of the overall frontage. Parking shall be behind the maximum setback or behind a line drawn parallel to the street at the point where the building is closest to the street, whichever is closest to the street. In no circumstance shall the parking be closer than the minimum building setback. For sites with multiple frontages, parking may be allowed up to the minimum setback regardless of building location as approved by the Manager or Design Commission. Standards for minimum building frontage along a street shall be considered when making this determination.
- c. For parking lot locations see **Section 7.0103(A)(1)**.
- d. Parking areas shall be connected to the site via recognizable transition points, including landscaping and other site elements such as sidewalks, bollards, lighting and appropriately scaled signage.
- e. Dwelling structures containing two (2) or three (3) dwelling units shall have additional off-street parking at a rate of one space per unit when the lot has limited frontage or where on-street parking is not allowed.
- f. Complexes containing twelve (12) or more units shall submit a Neighborhood Parking Analysis that identifies potential on-street parking conflicts on adjacent streets and recommends possible mitigation measures. The analysis shall include an assessment of the supply and demand for adjacent on-street parking and the estimated on-street parking demand created by the proposed development. Mitigation measures may

8. Vehicular Circulation and Off-Street Parking, continued

include, but are not limited to, parking duration limitations, time of day limitations, or supplemental off-street parking.

- g. Garages for attached dwellings shall only be used for the parking or storing of vehicles of residents.
- h. All attached street facing garages shall be located at least four (4) feet behind the front façade.
- i. Detached garages or carports shall reflect the architectural style and/or building materials that are used for the dwelling structures.

Mixed-Use Style Developments:

Mixed-Use Style Developments shall also comply with the following requirements:

- 3. Garage entries are prohibited on primary street façades, where façades include ground floor retail.

A. Site Design

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B. Building Design

1. Massing

- a. **Intent:** To create a transition in the bulk and scale between new developments and adjacent, less intense buildings and zones.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - H. Design Excellence and Architectural Expression
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 - 1. Building(s) that front the public realm shall avoid long, monotonous, uninterrupted walls.
 - 2. Building shall be modulated to prevent large, uninterrupted monotonous walls.
 - 3. Buildings shall differentiate between the base of the building and the top of the building to enhance the pedestrian realm.
 - 4. Storage. The Standard in **Section 7.0103(B)(1)(d)(4)** is required.



Fig. B.1.c.1. Building front shall avoid monotonous, uninterrupted walls.



Fig. B.1.c.2. Building facades shall be modulated.



Fig. B.1.c.3. Building shall differentiate between the base of the building and the top.

1. Massing, continued

d. **Design Standards:** All developments shall comply with the following requirements.

1. Structures shall not include long, monotonous, uninterrupted walls. Walls shall incorporate structural exterior wall offsets, projections and/or recesses as a means of reducing the scale and improving the appearance of the building. Exterior wall offsets shall reflect the living unit modules when individual unit entries face the street. A minimum of one (1) foot horizontal variation shall be used at intervals of fifty (50) feet or less along the structure's primary façade on the ground floor.
2. Structures shall not have an overall horizontal distance exceeding one hundred sixty (160) linear feet, measured from end wall to end wall. Structures facing a street can increase to two hundred (200) linear feet provided a courtyard, portal to a shared parking area or other open space is provided that breaks up the building wall. Open spaces shall be a minimum of thirty-five (35) feet in width and depth.
3. Buildings shall have, at a minimum, a base and top.
 - a. The "base" shall be considered from grade and it shall be twelve to twenty (12-20) feet tall. The top of the base or ground floor level shall consist of distinct physical transition between the base and any upper floors. This transition element (such as change in brick pattern and other materials, articulation of a floor line, change in window types, etc.) shall be compatible, where possible, with datums on surrounding buildings.
 - b. The "top" of a building shall be considered either the upper story or the top of the façade and shall have a distinct visual design from the "base" by material treatment, color, texture, or change in materials or roof form.
4. Storage: Space shall be provided for garbage, recycling and storage in accordance with the following standards:
 - a. Exterior garbage collection and recycling areas shall be entirely screened by the employment of a vegetative screening and/or minimum six (6) foot high sight-obscuring fence or wall from public view.



Fig. B.1.d.1. Exterior wall offsets shall reflect the living unit modules when individual unit entries face the street.



Fig. B.1.d.2. Structures facing a street can increase horizontal length to 200' by providing an internal courtyard with a minimum 35' foot width.



Fig. B.1.d.3. Buildings that are greater than two stories shall have a base and top.

1. Massing, continued

- b. Storage facilities shall be provided for articles used outdoors such as barbecues, outdoor furniture, etc. The storage facility shall be a minimum six (6) feet high and twenty-four (24) square feet in area. The facility shall either be connected to each unit in a logical fashion as part of the building design or shall be easily accessible (such as in a central facility or garage) and capable of being locked. (Except for retirement housing, elderly housing assisted living developments need not comply with this requirement.)
- c. If located within a garage, the storage space must be separate from and in addition to the area required for vehicle parking so as to not impede vehicle parking.



Fig. B.1.d.4.a. Wall provides screening for exterior garbage and recycling collection area.



Fig. B.1.d.4.b Outdoor storage facilities are connected in a logical fashion to the building, are lockable, and are easily accessible.

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2. Façade Composition

- a. **Intent:** To create a harmonious building façade that respects neighboring buildings through the use of architectural elements and timeless architectural principles.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - H. Design Excellence and Architectural Expression
 - J. High Quality Materials
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. Changes in wall planes, layering, horizontal datums, vertical datums, building materials, color, or fenestration shall be incorporated to create simple and visually interesting buildings.
 2. Mechanical equipment shall not detract from building architecture and facade composition.
 3. Windows and doors shall be designed to create depth and shadows and to emphasize wall thickness and give expression to residential buildings.
 4. Windows shall be used on the façade to provide articulation to the façade and visibility into the street.
 5. Blank, windowless walls in excess of seven hundred fifty (750) square feet are prohibited when facing a public street unless required by the Building Code. In instances where a blank wall exceeds seven hundred fifty (750) square feet, it shall be articulated or intensive landscaping shall be provided.
 6. Building Façade Transition. Adjacent building façades need to be compatible.
 7. Mechanical Screening. The Standard in **Section 7.0103(B)(2)(d)(6)** is required. Utilities shall be screened from the public realm and the internal public or private areas.
 8. Garage doors shall be integrated into the design of the larger façade in terms of color, scale, materials, and building style.



Fig. B.2.c.1 (1) Changes in wall planes and layering creates a simple and visually interesting building.



Fig. B.2.c.1 (2) Building materials and colors create simple and interesting façades.



Fig. B.2.c.9. Emphasize windows with trim.

2. Façade Composition, continued



Fig. B.2.c.11 (1). Pedestrian experience is enhanced by ground floor store fronts, rhythmic vertical elements, and overhanging awnings.



Fig. B.2.c.11 (2) The pedestrian realm at the street level is enhanced with ground floor commercial activity.

Duplexes and Townhouse Style Developments: Duplex and Townhouse style developments shall also comply with the following requirements:

9. The street facing façade shall be animated through the use of windows.
10. Window trim or extruded metal frames shall be provided around all windows for windows emphasis.
11. A visual distinction shall be created between adjacent units.

Mixed-Use Style Developments: Mixed-Use Style Developments shall also comply with the following requirements:

12. The pedestrian experience shall be enhanced by creating ground floor store fronts that foster a sense of interaction between activities inside the building and those on the sidewalk and in the larger public realm. A rhythm of vertical elements shall be established along the ground floor façade and weather protection shall be provided by incorporating awnings, overhangs and/or canopies.
13. Windows or other elements shall be used in the façade to create logical rhythms and patterns.
14. An appropriate number of windows above the ground floor shall be provided to articulate the façade and to provide visual interest.
15. Window Transparency. Windows shall allow visibility into the buildings.

2. Façade Composition, continued

- d. **Design Standards:** All developments shall comply with the following requirements.
1. Street-facing elevations shall be divided into wall planes that reflect living unit modules. Generally wall planes over seven hundred fifty (750) square feet shall be divided into distinct planes. This can be achieved by:
 - a. Incorporating elements such as porches or decks into the wall plane;
 - b. Recessing the building a minimum of two (2) feet over six (6) feet in width; or by
 - c. Extending an architectural bay a minimum of two (2) feet from the primary street facing façade.
 2. Packaged Terminal Air Conditioners, Package Terminal Heat Pumps and similar systems with individual through-wall heating/cooling shall not be allowed.
 3. Exterior windows shall have a minimum of two (2) inch reveal (depth) to create a shadow line that highlights materials and the thickness of the wall.
 4. Windows shall occupy a minimum of twenty-five percent (25%) of the total street-facing façade.
 5. Blank, windowless walls are prohibited when facing a public street unless required by the Building Code. Blank walls are discouraged in all other situations. Where the construction of a blank wall is required and it exceeds seven hundred and fifty (750) square feet, it shall be articulated.
 6. Within a development, the building façades shall transition from one building face to an adjacent building face through the use of compatible materials, glazing and scale elements such as porches and decks. Architectural elements such as posts, beams and planting walls shall be scaled to reflect their function. Tacked-on faux architectural elements are prohibited.
 7. Mechanical and communication equipment and components shall be screened so they are not visible from



Fig. B.2.d.1 (1). No contiguous wall planes over 750 square feet.



Fig. B.2.d.1. (2) Wall planes over 750 square feet are divided into distinct planes by incorporating porches and/or extending an architectural bay.

B. Building Design

2. Façade Composition, continued



Fig. B.2.d.3. Street-facing facade is composed of a minimum of 25% glazing.



Fig. B.2.d.8. Garage doors match the main building in color, materials, and trim.



Fig. B.2.d.11. Bays reduce townhome style building facades into smaller volumes in order to achieve residential scale and unified building appearance.

streets and other street level public spaces, including alleys. They shall be screened in a manner that is compatible with the architectural character of the building. Appropriate screening for rooftop equipment includes parapet walls or architecturally compatible fabricated enclosures such as panels and walls. The Manager may require a review of screening of rooftop equipment by requesting sight line studies. Roof-top solar equipment that is installed parallel to the roof or within 18 inches of the roof that does not exceed the peak height of the roof, and that does not increase the footprint of the building is exempt from this requirement for extensive surveys or site evaluations only as specified in **Article 4** and **Section 10.0900**. Utilities such as transformers, heating and cooling, electric meters and other utility equipment shall be not be located within five (5) feet of the front entrances and shall be screened with landscape materials.

8. Garage doors shall match the main building in terms of color, materials, and trim.

Duplexes and Townhouse Style Developments:

Duplex and Townhouse style developments shall also comply with the following requirements:

9. Windows shall occupy a minimum of twenty percent (20%) of the total street facing façade. A minimum of twenty-five percent (25%) of the ground floor living units shall be windows.
10. Windows and doors shall incorporate a minimum of three and one-half (3.5) inch trim.
11. Horizontal facades for townhome style buildings longer than thirty (30) feet shall be reduced into smaller volumes as individual units to achieve a residential scale and a unified building appearance. A minimum of one (1) of the following methods shall be used:
 - a. Variation in the building form by using bays, shifts in massing or distinct roof shapes;
 - b. Diversity of window size, shape or patterns that relate to the interior function;
 - c. Emphasis of building entries through a projecting or recessed form, detail, color, and/or materials; or
 - d. Variation in detailing including sills, headers, belt courses, reveals, pilasters, window bays, and similar features.

2. Façade Composition, continued

Mixed-Use Style Developments:

The non-residential component of Mixed-Use Style Developments shall also comply with the following requirements:

12. A minimum of forty percent (40%) of the length and the overall area of the ground floor street facing façade shall be window glazing. The street facing façade shall consist of a minimum of forty percent (40%) glazing of the area above the ground floor.
13. Along alleyways, façades shall provide windows along twenty-five percent (25%) of the area above the ground floor.
14. Awnings, overhangs and/or canopies over every bay/display window shall be incorporated as means of creating a rhythm at the street and providing weather protection.
15. To meet the transparent glass requirement, storefront windows shall have a Visible Transmittance (VT) value of sixty percent (60%) or greater.



Fig. B.2.d.12. Elevation indicates minimum glazing percentages of 40% at ground floor and 40% at upper floors.



Fig. B.2.d.14. Awnings and overhangs over each bay and display window create rhythm and provide weather protection.

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3. Sense of Entry

- a. **Intent:** To promote pedestrian comfort, safety and orientation by creating well-defined and welcoming building entries.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - H. Design Excellence and Architectural Expression
 - J. High Quality Materials
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 - 1. Front Door Orientation. All building entrances shall be enhanced architecturally.
 - 2. Walk Connection. Walkways shall connect the internal sidewalks to the front doors.
 - 3. Entries shall be highlighted and visible from the street.
 - 4. The street-facing building entry in larger apartment-style and big house multi-plexes shall be reinforced.
 - 5. All ground floor common entries or individual unit primary entrances shall provide protection from the weather.
 - 6. Doors shall be made of high quality, long lasting materials.



Fig. B.3.c.1, 5 & 6. Front doors are enhanced architecturally, highlighted, visible, of high quality materials, and provide protection from the weather.

Mixed-Use Style Developments:

Mixed-Use Style Developments shall also comply with the following requirements:

- 7. Building entrances shall be provided at regular intervals for convenience in mixed-use buildings. Entrances at corners shall articulate the corners of the building and create a formal sense of entry to the building.



Fig. B.3.c.7. Building entrances are articulated at the corners, creating a formal sense of entry.

3. Sense of Entry, continued



Fig. B.3.d.1. Visually prominent entry exhibits a projected canopy and landscape elements connecting the public and private realm.



Fig. B.3.d.3. Entrance incorporates landscaping, an entry courtyard, and an ornamental fence.

- d. **Design Standards:** All developments shall comply with the following requirements.
1. Multi-family buildings that face the street shall orient the front door to the street or to a central courtyard. All entries shall be made visually prominent and receive architectural emphasis. Possible techniques to accomplish this include but are not limited to:
 - a. Recessed entries;
 - b. Corner entries;
 - c. Projecting entries, including porches, canopies and articulated lintels above the doorway;
 - d. Pilasters or columns supporting and/or framing the entrance;
 - e. Elevated entries with transparent stairways that are compatible with the architecture; or
 - f. Landscape treatments that connect the public realm to the private realm.
 2. For developments with multiple ground floor and street facing units, such as townhouses, a direct connection from the sidewalk to the front door of the residential unit shall be provided. The connection shall be a minimum of five (5) feet wide.
 3. Entrances shall be highlighted by incorporating two (2) or more of the following elements:
 - a. Landscaping (ground cover, shrubs and trees) that emphasize seasonal color and interest;
 - b. An entry courtyard;
 - c. Ornamental glazing, railings and balustrades;
 - d. Prominent landscape feature, such as a trellis or an arbor;
 - e. Ornamental gate and/or fence;
 - f. Water feature; or
 - g. Year-round site furnishings, including benches, tables and sitting areas.
 4. The building entry into larger apartment-style and multi-plexes shall be emphasized by creating a large inviting entryway into a shared lobby.
 5. All ground floor common entries or individual unit primary entrances shall be sheltered with a minimum four (4) foot overhang projection. Sheltered entries shall not project more than two (2) feet into a required yard setback.
 6. Buildings shall include primary entry doors of

3. Sense of Entry, continued

high quality materials such as solid wood or material as approved by the Manager.

Mixed-Use Developments:

Mixed-Use Style Developments shall also comply with the following requirements:

7. Building entrances shall be located at intervals of no more than fifty (50) feet along the primary street facing elevation. Entrances at corners shall articulate the corners of the building and create a formal sense of entry to the building.

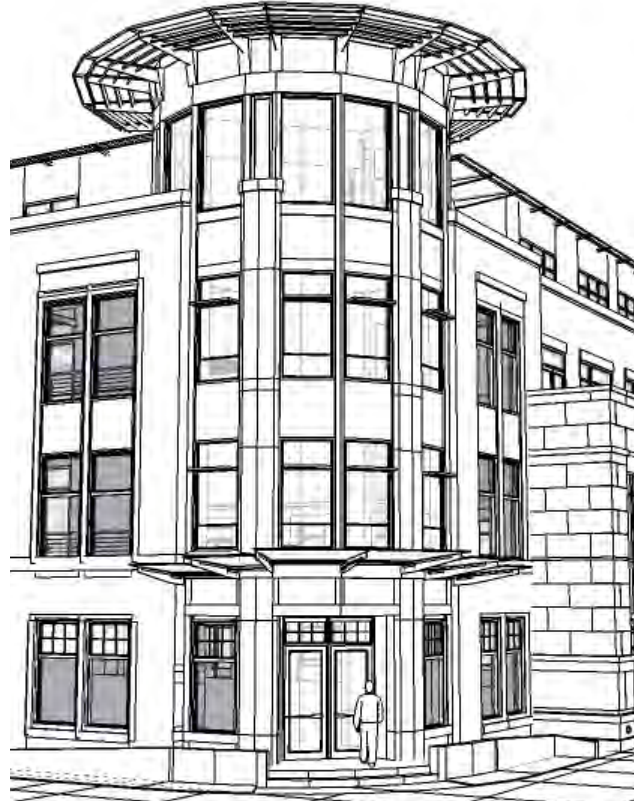


Fig. B.3.d.7. Corner entry is articulated creating a formal sense of entry.

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4. Sustainable Architecture

- a. **Intent:** To incorporate design techniques and technologies to minimize building energy use, increase occupant health, and maximize a building's positive impact on the environment.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - H. Design Excellence and Architectural Expression
 - I. Sustainable Architectural Design
 - J. High Quality Materials
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. **Energy Efficiency.** Buildings shall be designed to conserve energy by optimizing the collection of passive solar radiation through building orientation for winter.
 2. **Sustainable Materials.** The demand for building products that have incorporated recycled content materials shall be increased, therefore reducing the impacts resulting from the extraction of new materials.
 3. **Sustainable Architectural Elements.** Developments shall utilize strategies that reduce water and energy usage attributed to site and building development, building use, and the transportation of building users while not detracting from good site and building design. Healthy and sustainable communities shall be created that incorporate "best practices" such as LEED™ for Neighborhood Development to conserve natural resources and reduce carbon emissions.



Fig. B.4.c.1. Building exhibits south-facing facade, passive solar orientation, and photovoltaic solar panels.



Fig. B.4.c.3. Vegetated roof contributes to water and energy conservation efforts.

4. Sustainable Architecture, continued



Fig. B.4.d.2. (1) Recycled building materials are incorporated into building fencing.



Fig. B.4.d.2. (2) Recycled aluminum blocks are incorporated into ground floor walls.

- d. **Design Standards:** All developments shall comply with the following requirements.
1. Buildings shall be designed to conserve energy by incorporating the following:
 - a. Windows shall be operable by building occupants, and shall be oriented to provide views of surrounding landscaping, streets, and natural areas;
 - b. Windows shall be high quality, durable and energy efficient with insulating double or triple panes; and
 - c. Sunshades shall be designed to effectively limit summer sun and to allow for winter sun penetration.
 2. A letter from the Development Permit Applicant or Appointed Representative shall specify one of the following:
 - a. A minimum of twenty percent (20%) of building materials contain, in aggregate, a minimum weighted average of twenty percent (20%) post consumer recycled content materials such as aluminum, glass or recycled paper;
 - b. A minimum of twenty percent (20%) of building materials are manufactured regionally within a radius of five hundred (500) miles of the site;
 - c. A minimum of five percent (5%) of the building materials consist of rapidly renewable materials which include materials that can be planted and harvested within ten (10) years; or
 - d. A minimum of twenty percent (20%) of wood based materials are certified in accordance with the Forest Stewardship Council (FSC) and have been used in construction.
 3. Sustainable Architectural Elements: Projects with greater than forty thousand (40,000) square feet of floor area shall meet at least one (1) of the following:
 - a. A vegetated roof for a minimum of thirty percent (30%) of the total roof surface;

4. Sustainable Architecture, continued

- b. For a minimum of seventy-five percent (75%) of the total roof surface, a white roof with a Solar Reflectance Index (SRI) of seventy-eight (78) or higher if the roof has a three to twelve (3:12) roof pitch or less, or Solar Reflectance Index (SRI) of twenty-nine (29) or higher if the roof has a roof pitch greater than three to twelve (3:12);
- c. A system that collects rainwater for reuse on-site (e.g., site irrigation) for a minimum of fifty percent (50%) of the total roof surface;
- d. An integrated solar panel system for a minimum of thirty percent (30%) of the total roof or building surface. The location and configuration of solar energy panels shall be approved by the Manager or Design Commission depending on the procedure type only as permitted in **Article 4** and **Section 10.0900**. Solar panels shall be integrated into the building design or shall be screened from view at street level with materials that are consistent with the building design and yet do not interfere with the purpose of the solar panels;
- e. Another sustainable element approved by the Manager.



Fig. B.4.c.3.d. Solar panel system is incorporated into the facade, providing shading and electricity.

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5. High Quality Materials

- a. **Intent:** To promote the use of traditional and contemporary architectural materials that provide a sense of permanence and high quality.
- b. **Applicable Multi-Family Design Principles from Section 7.0102:**
 - H. Design Excellence and Architectural Expression
 - J. High Quality Materials
- c. **Design Guidelines:** All developments shall comply with the following requirements.
 1. Street-facing façades shall consist predominantly of a simple palette of long lasting timeless materials such as brick, stone, stucco, wood siding, and wood shingles.
 2. A hierarchy of building materials shall be incorporated that are durable and reflect a sense of permanence and quality of development.
 3. Limited Materials. Split-faced block and gypsum reinforced fiber concrete (for trim elements) shall only be used in limited quantities.
 4. Prohibited Materials. The Standard in **Section 7.0103(B)(5)(d)(4)** shall be complied with.
 5. Fencing shall be durable, maintainable, and attractive.



Fig. B.5.c.1. Façades exhibiting long-lasting materials such as wood siding, wood veneer, wood shingles, and stone.



Fig. B.5.c.2. Façades exhibiting long-lasting timeless materials such as brick and stucco.



Fig. B.5.c.5. Durable and attractive fencing.

5. High Quality Materials, continued



Fig. B.5.d.1.d. Wood siding and stone on street-facing façade.



Fig. B.5.d.1.e. (1) Metal panel siding on street-facing façade.



Fig. B.5.d.1.e. (2)

- d. **Design Standards:** All developments shall comply with the following requirements.
1. The following primary building materials shall be utilized on a minimum of sixty-five percent (65%) of the street-facing building façades or greater:
 - a. Brick;
 - b. Stone;
 - c. Stucco;
 - d. Wood siding and wood simulation materials;
 - e. Metal panels, including recycled panels and blocks;
 - f. Fiber reinforced cement siding or panels;
 - g. Ceramic tile; and
 - h. Other as approved by the Manager or Design Commission.
 2. The following building materials are prohibited as primary cladding on new street-facing building façades and shall not be allowed on more than thirty-five percent (35%) of each individual building façade:
 - a. Corrugated metal;
 - b. Smooth concrete block;
 - c. Plain concrete;
 - d. Spandrel glass;
 - e. Sheet pressboard; and
 - f. Other as approved by the Manager or Design Commission.
 3. The following building materials are permitted as accent materials on no greater than five percent (5%) of each individual building façade (e.g., flashing, projecting features, ornamentation, etc.):
 - a. Split-faced block (for piers and foundation walls); and
 - b. Gypsum reinforced fiber concrete (for trim elements).
 4. The following building materials are prohibited:
 - a. Vinyl siding;
 - b. T-111 plywood; and
 - c. Exterior Insulation Finishing System (EIFS)

5. High Quality Materials, continued

5. Fencing materials shall be durable, maintainable, and attractive. The following fencing materials are prohibited:
 - a. Plastic or vinyl fencing; and
 - b. Chain-link fencing.