

# RESIDENTIAL DEVELOPMENT STANDARDS

CITY OF INDEPENDENCE



RESIDENTIAL DEVELOPMENT STANDARDS

### How to Use This Document

The following document presents proposed Residential Development Standards for the RS, RM, and RH zones. Each standard is presented using the following elements:

- **Standard:** A description of the proposed standard
- **Explanation/Rationale:** A description of the reasoning behind the proposed standard
- **Further Approaches:** Where applicable, a description of additional approaches applicants may want to pursue to meet the City's long-term vision

Standards are illustrated with clear, easy to understand diagrams that graphically explain the proposed standard. Diagrams are accompanied by photographs, where applicable. Given their graphic nature, the proposed standards are easier to understand and more accessible to users than a standard code. A clear code helps to articulate the community's vision for a vibrant and attractive city and reduce staff time for plan review.

A summary of the proposed standards is found in the development standard table, which follows this section. All new and updated standards apply equally to all three residential zones. Where a standard is only applicable to a specific zone, that zone is specified.

Existing City Development Standards that were determined to be in compliance with the Vision are not addressed as part of the proposed Development Standards but can be found in a table following the summary of the Development Standards. A glossary of terms and building and facade elements can be found in Appendix A. Additional methods for sustainable building methods can be found in Appendix B.

### When Development Standards Apply

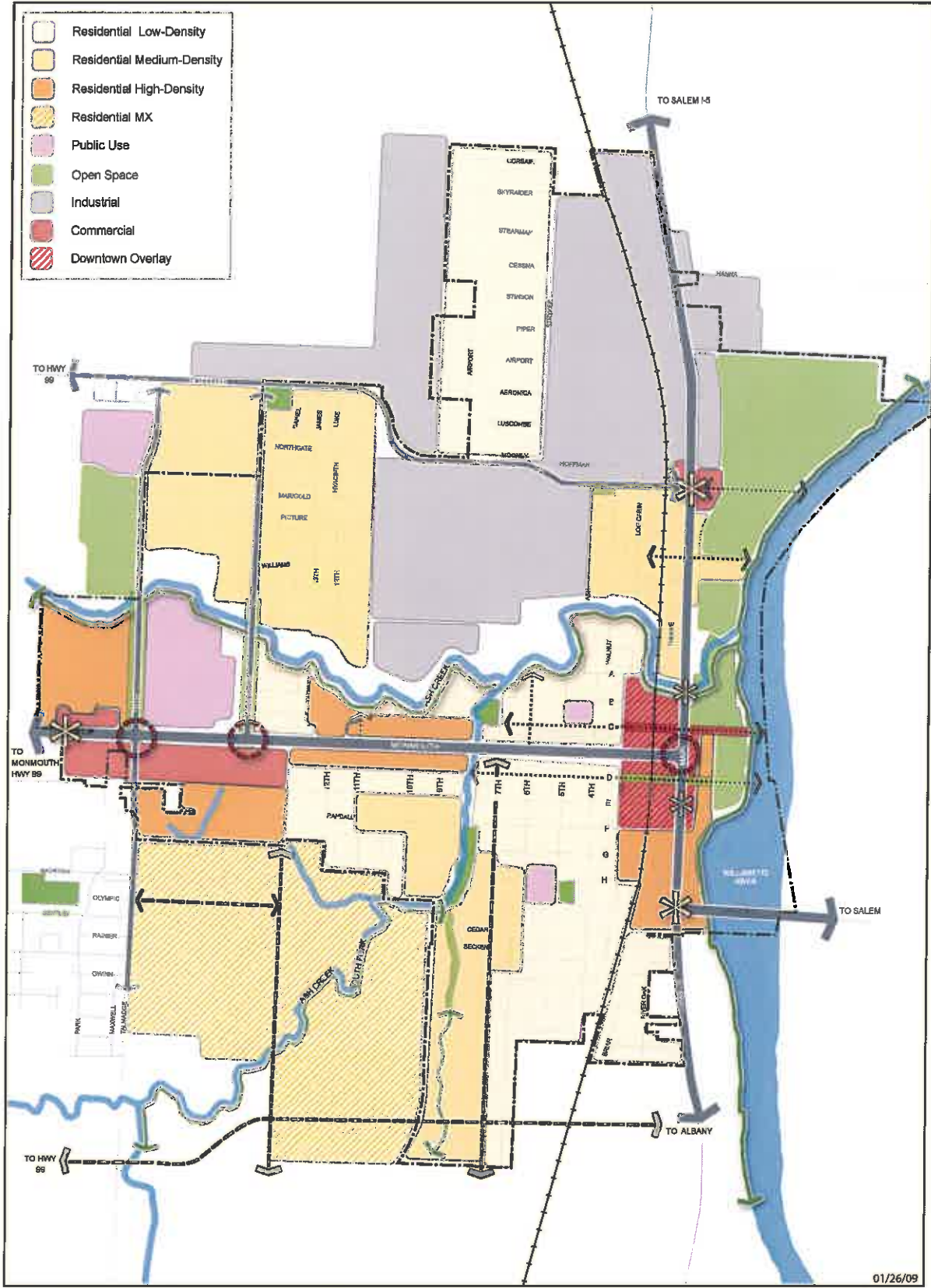
All development that requires a building permit is required to meet the proposed Residential Development Standards.

As described in Sub-Chapter 10, General Provisions, expansion of existing nonconforming lots, parcels, structures, and uses is strongly discouraged. However, non-conforming uses are allowed to continue to operate provided that their hours of business do not impact the goals and objectives of the established base zone.

Changes of use are to be determined by the Community Development Director.



# INDEPENDENCE FRAMEWORK PLAN



### Vision 2020 Plan

The Residential Development Standards were developed through the Independence 2020 Vision planning process and reflect input from citizens, the Project Advisory Committee (PAC), the Technical Advisory Committee (TAC), members of the public, and City staff. Participants in public meetings and other outreach efforts (including the Vision 2020 web site) articulated the following themes for future growth. These themes represent the voice of the community and what they would like to see in the City of Independence.

- *Enhance historic character:* Expand and strengthen the downtown commercial core while maintaining and enhancing the historic character of Independence.
- *Develop a vibrant downtown:* Encourage and promote the redevelopment of downtown, including housing, as a vibrant and successful mixed-use district.
- *Create an accessible community:* Emphasize bicycle and pedestrian connections along natural amenities, such as Ash Creek and the Willamette River, as a way of moving residents and visitors across town and improving connections to downtown.
- *Improve and promote community assets:* Create a strong link from the commercial core along Main Street to the amphitheater and the recreational land uses along the river and recognize key intersections as gateways and nodes of commercial activity.
- *Focus on youth:* Develop more facilities and programs for youth that ensure Independence is a place for people of all ages.
- *Sustainability at work:* Maintain and improve natural areas as resources where possible and target environmental initiatives such as recycling programs and green building techniques.
- *Promote economic vitality:* Support the continued growth of local and living wage jobs and develop tools to market opportunities.

Through a public outreach process that included multiple open houses and town hall meetings, these themes were translated into a vision for the City's future in 2020. As part of this visioning process, participants brainstormed about what they would like to keep the same about Independence and what they would like to see change.

Participants expressed a desire to maintain the history of Independence, including protecting and supporting the historic residential area while increasing residential housing options and density. Residents want to increase housing opportunities downtown by redeveloping the existing gravel site with attached housing including rowhomes or townhouses. Residents are also interested in continuing to pursue residential uses for the upper floors of existing buildings along Main Street to support a vital, mixed-use core. A desire also exists for more middle- and upper-income housing stock in Independence so that people's children can stay in town and raise families.

Residents would like to see houses that emulate historic residences in their attention to detail and quality of material and construction techniques, as well as their orientation of primary living spaces toward the street. Edwards Addition in Monmouth was cited as a successful example of the type of development they would like to see. Houses built in this manner will be long-lasting and increase in value over time, strengthening the community. High-quality residential development will support the growth of the City and support local businesses.

These ideas were then translated into a Framework Plan (see the left hand page) that graphically depicts the vision for future growth in Independence as translated into the City's built environment. The Framework Plan indicates that areas of higher density residential uses will be clustered around the two retail centers on Monmouth Street and on Main Street. Higher density levels are targeted in these areas because of their proximity to services and goods. Medium density housing will be located close to major arterials and existing and future collectors such as Gun Club Road, 51, and those planned for in the Transportation System Plan (TSP). There will be no changes to the location of the current low density housing zone. Additional opportunities for larger lot development will be available within the MX zone.



RESIDENTIAL DEVELOPMENT STANDARDS



**Existing Strengths.** Excellent examples of high-quality housing can be found throughout the City's National Historic District. Architectural elements that should be reflected in new development include primary living spaces oriented to the street, multiple roof forms, architectural details (including dormers, gables, and window trim), numerous windows and a primary entry that face the street, and high quality materials. These elements translate into pedestrian orientation neighborhoods with homes that increase in value over time.

## Residential Development Standards

The Residential Development Standards seek to establish a framework for the future growth of Independence in keeping with the Vision 2020 while also responding to the context of the strong existing built fabric. The Development Standards build off the historic development patterns found in the City's Historic District.

The Development Standards establish a base for the quality of the design of new homes. The Standards require homes to be oriented to the street to foster pedestrian activity and community interaction. The Standards also specify required architectural elements. By requiring a certain level of quality in the architecture and public realm of the City, the Standards ensure that Independence will remain a great place to live far into the future.

The standards are the outcome of a comprehensive code audit, a detailed analysis of existing conditions, and a careful study of successful standards throughout the region and the nation. In addition to the TAC, the PAC, members of the public, and City staff, stakeholders (including architects, builders, and developers) provided input on the content of the standards.

Individual elements of the historic district were analyzed to understand how they contributed to the quality of the building, the street environment, and the larger neighborhood. Then new higher-quality communities throughout the region were analyzed in order to understand how historic building elements and practices could be employed in a modern-day setting.

From this analysis a set of design principles were created. The Development Standards do not seek to emulate a specific style but rather establish a common architectural vocabulary of elements that improve not only the quality of individual homes but also the overall quality of the community. Those principles are as follows:

- Primary living space extends beyond any secondary living spaces such as a garage
- Multiple roof forms used wherever possible
- Architectural details employed to provide interest and establish a sense of depth for the building face
- Windows and doors face the street and provide eyes on the street
- High quality materials used to establish a sense of timelessness

The standards consist of an update of existing development standards as well as new standards that support the implementation of the Framework Plan. The Residential Development Standards apply to the Low Density (RS), Medium Density (RM) and High Density (RH) Residential Zones.



RESIDENTIAL DEVELOPMENT STANDARDS

*New Columbia, Portland, Oregon*



*Fairview, Oregon*



*Edwards Addition, McMinnville, Oregon*



**Vision.** The existing built fabric and values articulated by the community through the public outreach process of the Vision 2020 Plan serve as the basis for the content of the Residential Development Standards. The Standards seek to reinforce and create additional pedestrian-friendly neighborhoods that emulate the City's historic neighborhoods. New development should offer high-quality housing that will increase in value over time and offer the opportunity to get to know one's neighbors and community members.



## Existing Strengths

Clues to Independence's rich history can be found not only along the historic buildings of Main Street but also in the Italianate, Queen Ann, Bungalow, and Craftsman cottages and homes that line the streets of the City's National Historic District adjacent to the downtown core.

Gables and porches face the street with straight paths connecting front doors to the sidewalk. Homes are framed and shaded by large trees. The front facade of homes have prominent entries, with the primary living space extending to welcome visitors. Tall windows and glass doors look out on the street and promote a sense of safety for passing pedestrians. Architectural details such as dormers, gables, and window trim render richness and establish a sense of depth to the building faces.

Garages are detached from homes and set behind the residence. Access is often provided from a rear alley as opposed to driveways in front of the home. Porches, paths, detached garages, and street trees translate into pedestrian oriented streets and sidewalks that are pleasing to walk along.

## Vision

Building off these existing strengths, the Development Standards provide a tool to accomplish the Vision for Independence's growth. With these Development Standards in place, one can imagine how Independence might look in 2020.

With the Development Standards in place, new homes are built with a pedestrian orientation that fosters a walkable city where residents feel safe and comfortable. Homes have rich architectural details that establish a level of quality in the housing stock that is apparent when walking by and improve the quality of the pedestrian environment. While new homes all reflect the quality of buildings found in the Historic District, a range of styles can be found whose architecture is timeless.

These homes provide the base of a strong community where neighbors can walk down the street and pause in front of homes to chat while walking their dog or on their way to downtown. Families can take advantage of a sunny day by gathering in their front yard for a barbecue or working on their car or other projects in their driveway. Kids can play in the street safely as cars drive at slow speeds on narrower streets. Parents keep an eye on their kids from the large windows oriented to the street or while sitting on their front porch.

As they walk through the neighborhood, pedestrians are not forced to walk into the street around cars that hang over the sidewalk. Sidewalks are wide and well maintained and street trees provide shade. Residents of all ages ride bike through the neighborhood to run errands, get to the Ash Creek Trail, or meet friends at the new ball fields at North Riverside Park.

Residents can walk with their families and feel a sense of safety as homes are oriented to the street with transparent windows and doors that provide eyes on the street. This sense of safety extends to the interior of the spaces; residents can see clearly out their front windows and doors to their yard and the street without sight lines being obstructed by protruding garages.

These small changes in the architecture of new homes and neighborhoods foster a sense of community and promote a new lifestyle of interaction and pedestrian activity.

RESIDENTIAL DEVELOPMENT STANDARDS

### Development Standards Summary

Below are summary tables that organize the proposed Development Standards by topic. These three topics reflect the manner in which buildings are designed and developed. The first summary table outlines key Development Standards that impact the potential use and dimensions of the site. The second summary table outlines Development Standards that impact the potential height and building massing. The last table outlines Development Standards that require architectural details to the building. The Development Standards apply to all three residential zones, unless noted in bold text.

PROPOSED STANDARD	DEVELOPMENT STANDARD	PAGE
<b>Site</b>		
Prohibited Uses	Prohibited uses are listed in a table. Definitions can be found in the glossary in Appendix A and outline exceptions.	10
Lot Area	The minimum lot size on corner lots for the exclusive development of townhouses, rowhouses and duplexes shall be 2,500 square feet.	11
Yards	Building eaves, bay windows, and uncovered balconies shall be allowed to extend into setbacks if they are a minimum of 3 feet from the property line. Detached covered accessory structures shall not exceed 15% of the total site and shall be equal to or lesser than the height of the primary structure.  The minimum front setbacks shall be 15 feet in RS, 10 feet in in RM, and 5 feet in RH. The minimum setback for an attached garage shall be 19 feet, at least 4 feet from the front facade (the front wall of a house, not including a porch face). The minimum setback for detached garage shall be 40 feet from the primary street.	12
Off-Street Parking	Minimum of 1 parking space/dwelling unit. Maximum of 3 parking spaces/dwelling unit. Maximum of 2 parking spaces/dwelling unit for multi-family/attached.	14
Site Landscaping	15% of the site area shall be landscaped. 30% of the landscaped area can be dedicated to hardscape.	15
Off-Street Parking Lot Landscaping	There shall be a minimum 6' of perimeter landscaping around all surface parking lots planted with approved planting materials.  In parking lots with more than 10 spaces, 15% of all parking area shall be dedicated to interior landscaping. For every 10 spaces, a minimum of 200 square feet of landscaping shall be provided, including 2 shade trees per every 10 spaces.	16

PROPOSED STANDARD	DEVELOPMENT STANDARD	PAGE
<b>Building Height/Massing</b>		
Street-Facing Façade	The length of a street-facing garage on attached units shall not exceed 50% of the overall building length. Non-attached residential buildings shall have a minimum of 25% of ground-floor living area that faces the street consist of windows.	18
Large Building Elevation	The front elevation of buildings with over 500 square feet of surface area shall be divided into distinct planes of 500 square feet or less through changes in the wall plane or distinct architectural elements.	19
Building Length	<b>In RM and RH zones</b> , multi-dwelling buildings shall not exceed 100 feet in length. Maximum length can increase to 200 feet with minimum 35 foot wide and 35 foot deep break consisting of a portal or courtyard. The maximum length for row-houses shall be 300 feet.	20
Height	<b>In RS zone</b> , the maximum height shall be 35 feet for residential buildings. <b>In the RM and RH zones</b> , the minimum floor-to-ceiling heights for residential buildings shall be 9 feet.	21



RESIDENTIAL DEVELOPMENT STANDARDS

PROPOSED STANDARD	DEVELOPMENT STANDARD	PAGE
<b>Architectural Features</b>		
Main Entrance	All residential buildings shall have a front door facing the street and provide a 5 foot wide connection to the sidewalk. Porches and stoops shall not be greater than 3 feet above the finished grade and shall be a minimum of 25 square feet in area and 5 feet wide clear (from building face to the face of the column) to allow handicap access.  <b>In RM and RH zones</b> , hardscaped, well-lit pedestrian connections shall be made between buildings and sidewalks.	22
Roof Forms	A roof pitched less than 6 over 12 shall not be allowed on residential buildings. Primary gables shall be oriented to the street and decorated with architectural features. Roof eaves shall be at least 12 inches in width. Roof forms shall consist of more than a single large roof form, using gables or dormers to create a more varied roof form.	23
Exterior Siding/Cladding	T-111, plastic, or vinyl shall be prohibited as building materials. Approved building materials shall be used on all sides of the residence. Horizontal siding shall not exceed 6 inches in revealed width. Shingles shall not exceed 12 inches in revealed width.	24
Windows	Windows shall have a minimum height to width ratio of 2:1 and incorporate various architectural elements. Windows shall occupy a minimum of 15% of the street-facing façade. Horizontal slider windows and windows that use reflective glass shall be prohibited along the street-facing facade.	25
Doors	Residential doorways shall be street-facing with a minimum of 25% transparent or translucent windows or sidelites or side windows that shall be a minimum of 5 feet in height and 12 inches in width. Doors shall be made out of wood, metal-clad wood, metal, or cast fiberglass and shall be able to be painted.	26
Trim	All windows and doors shall have side trim and head casings that are a minimum of 3½ inches wide and project no less than ½ from the wall.	27
Foundations	Foundations shall not exceed 3 feet in height, except in floodplains, and shall be landscaped with a continuous line of planting materials so as to be obscured.	28
Fences	Front yard fence shall not exceed 3½ feet in height. Side and rear yard fences shall not exceed 7 feet in height. Fences shall be made of wood, brick or wrought iron. Chain link and vinyl fences shall be prohibited.	29
Screening	All exterior garage, recycling, and equipment areas shall be screened with a fence, wall, or landscaping.	30

### Existing Development Standards

Below is a table indicating the existing Development Standards that will not be impacted by the proposed Residential Development Standards. These Development Standards will continue to be enforced as indicated in the existing zoning code. Any items in the existing code that are not included below were recommended for elimination through the code audit process.

LOW DENSITY (RS)	EXISTING STANDARD
20.010 Density	The density upon any lot shall not exceed 8 dwelling units/acre
20.040 Yard	No building shall be placed within a required setback. The minimum front yard setback is 15 feet. The minimum rear yard setback is 15 feet. The minimum side yard setback is 5 feet and 10 feet for corner lots.
20.050 Lot Coverage	No main building or group of buildings will occupy more than 40% of the area of a single lot.

MEDIUM DENSITY (RM)	EXISTING STANDARD
21.010 Density	The density upon any lot shall not exceed 12 dwelling units/acre
21.030 Lot Frontage	The minimum width at the front lot line is 25 feet.
21.035 Lot Width	The minimum width at the front building line of any lot shall be 50 feet. The minimum width for townhouse lots shall be 25 feet.
21.040 Yard	No building shall be placed within a required setback. The minimum rear yard setback is 15 feet. The minimum side yard setback is 5 feet and 10 feet for corner lots.
21.045 Height	No building shall exceed a height of 35 feet except public buildings or churches which can not exceed a height of 45 feet.
21.050 Lot Coverage	No main building or group of buildings will occupy more than 40% of the area of a single lot.

HIGH DENSITY (RH)	EXISTING STANDARD
22.010 Density	The density upon any lot shall not exceed 20 dwelling units/acre
22.030 Lot Frontage	The minimum width at the front lot line is 25 feet.
22.035 Lot Width	The minimum width at the front building line of any lot shall be 50 feet. The minimum width for townhouse lots shall be 25 feet.
22.040 Yard	No building shall be placed within a required setback. The minimum rear yard setback is 10 feet. The minimum side yard setback is 5 feet and 10 feet for corner lots.
22.045 Height	No building shall exceed a height of 45 feet.
22.050 Lot Coverage	No main building or group of buildings will occupy more than 45% of the area of a single lot.
22.070 Development Standards	Multi-family residential buildings shall comply with the following standards: Signs (Subchapter 58), Design Review (Subchapter 80), Access.

RESIDENTIAL DEVELOPMENT STANDARDS

**Prohibited Uses**

**Standard**

The following uses shall be prohibited in the all three residential zones:

PROHIBITED USES	RS	RM	RH
Drive-Through Facility	X	X	X
Entertainment/Major Event	X	X	X
Office over 2,000 square feet	X	X	X
Retail over 2,000 square feet	X	X	X
Self-Service Storage	X	X	X
Vehicle Servicing/Repair	X	X	X
Wholesale Retail	X	X	X
Heavy Industrial	X	X	X
Light Industrial	X	X	
Manufacturing and Production	X	X	X
Warehouse and Freight	X	X	X
Waste-Related	X	X	X
Agriculture	X	X	X
Mining	X	X	X
Commercial Parking	X	X	X
Commercial Outdoor Recreation	X	X	X
Community Services over 2,000 square feet	X	X	X
Single-Family Homes			X
Railroad Yards	X	X	X
Detention Facilities	X	X	X

**Explanation/Rationale**

Listing permitted and conditional uses focuses regulation on the character of the use inside the building. Listing prohibited uses places the emphasis on the built environment and the impact of the building on the public realm rather than on the character of the uses taking place inside the building. Uses, unless they are noxious or dangerous, should be allowed outright.

This list of prohibited uses will protect the health and well being of citizens while the Development Standards address the building form and its impact on the public realm. A further description of these uses can be found in the Glossary in Appendix A that outlines any exceptions. For example, arts production is not included in the definition of manufacturing and Production and therefore would be allowed.

Prohibited uses were chosen based on potential negative impacts on the pedestrian environment as well as potential noxious or dangerous impacts that would negatively impact the health, safety, and welfare of the citizens of Independence



## Lot Area

### Standard

**In the RS Zone**, the minimum lot size for corner lots for the exclusive construction of duplexes, townhouses, and rowhouses shall be 2,500 square feet in order to allow for more density. This type of higher density development is allowed only on corner lots. The lot area for single-family homes shall remain 5,000 square feet.

### Explanation/Rationale

A 2,500 square foot lot is conducive to fee-simple row house/ townhouse development. Typically, a 2,500 square foot lot consists of a 25 foot wide lot and a 20 to 25 foot wide rowhouse or townhouse frontage. Two attached homes could be built on a 5,000 square foot lot with a rental or condominium structure.

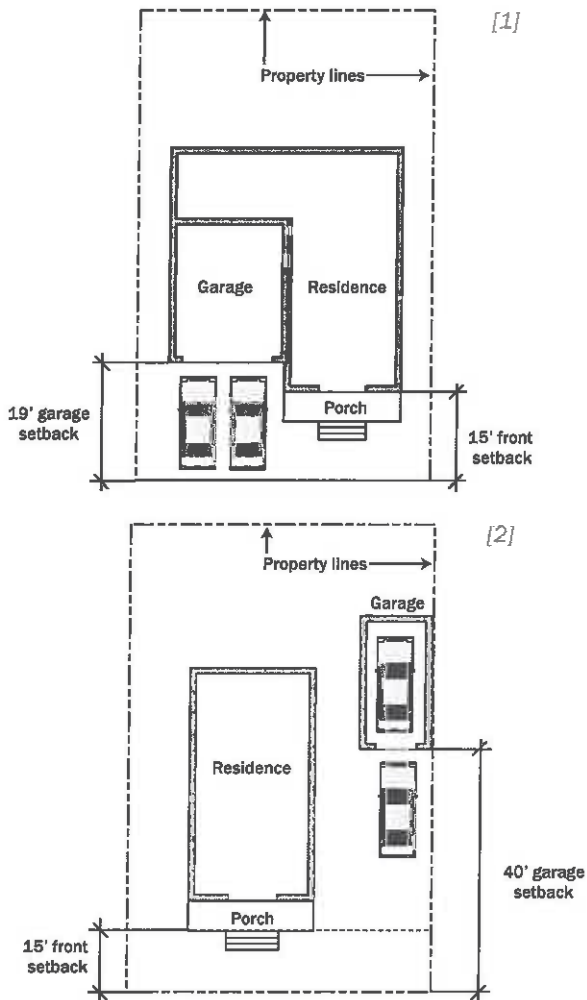
Row houses, townhouses, and duplexes provide opportunities for increased density. By placing parking behind this type of housing, the integrity of the building façade can be further improved. This type of housing also provide opportunities for entry level home buyers and empty nesters. Additionally these housing types maintain the character, scale, and massing of existing single-dwelling residential neighborhood.

[1]



**Density.** [1] Smaller lot sizes allow for the development of attached row houses, townhomes, and duplexes on the corners of existing residential neighborhoods. These housing types maintain the scale and massing of existing single-dwelling neighborhoods.

RESIDENTIAL DEVELOPMENT STANDARDS



**Yards.** [1] The minimum front setback for detached dwellings should be 15 feet with a 4 foot setback for attached garages. [2] The minimum front setback for detached garages should be 40 feet.

## Yards

### Standard

Building eaves, bay windows, uncovered balconies, and front steps, stoops, or porches shall be allowed to extend into setbacks provided that they are a minimum of 3 feet from the property line.

The minimum front setback for a dwelling in the RS zone shall be 15 feet. The minimum front setback for a dwelling in the RM zone shall be 10 feet. The minimum front setback for a dwelling in the RH zone shall be 5 feet.

The minimum setbacks for attached garages on the front facade of single family dwellings shall be 19 feet. There shall be no minimum setback for attached garages on the front of attached housing. If the dwelling has a setback greater than the minimum setback, the garage shall maintain a 4 foot setback from the front facade of the dwelling (the front wall of the building not including a porch face).

The minimum front yard setbacks for detached garages shall be 40 feet. Detached garages setback 40 feet may be placed on the side property lines. If the dwelling is on a corner and the garage faces a secondary street, the garage shall be set back a maximum of 25 feet or a minimum of 5 feet from the side street property line.

All detached, covered, accessory structures shall not exceed a maximum lot coverage of 15%. Covered accessory structures shall be limited to a height equal to or less than the height of the primary structure. If it is as tall as the primary structure, the accessory structure shall have two discernible floors and the upper floor shall be usable space.

### Explanation/Rationale

Building eaves, bay windows, and uncovered balconies do not detract from privacy between lots; they still allow light and air levels characteristic of lower density developments.

The garage setback ensures that accessory structures do not visually compete with the primary dwelling unit. The 25 foot maximum and 5 foot minimum setback for dwellings that face a secondary street allows for more flexibility in the layout of the building.

The 19 foot setback for attached garages corresponds to the existing development standards, which are informed by the length of a standard parking space. Parking spaces less than 19 feet can result in a vehicle overhanging the sidewalk

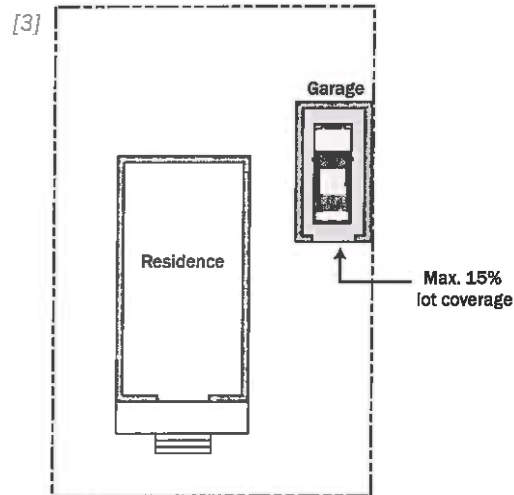
Accessory structures are incidental to the primary structure and, therefore, should be reduced in terms of their location and size so as not detract from the primary dwelling.

The height of accessory structures should be limited so that structures are not visible from the street and do not detract from the primary structure.

### Further Approaches

Requiring detached garages to be placed 40 feet back from the front property line allows more flexibility in site design and encourages rear access to the lot via alleyways. With rear access from an alley, dwellings can have a positive street presence with more attractive block faces that are oriented to pedestrians. Alley access limits driveway curb cuts, which allows for more landscaping, street trees, and on-street parking, making for a more pedestrian-friendly street.

Accessory structures can be sheltered from the street by siting the structure in an area that is not visible from the street-facing elevation. Additionally landscaping can be used to shield the structure. Allowable heights equal to that of the primary structure encourage the development of attached dwellings units (ADUs) or granny flats.



**Yards.** [3] Detached, covered, accessory structures should not exceed a maximum lot coverage of 15% of the site as they are secondary uses and should not detract from the primary use [4] They can be used to house an attached dwelling unit.



## RESIDENTIAL DEVELOPMENT STANDARDS



[1]

### Off-Street Parking

#### Standard

In all residential zones, there shall be a minimum of one off-street parking space per dwelling unit and a maximum of three off-street parking spaces per dwelling unit. A maximum of two off-street parking spaces shall be provided for each unit in attached or multi-family housing.

#### Explanation/Rationale

Reducing the number of off-street parking spaces, particularly in higher density residential zones, discourages automobiles and privileges pedestrians over cars. This encourages residents to park a second vehicle on the street, which, in turn, tends to reduce the width of the right of way and thus slow down traffic. Cars parallel parked along curbs also provide a protected edge condition for pedestrians along the sidewalk.

The decrease in off-street parking facilitates the more built-up character envisioned for higher density zones. RH housing, for example, is envisioned as being within walking distance of commercial centers and community uses so that residents reduce their dependency on automobiles.

#### Further Approaches

Create distinct pedestrian paths from centrally located parking facilities that are a minimum of 6 feet in width by applying striping, raised areas, or using a change in materials.



[2]

**Off-Street Parking.** A reduced number of off-street parking spaces required will privilege pedestrians over cars [1] Second vehicles will be parked along the street, which will slow car traffic and provide a protected edge condition for pedestrians [2] Distinctive pedestrian paths that are striped, raised, or use a different material can safely connect off-street parking with residences.

## Site Landscaping

### Standard

**In the RM and RH Zones**, a minimum of 15% of the site shall be landscaped. Interior parking lot landscaping may be applied to meet this minimum.

Landscaping shall be provided in the form of a dedicated landscape zone that has, at a minimum, a rate of 1 tree and 3 shrubs per every 400 square feet of contiguous open space. Remaining area within the 400 square foot open space area shall be planted with ground cover, including grass, that fills the area after 3 years.

Up to 30% of the landscaping requirement for the site may be dedicated to hardscape – walkways, plazas and small gathering areas. Every attempt shall be made to use permeable materials such as grasscrete, gravel, or pervious asphalt.

### Explanation/Rationale

Landscaping softens the effects of built and paved areas. If the landscaping is pervious, it also helps reduce stormwater runoff by providing a surface into which stormwater can percolate.

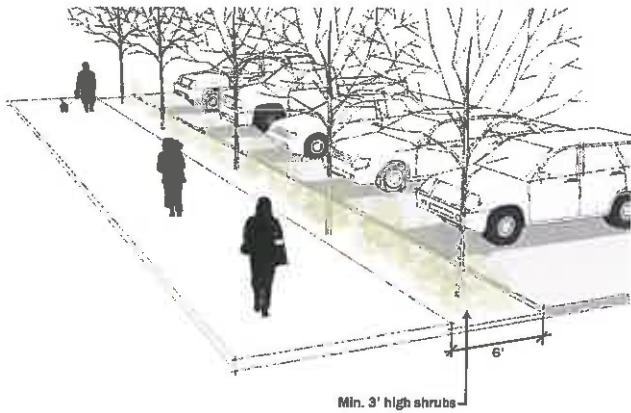
### Further Approaches

Look for opportunities within the public right-of-way to incorporate urban storm water detention and retention facilities. These facilities can reduce storm water run-off, and depending upon how they are detailed, serve as an amenity to the built environment.



**Site Landscaping.** [1] A minimum of 15% of the site should be landscaped [2] Up to one-third of the landscape may be hardscape such as a walkway, plaza, or small gathering area [3] Whenever possible, stormwater detention and retention facilities should be incorporated into the landscape.

RESIDENTIAL DEVELOPMENT STANDARDS



[1] **Off-Street Parking Lot Landscaping**

**Standard**

In regulating off-street parking lots, the following landscape standards shall apply:

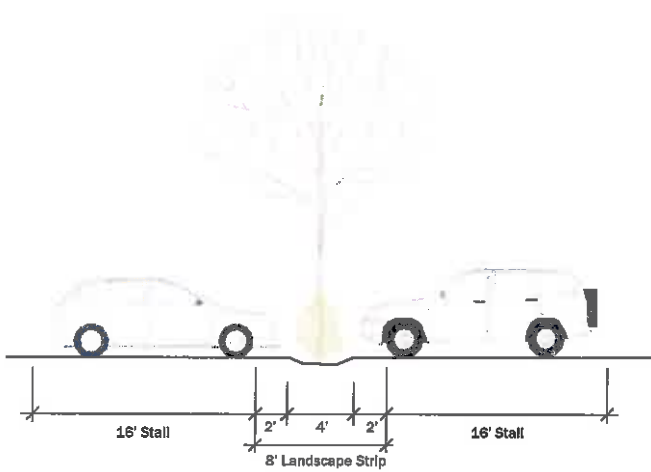
**Perimeter landscaping**

- In all parking lots a minimum perimeter of 6 feet shall be landscaped within the front and side yard setbacks in order to buffer the parking lot. This 6 foot wide strip shall be landscaped with noninvasive ground cover (including grass), shrubs that are a minimum of 3 feet high after 2 years and form a continuous screen, and approved street trees that are a minimum a 2.5" caliper and planted at a rate of 1 every 25 feet.
- A 3 foot high wall or planter constructed of either concrete or masonry may be substituted for ground cover or shrubs to screen the sidewalk from parking.

**Interior landscaping**

- In parking lots that have more than 10 parking spaces, there shall be a minimum of 200 square feet of landscaping per every 10 spaces that includes 2 shade trees for every 10 spaces.

All planting must be approved by the City of Independence.



[2]



[3]

*Note: Perimeter landscaping may not serve as a substitute for interior landscaping.*

*Note: Landscaping strips between parking spaces should be a minimum of 8 feet wide and consist of continuous ground cover, drought tolerant shrubs at a rate of 1.5 shrubs per space, and at least two trees per every 10 spaces. Landscaping strips may take up to 2 feet of the front of each parking space, allowing the car to overhang the planted area.*

*Note: Wherever possible, parking surfaces should reduce stormwater run-off and direct drainage toward planting areas. Pervious materials are highly recommended for parking surfaces. Such materials include grasscrete, modular pavers, and pervious asphalt.*

**Off-Street Parking Lot Landscaping.** Parking lot appearance and functionality can be improved by [1] a minimum perimeter setback of 6 feet with ground cover, shade trees, and shrubs that are a minimum of 3 feet high [2] internal landscaping strips that are a minimum of 8 feet wide [3] and stormwater detention and retention landscaping that reduces run-off while also providing a buffer between parking and pedestrians.



### Explanation/Rationale

Landscaping has the following benefits:

- Reduces the visual impact of the parking area from the street and the sidewalk
- Helps organize the design and layout of the parking lot and directs traffic
- Provides shade
- Reduces the rate and amount of stormwater run-off
- Reduces carbon dioxide
- Reduces the heat island effect.

### Further Approaches

For the purpose of reducing stormwater run-off, the replacement of continuous front curbs with tire stops is encouraged in order to create a minimum two foot ground cover zone per automobile that can be overhung by the automobile.

The required 200 square feet for every 10 parking spaces translates into islands throughout the parking lot with two trees per every 10 spaces. Although it goes beyond the minimum parking lot landscaping required, the ideal landscaping is a center median that helps to manage stormwater and islands on either end that provide shade. This configuration improves the aesthetic of parking lots by increasing the amount of landscaping while also managing stormwater internally.

[4]



[5]



**Off-Street Parking Lot Landscaping.** Parking lot landscaping should be [4] drought tolerant in order to reduce water use and consist of approved planting materials [5] In parking lots with more than 10 parking spots, there should be 200 square feet of landscaping, including 2 shade trees per every 10 spaces.

## RESIDENTIAL DEVELOPMENT STANDARDS



### Street Facing Facade

#### Standard

Any street-facing attached garage on multi-dwelling units shall not exceed 50% of the overall building length as viewed from the street.

For detached housing, a minimum of 25% of the ground floor living area that faces the street (defined as the first habitable floor level of a building directly accessible from the exterior finished grade) shall consist of windows. This can include windows in the front door.

The maximum number of detached garages for attached or multi-family units is 4 attached garages of a maximum width of 24 feet each (corresponding to a two-car garage).

Detached car ports are allowed provided that:

- They do not exceed the overall lot coverage requirement
- They have a capacity of no more than 8 vehicles
- They are not visible from the primary street

#### Explanation/Rationale

The cap on the length of the street-facing garage for attached units is intended to emphasize the living spaces of the units and the pedestrian realm. Having more living space facing the street reinforces the pedestrian realm by limiting the amount of blank walls and automobiles that pedestrians walk by. Having more living space facing the street also enhances a sense of safety by providing more “eyes on the street.” It also fosters a sense of community as pedestrians and neighbors interact with one another in the spaces, such as front porches and front yards, that transition from the public realm to the private realm.

#### Further Approaches

Incorporate translucent or transparent windows into the facades of street-facing garages.

Garages and the driveways serving them may be combined in order to minimize curb cuts and create a more unified building facade. Shared driveways should be a minimum width of 18 feet and should not exceed a maximum width of 24 feet.

**Street Facing Facade.** [1] Attached garages on multi-dwelling units should not exceed 50% of the total building length as viewed from the street. [2] The maximum number of detached garages for attached or multi-family units is 4 attached garages that are a maximum of 24 feet wide each.

## Large Building Elevation

### Standard

**In RM and RH Zones**, the front elevation of buildings with over 500 square feet of surface area shall be divided into distinct planes consisting of 500 square feet or less. This can be achieved by:

- Incorporating elements such as a porch or a dormer into the wall plane
- Recessing the building a minimum of 2 feet over 6 feet
- Providing a bay window that extends a minimum of 2 feet from the primary street-facing facade.

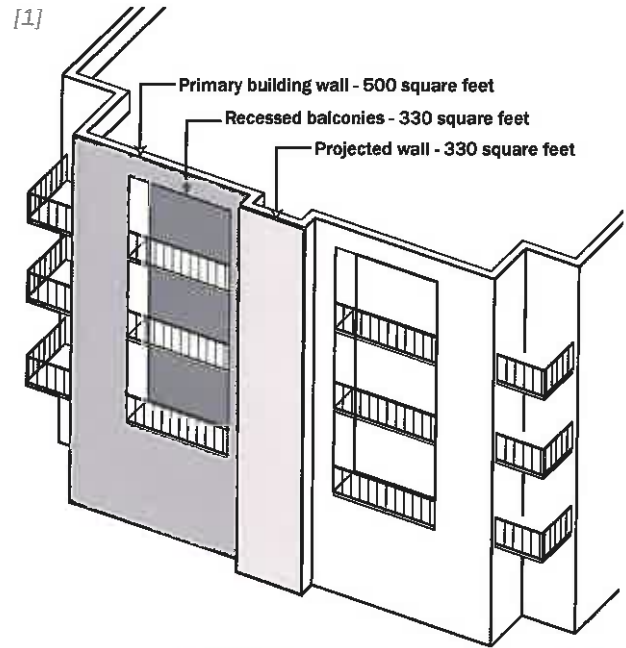
### Explanation/Rationale

The desire for attractive and compatible higher density housing has been expressed throughout the visioning process. The Large Building Elevation Standard seeks to break down large, uninterrupted wall planes into smaller volumes in order to minimize the impact of larger buildings on the public realm. Larger buildings, if well designed, can contribute to the character and livability of neighborhoods while still increasing density levels.

Smaller volumes achieved through shifts in the horizontal and vertical facade, break up potentially monolithic building forms. In addition, these distinct planes translate into a varying building facade that offers visual interest to pedestrians.

### Further Approaches

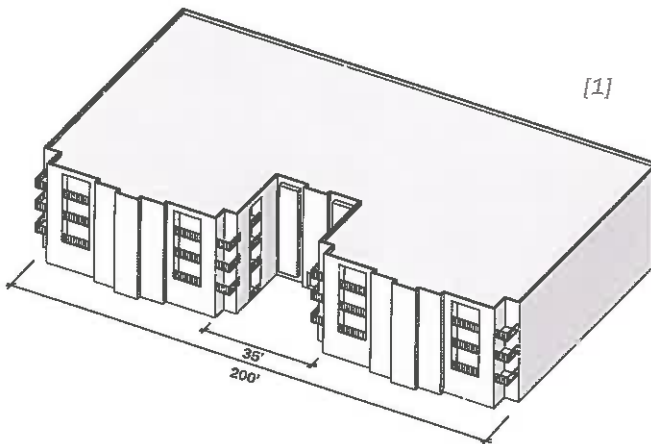
Additional methods can be applied to further distinguish individual units within a larger multi-dwelling building in order to establish a more human-scale. For example, chimneys, awnings, and steps or stoops can be used to articulate units. Horizontal banding can define different floors to break down the building's massing. These bands prevent the building from being read as a single, monolithic mass. Shifts in materials and the incorporation of secondary design elements can demarcate different units, floors, or portions of the building.



**Large Building Elevation.** [1] The front elevation of buildings with street-facing facades greater than 500 square feet should carve the building face into smaller, distinct planes, which can be accomplished by [2] incorporating a porch or dormer into the wall plan or [3] recessing the building a minimum of 2 feet over 6 feet.



## RESIDENTIAL DEVELOPMENT STANDARDS



### Building Length

#### Standard

**In the RM and RH Zones**, the maximum building length for multi-dwelling buildings that face the street shall be 100 feet. This maximum length can increase to 200 feet if a courtyard, portal, or other shared open space is provided in order to create a break in the building wall. This open space shall be a minimum of 35 feet in width and depth.

The maximum building length for row houses shall be 300 feet i.e. a maximum of 12 attached units that are each 25 feet wide. This length corresponds to the length of a typical city block.

#### Explanation/Rationale

The Building Length Standard breaks up the street wall of excessively long buildings in order to maintain a sense of pedestrian safety and provide an interesting pedestrian realm. Additionally, these open spaces provide a zone of transition from the public realm of the sidewalk to the private realm of the building. Well-designed spaces can thus foster interaction between the residents of the building and passing pedestrians.

Requiring that the portal or shared open space be at least 35 feet in width and in depth creates an open space that is of a sufficient size to be usable rather than an entry courtyard. Additionally, due to the open space, residential spaces will receive ample daylight while still being sufficiently deep.

#### Further Approaches

In regulating the bulk of the building, the City needs to also control the height and setbacks of buildings. The City should consider requiring buildings' mass to be broken up further through the use of repetitive architectural elements such as engaged or stand-alone columns, windows, and front porches.

**Building Length.** In order to control the bulk of buildings and maintain a sense of pedestrian safety and intrigue [1] the maximum building length for multi-dwelling buildings shall be 100 feet, which can increase to 200 feet if a break is provided that is a minimum of 35 feet deep and wide [2] A break can be a portal or space between buildings or [3] a courtyard that provides a transition from the public realm to the private realm.

BUILDING HEIGHT AND MASSING STANDARDS

**Height**

**Standard**

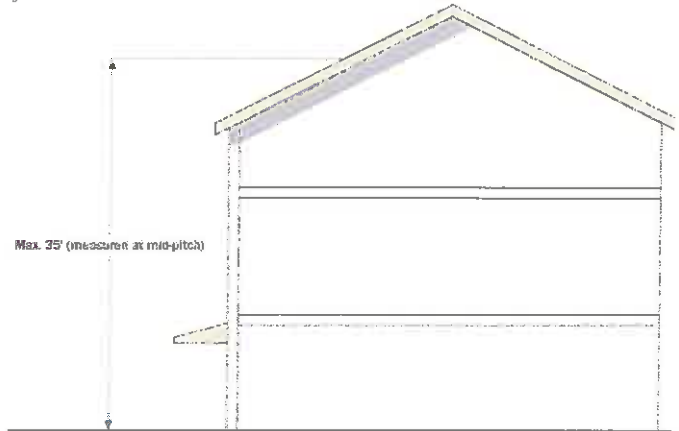
**In the RS zone**, residences shall be allowed a maximum height of 35 feet. **In the RM and RH zones**, residential buildings shall have a minimum floor-to-ceiling height of 9 feet.

**Explanation/Rationale**

Currently height limits in the RS Zone are 30 feet. Increasing the building height limit to 35 feet brings the RS Zone into accordance with the other residential zones, including the new MX zone.

Minimum floor-to-ceiling heights of 9 feet translate into more attractive, comfortable residential spaces that provide a sense of spaciousness and day light.

[1]



[2]



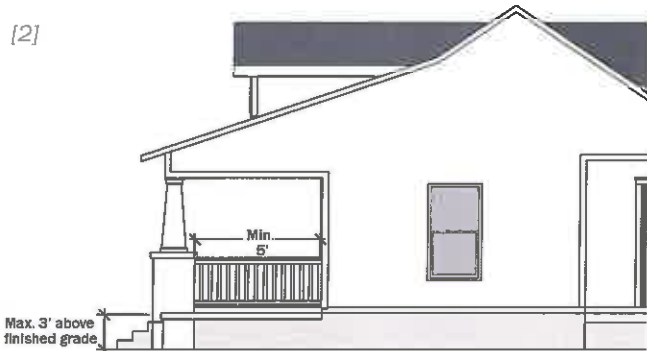
[3]



**Height.** [1] Townhouses and rowhouses should be allowed a maximum height of 35 feet in order to allow for [2] graceful pitched roofs for residential buildings [3] and taller ground floor heights that could allow for live/work units that activate the street.



RESIDENTIAL DEVELOPMENT STANDARDS



**Main Entrance.** Buildings should have [1] front doors that face the street and connect to the sidewalk via a 5 foot wide path at a minimum [2] Porches should be an extension of the living space and be at a minimum 5 feet clear in depth.

## Main Entrance

### Standard

All buildings shall have a front door that faces the street and connects to the sidewalk via a straight path that is a minimum of 5 feet wide.

Where porches are provided, they shall be an extension of the living space and provide greater opportunity for viewing activity on the street. Porches and stoops shall not be constructed more than three feet above the finished exterior grade. They shall be a minimum of 25 square feet in area and 5 feet deep, clear from column face to the face of the primary facade to allow for handicap access.

**In RM and RH zones,** direct pedestrian connections shall be created between the front doors of all buildings and the street-facing sidewalk. These connections shall be well-lit and hardscaped, preferably using some type of ADA accessible permeable paver or material.

### Explanation/Rationale

The Main Entrance Standard highlights the desired character of the connection between the residence and the street. Similar to the Street Facing Facade Standard, the Main Entrance Standard enhances safety by creating “eyes on the street” and a direct connection to the sidewalk and the street. Front porches add further richness to residences by creating a focal point on the facade and providing a sense of entry.

Direct, well-lit connections are important between street fronting buildings and the sidewalk, as well as internally between buildings, in order to create a sense of safety. A clear pedestrian system also eliminates conflicts between automobile and pedestrians.

### Further Approaches

Front porches should have support columns that have a clear base, middle, and top. These columns should be a minimum of 8 inches in diameter so that appear to be structural elements rather than simply decorative features. The base of these columns can consist of a large box, a minimum of 24 inches in width, constructed of boxed wood, brick or stone to provide a weightier base to the porch support.

## Roof Forms

### Standard

For pitched or hipped roof residential buildings:

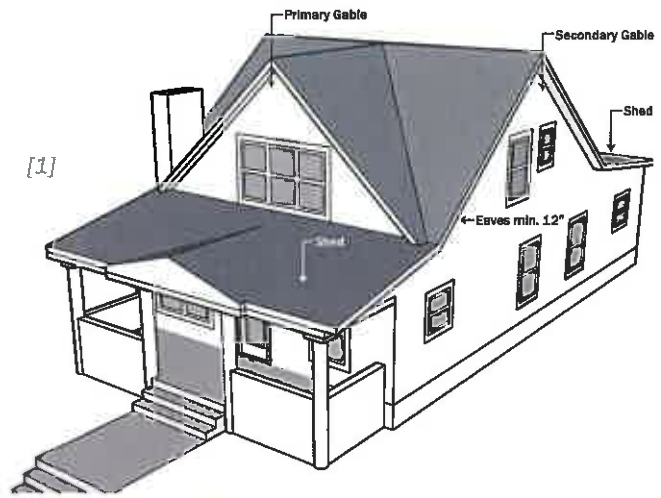
- Roof pitches less than 6/12 shall be prohibited. Lower roof pitches are allowed on porches.
- The primary gable or hip roof shall be oriented to the street. If located on a corner, the primary gable shall be oriented to the front of the lot. Window(s), trimmed vent, or some other type of decorative element shall be incorporated into the gable.
- All roof eaves (overhangs) shall be a minimum of 12 inches wide.
- Roof forms shall consist of a minimum of two roof forms. The roof can consist of a single gable or hip roof with one of the following additional roof forms:
  - A secondary gable of equal or smaller size that extends from the ridge of the primary roof form
  - A single dormer with a shed roof on the porch
  - Two or more smaller dormers

### Explanation/Rationale

The minimum 6 over 12 roof pitch is the primary roof form of the Craftsman and Queen Anne homes found in the Historic District. Given its slope, this type of roof form allows for ornamentation. This ornamentation may include decorative rafters and decorative elements on the second floor such as windows with trim, leaded and stained glass, and shingles. Lower roof pitches have less surface area and, therefore, limit the incorporation of appropriately scaled architectural elements.

### Further Approaches

Complex roof forms that consist of multiple volumes and provide changes in the façade respond to the existing context. Historically, single-dwelling and multi-dwelling residential structures were composed of multiple forms, intersecting roof lines, and dormers. A vocabulary of different roof forms creates interest and breaks up otherwise flat, uninterrupted facades of residences.



**Roof Forms.** [1] Roof pitches less than 6 over 12 are prohibited and roof forms will consist of more than a single large roof form [2] The primary gable shall be oriented to the street and decorated with windows, trim, or a vent [3] Roof eaves will project at a minimum 12 inches.

RESIDENTIAL DEVELOPMENT STANDARDS



[1]

### Exterior Siding and Cladding

#### Standard

The following siding and cladding materials shall be allowed outright and must be used on all sides of the dwelling:

- Horizontal wood or cementitious siding that has a maximum of 6 inches in width revealed
- Wood or cementitious shingles that have a maximum of 12 inches in width revealed
- Board and batten vertical siding
- Brick or stone veneer

In order to promote high-quality buildings that will be maintained for generations, the following materials shall be prohibited:

- T-111 or similar sheet materials
- Plastic or Vinyl

#### Explanation/Rationale

Independence's historic residential building stock is primarily wood frame construction, with most historic buildings clad in wood siding (clapboards). A few houses are clad in wood shingles, but in most cases shingles are used decoratively in gable ends. New construction should reflect the use of similar materials.

High quality construction materials such as wood, brick, and stone impart a sense of quality and permanence to residences. Buildings constructed with these materials will last over time and can be owned for generations to come.

#### Further Approaches

Wood shingles used for cladding material or decoration, such as in the gable ends, should be retained in repair or resurfacing. In remodels, deteriorated wood siding should be replaced with new wood siding replicating the original in width, thickness and profile, and texture.



[2]

**Exterior Siding and Cladding.** [1] Wood or cementitious siding that has a maximum of 6 inches in width revealed and [2] wood or cementitious shingles that have a maximum of 12 inches in width revealed are allowed outright along with board and batten vertical siding and brick or stone veneer.



## Windows

### Standard

All windows shall have a minimum height to width ratio of 2:1. Square or horizontal windows shall be formed by combining multiple window sashes into groupings.

Windows shall occupy a minimum of 15% of the street-facing facade as viewed from the street.

The following types of windows shall be prohibited along street facing facades;

- Horizontal slider windows
- Windows that use "mirror" or reflective glass

All windows shall incorporate all of the following elements:

- A decorative header/cap
- Continuous trim
- Projected window sill

### Explanation/Rationale

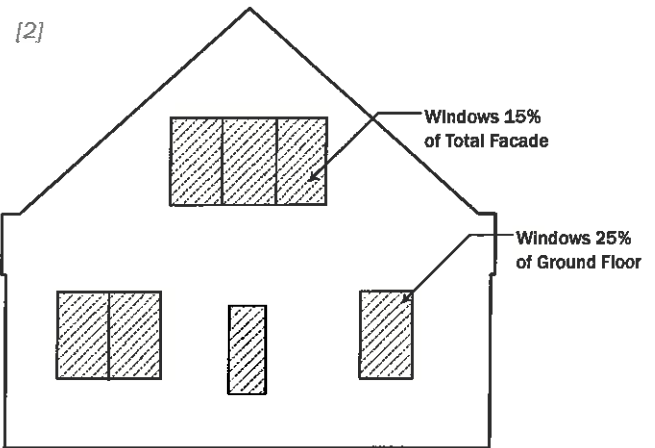
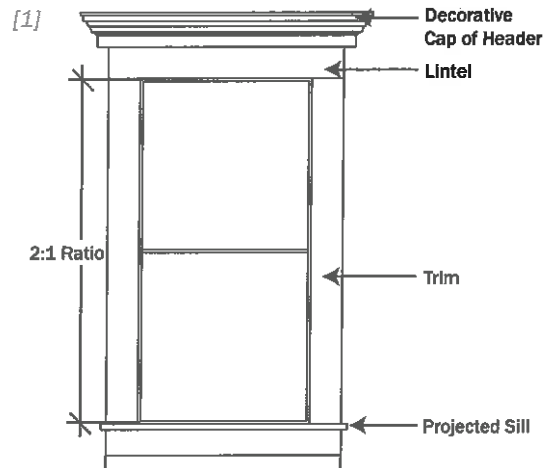
Windows are one of the most important character-defining features of Independence's historic structures. The windows within the historic district employ a larger height to width ratio (typically 2:1). Beyond being a scale element, windows add interest to the composition of individual facades.

In addition to their historic qualities, windows both literally and figuratively provide a connection from inside to outside. Providing "eyes on the street" supports the public realm by creating a sense of surveillance of activities.

### Further Approaches

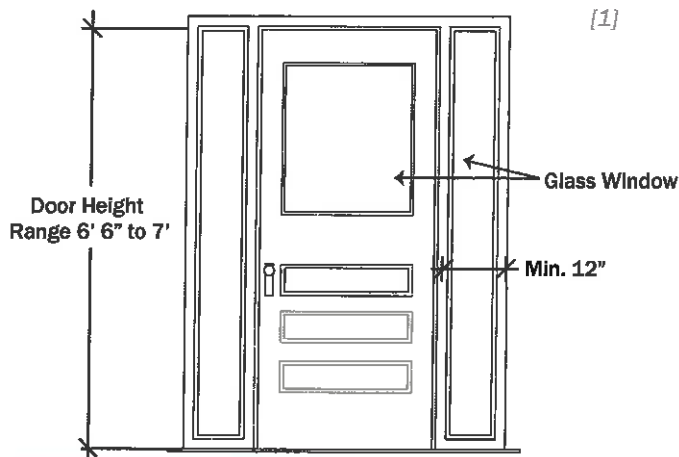
The City should consider allowing special windows that are not a 2:1 ratio if the windows highlight or articulate architectural features. For example lunettes or circular windows could be decorative features within a gable.

Wood or enamel clad windows are preferred as they are more consistent with the existing windows found in the historic district. Vinyl and paintable fiberglass windows should also be allowed.



**Windows.** Windows are character-defining and should reflect the characteristics of existing windows in the historic district [1] Windows should have a height ratio of 2 to 1 [2] Windows should cover a minimum of 15% of the street facing façade [3] Windows should have an architectural feature such as a decorative header of cap, continuous trim, and/or a projected or articulated window sill in order to accentuate windows.

RESIDENTIAL DEVELOPMENT STANDARDS



**Doors**

**Standard**

All residential doorways shall be street-facing and consist of a minimum of 25% transparent or translucent windows. Alternatively, doorways shall have side windows or sidelites that are a minimum of 60" in height and 12" wide. These side windows or sidelites shall flank, at a minimum, one side of the doorway. Side windows or sidelites that flank both sides of the door are preferred.

Doors shall be made of wood, metal-clad wood, metal, or cast fiberglass, provided that the material reflects a traditional wood door and can be painted.

**Explanation/Rational**

Similar to the Windows Standard, the Doors Standard fosters a more inviting pedestrian environment. Windows in or beside doors provide a connection from the inside to the outside both literally and figuratively. Providing "eyes on the street" supports the public realm by creating a sense of surveillance of activities.



**Doors.** All residential doorways should face the street in order to connect the interior of the residence with the sidewalk and street in order to foster a more inviting and safe pedestrian environment [1] Doors should consist of a minimum of 25% transparent or translucent windows or have side windows or sidelites that are a minimum of 60" in height and 12' inches in width.



ARCHITECTURAL FEATURES STANDARDS

**Trim**

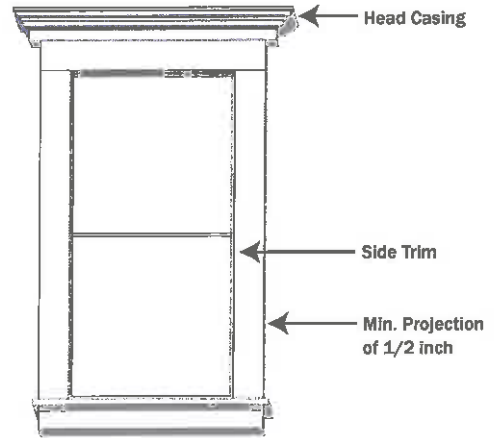
**Standard**

All windows and doors shall have side trim and head casings. Trim shall be a minimum of 3 ½ inches wide and project no less than a ½ an inch from the wall.

**Explanation/Rationale**

Wall and door trim is necessary to highlight both doors and windows as architectural features that add richness. Historic windows and doors are often characterized by being inset into relatively deep openings or defined by surrounding casings and sash components that cast a shadow and create a sense of depth. This sense of depth is too often missing from windows and doors on newer single- dwelling and multi-dwellings, which appear as a flat plane.

[1]



[2]



**Trim.** [1] All windows and doors should have side trim and head casings [2] Trim should be at a minimum 3½ inches wide and project no less than a ½ an inch from the wall.

## RESIDENTIAL DEVELOPMENT STANDARDS



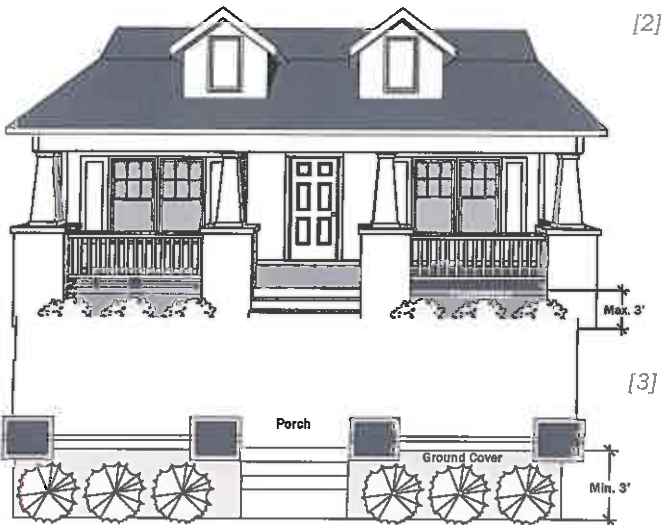
### Foundations

#### Standard

Concrete block, poured in place concrete, or brick shall be allowed as foundation material on all residential types, provided that the foundation material is no more than 3 feet above the finished grade (except in areas zoned floodway).

All concrete block and poured in place concrete foundations shall be landscaped with a continuous line of a range of planting materials that are a minimum of 50% site obscuring and 3 feet high at maturity.

Exposed foundations or front porches can be sheathed with wood siding (clapboard) as an extension of the primary façade.



#### Explanation/Rational

Creating a strong base is important in anchoring the building to the ground. Foundations that are beyond three feet in height detract from the residence and the pedestrian realm. Screening, especially landscaping, is an important element in softening the appearance of foundations.

#### Further Approaches

The City should provide a range of approved planting materials including native plants and drought tolerant grasses.

**Foundations.** Allowed foundation materials include concrete block, poured in place concrete, and brick [1] Concrete block and poured in place concrete should be landscaped with a continuous line of planting materials that obscure the foundation [2] These planting materials should be 50% obscuring and 3 feet high at maturity [3] The landscaped area should be 3 feet deep and covered with ground cover where not planted with site planting materials.

## Fences

### Standard

**In the RS and RM Zones,** fences in the front yard shall not exceed 3½ feet in height. Side and rear yard fences shall not exceed 7 feet in height.

Fences shall be made of wood, brick or wrought iron. Chain link and vinyl fences shall be prohibited.

### Explanation/Rationale

Fences are important in terms of creating a sense of privacy and safety. However, fences need to be built in a manner and with materials that ensures that they are attractive and do not inhibit surveillance, especially along the fronts of residences.

### Further Approaches

Landscaping consisting of low and high shrubs that grow to a maximum of 6 feet in height and are a minimum of 50% site obscuring can be used in place of fences.



**Fences.** [1] Fences should be made of wood brick or wrought iron. [2] Front yard fences should not exceed 3 1/2 so as not to inhibit surveillance.

RESIDENTIAL DEVELOPMENT STANDARDS



[1]

**Screening**

**Standard**

**In the RM and RH Zones**, all exterior garbage collection areas, recycling areas, and mechanical equipment shall be screened with a site obscuring fence, wall, and/or sufficient landscaping.

Unsightly garbage collection areas, recycling areas, and mechanical equipment shall be located away from the street.

**Explanation/Rationale**

Most larger multi-dwelling buildings have areas devoted to services and equipment. These uses can be noisy, noxious and unsightly. Consequently, these elements should be screened from the public realm. Typically screening is achieved via site obscuring fences or landscaping.



**Screening.** In the RM and RH Zones, buildings should shield [1] exterior garbage collection and recycling areas [2] and mechanical equipment with a site obscuring fence, wall or sufficient landscaping.



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## APPENDIX A

### Glossary

Below are the definitions of terms used throughout the Commercial Development Standards and Design Standards and Guidelines. Please use this glossary as a reference tool.

**Agriculture** – Activities that raise, produce or keep plants or animals. Examples include breeding or raising of fowl or other animals; dairy farms; stables; riding academies; kennels or other animal boarding places; farming, truck gardening, forestry, tree farming; and wholesale plant nurseries.

**Awning** – An overhead cover extending above the sidewalk (usually above windows and doors) as a shelter and/or sunshade.

**Band** – Any horizontal flat member or molding or group of moldings projecting slightly from a wall plane and usually marking a division in the wall.

**Bay** – 1) Within a structure, a regularly repeated spatial element defined by beams or ribs and their supports. 2) A protruded structure with a bay window.

**Belt Course** – A horizontal band or molding set in the face of a building as a design element; also referred to as a string course.

**Blade Signage** – A sign that projects from and is supported by or attached to a wall that hangs out over the public right-of-way or any private area subject to pedestrian travel.

**Build-to-Line** – A predetermined line (most often a front, side or rear property line) from which a building, landscaping or some other site requirement is measured.

**Building Base** – The area extending from the top of the finished grade or sidewalk to the bottom of the window sill.

**Canopy** – A covered area which extends from the wall of a building protecting an entrance or loading dock.

**Casement** – A window sash which swings open along its entire length; usually on hinges fixed to the sides of the opening into which it is fitted.

**Chamfer** - To cut off the edge or corner of a building at a 45 degree angle to open entry to both directions.

**Clerestory** - The upper level of a room that extends beyond the single-story height; often penetrated by windows.

**Column** – In structures, a relatively long, slender structural compression member such as a post, pillar, or strut; usually vertical, supporting a load which acts in (or near) the direction of its longitudinal axis.

**Commercial Parking** – A parking structure, surface, or below grade parking lot for which a charge or fee is assessed for parking that is not accessory to a primary use, except as identified in an approved parking plan.

**Commercial Outdoor Recreation** – Large uses that provide continuous recreation or entertainment oriented activities. Examples include amusement parks, theme parks, golf driving ranges, miniature golf facilities, and marinas.

**Community Services** - Uses of a public, nonprofit, or charitable nature generally providing a local service to people of the community. The use may provide mass shelter or short term housing. The use may also provide special counseling, education, or training of a public, nonprofit or charitable nature. Examples include libraries, museums, senior centers, community centers, publicly owned swimming pools, youth club facilities, hospices, ambulance stations, drug and alcohol centers, social service facilities, mass shelters or short term housing when operated by a public or non-profit agency.

**Cornice** – Decorative projection or crown along the top of a wall or roof.

**Cupola** – A dome-shaped ornamental structure on the top of a larger roof or dome. In some cases, the entire roof of a tower or spire can be a cupola. More frequently, however, the cupola is a smaller structure that sits on top of the main roof.

**Detention Facilities** – Facilities for people who are under judicial detainment and are under the supervision of sworn officers

**Dormer** – A structure projecting from a sloping roof usually housing a window or ventilating louver.

**Drive-Through Facility** – A facility or structure that is designed to allow drivers to remain in their vehicles during an activity on the site. Examples are drive-up windows, menu boards, order boards or boxes, gas pump islands, car wash facilities, auto service facilities, such as air compressor, water, and windshield washing stations, or quick-lube or quick-oil and change facilities.

**Eaves** – The lower edge of a sloping roof; that part of a roof of a building which projects beyond the wall.

**Engaged Column** – A column embedded in a wall and partly projecting from the surface of the wall.

**Entertainment/Major Event** – Uses characterized by activities and structures that draw large numbers of people to specific events or shows. Examples include sports arenas, race tracks (auto, horse, dog, etc. ), auditoriums, exhibition and meeting areas, outdoor amphitheaters, and fairgrounds.

**Facade** – The exterior face of a building which is the architectural front, sometimes distinguished from the other faces by elaboration of architectural or ornamental details.

**Fenestration** – The arrangement of windows in a building to provide interior light; also used as decorative elements in a façade.

**Foot Candles** – A unit of measurement to calculate lighting levels. A foot candle is defined as the amount of illumination the inside surface an imaginary 1-foot radius sphere would be receiving if there were a uniform point source of one candela in the exact center of the sphere.

**Frieze** – A decorative horizontal band as along the upper part of a wall in a room; often used for signage in modern buildings but derived from classical architectural principles.

**Gable Roof** – A roof having a gable at one or both ends.

**Goose Neck Fixture** – A type of light fixture attached to a building face or wall that extends out from the building or wall like a neck.

**Grasscrete** – A structural paver that consists of pores or holes that are typically infilled with grass or some other type of ground cover that helps to reduce storm water by treating the water on site.

**Heavy Industrial** – Industrial uses are engaged in the repair or servicing of industrial, business or consumer machinery, equipment, products or by-products. Firms that service consumer goods do so by mainly providing centralized services for separate retail outlets. Few customers, especially the general public, come to the site. Examples include machine shoppes, auto and truck salvage and wrecking, printing, dyeing establishments, and fertilizer production.

**Hip Roof** – A roof which slopes upward from all four sides of a building requiring a hip rafter at each corner.

**Light Industrial Uses** – Light industrial uses are usually less capital intensive and produce products for end users as opposed to for other industries. Light industrial uses also have less environmental impacts. Examples include the manufacture of clothes, shoes, furniture, consumer electronics, and household items.

**Lot Coverage** – The percentage of the site that is occupied by a structure.

**Lintel** – The horizontal member above a door or window which supports the wall above the façade opening.

**Lunettes** – A half-moon shaped space, either masonry or void, formed when a horizontal cornice transects a round-headed arch at the level of the imposts where the arch springs.

**Manufacturing and Production** – The manufacturing, processing, fabrication, packaging, or assembly of goods. Natural, man-made, raw, secondary, or partially completed materials may be used. Products may be finished or semi-finished and are generally made for the wholesale market, for transfer to other plants, or to order for firms or consumers. Goods are generally not displayed or sold on site, but if so, they are a subordinate part of sales. Relatively few customers come to the manufacturing site. The manufacturing or production of art is not included in this definition and is therefore allowed.

**Medallion** – A decorative element set into the upper portion of a building façade periodically, typically aligning with columns or pilaster.

**Mining** –The mining or extraction of mineral or aggregate resources from the ground for off-site use.

**Modular Pavers** –A pre-cast piece of usually either concrete or brick that is commonly used in exterior paving applications. Pavers can be made permeable so that moisture filters through the joints allowing for ground water recharge.

**Mullion** – A vertical post or upright element dividing a window or other opening into two or more sections.

**Parapet** – A low, solid, protective screening or decorative wall that is an extension of exterior building walls beyond the roof or deck level.

**Pervious Asphalt** – Asphalt that consists of pores or openings that allows for liquid or gas to pass through.

**Pilaster** – A rectangular or round column or shallow pier attached to a wall constructed to coordinate with the style of the building.

**Portico** – A porch or covered walk consisting of a roof supported by columns.

**Projected Window Sill** – An articulated, horizontal member at the base of the window that supports the window and

## APPENDIX A

**Projected Window Sill** – An articulated, horizontal member at the base of the window that supports the window and provides a slight shadow line that accentuates the depth of the opening.

**Railroad Yards** – Areas that contain multiple railroad tracks used for rail car switching, assembling of trains and shipment of goods to other transportation modes.

**Roof Pitch** – The angle of the roof described as a horizontal to vertical proportion.

**Self-Service Storage** – A designated area that provides separate storage for individual or business uses. The storage areas are designed to allow private access by the tenant for storing personal property.

**Shared Parking** – 1) An arrangement between adjacent property owners or uses that allow for the sharing of a central parking facility 2) A legal arrangement between separate uses, typically one that is a morning/afternoon oriented use and one that is an evening use, that allows for the shared use of parking facilities.

**Stacking Area/Lane** – A designated lane where vehicles queue before proceeding through a drive-through facility.

**String Course** – A horizontal band or molding set in the face of a building as a design element (also called a belt course).

**Transom** – A horizontal glass plane, typically encased in a wood or metal frame, that separates the storefront from the upper facade.

**Turret** – A very small and slender tower attached to a larger building.

**Vehicle Servicing/Repair** – Firms servicing passenger vehicles, light and medium trucks, and other consumer motor vehicles, such as motorcycles, boats, and recreational vehicles. Generally, the customer does not wait at the site while the service or repair is being performed. Examples include vehicle repair, transmission or muffler shop, auto body shop, alignment shop, auto upholstery shop, auto detailing, and tire sales and mounting.

**Wall Sconce** – Wooden or metal bracket affixed to a wall and designed to hold candles, lamps, or other types of illumination.

**Warehouse and Freight** – The storage or movement of goods for themselves or other firms. Goods are generally delivered to other firms or the final consumer, except for some will-call pickups. There is little on-site sales activity with the customer present.

**Waste-Related** – A land use that receives solid or liquid wastes from another source for disposal on the site or for transfer to another location.

**Wholesale Retail** – The sale, lease, or rental of products primarily intended for industrial, institutional, or commercial businesses. The uses emphasize on-site sales or order taking and often include display areas. Businesses may or may not be open to the general public, but sales to the general public are limited as a result of the way in which the firm operates.

**Wood Frame Construction** – The prevalent method for constructing homes using a structural system of wood. Structures can be built above a concrete pad or plinth.



## Building Sustainability Measures

The intent of sustainability guidelines is to establish a framework that will assist individual building projects in reducing their environmental impact while still contributing to the larger sustainability goals of the City. Some of the diverse issues that should be considered at an individual building level are detailed below with recommendations:

**Building Siting:** Choose the site carefully to capture daylight, to keep the most critical existing ecological areas intact, and to promote neighborhood connectivity and efficient transportation options. Encourage development within or near existing communities and/or public transportation in order to reduce the number of vehicle miles traveled and promote public health by encouraging walking and biking. Encourage the reuse of development sites to reduce the pressure on undeveloped land; this may require remediating environmental contamination. Encourage the creation of housing adjacent to jobs and recreation. Conserve land by promoting more compact forms of development. Encourage a mix of land uses on a site in order to create a more diverse community and further reduce miles traveled.

**Construction Practices:** Develop construction standards that reduce construction-related pollution and encourage recycling and comprehensive construction waste management policies.

**Design for Solar Access:** Optimize solar access as a means to reduce energy operating costs, provide better daylight, and present opportunities for renewable energy systems (e.g. solar electric). Orient street facing facades to the primary street such that 75% of the block is plus/minus 15 degrees of due east-west. Design buildings to be 1.5 times longer than their corresponding width, and orient the longer facade 15 degrees of due east-west. The height of north-south facing facades of residences should not be blocked by more than a maximum of 25% of unconditioned spaces at noon on December 21st.

**Daylighting:** Incorporating day lighting in buildings provides direct operational savings in reduced demand for electric lighting. In addition, day-lit spaces contribute to increased occupant productivity and reduce illness and absenteeism.

**Ecological Communities:** Incorporate natural species and ecological communities through protection and incorporation into the overall design. Develop tree-lined streets as a means of encouraging walking and bicycling, reducing the urban heat island effect, and improving the air quality by decreasing carbon dioxide.

**Energy Performance:** Encourage high performance building envelopes, efficient lighting and controls systems, and efficient mechanical systems. Careful attention to building wall and roof

construction, as well as glass types and shading all contribute substantially to a building's energy performance. Efficient lighting and equipment systems reduce energy operating costs. Climate specific design provides both increased comfort, reduced energy operating costs, and can reduce mechanical system requirements.

**Food Production:** Promote community-based and local food production as a means of providing access to healthier (more fresh) food and also reducing vehicle miles traveled (VMT) associated with shipping food long distances. Local food production will also keep local dollars within the community.

**Gray Water Reuse:** Encourage the reuse of gray water (water from sinks, showers, washing machines, etc). Gray water requires much less treatment than does blackwater/sewage, and can be reused on-site where potable water is not required, such as for irrigation, toilet flushing, washing machines, etc.

**Materials & Resources:** Encourage the use of materials that promote indoor environmental quality while minimizing off-site environmental impacts. Encourage use of materials with recycled content, locally produced and regionally sourced materials, rapidly renewable materials, and low-toxicity paints and sealants.

**Stormwater Management:** Encourage integrated stormwater management planning; treat stormwater runoff on-site through the use of bioswales and landscape plantings. Encourage the use of green roofs, permeable pavers, and other strategies to reduce impermeable surface area. Consider the potential to store and re-use rainwater on site for landscape irrigation. Well-designed projects can hold stormwater runoff to pre-development conditions and, thereby, decrease or eliminate downstream impacts of erosion, siltation, and riparian habitat destruction. These systems can be cheaper than conventional piped systems.

**Water Use Efficiency:** Encourage landscaping that favors native or low-water intensity plantings and use efficient irrigation systems. Encourage use of low-flow fixtures in buildings. Consider capturing the water that falls on buildings' roofs to reuse on-site. Consider reusing gray-water on-site for non-potable uses such as toilet flushing, clothes washing, and landscape irrigation. Encourage new development within or near existing communities in order to utilize existing infrastructure and thereby reduce the environmental, economical, and social impacts of sprawl.