

ZONING REGULATIONS UPDATE WORKING GROUP AGENDA
CITY HALL COUNCIL CHAMBERS
Tuesday, September 28, 2021
6:30 pm

THIS AGENDA IS SUBJECT TO CHANGE UNTIL THE START OF
THE MEETING

I. CALL TO ORDER

II. BACKGROUND

1. Zoning Regulations Update Process To-Date

III. PRESENTATION

1. Module 2 Review and Discussion

IV. NEXT STEPS

1. Module 2 Comments due by Monday, October 11th
2. Module 3 Meeting – TBD before the end of the year

V. ADJOURN

MEMO

To: Zoning Regulations Working Group
From: Jason Lindahl, AICP
Date: September 28, 2021
Subject: Zoning Regulations Update - Module 2 of the Draft Zoning Regulations

Overview

Our next meeting will cover review and discussion of Module 2 of the draft zoning regulations. Module 2 is the second of three modules that will eventually make up the final version of the draft zoning regulations. The 3 modules will eventually become the final draft of the zoning regulations and be presented to the community, Planning & Zoning Commission and City Council for final review and action. Please review Module 2 (attached) and bring your questions and comments to the meeting for discussion. As always, please reach out to me by phone or email if you have questions before the meeting.

Attachments

- Module 2 of the Draft Zoning Regulations
- Draft Zoning Map

Background

The Zoning Regulations Update Project started in February 2020 and is divided into 4 phases (see graphic below). We are currently in Phase 2 – Initial Draft Development. This phase includes crafting, review and discussion of the draft zoning regulations in 3 separate parts or modules. Our last meeting reviewed Module 1. During this meeting, we will review and discuss Module 2 (attached). Module 3 is scheduled for review and discussion before the end of the year.



The first phase of the zoning update process was Listening & Learning and involved a series of community listening sessions and formation of the Zoning Update Working Group to help guide city staff and the consultant team while drafting the new zoning regulations. Feedback from the

listening sessions and Working Group were used to identify important issues for the City to consider while updating the zoning regulations. A summary of the issues identified can be found on the Zoning Regulations Update Project website.

Based on feedback from the listening sessions and Zoning Update Working Group, as well as a review of the City's plans and policy documents, the consultant team drafted the Zoning Update Directions Report. A copy of the Directions Report can be found on the project website. It summarizes the consultant team's initial recommendations regarding the scope and direction to pursue when drafting the new zoning regulations. The Working Group reviewed and commented on the Directions report during their December 9, 2020 meeting.

The Directions report was also presented to the public for review and comment at the February 10, 2021 virtual open house. A summary of the community feedback from the virtual open house can be found on the project website. A key question raised by the community during the Listening and Learning phase was "How will the new zoning code address the issues of race equity and anti-displacement?" Based on this feedback, the Working Group chose to form an Equity subcommittee. That subcommittee is made up of members of the Working Group and other residents and will conduct an equitable development audit the draft zoning regulations and report back to the larger working group. More details about the work of the equity subcommittee will be provided during the meeting.

As mentioned above, the project is currently in Phase 2 – Initial Draft Development. During our last meeting in August 2021, the Working Group reviewed Module 1 of the draft zoning regulations. Module 1 included the first 6 articles of the draft regulations. A summary of the topics covered in each of the first 6 articles is provided below.

- **Article 1, Introductory Provisions** – Legal framework, rules of construction, zoning map, transitional provisions and severability.
- **Article 2, Neighborhood Zones** – Allowable uses, building types, and development standards.
- **Article 3, Mixed Use Zones** – Allowable uses, building types, and development standards.
- **Article 4, Special Zones** – Open Social Space, Public & Institutional, Light Industrial, and Waste & Energy zones.
- **Article 5, Principle Uses** – Use table, use groups (Residential, Commercial, Manufacturing & Industrial, and Civic & Institutional) and short-term rentals.
- **Article 6, Accessory Uses and Structures** – Development standards for various accessory uses including accessory dwelling units (backyard cottages and secondary suites), outbuildings, home occupations, drive-thrus, fuel pumps and the like.

Draft Zoning Regulations

The next step in Phase 2 – Initial Draft Development is to review Module 2 (attached). Module 2 builds on the information in Module 1 and covers the five articles listed below. Articles 11 (Subdivision), 12 (Flood Hazard Areas), 13 (Stormwater Management) and 16 (Nonconformities) represent either standard regulations that include minor edits and reorganization or required updates based on state law. Articles 7 (Building & Site Design) and 8 (Landscaping & Site Design) represent more substantive changes intended to bring the zoning regulation in conformance with the goals and policies of the comprehensive plan and is likely where most of the group discussion will occur.

- **Article 7, Building & Design** – This article addresses roofs, building entrances, exterior materials, façade elements, and utility equipment. These standards are intended to improve the physical quality of buildings, improve the long-term value and durability of buildings, enhance the pedestrian experience and protect the historic form and scale of the city. This article represents a change in current regulatory approach from one that has generalized standards to one with more detailed standards with specific requirements for building design.
- **Article 8, Landscaping & Site Design** – This article covers installation, maintenance, plantings, streetscape design, buffering, interior parking lot landscaping and refuse and utility area screening standards. They are intended to protect the appearance of neighborhoods and commercial zones, improve the appearance of the public realm, increase the urban tree canopy, promote prudent use of water and reducing the urban heat island effect. This article represents change in current regulatory approach from standards based on a landscape budget as a percentage of the total development costs to one that focuses on sustainability, buffering, pedestrian experience and reducing the urban heat island effect.
- **Article 11, Subdivision Design & Improvements** – This article constitutes the minimum design and improvement standards for subdivision within the city. It is based on the city’s existing subdivision regulations with only minor edits and reorganization and no substantive changes.
- **Article 12, Flood Hazard Areas** – The purpose of the flood hazard area regulations is to protect life and property, preserve the natural characteristics and functions of watercourses and floodplains within the community and maintain the community’s eligibility for participation in the National Flood Insurance Program. It is based on the April 12, 2021 version of the Minnesota Department of Natural Resources Model Floodplain Ordinance.
- **Article 13, Stormwater Management** – This article is intended to minimize threats to public health, safety, public and private property and natural resources with the city. They are crafted based on the state statute and incorporated with the city’s Engineering Design Guidelines. This article is based on the existing regulations with only minor edits and reorganization and no substantive changes.
- **Article 16, Nonconformities** – This article governs nonconformities or “Grandfathered” situations which include lots, uses, buildings and other structures and improvements that were lawfully established but – because of the adoption of new or amended zoning regulations – these no longer comply with one or more provisions of the zoning regulations. Minnesota State Statute, Section 462.357, Subdivision 1e details the regulation of nonconformities. This article revises the city’s nonconformities regulations to reflect state law.

Please review Module 2 and bring your questions and comments to the meeting. After our meeting and discussion, staff will send out an email with a PDF link to Module 2 which will allow you to provide written comments until Monday, October 11th. The next step in the Initial Development Draft will be to review Module 3 (parking, signs, procedures and administration) before the end of the year.

City of Hopkins

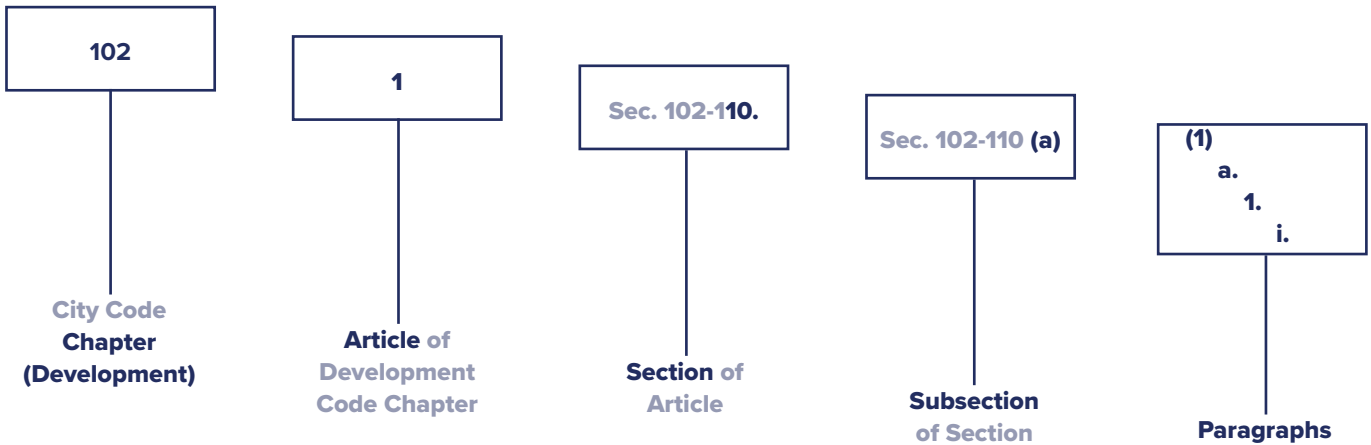
Development Code Update

MODULE TWO

WORKING GROUP DRAFT

September 21, 2021

**Development Code
Numbering System**



Editor's Note:

This is an initial working draft of MODULE ONE of the draft development code. It is subject to change based on input received during the review process. Red and green text is used occasionally within this draft to indicate the following:

1. **Green text** highlights an existing regulation/standard and is provided for reference only
2. **Red text** highlights items requiring further study/discussion
3. **XXX** is used as a placeholder for cross-references to sections of the code that have not yet been prepared.

Chapter 102 | Development Code

ARTICLE 1 INTRODUCTORY PROVISIONS 1-1

ARTICLE 2 NEIGHBORHOOD ZONES2-1

ARTICLE 3 MIXED-USE ZONES.....3-1

ARTICLE 4 SPECIAL ZONES4-1

ARTICLE 5 PRINCIPAL USES5-1

ARTICLE 6 ACCESSORY USES AND STRUCTURES6-1

ARTICLE 7 BUILDING DESIGN7-1

ARTICLE 8 LANDSCAPE & SITE DESIGN8-1

ARTICLE 9 PARKING ARTICLE 9.....9-1

ARTICLE 10 SIGNS 10-1

ARTICLE 11 SUBDIVISION DESIGN & IMPROVEMENTS11-1

ARTICLE 12 FLOOD HAZARD AREAS 12-1

ARTICLE 13 STORMWATER MANAGEMENT 13-1

ARTICLE 14 PROCEDURES 14-1

ARTICLE 15 ADMINISTRATION..... 15-1

ARTICLE 16 NONCONFORMITIES 16-1

ARTICLE 17 DEFINITIONS & MEASUREMENTS..... 17-1

ARTICLE 7 BUILDING DESIGN

102-710 Generally 7-2
102-720 Roof Types 7-2
102-730 Entrance Types 7-6
102-740 Facade Materials 7-8
102-750 Facade Elements 7-14
102-760 Utility Equipment 7-21

102-710 Generally

102-710 (a) APPLICABILITY

The regulations of this article apply to all buildings in all zones, unless otherwise stated.

102-710 (b) EXCEPTIONS

Unless otherwise noted, modifications to design regulations in this article may be approved as part of a major exception.¹

102-710 (c) INTENT

The regulations of this [Article 7](#), along with the building type regulations in [Article 3](#), are intended to improve the physical quality of buildings, improve the long-term value and durability of buildings, enhance the pedestrian experience, and protect the historic form and scale of the city.

- (1) **Durable, High Quality.** Ensure the use of well-tested, high quality, durable, weather-resistant, exterior grade materials on the majority of finished building surfaces, while permitting a wider range of materials for details. High quality materials can improve how well buildings weather, reduce material failure rate, require lower maintenance, have a longer life cycle and sense of permanence, and maintain longer term value.
- (2) **Human-Scaled Facades.** Promote clearly articulated, well-organized facades that are easy to understand, have a clear hierarchy, and yield building proportions and details comfortable to and in line with the scale of people.

¹ We may want to define any design regulations that may not be modified? Also, those that may be able to be modified by a minor (administrative) exception.

102-720 Roof Types

102-720 (a) GENERAL REQUIREMENTS APPLICABLE TO ALL ROOF TYPES

- (1) Roof types apply to all mixed-use zones in [Article 3](#).
- (2) The major components of any roof must meet all the requirements of one of the roof types allowed per the building type regulations in [Article 3](#).
- (3) Roofs for bay or bow windows and dormers are not required to meet a roof type.
- (4) Terraces, green roofs, rooftop gardens, and other outdoor facilities are allowed on any roof and are not considered a roof type. However, any permanently covered area is considered a story and must meet the following:
 - a. Where a cover is visible from any public way or open space, the cover must comply with a roof type.
 - b. Any fully enclosed structure on a roof must meet the tower regulations.
- (5) **Minor and major exceptions to these regulations may be approved per XXX.²**

102-720 (b) OTHER ROOF TYPES

Other cap designs not defined in this section may be approved through a major exception during the review process with the following requirements:

- (1) **Special Building.** The building or portion of building receiving the roof type must warrant a separate status from the majority of buildings in the zone, with a correspondence between the form of the roof and the building use, such as a dome for a planetarium, a dome for a place of worship, or a unique, iconic roof for a more distinctive performing arts venue.
- (2) **Occupied Building Space.** The roof type must not create additional occupiable floor space beyond that permitted by the building type.
- (3) **Other Design.** The shape of the roof must be different from those defined in this section, [102-720](#), such as a dome, spire, or vault and not a gabled roof, hipped roof, parapet roof, or flat roof.

102-720 (c) PARAPET ROOF TYPE

A parapet is a low wall projecting above a building's roof

² Process will be included in procedures section in module 3. Administrative exceptions are intended to be approved administratively. Major exceptions will be approved through a more intensive process.

along the perimeter of the building on all street facades and other front facades. See [Figure 7-A](#) Example of a Parapet Roof.

- (1) **Parapet Height.** Height is measured from the top of the upper story to the top of the parapet.
 - a. Minimum height is 1.5 feet with a maximum height of 6 feet. Additional height may be approved through an administrative exception.
 - b. A shadow line must be located within 2 feet of the top of the uppermost story. See XXX for definition of shadow line.
 - c. A shadow line must be located at the top of the parapet. See XXX for definition of shadow line.
- (2) **Occupied Building Space.** Occupied building space must not be incorporated behind this roof type. See XXX for definition of occupied building space.
- (3) **Rooftop Appurtenances.** With the exception of solar panels and small wind, any rooftop appurtenances must be located towards the rear or interior of the parapet roof. Rooftop appurtenances should be located such that the parapet blocks their view from the sidewalk across the street or may be located within a tower per [102-720 \(f\)](#). See [102-760](#) for additional regulations of mechanical and utility equipment.

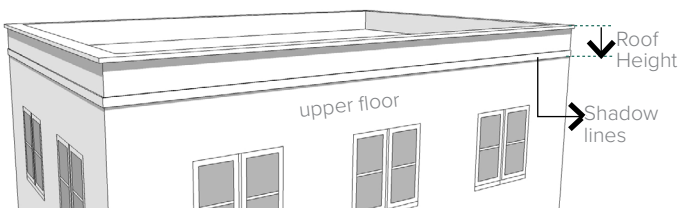


Figure 7-A. Example of a Parapet Roof type

102-720 (d) FLAT ROOF TYPE

This roof type is a visibly flat roof with overhanging eaves. See [Figure 7-B](#) Example of a Tower.

- (1) **Maximum Slope.** The maximum slope is 2:12; however, the roof must not appear to be visibly sloped from the street or other front frontages.
- (2) **Eaves.** Eaves are required on all street and other front frontages.
 - a. **Eave Depth.** Eaves must have a depth of at least 14 inches. Eave depth is measured from the building facade to the outside edge of the eave.
 - b. **Eave Thickness.** Eaves must be a minimum of 6 inches thick. Eave thickness is measured at the outside edge of the eave, from the bottom of the eave to the top of the eave.
- (3) **Interrupting Vertical Walls.** Vertical walls may interrupt the flat roof and extend above the top of the eave with no discernible roof type.
 - a. No more than one-third or 30 feet, whichever is less, of any front facade may consist of an interrupting vertical wall.
 - b. Vertical walls shall extend no more than 8 feet above the top of the eave.
- (4) **Occupied Building Space.** Occupied building space must not be incorporated behind this roof type, including the flat roof and vertical wall. See XXX for definition of occupied building space.
- (5) **Rooftop Appurtenances.** With the exception of solar panels, rooftop appurtenances may not be located on the flat portion of this roof type. Any rooftop appurtenances may be located behind the interrupting vertical wall with no visibility from the sidewalk across the street or may be located within a tower per [102-720 \(f\)](#).

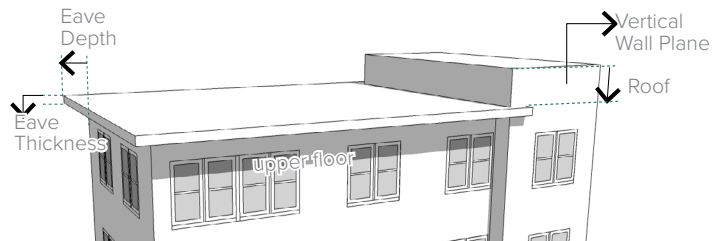


Figure 7-B. Example of a Flat Roof type

102-720 (e) PITCHED ROOF TYPE

This roof type is a sloped or pitched roof, where the slope occurs on all street and other front facades. Slope is measured with the vertical rise divided by the horizontal span or run. See XXX Examples of a Pitched Roofs.

(1) **Pitch Measure.** The roof may not be sloped less than a 4:12 (rise:run) or more than 14:12. Slopes less than 4:12 are permitted to occur on second story or higher roofs.

(2) **Configurations.**

a. Hipped, gabled, and a combination of hips and gables with or without dormers are allowed. When the ridge line runs parallel to any street or other front frontage, one of the following must occur:

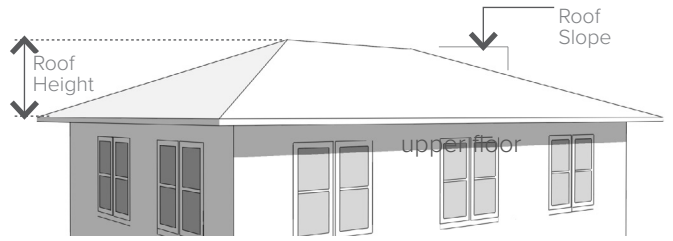
1. A gabled end or perpendicular ridge line must occur at least every 100 feet of roof; or
2. One dormer must be provided for every 15 feet of ridge line on any street or front frontage with at least one dormer per frontage.
3. Occupied building space within the roof is allowed and counts as a half or full story. See XXX definition of half story and any half story limitations per the building type regulations. See XXX for definition of occupied building space.

b. Butterfly (or inverted gable or V-shaped roof) and shed roofs are not allowed, except per the following:

1. A administrative exception is approved.
2. The butterfly or shed roof must not exceed 8 feet in total height, inclusive of overhang.
3. Occupied building space within the roof is allowed and counts as a half or full story. See XXX definition of half story and any half story limitations per the building type regulations. See XXX for definition of occupied building space.

c. Mansard are not allowed. Gambrel roofs are allowed, provided the following are met:

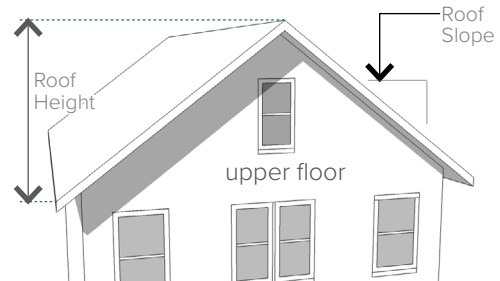
1. The main ridge line of the gambrel roof must be perpendicular to the front street.
2. Gambrel roofs with the ridge parallel to a side street must include one dormer for every 15 feet of ridge line with at least one dormer per frontage.



Low Pitched Roof Roof type (Hip Roof)



Parallel Pitched



Pitched Roof type (Gable Roof)

Figure 7-A. Examples of Pitched Roof type

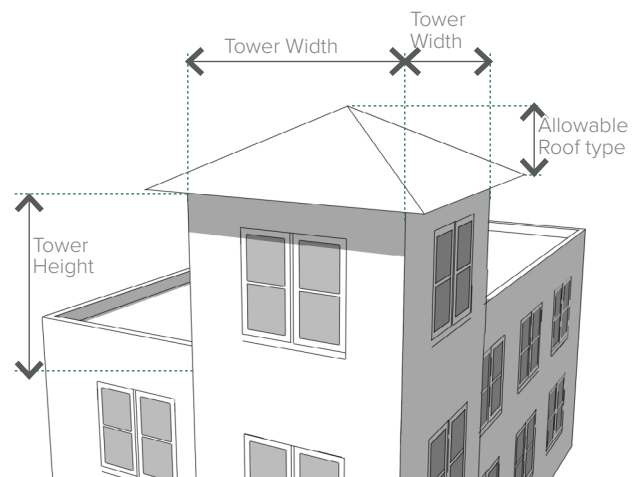


Figure 7-B. Example of a Tower

- 3. The steepest portion of the roof must be no greater than the tallest permitted height of one upper story.
 - 4. Occupied building space is required beneath the gambrel roof and counts as a half or full story, based upon the percentage of footprint allowed for a half story within the building type regulations. See XXX definition of half story. See XXX for definition of occupied building space.
- (3) **Maximum Roof Height.** Roofs without occupied building space and/or dormers must have a maximum height on front and non-front frontage facades equal to no more than 1.5 times the upper story floor to floor height utilized on the building.
- (4) **Rooftop Appurtenances.** With the exception of solar panels, antennae, and wind turbines, any rooftop appurtenances must be recessed within the pitched roof with no visibility on any street elevation drawing. See XXX for additional regulations of mechanical equipment.

102-720 (f) TOWERS

A tower is a vertical element that must be used with other roof types. See XXX Example of a Tower.

- (1) **Degree of Enclosure.** A street facade tower must be fully enclosed. Any interior building tower may be partially or fully enclosed. A fully open structure, such as a rooftop gazebo is not a tower.
- (2) **Quantity.** Unless otherwise defined in the building type regulations, the following is allowed:
 - a. Street Facade Towers. A maximum of 2 towers located within 15 feet of any street facade is permitted on any building. Street facade towers enhance the facade design.
 - b. Interior Building Towers. Two additional towers are permitted provided the towers are located a minimum of 30 feet from any street facade. Interior towers are typically functional, providing housing for utilities or access to the roof.
- (3) **Tower Height**
 - a. Maximum height, measured from the top of the uppermost floor of the building to the top of the tower shaft, not including the tower roof, is the equivalent of the height of one upper floor of the building to which the tower is applied.
 - b. A tower allows for up to one additional story of height within the tower footprint to any building type where permitted.
- (4) **Tower Footprint**
 - a. A tower footprint may be polygonal (simple, e.g. hexagonal or octagonal), rectilinear, or cylindrical in plan.
 - b. The maximum width in any direction of the footprint of any tower is 1/3 the width of any street or front facade or 30 feet, whichever is less.
- (5) **Tower Spacing.** Street facade towers, within 15 feet of any street facade, must be spaced a minimum of 120 feet from other street facade towers. Interior building towers must be located a minimum of 60 feet from any other tower.
- (6) **Transparency.** Towers that meet the minimum floor-to-floor to height of the building type and are located within 30 feet of a street facade shall meet the minimum front street facade transparency requirements of an upper story of the building type to which the tower is applied.
- (7) **Horizontal Shadow lines.** If the tower extends the building up to a 5th or higher story, a shadow line is required between the 4th and 5th stories on any tower. Shadow lines required by the roof type used on the tower also apply.
- (8) **Occupied Building Space.** Towers may be occupied by the same uses allowed in upper stories of the building type to which it is applied. See XXX for definition of occupied building space.
- (9) **Rooftop Appurtenances.** No rooftop appurtenances are permitted on tower roofs. Roof appurtenances may be housed within a tower.
- (10) **Tower Roof.** The tower may be roofed by the parapet, pitched, or flat roof types.

102-730 Entrance Types

102-730 (a) APPLICABILITY

The following entrance type regulations apply to buildings in the mixed-use and public-institutional zones. The facade regulations for each building type regulate which entrance types are allowed on the building types. See [Article 2](#) and [Article 3](#) for building types.

102-730 (b) STOREFRONT ENTRANCE TYPE

- (1) **Recessed Entrance.** Where the sidewalk outside the storefront is less than 7 feet in width, measured perpendicular to the facade, entrances must be recessed as follows:
 - a. The door must be recessed a minimum of 3 feet and a maximum of 8 feet deep, measured from the main building facade, and may exceed the maximum setback regulation.
 - b. The maximum width of the recess is 10 feet.
- (2) **Transparency.** A minimum amount of ground story storefront glass is required per the building type regulations.
 - a. The storefront glass must turn the corner of any recessed entry as shown in [Figure 7-C](#).
 - b. Transom windows above doors are encouraged. Transom windows are encouraged to extend along all storefront windows.
- (3) **Clear Windows.** Windows must be unobstructed during the daytime and evening hours. Displays inside the building, viewable from outside the window, may be included, but the area on the other side of the window display must be occupied building space with daylight extending into the space. See XXX for window signs.³
- (4) **Bulkhead.** Where a bulkhead is incorporated, the maximum height is 24 inches. A bulkhead is the lower set of panels or low wall upon which the storefront windows rest. See [Figure 7-C](#). The bulkhead may be constructed of wood, metal, stained concrete, spandrel glass, or masonry. Concrete masonry units may not be exposed.

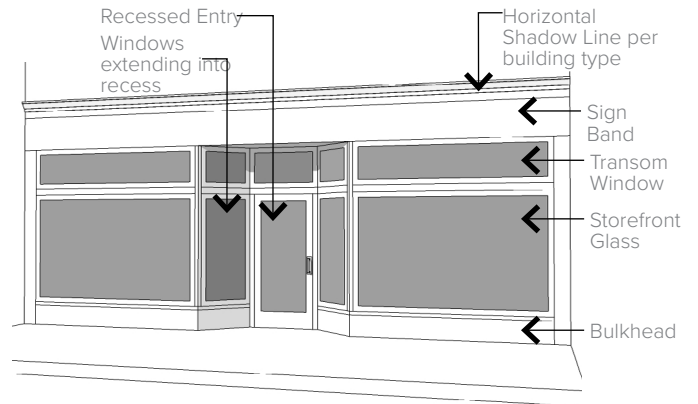


Figure 7-C. Example of a Storefront Entrance

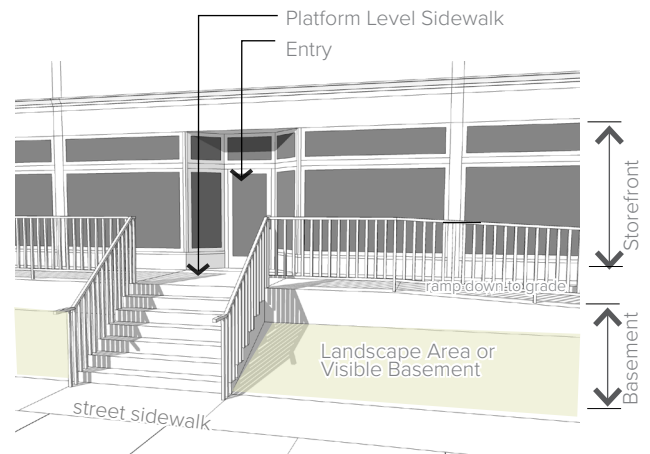


Figure 7-D. Example of Elevated Storefront

102-730 (c) STOOP ENTRANCE TYPE

A stoop is a small, open platform that may include a canopy or roof cantilevered off the building and may or may not be elevated above the sidewalk.

³ Discuss the need for this regulation and the ability to enforce it.

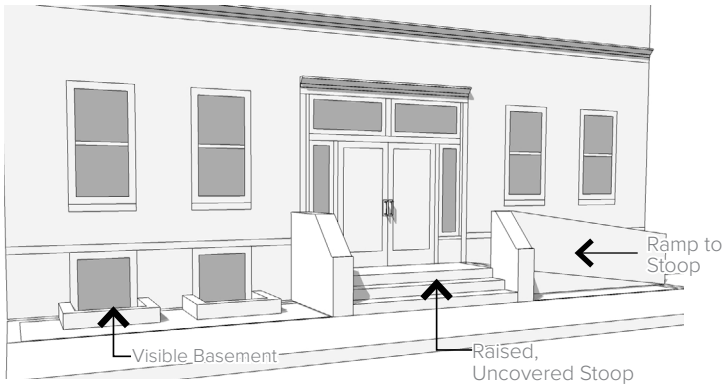


Figure 7-E. Example of Stoop Entrance

- (1) **Stoop Size.** Stoops must be a minimum of 4 feet wide and 3 feet deep.
- (2) **Ramps.** Where feasible, ramps should be incorporated at the principal building entrance and designed as an integrated part of the stoop, with rails matching any provided on steps.

102-730 (d) PORCH ENTRANCE TYPE

A porch is a raised, roofed platform that may or may not be enclosed on all sides and may or may not be elevated above the sidewalk.

- (1) **Transparency.** If a porch is enclosed, refer to the building type for minimum transparency requirements.
- (2) **Porch Size.** The porch shall be a minimum of 5 feet deep and 8 feet wide.
- (3) **Height.** Porch may be 2 stories to provide a balcony on the second floor.
- (4) **Ramps.** Where feasible, ramps should be incorporated at the principal building entrance and designed as an integrated part of the stoop, with rails matching any provided on steps.

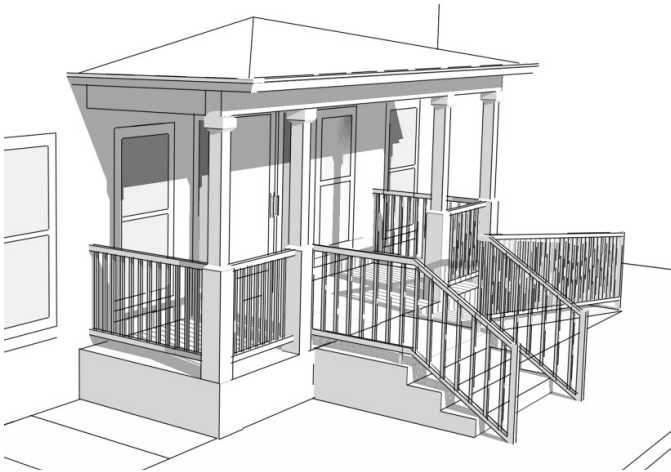


Figure 7-F. Example of Porch Entrance

102-740 Facade Materials

102-740 (a) APPLICABILITY

All facades on all buildings in any zone except N zones must meet the regulations for facade materials in this section.

102-740 (b) OTHER MATERIALS

Materials not listed in this section as allowed major, minor, accent/detail, or roof materials may not be installed on any facade or roof unless approved as a major exception per the following:

- (1) **Intent.** Other materials may be allowed if the applicant demonstrates the material in its proposed application meets the intent of the facade material standards.
- (2) **Examples.** Samples and examples of successful high quality local installation and the manufacturer’s warranty and industry ratings shall be provided by the applicant.
- (3) **Prohibited Materials.** Materials listed on [Table 7-5](#) may not be submitted for use with an exception.

102-740 (c) MAJOR FACADE MATERIALS

Major facade materials are intended to serve as the primary surface material of street facades and other highly visible front facades.

- (1) **Street and Other Front Facades.** Allowed major facade materials, listed in [Table 7-1](#), must be applied to a minimum of 65% of all street or other front facades, not

including window and door areas. Other front facades include those facing civic spaces, as defined in XXX of building types.⁴

- (2) **Simplicity of Facade Materials.** A single major facade material must be used for each building facade segment, 60-foot or larger. See [Figure 7-G](#).
- (3) **Exception.** For the EX zone, street facades located more than 100 feet from the street are exempt from the major facade material requirements.
- (4) **Side and Rear Facades.** When side yards between two buildings are a total of 5 or more feet in width, major materials must be applied along that side facade from the front of the building a distance equal to the width of the side yard, as measured perpendicularly between the two side facades.
- (5) **Original Facade Materials.** Where brick or stone is an existing building's original facade material, the following applies:
 - a. The original brick or stone may be maintained if in good condition or repaired, or the brick or stone may be replaced by new brick or stone.

⁴ Discuss whether facades on rail corridors and other public ways (trails, etc.) should use major materials? Currently not required.



Figure 7-G. Major vs. Minor Materials

- b. A different major material may not be installed over the original brick or stone except by approval of an **major exception**.

102-740 (d) MINOR FACADE MATERIALS

- (1) **Maximum Minor Materials for Street Facades.** A maximum of 35% of each street or other front facade surface, not including window and door areas, may be composed of minor facade materials per [Table 7-2](#). Other front facades include those facing civic spaces, as defined in XXX of building types.
- (2) **Side and Rear Facades.**⁵ Interior side and rear facades must be faced in a major facade material, a minor facade material, or a material as allowed in [Table 7-3](#).
- (3) **Accents and Details.** Additional materials are allowed for trim, accents, and details per [Table 7-4](#), not included in the maximum surface area.

102-740 (e) PITCHED ROOF MATERIALS

Allowed pitched roof materials include dimensional asphalt composite shingles, wood shingles and shakes, metal tiles or standing seam, slate, ceramic tile, engineered wood or slate.

102-740 (f) APPROPRIATE GRADE OF MATERIALS

All doors, windows, and hardware must be of commercial grade quality with the exception of those on Row and House buildings.

102-740 (g) MATERIALS INSTALLATION

The following materials installation requirements are intended to advance the quality of construction, durability, and aesthetics of new buildings, specifically related to application and detailing of facade materials.

- (1) **Changes in Facade Materials.** Changes in facade materials, whether major materials or minor materials, should occur mainly at concave corners or changes in facade planes.
- (2) **Materials Hierarchy.** A hierarchy of materials must be maintained on the building facade, where "heavier", articulated unit materials (brick, concrete masonry units, stone) are located at the base of the facade and "lighter", constant surface materials with fewer seams (stucco, panels) are located above those on the facade.
- (3) **Shadow Lines on Surfaces.** Shadow lines must delineate changes in materials with solid materials of a thickness that is greater than 1.5 inches, such as cast stone, masonry, or stone. For example, cast stone elements or brick may be offset to create a shadow.

⁵ Alternatively, the code can be silent as to materials on the side and rear facades, allowing more flexibility.

102-750 Facade Elements

102-750 (a) APPLICABILITY

The facade element regulations in this section, [102-750](#), apply to all buildings in any zone except N zones.

102-750 (b) EXCEPTIONS

Alternatives to any of the facade element regulations may be approved **through the major exceptions process (XXX)**, **unless otherwise noted**. The alternative design must meet the intent of these regulations (see [102-710 \(c\)](#)).

102-750 (c) WINDOWS

Windows on all street and other front facades of all buildings shall be constructed consistent with the following requirements:

- (1) **Amount.** Each building must meet the transparency requirements per the building regulations. See [Article 3](#).
- (2) **Recessed.** All windows, with the exception of ground story storefront systems and glass curtain wall systems, shall be recessed with the glass a minimum of **2 inches** from the facade surface material or adjacent trim.
- (3) **Vertically Oriented.** A minimum of 70% of street facade windows must be vertically oriented. An abutting series of individually vertically oriented windows creating a horizontally oriented bank of windows is acceptable.
- (4) **Visibility Through Glass.** Reflective glass and glass block are prohibited on street and other front facades. Windows shall meet the transmittance and reflectance factors established in the transparency definition (see XXX).
- (5) **Operable Windows.** A minimum of 70% of all street facade upper story windows on all buildings, except the Workshop-Warehouse, must be operable. Ground story storefront glass and glass curtain wall systems are not required to be operable.
- (6) **Expressed Lintels.** For masonry construction, the expression of lintels must be included above all windows and doors by a change in brick coursing or by a separate detail or element. See [Figure 7-H](#) for illustrations of expressed lintels.
- (7) **Glass Overhead Doors.** Glass overhead doors utilized for patio access, open air dining, or display and not utilized for vehicular access, may be used for storefronts or other window requirements on any building type, provided all other regulations are met, and health department licensing is obtained as required.

Table 7-1. Allowed Major Facade Materials

MAJOR FACADE MATERIAL (alphabetical)	BUILDING TYPES & ZONES					
	STOREFRONT, GENERAL BUILDINGS			COMMERCIAL HOUSE, ROW BUILDING, TRADITIONAL HOUSE	WORKSHOP- WAREHOUSE	CIVIC BUILDING
	MX-D, MX-N, RX-D, RX-N, NX2	MX-TOD, RX-TOD, MX-S	IX-TOD, IX-S	MX-N, RX-N, NX1, NX2	IX-TOD, IX-S, I-TOD	ALL
A Brick full dimensional, economy, unit, face brick	●	●	●	●	●	●
B Concrete Masonry Units architectural, minimum 3” depth, “artisan stone” look, varied sizes, (Eschelon Masonry or approved equal), “stone” face, “hewn stone”, rock cut	–	●	●	–	●	●
C Fiber Cement Board panels, finished lap siding or shingles	–	–	–	●	–	●
D Glass curtain wall	–	–	●	–	●	●
E Metal, Architectural architectural panel, cladding system (steel, titanium, zinc)	–	–	●	–	●	●
F Stone natural, units	●	●	●	●	●	●
Stucco cement-based, 2-3 layer hard coat	–	●	●	–	●	●
G Vinyl & PVC Siding minimum .040 in. thick	–	–	–	●	–	–
H Wood or Composite Wood painted, stained, charred, or treated lap siding, shingles, board & batten, rainscreen	–	–	–	●	–	–

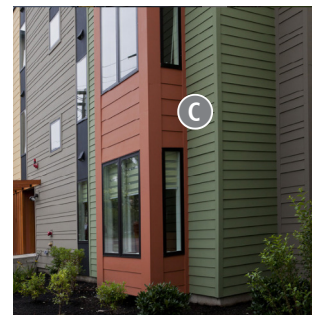
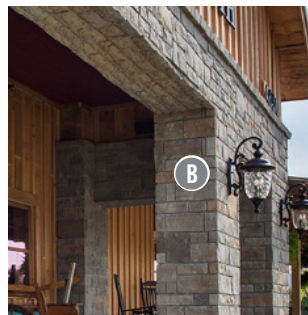
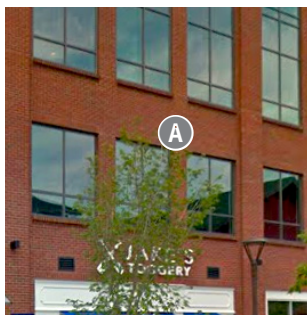


Table 7-2. Allowed Street Facade Minor Materials

All major facade materials allowed on the building type in the zone per [Table 7-1](#) may be used for minor facade materials, unless otherwise listed as prohibited.

	MINOR FACADE MATERIAL (alphabetical)	ALLOWED ON BUILDING TYPES	OTHER LIMITATIONS	MAXIMUM AMOUNT ON STREET & OTHER FRONT FACADES
	Concrete Surfaces finished, stained, painted, treated	All	Below ground floor only	15%
B	Concrete Masonry Units architectural, minimum 3” depth, “artisan stone” look, varied sizes, (Eschelon Masonry or approved equal), “stone” face, “hewn stone”, rock cut	All	–	35%
J	Concrete Masonry Units minimum 3” depth, split-faced, burnished/ground face, glazed, or honed	Workshop-Warehouse	–	35%
C	Fiber Cement Board finished panels	All	Major material is required at grade up to 2 feet and adjacent to entrances	35%
D	Glass curtain wall	All except Traditional and Commercial House	–	35%
E	Metal Architectural architectural panel, cladding system (steel, titanium, zinc)	All, except buildings in MX-D, RX-D and all Commercial House, Traditional House	Major material is required at grade up to 2 feet and adjacent to entrances	35%
L	Stucco synthetic or with elastomeric finishes	All	Only 3rd or higher stories	35%
	Stucco cement-based, 2-3 layer hard coat	All	–	35%
	Terra Cotta or Ceramic tiles or panels	All	–	35%
H	Wood painted, stained, treated, natural, or aged lap siding, shingles, board & batten	All	–	35%
I	Wood, Composite lap siding, shingles, board & batten, rainscreen system	All	–	35%

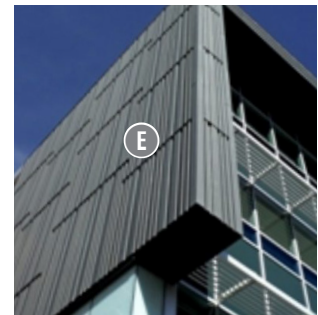
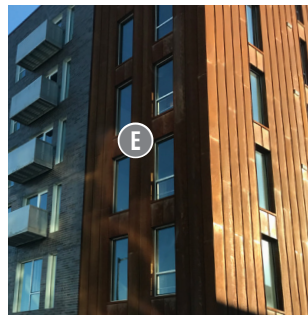
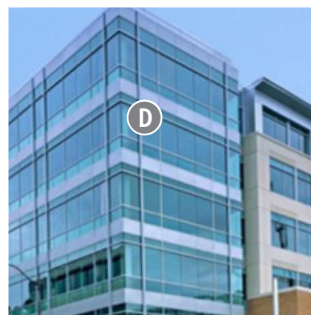


Table 7-3. Allowed Non-Street Facade Materials

All allowed major facade materials and minor facade materials may be used on 100% of non-street facade, unless otherwise indicated below or unless listed as prohibited in [Table 7-5](#).

MINOR FACADE MATERIAL (alphabetical)	ALLOWED ON BUILDING TYPES	OTHER LIMITATIONS	MAXIMUM AMOUNT ON NON-STREET FACADES
Brick thin, veneer	All	–	100%
Concrete Surfaces unfinished, untreated, unstained, unpainted	General and Workshop-Warehouse buildings in IX and I zones only	–	100%
Concrete Surfaces finished, stained, painted, treated	All	–	100%
I Concrete Masonry Units minimum 3” depth, split-faced, burnished/ground face, glazed, or honed	All except Traditional and Commercial House, Row	–	100%
K Glass Block clear or patterned units without color	All	–	30%
L Metal, Aluminum Composite aluminum composite materials (ACM) or panels (ACP)	All except Traditional and Commercial House	Only 3rd or higher stories	30%
Metal, Corrugated, Other ribbed, corrugated, sheet	Workshop-Warehouse	–	100%
Stucco synthetic or with elastomeric finishes	All	Only 3rd or higher stories	30%

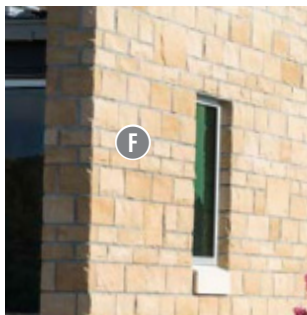


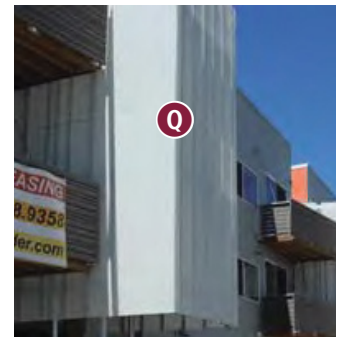
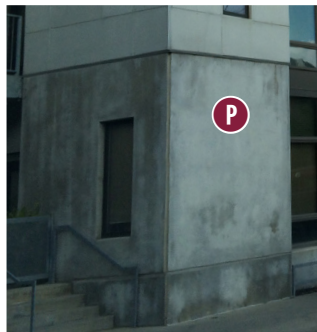
Table 7-4. Allowed Detail & Accent Materials

All allowed major and minor facade materials may be used for details, trim, and accents.

M	Concrete Details precast stone ornamentation, lintels, sills, banding, columns, beams
	Fiber Cement Details trim, soffits
N	Metal Details trim, ornamentation, lintels, beams, columns
	Wood and Wood Composite Details painted/treated trim, soffits, other approved details
O	Vinyl Details limited to soffits, window trim; minimum .04 inches thick

Table 7-5. Prohibited Materials

	Fiberglass and Acrylic Panels all
Q	Plastic Panels all, including high-density polyethylene and polycarbonate panels
R	Stucco Moldings or Synthetic Stucco Moldings trim, sills, cornices, banding, columns, pilasters or other 3 dimensional details
	Wood Unfinished, untreated plywood siding or panels



102-750 (d) AWNINGS & CANOPIES

Removable awnings and canopies attached to buildings shall be constructed consistent with the requirements of this section. See [Figure 7-I](#) for examples of awnings.

- (1) **Material.** All awnings and canopies shall be canvas or metal. Plastic awnings are prohibited.
- (2) **Lighting.** Backlighting is allowed only on metal awnings.
- (3) **Structures.** Frames must be metal and wall mounted. Support poles from the ground are prohibited except where the awning is over 8 feet in depth and utilized for outdoor eating areas or entrances.
- (4) **Canopies & Light Shelves.** Permanent canopies, projections, or overhangs used as architectural features, light shelves, or shading devices are allowed and not intended to be regulated by this subsection [102-750 \(d\)](#).
- (5) **Clearance.** All portions of any awning or canopy shall provide at least 8 feet of clearance over any walkway and 15 feet of clearance over vehicular areas.
- (6) **Signs.** Refer to Article XXX for signs on awnings and canopies.

102-750 (e) BALCONIES

Balconies on street facades, facades of courtyard open to the street or civic space, and facades on civic space⁶ shall be consistent with the requirements of this subsection. See [Figure 7-J](#) for examples of balconies.

- (1) **Definition.** For the purpose of this subsection, balconies shall include any roofed or unroofed platform that projects from the wall of a building above grade and is enclosed only by a parapet or railing. This definition does not include false balconies, juliet balconies, or balconettes.
- (2) **Balconettes.** Sometimes referred to as juliet balconies, balconettes are false balconies consisting of a rail and door, either without an outdoor platform or with an outdoor platform less than 18 inches in depth. Balconettes are allowed and do not count towards the maximum permitted amount of balcony on a street facade.
- (3) **Size.** Balconies must be a minimum of 4 feet deep and 5 feet wide.
- (4) **Facade Coverage.** A maximum of 35 percent of street facades, calculated separately for each facade, may be

⁶ Consider whether to include rail corridor facades. This may also apply to major materials -- should rail corridor facades be treated as "fronts"?

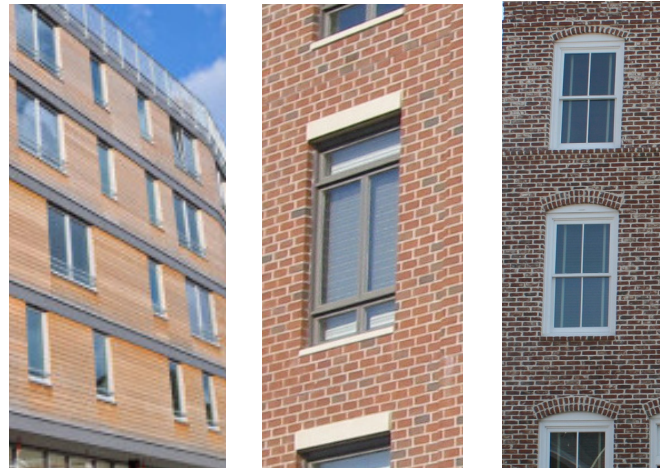


Figure 7-H. Vertically Oriented Windows with Expressed Lintels



Metal Awning



Canvas Awning

Figure 7-I. Examples of Awnings

covered by balconies. The balcony area is calculated by drawing a rectangle on the facade elevation around the following: the platform or floor of the balcony; any rails, walls, columns or indentations; and any ceiling, roof, or upper balcony.

- (5) **Integrated Design.** Balconies are intended to be integrated with the design of the facade, avoiding tacking the balconies onto the facade after the elevation has been designed.
 - a. A minimum of 50 percent of the perimeter of each balcony must abut an exterior wall of the building, partially enclosing the balcony.
 - b. The balcony support structure must be integrated with the building facade; separate columns or posts supporting any balcony from the ground are not allowed.
- (6) **Platform.** The balcony platform must be at least 3 inches thick and any underside of a balcony that is visible from any street or public way shall be finished.
- (7) **Maximum Setback.** When the balcony is located within the minimum and maximum setback area, the portion of the facade behind the balcony is exempt from meeting the maximum setback requirement.

102-750 (f) SHUTTERS

When shutters, whether functional or not, are utilized on a street or other front facade of any building type except a House building type, the shutters shall meet the following requirements. See [Figure 7-L](#).

- (1) **Size.** All shutters must be sized for the windows, so that, if the shutters were to be closed, they would not be too small for complete coverage of the window.
- (2) **Materials.** Shutters must be wood, metal, or fiber cement. Other synthetic and engineered woods may be approved through an administrative exception provided that the applicant submits a sample and examples of high quality, local installations of the material.

102-750 (g) SECURITY GRILLS & BARS

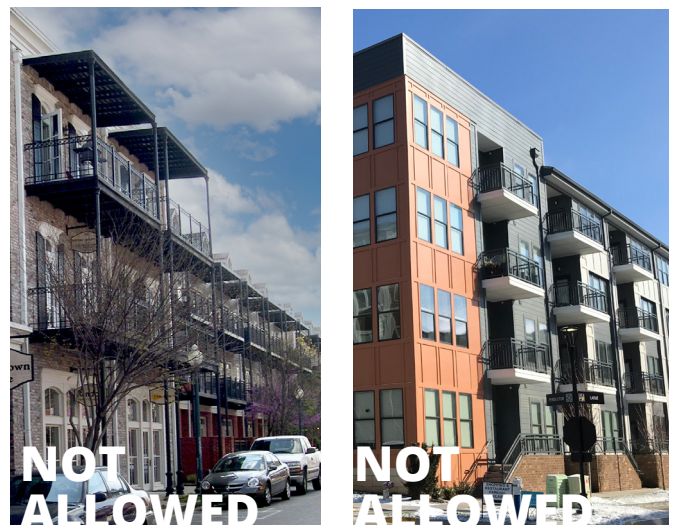
- (1) Exterior bars and security grills are prohibited on any street facade opening.
- (2) Security grills must be fully retractable and completely located within the interior of the building. When retracted, the grills must not be visible from the exterior of the building.

102-750 (h) PRINCIPAL ENTRYWAY

See [Figure 7-K](#) for examples of defined principal entryways.



Balconies Appropriately Attached to or Incorporated into Facade.



Balconies: Covers More than 35 Percent of Facade

Balconies: Extending Off Facade

Figure 7-J. Examples of Balconies

Principal entrances to all buildings or units, except storefronts, must be clearly delineated through one or more of the following design features:

- (1) **Roof or Canopy.** The entryway is covered by a roof or canopy differentiating it from the overall building roof type.
- (2) **Porch.** The entryway is through a porch.
- (3) **Sidelights and Transom.** Sidelights or transom windows are included around the entryway.
- (4) **Extended Articulation.** The entryway is included in a separate bay of the building that extends up at least 2 stories.

102-750 (i) ARCADE DESIGN

The following requirements apply to arcades. An arcade is a covered pedestrian walkway within the recess of a ground story. See [Figure 7-M](#).

- (1) **Depth.** An open-air public walkway may be recessed from the principal facade of the building a minimum of 8 feet and a maximum of 16 feet.
- (2) **Height.** The height of the interior space of the arcade, measured floor to ceiling, must not exceed 16 feet.
- (3) **Maximum Setback.** When the arcade is utilized, the outside face of the arcade shall be considered the front facade, located within the required minimum and maximum setback area.
- (4) **Column Spacing.** Columns must be spaced between 10 feet and 12 feet on center.
- (5) **Column Width.** Columns must be a minimum of 1.5 feet 6 inches and a maximum 2 foot 6 inches in width.
- (6) **Arcade Openings.** Openings must not be flush with interior arcade ceiling and may be arched or straight.
- (7) **Horizontal Facade Division.** A horizontal shadow line shall define the ground story facade from the upper stories.
- (8) **Visible Basement.** A visible basement is not allowed.
- (9) **Exception.** A administrative exception may be submitted for approval of an alternate arcade design.

102-750 (j) GROUND STORY AT SLOPING FACADES

Grade transitions on any building along a significantly slope sidewalk or street should be designed to minimize blank walls and maximize pedestrian-scale frontages between waist and eye level. See [Figure 7-N](#) for examples of positive



Inappropriately Scaled Shutters.



Figure 7-L. Examples of Shutters

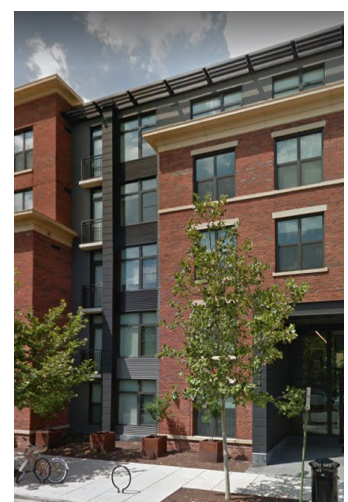


Figure 7-K. Examples of Defined Principal Entryways

facades along slopes.

- (1) **Storefronts.** The following regulations apply to storefront facades along sloping streets:
 - a. The interior floor level must step to match the exterior grade within 3 feet. With an administrative exception, changes in grade may be accommodated by a storefront window display space.
 - b. Knee wall and retaining walls must not exceed 30 inches in height except a maximum 9-foot section of length may be up to 48 inches in height.
 - c. If grade change is more than 9 feet along a single block face, the following applies:
 - 1. Entrance requirements may be increased to one entrance per 90 feet of building frontage.
 - 2. Entrances adjacent to the street must be within 3 feet of the elevation of the adjacent sidewalk.

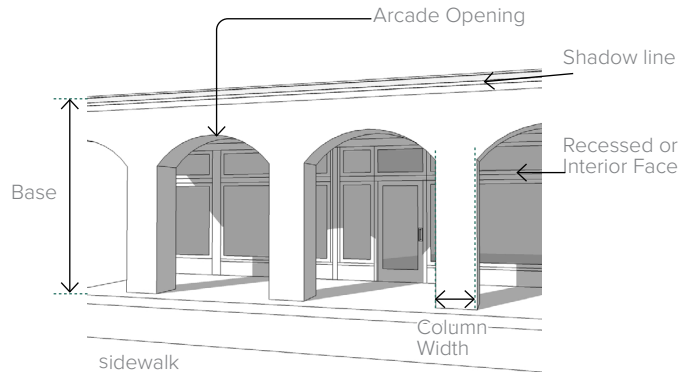


Figure 7-M. Example of Arcade.

- (2) **Non-Storefronts.** The following regulations apply to all non-storefront facades along sloping streets:
 - a. Grade transitions at the building along the sidewalk shall be designed to minimize blank walls. Multiple front entrances along the street should activate each segment of building section at each grade.
 - b. The interior floor level must step to match the changes in exterior grade within a 3-foot range. With an administrative exception, deeper transition zones between the sidewalk and building facade of porches, terraces, and landscape areas may be used assist with grade changes.
 - c. Changes can be accommodated by terraced planters and retaining walls at the lowest heights practicable. Retaining walls shall not exceed 30 inches in height except along a maximum 8-foot section of frontage.
 - d. When the elevation of the first floor is more than 3 feet above grade, the elevation is considered a visible basement and windows must be provided into the basement or lower floor elevation.

102-750 (k) BUILDING VARIETY

See [Figure 7-O](#) for examples of building facade variety with intent of providing interest and variety along street and open space frontages.



Figure 7-N. Examples of Ground Story along Slopes.

- (1) **MX Zones.** Buildings must treat that frontage in segments of **50 feet or less**⁷ with the building variety standards in [102-750 \(k\)\(3\)](#), below.
- (2) **RX, IX, and NX Zones.** For buildings **90 feet** in length or greater, as measured along any street or front facade, must treat that frontage in segments of **50 feet or less** with the building variety standards in [102-750 \(k\)\(3\)](#), below.
- (3) **Standards.** Each facade segment must vary by at least 2 of the following:
 - a. The type of dominant facade material or by color, scale, or orientation of that material;
 - b. The proportion of recesses and projections within the minimum and maximum setback area;
 - c. The location of the entrance and window placement, unless storefronts are utilized;
 - d. Roof type, plane, or material, unless otherwise stated in the building requirements;
 - e. Building height.
 - f. Other method achieving the intent and approved as a major exception.

102-750 (l) ARTICULATION OF STORIES

Stories must be articulated on street and other front facades.

- (1) **Fenestration.** Fenestration or window placement on street facades must be organized by stories per the building type facade transparency regulations.
- (2) **Shadow Lines.** Horizontal shadow lines and lintels over openings may be used to delineate stories with minimum shadow lines required per building type.
- (3) **Mezzanines.** Mezzanines that fall within the range of floor to floor heights of the building type shall be articulated on the facade and require separate calculation for transparency per XXX Tall Stories.
- (4) **Taller Spaces.** Spaces exceeding the allowable floor to floor heights of the building type shall be articulated as multiple stories on the street facade.

⁷ Downtown appears to have originally been laid out in 25-foot wide lots. The current code has a variety dimension of 45 feet; I suggest allowing a 50- or 60-foot increment to simplify the regulation, removing the minimum size, and to accommodate the 50-foot buildings that exist. The Marketplace Lofts treats the Mainstreet facade in about 40-foot increments.



Figure 7-O. Examples of Building Articulation



Figure 7-P. Example of a Terminated Vista.

102-750 (m) VISTAS⁸

Views down streets must be considered when designing building facades, laying out streets, and locating open space, parking, and buildings on sites. [Figure 7-P](#).

- (1) **Rears of Buildings.** The location of open space and streets shall not create views of the rear of buildings or parking behind buildings.
- (2) **Parking.** Parking structures and surface parking lots are not permitted at the termination of a street vista.
- (3) **Street Termini.** When a street terminates at a parcel, the parcel shall be occupied by one of the following:
 - a. **Open Space.** If the parcel is open space, any open space type shall be utilized and a vertical element shall terminate the view. Acceptable vertical elements include, but are not limited to, a stand or group of trees, a sculpture, a gazebo or other public structure, or a fountain.
 - b. **Building.** If the parcel is not utilized as an open space, the facade of a building, whether facing a front street or not, shall terminate the view. The building shall incorporate one of the following treatments to terminate the view: a tower, a bay, or a courtyard. That portion of the facade shall be treated as a front facade.

102-750 (n) GARAGE DOORS

The following requirements apply to garage doors included on any street facade.

- (1) **Location.** Allowed locations for garages doors on street and non-street facades are regulated by the building type regulations.
- (2) **Recessed from Facades.** Garage doors located on street facades must be recessed a minimum of 5 feet from the dominant facade of the principal building facing the same street.
- (3) **Design.** Garage doors facing a street or visible from a street must meet the following:
 - a. The doors must be clad with materials consistent with the design of the building.
 - b. Upgraded architectural doors or carriage-style doors are required on all Row buildings.

102-750 (o) PARKING STRUCTURE FACADES

Parking structure facades visible from any street or other

front facade shall meet the following standards. See [Figure 7-P](#) for one illustration of a parking structure facade.

- (1) **Materials.** Major and minor material requirements, per [102-740](#), above, shall be met on all street and other front facades. An additional permitted minor material is stained, finished concrete.
- (2) **Ramps and Slopes.** Ramps and slopes shall not be located on any front or street facades.
- (3) **Vertical Divisions.** Vertical divisions extending the full height of the structure are required every 30 feet to de-emphasize the horizontal decks. Divisions shall be a minimum of 2 feet in width with a minimum projection of 2 inches.
- (4) **Blank Wall Limitations.** No rectangular area greater than 30 percent of any story's facade, as measured from floor to floor, and no horizontal segment of a story's facade greater than 15 feet in width may be solid wall without an opening.
- (5) **Entry Tower.** Any pedestrian entrances directly into the parking structure from the street are required to be separate from the vehicular entrance and directly accessed the sidewalk. The pedestrian entrance must meet the principal entryway regulations in [102-750 \(h\)](#). Stairwells must be located inside a tower per [102-720 \(f\)](#) with windows at a transparency rate of 65%.
- (6) **Cap.** The top story of the parking structure shall include a parapet or other roof type along the public way facades. Refer to roof types defined in [102-720](#).
- (7) **Vehicular Entrances.** Driveways shall be no wider than 22 feet and the entrance and exit should be split by a median. Access shall be located on a non-front street, unless the lot does not abut a non-front street. No more than 2 access points shall be located on any one street, totaling no more than 24 feet of drives crossing sidewalk. See XXX for driveways.

⁸ May move this to MPD, except the last paragraph related to building design at a street terminus..

102-760 Utility Equipment

Mechanical and utility equipment and appurtenances are necessary for any building design, but can have a negative visual impact and detract from the quality of the design of a building. The purpose of the regulations of this section, [102-760](#), is to ensure that the visual impact of mechanical equipment and appurtenances is minimized.

102-760 (a) "MECHANICAL EQUIPMENT" DEFINED

When the following regulations refer to "mechanical equipment", any mechanical equipment or utility appurtenance, such as but not limited to HVAC systems, boilers, condensers, transformers, vents, meters, ducts, are being referenced, except the following:

- (1) Solar and wind energy systems are allowed, subject to [102-6130](#) in accessory structure regulations.
- (2) Rainwater cisterns are allowed.

102-760 (b) MECHANICAL EQUIPMENT IN BUILDING

Mechanical equipment shall be located within the

Entry Tower
 Cap
 Vertical Divisions
 Blank Wall Limitations and No Ramps or Slopes
 Vehicular Entrance



Figure 7-Q. One Example of a Parking Structure

building, unless the applicant demonstrates that locating the equipment within the building would conflict with the equipment's function.

102-760 (c) ROOFTOP MECHANICAL EQUIPMENT

Any rooftop mechanical equipment, such as but not limited to vents, ducts, condensers, and ventilators, and not including solar panels or wind turbines, shall be located consistent with one of the following methods:

- (1) Incorporate equipment into the roof design consistent with the applicable standards of roof types in [102-720](#).
- (2) Set the equipment back a minimum of 10 feet from any street or public way facade.
- (3) To the extent practicable, all rooftop mechanical shall be painted to blend with the structural roof and limit its visibility.

102-760 (d) MECHANICAL EQUIPMENT ON STREET FACADES

Mechanical equipment and utility appurtenances shall not be located on a street facade unless the applicant demonstrates that locating the equipment in a different location would conflict with the equipment's function. Any equipment or appurtenance approved on a facade shall be located consistent with the following standards:

- (1) **Street Facade.** The mechanical equipment may be located on a street facade only if the following requirements are met:
 - a. The equipment is located on a surface perpendicular (and not parallel) to the adjacent street. **An administrative exception may be approved for surfaces parallel to the street if all other requirements of this subsection, [102-760 \(d\)](#), are met.**
 - b. The equipment extends from the facade surface no more than 3 inches; and
 - c. The equipment is screened from the sidewalk by landscape, railings, other facade walls, or other designs.
- (2) **Air Vents or Grills.** Air vents and grills may be successfully incorporated into storefront window systems, provided the transparency requirements are met by the actual windows in the system.
- (3) **Alignment.** Multiple pieces of mechanical equipment must be organized on the facade in a regular pattern and aligned. Compliance with this standard must be illustrated on the drawing elevations submitted as part of the application.

- (4) **Material Coordination.** To the extent practicable, facade-mounted mechanical appurtenances shall be located on a material that limits their visibility. For example, dark colored vents will be more visible on light colored fiber cement panels than a textured, darker surface such as brick.

102-760 (e) MECHANICAL EQUIPMENT ON OTHER HORIZONTAL SURFACES

Mechanical equipment, such as electrical transformers and air conditioners, located on the ground, decks, or horizontal surfaces other than the roof shall be located consistent with the following standards:

- (1) **No Encroachment.** Mechanical equipment shall not extend into any right-of-way or easement, unless otherwise approved by the city.
- (2) **Allowed Yard Location.** See XXX for definition of yards.
 - a. **Front Street Yard.** Mechanical equipment and appurtenances shall not be located in the front street yard, except with approval of a administrative exception and meeting all regulations of this section [102-720](#) without additional mechanical equipment location exceptions.
 - b. **Non-Front Street Yard.** Mechanical equipment may be approved in the non-front street yard, provided the equipment is screened from the street per the following regulations.
 - c. **Rear and Side Yard.** Mechanical equipment may be located in any rear or side yard.
- (3) **Screening from streets, open spaces, or civic spaces.** All equipment must be screened from view from any streets, open space, or civic space per the following:
 - a. Walls for screening must be consistent with the building design, colors, and materials, faced with an allowed major facade material.
 - b. Where landscaping only is employed, the following must be met:
 - 1. Where landscaping only is employed, the utility must be located in a larger landscape area and the landscape screen must be designed as part of the large planting bed design.
 - 2. A single row of evergreen shrubs shall fully screen the equipment within 1 year of installation.
 - 3. The zoning administrator may require additional landscape materials.
- (4) **Street Frontage or Front Yard Location.** Equipment located in a street yard or other front yard may approved only if all of the following are met:
 - a. The applicant demonstrates that the equipment cannot be located in a rear yard, street side yard, or in a side yard.
 - b. Equipment may be located in a front street yard only if the applicant demonstrates that the equipment cannot be located in a non-front street yard.
 - c. No other utility cabinets, boxes, or other appurtenances are within 200 feet along the same side of the street as the proposed utility appurtenance.
 - d. The appurtenance is located a minimum of 35 feet from a street intersection, measured from the intersection of the curb line, and does not impact the sight vision clearance at intersections.
 - e. The appurtenance is fully screened in a manner that is consistent with the building design, colors, and materials and of a height that is the minimum to adequately screen the appurtenance and that does not prevent the facade from fulfilling any transparency requirements. See [Figure 5.03\(8\)](#) for examples of poorly located, unscreened equipment on front streets.



Figure 7-S. Rooftop Utilities Screened from the Public Way by a Parapet

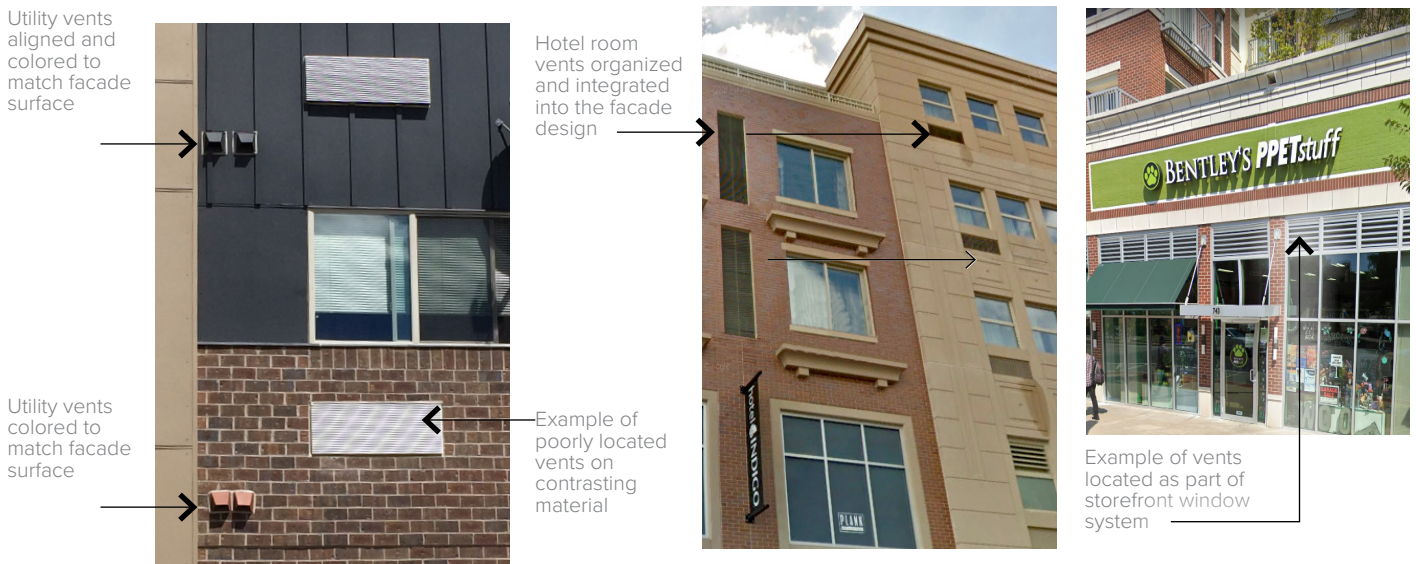


Figure 7-R. Utility Appurtenances located on Facades



Figure 7-T. Examples of Poorly Located Utility Appurtenances on Primary Streets: NOT PERMITTED

ARTICLE 8 LANDSCAPE & SITE DESIGN

- 102-810 Generally 8-2
- 102-820 Landscape Installation 8-2
- 102-830 General Landscape Maintenance 8-3
- 102-840 Existing Trees 8-4
- 102-850 Ground Vegetation 8-6
- 102-860 Site Trees 8-6
- 102-870 Streetscape Design 8-7
- 102-880 Street Sidewalks 8-8
- 102-890 Internal Site Sidewalks 8-9
- 102-8100 Street Trees 8-10
- 102-8110 Frontage Buffer 8-11
- 102-8120 Side and Rear Buffers 8-12
- 102-8130 Interior Parking Lot Landscape 8-15
- 102-8140 Screening of Refuse & Utility Areas 8-16

102-810 Generally

102-810 (a) PURPOSE

The landscape and site design regulations of this article are intended to provide the following.

- (1) To protect property values and the appearance of neighborhoods and commercial zones through appropriate landscape and fencing.
- (2) To provide for healthy, long-lived trees within all public ways to improve the appearance of streets and create a buffer between pedestrian and vehicular travel lanes.
- (3) To increase the urban tree canopy throughout the city.
- (4) To increase the compatibility of adjacent uses and minimize the adverse impacts created by adjoining or neighboring uses.
- (5) To promote the prudent use of water through sustainable, functional landscapes.
- (6) To reduce energy demands through the shading of buildings and pavement, reducing urban heat island effects.

102-810 (b) VISIBILITY AT INTERSECTIONS²

At street intersections in all zones except MX-D and MX-N, walls, fences, plants, or trees in excess of 30 inches above the abutting curb line shall not be located within a triangular area bounded by the following 3 lines:

- (1) From the intersection of the projected curb lines of two intersecting streets, extending 30 feet along one curb line;
- (2) From the intersection of the project curb lines of two intersecting streets, extending 30 feet along the other curb line;
- (3) Connecting those 2 lines diagonally from the extended endpoints.

¹ This section is quite different from how landscaping is treated in your current code. For example, in the business park zone, the current code requires landscape yards for different uses and an overall cost amount for landscape. This code requires preservation of trees, provision of site trees (for canopy cover), and coverage of the ground with either grasses or beds.

² From section 102-12 of current code, reworded.

102-820 Landscape Installation

102-820 (a) INTENT

The following provisions aid in ensuring that all required landscaping is installed and maintained properly.

102-820 (b) APPLICABILITY

These provisions apply to landscape installation required by this article.

102-820 (c) GENERAL INSTALLATION REQUIREMENTS

- (1) **National Standards.** Best management practices and procedures according to the nationally accepted standards must be practiced. All landscape and trees must be installed in conformance with the practices and procedures established by the most recent edition of the American Standard for Nursery Stock (ANSI Z60.1) as published by the American Association of Nurserymen.
- (2) **Letter of Credit.** A letter of credit is required for all landscape installation. All landscape materials must be fully installed prior to the issuance of a certificate of occupancy, except when seasonal conditions preclude the complete installation. Complete installation is required within 9 months of the issuance of a temporary certificate of completeness or occupancy permit or the letter of credit may be forfeited.
- (3) **Tree Measurement.** Caliper is the measured diameter (inches) of the tree trunk as follows:
 - a. Caliper measurement of the trunk must be taken 6 inches above the ground or top of the rootball up to and including 4 inch caliper size.
 - b. If the caliper at 6 inches above the ground exceeds 4 inches, the caliper should be measured at 12 inches above the ground or top of the rootball.
- (4) **Plant Size Requirements.** Plant material must be sized according to [Table 8-1](#) unless otherwise noted in this section.
- (5) **Condition and Selection of Planting Materials.** The plant materials used must be free from visible signs of disease, infestation, or physical defect at the time of planting. Plant materials must:
 - a. Be appropriate for the conditions of the location, including sun and wind exposure, air quality, salt exposure, soil type, expected moisture content of soil, and slope.
 - b. Not be an invasive or a potentially invasive species.

- c. Be, wherever possible, native or naturalized to the Bridgeport region.
- (6) **Compost, Mulch, and Organic Matter.** Compost, mulch, and organic matter must be utilized within the soil mix to reduce the need for fertilizers and increase water retention.
- (7) **Establishment.** All installed plant material must be fully maintained until established, including watering, mulching, fertilizing, and replacement as necessary.

102-820 (d) TREE INSTALLATION

- (1) **Permeable Surface.** For each tree planted, a minimum amount of permeable surface area is required, unless otherwise stated in this ordinance. See [Table 8-2](#) for estimated tree canopy sizes at maturity. See [Table 8-3](#) for soil volumes and permeable area recommended per tree.
 - a. At least 70% of the limits of the mature canopy must have a permeable surface.
 - b. Permeable area for one tree cannot count toward that of another tree.
- (2) **Suspended Pavement System.** When the required soil surface area of a tree (see [Table 8-3](#)) will extend below any pavement, a modular suspended pavement system (Silva Cells, Root Space, or an approved equivalent), must be used below that pavement to ensure root growth and access to air and water.

Table 8-1. Plant Material Size at Installation

PLANT MATERIAL TYPE	MINIMUM SIZE
Street Tree	2 in. caliper
Deciduous Shade/Overstory Tree	1.5 in. caliper/ 8 ft. height
Evergreen Tree	8 ft. height
Understory Tree	6 ft. height
Ornamental Tree	1.5 in. caliper
Shrubs - Deciduous	5 gallon container or 18 in. balled & burlapped
Shrubs - Evergreen	5 gallon container or 18 in. balled & burlapped
Groundcover	3 in. height

102-830 General Landscape Maintenance

102-830 (a) INTENT

All landscaping must be maintained in good condition at all times to ensure a healthy and orderly appearance.

102-830 (b) APPLICABILITY

All landscape required by this article must be maintained in healthy condition per this section, [102-830](#).

102-830 (c) GENERAL MAINTENANCE

- (1) **National Standards.** All landscaping and trees must be maintained according to the most recent edition of the American National Standards Institute, including its provisions on pruning, fertilizing, support systems, lighting protection, and safety
- (2) **Replacing Unhealthy Landscaping.** Unhealthy landscaping must be replaced with healthy, live plants by the end of the next applicable growing season. This includes all plant material that shows dead branches over a minimum of 25 percent of the normal branching pattern.

Table 8-2. Canopy Coverage by Tree Size

TREE SIZE	MATURE CANOPY SIZE
Small	300 sq. ft.
Medium	700 sq. ft.
Large	1,000 sq. ft.

Table 8-3. Soil Volumes & Permeable Area

TREE SIZE	SOIL VOLUME	APPROX. SOIL SURFACE AREA 2.5-FT. SOIL DEPTH	REQUIRED PERMEABLE SURFACE AREA
Small	736 cu. ft.	294 sq. ft. (17 ft. x 17 ft.)	100 sq. f.t (4 ft. x 25 ft.)
Medium	2,852 cu. ft.	1,141 sq. ft. (34 ft. x 34 ft.)	225 sq. f.t (4 ft. x 56.25 ft.)
Large	6,532 cu. ft.	2,681 sq. ft. (34 ft. x 34 ft.)	400 sq. f.t (4 ft. x 100 ft.)

- (3) **Maintenance Responsibility.** The owner is responsible for the maintenance, repair, and replacement of all landscaping.
- (4) **Maintain Quality and Quantity.** Maintenance must preserve at least the same quantity, quality, and screening effectiveness as initially installed or required by this article.
- (5) **City Inspection.** All landscaped areas regulated by this ordinance may be inspected by the city.
- (6) **Tree Maintenance**
 - a. **Arborist.** Tree trimming, fertilization, and other similar work must be performed by or under the management of an ISA certified arborist.
 - b. **Tree Topping.** Tree topping is not allowed. When necessary, crown reduction thinning or pruning is permitted. Refer to [102-8100](#) for clear branch height of street trees.

102-840 Existing Trees
.....

102-840 (a) TREE SURVEY SUBMITTAL

A survey of existing trees on the site is required for all developments per XXX. The survey must illustrate the following:

- (1) All existing trees 4 inches or greater.
- (2) All trees to be removed.
- (3) All significant and contributing trees to be retained.
- (4) Tree protections to be installed for all significant and contributing trees.
- (5) The footprint of any existing and proposed structures fences, and paving.
- (6) Existing and proposed topography, including cut and fill diagrams.

102-840 (b) MEASURING EXISTING TREES

Existing trees must be measured as the diameter of trunk, at breast height, 4 feet above grade at the base of the tree.

102-840 (c) SIGNIFICANT TREES

Trees of significant size, type, or meaning must be retained on the site, unless otherwise determined by the municipal arborist.

- (1) **Definition.** A significant tree is one of the following:
 - a. Any tree with a diameter at breast height of 13 inches or more.
 - b. A grove of trees totaling 13 inches and as determined by the municipal arborist.
 - c. Any specific tree type designated significant by the municipal arborist, based upon the tree's age, species, health, meaning within the community, and/or historical importance.
- (2) **Removal of Significant Trees.** A significant tree may be removed with approval of the municipal arborist under the following conditions:
 - a. The tree is in poor health or diseased with an expected life span less than 2 years.
 - b. The tree poses a danger to human safety, health and welfare.
 - c. If approved by the municipal arborist, the removal is mitigated by one of the following:

1. Trees with a total of caliper inches equal to 3 times the diameter of the removed tree(s) planted on the site or a site approved by the municipal arborist and the zoning administrator.
2. When planting of replacement trees is determined impracticable by the municipal arborist and the zoning administrator, a fee in-lieu of replacement trees will be assessed and paid into the city’s Tree Planting Fund in accordance with the city’s fee schedule. The fee must include a cost per diameter inch of tree not replaced.
3. A combination of replacement trees and fee-in-lieu per this subsection.

102-840 (d) CONTRIBUTING TREES

Contributing trees are existing trees that are not significant trees, measuring greater than 6 inches, contributing to the city’s overall tree canopy cover.

- (1) **Removal of Contributing Trees.** A contributing tree may be removed under the following conditions:
 - a. The tree is in poor health or diseased with an expected life span less than 2 years.
 - b. The tree poses a danger to human safety, health and welfare.
 - c. The removal is mitigated by one of the following:
 1. Trees with a total of caliper inches equal to the diameter of the removed trees planted on the site or a site approved by the municipal arborist and the zoning administrator.
 2. A fee in-lieu of replacement trees is assessed and paid into the city’s Tree Planting Fund in accordance with the city’s fee schedule. The fee must include a cost per diameter inch of tree not replaced.
 3. A combination of replacement trees and fee-in-lieu per this subsection.

102-840 (e) TREE PROTECTION DURING CONSTRUCTION

During construction, all available precautions must be undertaken to prevent damage to existing trees, 6” in diameter or larger, to be retained on the site.

- (1) **Protection Fencing.** Tree protection fencing and trunk protection must be performed on existing trees per ANSI guidelines.

- (2) **Prevention of Injury.** Protection must include prevention of injury to the trunk, branches, and root systems of existing trees to be retained on the site and any trees on adjacent sites with root systems extending onto the site.
- (3) **Regrading within Dripline.** No soil removal, trenching, or regrading must occur within the root system or beneath the dripline of any tree to be retained on the site without mitigation of the impact of the activity on the tree per a certified arborist’s recommendation.
- (4) **Compaction of Soil.** No parking of vehicles or machinery, or storage of materials must occur within the dripline of any existing tree to be retained to avoid the compaction of soil around roots.
- (5) **Inspection.** Before, during, and after the start of construction activity, the municipal arborist may inspect the site and impose additional procedures to ensure the health of existing trees to be retained.
- (6) **Mitigation of Damage.** The municipal arborist may assess mitigation of trees damaged during or as a result of construction activities. Mitigation may include replacement trees or fees paid into the tree fund.

102-840 (f) PENALTIES

Any person who removes a significant tree without prior permission from the municipal arborist or causes the death of a significant tree through other means as determined by the municipal arborist must be subject to a fine equivalent to the value of the tree. The tree value must be established using the Trunk Formula Method set forth in the latest edition of Guide for Plant Appraisal authored by the Council of Tree and Landscape Appraisers.

102-850 Ground Vegetation

102-850 (a) APPLICABILITY

All unpaved areas of any lot in any other zone must be covered by planting bed per [102-850 \(b\)](#) or grass per [102-850 \(c\)](#) or a combination of planting bed and grass.

102-850 (b) PLANTING BEDS

- (1) **Allowed Materials.** All planting beds may include shrubs, ornamental grasses, ground cover, vines, annuals, or perennials.
 - a. A minimum of 60% of the bed area must be covered in plant material at maturity. The remaining portion of the bed may be covered with non-living permeable materials, such as mulch or pine straw.
 - b. Annual beds must be maintained seasonally, replanting as necessary.
- (2) **Required Plant Beds.** In all zones except N zones, where any street yard is greater than 10 feet deep, planting beds must cover a minimum of 30% of the area.

102-850 (c) GRASS

Seeded, plugged, or sodded grass may be planted throughout landscaped areas. Grass must be established within 90 days of planting or the area must be reseeded, replugged, or resodded.

102-860 Site Trees

102-860 (a) INTENT

Trees must be planted on all lots with sufficient space to ensure that tree canopy, when mature, contributes to a significant canopy over the city as a whole.

102-860 (b) APPLICABILITY

In all zones except any N zone or the MX-D zone, site trees are required on all lots with any street, rear, or side yard area totaling 3,000 square feet or more.

- (1) **Trees That Count.** The area of canopies of the following trees overhanging applicable yard areas may be removed from the yard area calculation. See [Table 8-2](#) to determine the canopy area at maturity.
 - a. **Street Trees.** Any street tree canopy overhanging the yard may be removed from the calculation of available yard area for site trees.
 - b. **Credit for Existing Trees.** Canopy areas of existing, healthy trees of appropriate species and location, subject to the approval of the zoning administrator, may be removed from the area calculation.
 - c. **Buffer and Parking Lot Trees.** Mature canopies of buffer and parking lot trees located within the yard area may be counted
- (2) **Yard Area Uses.** The area of the following permanent uses may be removed from the required site tree yard area through the approval of a administrative exception.
 - a. Sports fields or other outdoor recreational use areas
 - b. Urban farm plots
 - c. Plazas, patios, terraces, and other outdoor open space areas designed for people

102-860 (c) REQUIRED TREES

One medium or large tree is required per 3000 square feet of yard area³. See [Table 8-2](#) for canopy coverage areas.

102-860 (d) ALTERNATIVE COMPLIANCE

Where existing conditions or other provisions of this section make it impracticable to meet the site tree requirement on or adjacent to the site, the applicant must plant sufficient trees to make up the shortfall with the location to be determined by the municipal arborist.

³ Since a large tree's canopy at maturity is approximately 1000 s.f. (30 ft. by 30 ft.), this constitutes about a 30% coverage of the open yard areas on a site.

102-860 (e) NEGATIVE IMPACTS

To the extent practicable, new trees should be located with the canopy fully on the site, avoiding shading an adjacent property.

102-860 (f) TREE TYPES

A list of allowed tree types is available from the city hall.

- (1) Exceptions to this list may be approved by the zoning administrator with an administrative exception.
- (2) Planted trees must be a combination of permitted species, where possible.

102-870 Streetscape Design
.....

102-870 (a) INTENT

To establish attractive, contiguous streetscape with amenities along all corridors and streets throughout the city.

102-870 (b) APPLICABILITY

The regulations of this section, [102-870](#), apply to all zones, unless otherwise stated.

- (1) The requirements of this section apply to development of **new streets and development on all lots with 200 feet or more of street frontage on existing streets.**
- (2) **For developments with less than 200 feet of street frontage, a fee-in-lieu of streetscape will be assessed by the zoning administrator for deposit in the city's streetscape fund.⁴**
- (3) All locations where streetscape area is required by this zoning ordinance.

102-870 (c) GENERALLY

- (1) **Streetscape Location.** Streetscape occupies the full pedestrian area of any street right-of-way (back of curb to edge of street right-of-way) and the front yard of all developments as defined by the type of development in [102-870 \(h\)](#), below.
- (2) **Planned Streetscapes.** Proposed or planned streetscape designs must be considered when determining the applicable area and design elements.
- (3) **Streetscape Design Continuation.** The approved streetscape design for each street may be utilized by the city for the extension of any street outside the development to provide district continuity.
- (4) **Standard Specifications.** Streetscape must meet any standards defined by the city for sidewalk, curb, access, and parkway construction. The zoning administrator may request additional streetscape requirements or waive any streetscape requirements.
- (5) **Additional Elements.** Additional streetscape elements beyond those required in this section may be required, based on plans in place for the street, neighborhood, or city.
- (6) **Existing Streetscape Improvements.** Where streetscape has been installed within the last 10 years, the applicant must coordinate with the zoning administrator to replace or repair any existing streetscape improvements.

⁴ May need to establish this system? should all development be allowed to choose the fee-in-lieu route?

102-870 (d) SIDEWALKS

Sidewalks must be provided per [102-880](#).

102-870 (e) STREET TREES

Street trees must be planted within all streetscape areas per [102-8100](#).

102-870 (f) LIGHTING

Both pedestrian and vehicular lighting must be specified and locations and quantities noted. All lighting must meet any requirements of the [department of public works](#) and samples must be submitted upon request of the zoning administrator.

102-870 (g) STORMWATER

Stormwater accommodations, such as bioswales or rain gardens, may be located in any streetscape area, [as determined appropriate by the zoning administrator](#).

102-870 (h) ACTIVE STREETScape

Active streetscapes are those locations where significant pedestrian activity is anticipated, especially where multiple building entrances are provided along a street and where on-street parking will have multiple turnovers in a day.

- (1) **Applicable Building Types.** Active streetscape is required for all Storefront buildings in all zones, but may be utilized in part or for all streetscape area of any other building type.
- (2) **Streetscape Area.** The pedestrian realm and the street yard for the building must be designed as one space, extending from the building face to the back of curb or edge of pavement.
 - a. **Pedestrian Realm.** The pedestrian realm spans from the edge of the right-of-way to the back of curb of the street.
 - b. **Street Yards.** All street yard must be designed in conjunction with the pedestrian realm to create a cohesive streetscape. See XXX for definition of street yard.
- (3) **Design.** The full active streetscape area must be designed as a combination of hardscape, tree wells, and/or bed areas.
- (4) **Landscape Design.** Ground plane vegetation per [102-850](#) must be designated for any landscape bed areas, planter areas, and open tree wells.
- (5) **Sidewalk Cafes.** Sidewalk cafes may be incorporated into the active streetscape where eating and drinking uses are allowed per [Article 5](#). In the pedestrian realm within the right-of-way, a sidewalk cafe permit is

required per the sidewalk cafe policy in chapter 5 of the Legislative Policy Manual.

- (6) **Pavement Design.** Paving materials and a pattern is required for each street. Pavement design must include all required minimum sidewalks, other hardscape defined by the base or storefront streetscape, and connections to on-site sidewalks.
- (7) **Street Furnishings.** For each block face, a minimum of 2 benches and 1 trash receptacle is required. Benches and/or seatwalls, planters, planter fences, tree grates, tree guards, and trash receptacles must be specified and quantities and locations listed for each street.
- (8) **Bicycle Parking.** Short-term bicycle parking as required per [102-960](#) must be incorporated into the streetscape design.

102-870 (i) PASSIVE STREETScape

Passive streetscapes are those locations that are not anticipated to be as active, where less hardscape and more landscape is appropriate.

- (1) **Applicable Building Types.** Passive streetscape is required in all locations where active streetscape is not required or used.
- (2) **Streetscape Area.** The passive streetscape includes only the pedestrian realm, spanning from the edge of the right-of-way to the back of curb of the street.
- (3) **Design.** The passive streetscape area must include the following:
 - a. Minimum required sidewalk per [102-870 \(d\)](#).
 - b. Street trees must be located in a buffer area between the back of curb or edge of pavement and the sidewalk.
 - c. The buffer area between the back of curb and the sidewalk, where unpaved, must be planted with street trees and ground vegetation per [102-850](#).
- (4) **Alternate Design.** A administrative exception may be requested for a different streetscape configuration.

102-880 Street Sidewalks

102-880 (a) INTENT

Sidewalks or multi-use paths must be provided along all street frontages, located within the public right-of-way or any other required pedestrianway.

102-880 (b) APPLICABILITY

Street sidewalks must be provided on all lots in all zones except N1. ⁵

102-880 (c) SIZE

Sidewalks must be a minimum of 5 feet in width. Multi-use paths must meet the minimum size required by any trail or bicycle plan, unless otherwise defined by the zoning administrator.

102-880 (d) LOCATION

Sidewalks must be located a minimum of 4 feet off the back of curb or edge of pavement to accommodate street trees in a buffer area.

102-880 (e) ADA COMPLIANCE

All sidewalks and pathways must meet the American Disabilities Act requirements, including crossings at street intersections.

102-890 Internal Site Sidewalks

102-890 (a) INTENT

An internal circulation system is intended to provide a permanent pathway for pedestrians between public streets and building entrances throughout larger sites.

102-890 (b) APPLICABILITY

Internal site sidewalk regulations must be met on all lots except in N and NX1 zones.

102-890 (c) SIDEWALKS

- (1) **Size.** Sidewalks must be a minimum of 5 feet in width.
- (2) **Materials.** Sidewalks must be constructed of a permanent hard surface material, such as concrete, brick, or asphalt, unless part of a trail system approved per the zoning administrator.
- (3) **Designation.** Sidewalks must be permanently and clearly demarcated through a change in material or edging. Painted striping marking sidewalks edges is not allowed.
- (4) **Crossings.** The pavement of all sidewalks must continue at any crossing with any street, driveway, or parking drive aisle.
- (5) **Direct Routes.** Required connections must follow a direct route and not involve significant out-of-direction travel for system users.

102-890 (d) LOCATIONS

- (1) **Connection to Public Sidewalks.** Continuous sidewalks must connect between all building entrances to all

⁵ Some N2 zones?

public sidewalks, including at least one connection to each street-frontage sidewalk abutting the site.

- a. Building entrances located in the rear of MX-D, RX-D, AND MX-N lots may be excepted from this requirement when directly opening onto a public alleyway.
- b.
- (2) **Connection Through Parking Lots.** All parking lots with 25 or more motor vehicle parking spaces must provide at least one pedestrian walkway through the lot, located outside of a motor vehicle driving lane.
 - a. Parking lots with more than 3 parking aisles must provide at least one walkway per 3 parking aisles.
 - b. Parking area walkways must be at least 8 feet in width, but may be reduced to 5 feet in width if designed as a grade-separated walkway with landscape buffers on either side.
 - c. Walkways must be located within the parking area to serve the maximum number of parking stalls.

102-8100 Street Trees
.....

102-8100 (a) INTENT

To line all streets with a consistent and appropriate planting of trees to establish tree canopy for environmental and aesthetic benefits.

102-8100 (b) APPLICABILITY

The requirements of this section apply to all new development or redevelopment of lots in all zones except N1.

102-8100 (c) REQUIRED STREET TREES

Street trees must be installed along all new or existing streets, not including alleys, where street trees or streetscape do not exist. The zoning administrator may exempt locations where streetscape or street trees have been installed within the last 10 years or may require streetscape improvements if in disrepair through an administrative exception process.

102-8100 (d) REQUIREMENTS

- (1) **Street Tree Type.** A list of permitted street tree types is available from the zoning administrator. Where more than 4 trees are planted, a combination of permitted species should be considered.
- (2) **Street Tree Spacing.** Each lot is required to have one tree for every 40 feet of street frontage with a minimum of one street tree per street frontage.
- (3) **Location.** Street trees must be located between the curb and sidewalk, a minimum of 2 feet and a maximum of 10 feet off the back of curb, measured perpendicular to the curb.
 - a. **Limited Space.** Where a minimum 4-foot sidewalk and minimum 3-foot landscape area will not fit between an existing street and existing building, the street tree requirement may be waived by the zoning administrator.
- (4) **Tree Wells.** For trees not installed in a planted parkway (see [102-870](#) for streetscape), the tree well must meet the following requirements:
 - a. **Size.** The tree well must be a minimum of 4 feet wide (the distance perpendicular to the curb) and 8 feet in length.
 - b. **Opening.** The opening of such tree well must include one of the following:
 - 1. The tree well opening must be covered with an expandable iron tree grate.

- 2. The tree well opening must be fenced with an ornamental steel or iron fence 18 inches in height above sidewalk grade.
 - c. The tree well opening must be rimmed with a continuous curbing approximately 4 inches wide and 6 inches above the height of the sidewalk.
 - d. Other durable, long-lasting protective fencing or materials appropriate given site conditions and approved by the zoning administrator.
- (5) **Clear Branch Height.** Minimum clear branch height is 8 feet for the portion of trees overhanging sidewalks and 15 feet for the portions of trees overhanging streets. The clear branch height of a tree is the distance between the ground plane and the lowest branch of the tree at maturity.
- (6) **Permeable Surface and Suspended Pavement System.** See [102-820 \(d\)](#) for permeable surface requirements and recommendations for tree root support systems under pavement.

102-8110 Frontage Buffer

102-8110 (a) INTENT

To lessen the visual impact of on-site vehicular parking, loading, and other activities from the street.

102-8110 (b) APPLICABILITY

The frontage buffer is required on all lots for all building types in all zones, except N and NX1 zones, per the following:

- (1) **Vehicular Areas along Street Frontages.** Along the perimeter of any off-street surface parking, driveway, loading, or other vehicular areas fronting a street right-of-way, not including along any alley.
- (2) **Vehicular Areas along Open Space.** Along the perimeter of any off-street surface parking, driveway, or loading areas fronting or within a P1 zone or other open or civic space.
- (3) **Outdoor Storage in Street Yards.** Along the perimeter of any outdoor storage areas defined in [102-6180](#) located in a street yard or a yard facing an open or civic space. See [102-8110 \(c\)](#) for exceptions to requirements specific to this use.
- (4) **Vehicle Sales Lots.** Along the perimeter of any vehicle sales lots defined in [102-540 \(j\)](#) fronting a street right-of-way or open or civic space. See [102-8110 \(c\)](#) for exceptions to requirements specific to this use.
- (5) **Exceptions.** An administrative exception may be approved for...⁶

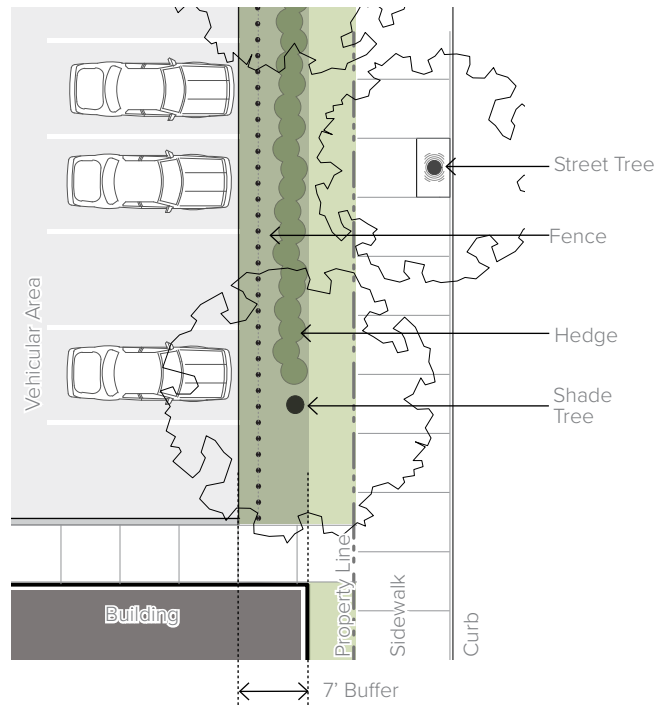
102-8110 (c) REQUIREMENTS

Refer to [Figure 8-A](#) for illustration of these requirements.

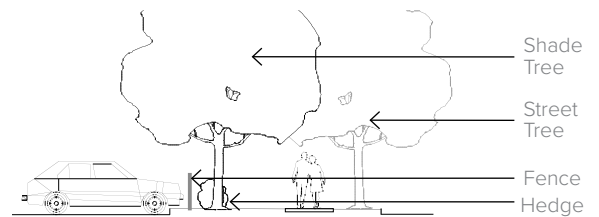
- (1) **Buffer Depth.** The required buffer area must be a minimum 7 feet in depth, measured from the street-facing lot line into the lot. When a building is located on the lot adjacent to the vehicular area, the buffer depth must be measured 7 feet from the street facade of the building back.
- (2) **Buffer Location.** The required buffer area must extend the width of the vehicular area, but may allow for the perpendicular crossing of driveways and walkways.
- (3) **Fence.** A continuous fence is required in the frontage buffer for all uses except for vehicle sales uses.
 - a. **Fence Location.** A continuous fence is required, located 2 feet from the back of curb or edge of the vehicular area into the buffer. One pedestrian

opening, maximum 4 feet in width, is permitted for every 30 feet of fence.

- b. **Fence Materials.** The fence must be black, gray, or dark green aluminum, steel or colored PVC. Masonry columns (maximum 2.5 feet in width) and base (maximum 18" in height) are allowed, but not required. Other fence materials may be submitted for an administrative exception.
- c. **Fence Height.** The fence must be a minimum of 3 feet and a maximum of 4 feet in height. For outdoor storage uses in I zones, up to 6 feet in height is allowed and up to 8 feet allowed with an approved administrative exception.



Front Buffer Plan



Front Buffer Section

Figure 8-A. Frontage Buffer Plan & Section

⁶ Other potential exceptions?

- d. **Fence Opacity.** The fence must be a minimum of 25 percent and a maximum of 60 percent opaque.
- (4) **Buffer Landscape.** The following landscape is required within the buffer.
 - a. **Shade Trees.** Medium or large shade trees are required at a minimum of 40 feet on center, with at least one shade tree required for each segment of buffer. Where feasible, spacing of the buffer trees should alternate with street trees.
 - b. **Hedge.** A single row hedge is required on the street-side, along a minimum of 80% of the fence. The hedge must consist of shrubs with a minimum mature width of 24 inches each, spaced no more than 36 inches on center, and height maintained no more than 42 inches.
 - 1. For outdoor storage uses, the hedge must consist of a double row of shrubs.
 - 2. For vehicle sales uses, a single row of lower shrubs, minimum 12 inches in height, is allowed instead of a hedge.
 - c. **Existing Vegetation.** Existing vegetation may be credited toward buffer requirements per the zoning administrator.

102-8120 Side and Rear Buffers

102-8120 (a) INTENT

To minimize the impact that one zone may have on a neighboring zone and to provide a transition between zones.

102-8120 (b) APPLICABILITY

A side and rear buffer is required along the side and rear lot lines of all lots for all building types per this section, [102-8120](#).

102-8120 (c) EXCEPTIONS

An administrative exception may be approved to reduce a buffer per the following:

- (1) **Existing Landscape.** Where the buffer will interfere with existing mature, healthy landscape, the zoning administrator shall determine the extent of the needed buffer.
- (2) **Existing Topography.** Where existing topography either reduces the need for or increases the visibility of the buffering or the use being buffered, the zoning administrator shall determine the extent of needed buffering.

102-8120 (d) BUFFER LOCATIONS

- (1) Side and rear buffers are required where the following occurs in the rear or side yards of a lot:
 - a. Any vehicular areas, abutting or adjacent to zones designated in [Table 8-4](#). Vehicular areas include such areas as parking spaces, drives, drive-through uses, fueling stations, auto sales or rental lots, truck parking, and structured parking.
 - b. Any loading areas abutting or adjacent to zones designated in [Table 8-4](#). Loading areas include such areas as loading bays, loading docks, service bays, garage doors, other outdoor trucking facilities.
 - c. Any service areas abutting or adjacent to zones designated in [Table 8-4](#). Service areas include such areas as delivery doors, refuse and recycling areas, outdoor employee break areas.
 - d. Any outdoor storage areas as allowed in the zone abutting or adjacent to zones designated in [Table 8-4](#). See [102-6180](#) for outdoor storage uses.
 - e. Other outdoor activities emitting sounds, smells, or other by-products, such as outdoor dining, as determined by the zoning administrator.
- (2) Side and rear buffers must be installed along the lot line or the buffer may be located at the edge of the activity

being buffered, provided the area between the buffer and the lot line is landscaped with ground vegetation per [102-850](#) and one tree per every 2,000 square feet.

- (3) **Access Points.** Driveways and other access points may interrupt buffers as necessary.

102-8120 (e) FENCE BUFFER

See [Table 8-4](#) where required. See [Figure 8-B](#) for illustration.

- (1) **Intent.** The fence buffer is intended to provide a physical and visual separation for uses of different intensities where limited buffer area is available.
- (2) **Buffer Depth.** A minimum 2-foot width buffer, measured from the lot line onto the subject lot, is required.
- (3) **Privacy Fence.** A minimum 6-foot, maximum 8-foot high, opaque, privacy fence screening the activity must be located in the buffer adjacent to the lot line. Allowed materials include PVC, composite wood, FSC wood (cedar, redwood, or other approved by the zoning administrator), stone, or brick. Concrete panels and concrete masonry units are not allowed, except faced on all sides with brick or stone.
- (4) **Curbs or Wheel Stops.** A curb or wheel stops must be provided along the buffer edge at any vehicular area to prevent motor vehicles from damaging the fence. Parking may not overhang into the buffer.

- (5) **Landscape.** The buffer area must be landscaped as planting bed. See [102-850](#) for required ground vegetation regulations.

102-8120 (f) LIGHT BUFFER

See [Table 8-4](#) where required. See [Figure 8-C](#) for illustration.

- (1) **Intent.** The light buffer is intended to provide physical and visual separation for uses of different intensities.
- (2) **Buffer Depth.** A minimum 5-foot width landscaped buffer, measured from the lot line onto the subject lot, is required.
- (3) **Privacy Fence.** See [102-8120 \(e\)](#) for the requirements of the privacy fence.
- (4) **Shade Trees.** Medium or large shade trees are required at a minimum of 40 feet on center, with at least one shade tree required for each segment of buffer.
- (5) **Landscape.** The buffer area must be landscaped as planting bed. See [102-850](#) for required ground vegetation regulations.

102-8120 (g) HEAVY BUFFER

See [Table 8-4](#) where required. One of the following options must be included within the buffer.

Table 8-4. Side & Rear Buffer Required

BUFFER REQUIRED ON LOTS ZONED:	ABUTTING ZONES:									
	I	IX	MX-S	MX-D, MX-N	RX-TOD, RX-D	NX2	RX-N	NX1, N	P1	P2, P3
I	-	LIGHT	HEAVY	HEAVY	HEAVY	HEAVY	HEAVY	HEAVY	HEAVY	HEAVY
IX	-	-	HEAVY	HEAVY	HEAVY	HEAVY	HEAVY	HEAVY	HEAVY	HEAVY
MX-S	-	-	-	-	-	LIGHT	LIGHT	LIGHT	LIGHT	LIGHT
MX-D, MX-N	-	-	-	-	-	FENCE	FENCE	FENCE	FENCE	FENCE
RX-TOD, RX-D	-	-	-	-	-	LIGHT	LIGHT	LIGHT	LIGHT	FENCE
NX2	-	-	-	-	-	-	LIGHT	LIGHT	LIGHT	-
RX-N	-	-	-	-	-	-	-	LIGHT	LIGHT	LIGHT
NX1, N	-	-	-	-	-	-	-	-	-	-
P1	-	-	-	-	-	-	-	-	-	-
P2, P3	-	-	-	-	LIGHT	LIGHT	LIGHT	LIGHT	LIGHT	-

See [102-8120 \(d\)](#) for activities triggering buffer requirement.

- (1) **Intent.** The heavy buffer is intended for use in special instances where extensive screening of both visual and noise impacts is needed to protect abutting uses.
- (2) **Buffer Depth.** A minimum 7.5-foot width buffer, measured from the lot line onto the subject lot, is required. See [102-850](#) for required ground vegetation.
- (3) **Privacy Wall Option.** A minimum 6-foot, maximum 8-foot high opaque, masonry wall screening the activity. Concrete panels and concrete masonry units are not allowed, except faced on all sides with brick or stone. See [102-850](#) for required ground vegetation.
- (4) **Landscape Option.** The following elements must be included within the buffer. See [Figure 8-D](#) for illustration.
 - a. **Fence and Hedge.** An open picket steel or PVC fence, minimum 6-foot in height, black, gray, or dark green in color. The fence must be a minimum of 25 percent and a maximum of 60 percent opaque. Masonry columns (maximum 2.5 feet in width) and base (maximum 18 inches in height) are allowed, but not required.
 - b. **Shade Trees.** Medium or large shade trees are required at a minimum of 40 feet on center, with at least one shade tree required for each segment of buffer.
 - c. **Hedge.** A continuous hedge is required, consisting of a double row of evergreen shrubs with a minimum mature width of 24 inches each, spaced no more than 36 inches on center, and height maintained between 48 and 72 inches.

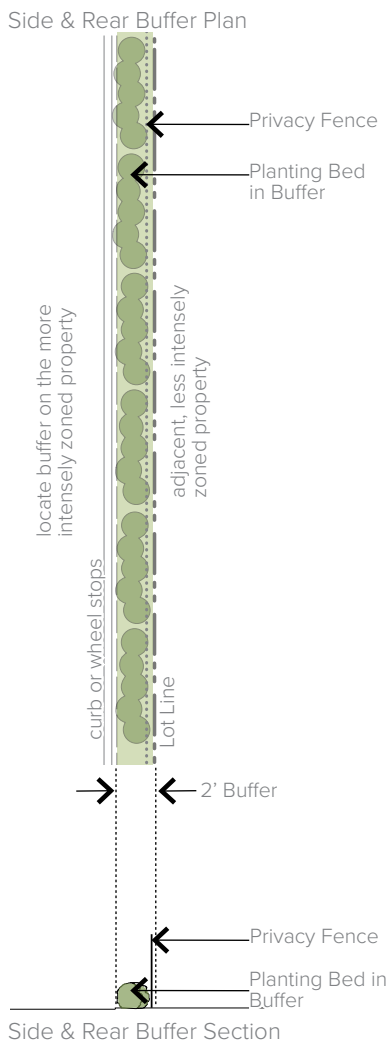


Figure 8-B. Fence Buffer

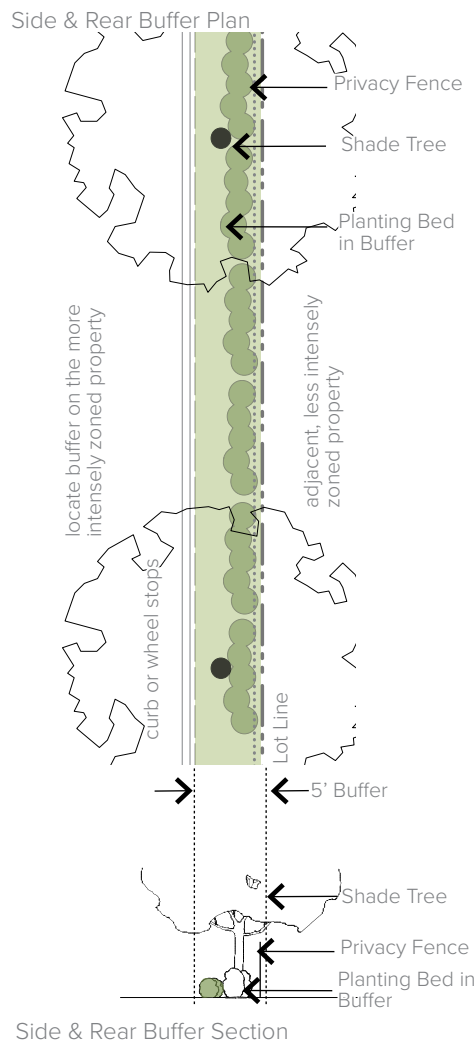


Figure 8-C. Light Buffer

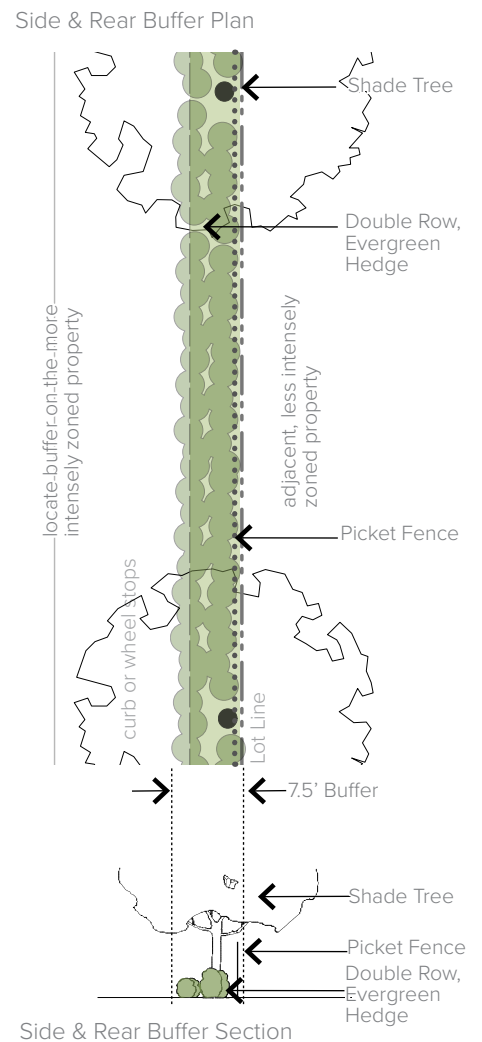


Figure 8-D. Heavy Buffer

102-8130 Interior Parking Lot Landscape

Parking lot interior is the area dedicated to parking on a given parcel as measured from edge of pavement to edge of pavement, and including any islands or medians. See [Figure 8-E](#) for illustration of these requirements.

102-8130 (a) INTENT

To provide shading of pavement surfaces to reduce heat island effects and to improve the appearance of parking lots by breaking up the large expanses of pavement with trees and landscaped islands.

102-8130 (b) APPLICABILITY

All off-street surface parking lots in all zones with more than 10 spaces and/or more than one drive aisle must meet the interior parking lot regulations.

- (1) See [102-8110](#) for perimeter buffer along street frontages and [102-8120](#) for perimeter buffers at side and rear lot lines.
- (2) A administrative exception may be approved when the number of required off-street parking spaces on a lot conflicts with the provision of the required landscape islands. An off-street parking space shall take precedence over a required landscape island; however, the parking lot must meet the shading requirement of [102-8130 \(d\)\(6\)d](#).

102-8130 (c) EXISTING VEGETATION

Existing vegetation may be credited toward these requirements through a administrative exception process.

102-8130 (d) REQUIRED LANDSCAPE ISLANDS

- (1) **Terminal End Islands.** Landscape islands are required at the terminal ends of freestanding rows or bays of parking. Freestanding rows or bays of parking are those not abutting the parking lot perimeter or building face, and may have a single or double row of parking.
- (2) **Row Islands.** For rows of parking with more than 8 spaces, a landscape island is required for every 9th parking space with result of no more than 8 continuous parking spaces in a row without a landscape island.
- (3) **Island Width.** The minimum width for an island is 5 feet.
 - a. Islands less than 15 feet in width **must utilize suspended pavement system** per [102-820 \(d\)](#) under any paved surface within a tree’s critical root zone.
 - b. Islands less than 9 feet in width must install an **aeration system and utilize permeable paving** within the mature tree canopy area.
- (4) **Required Island Trees.** A minimum of 1 medium or large shade tree is required within each island.

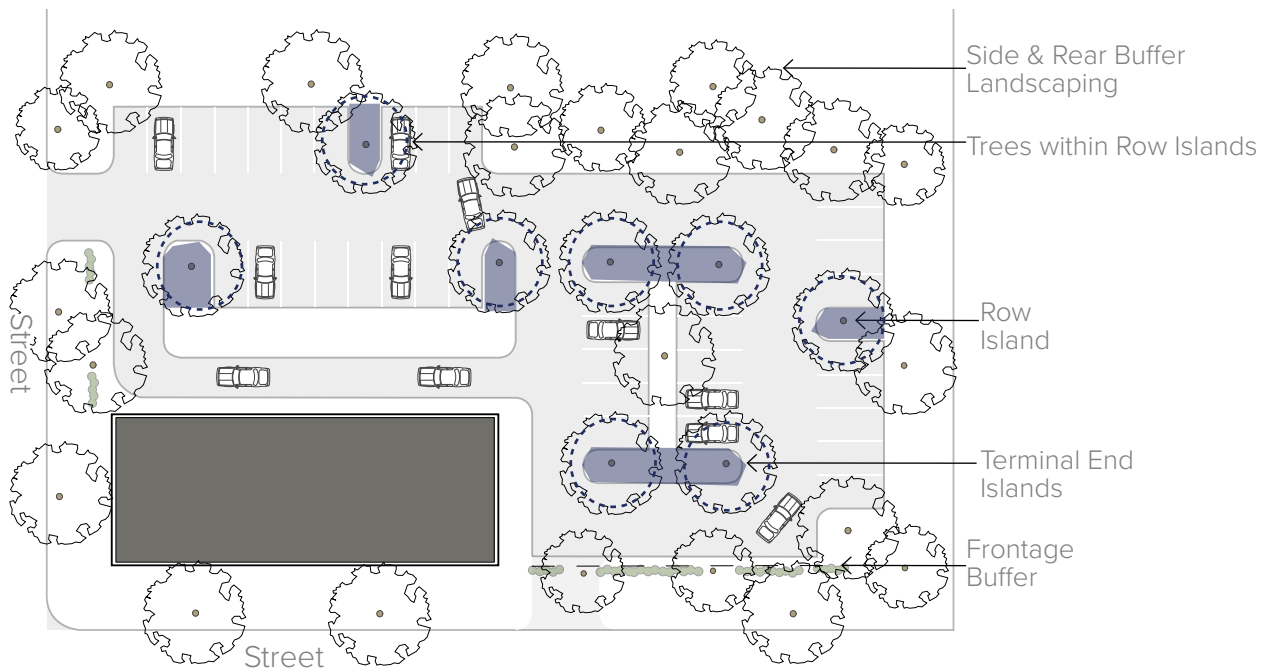


Figure 8-E. Interior Parking Lot Landscape

- (5) **Stormwater.** Islands may accommodate stormwater detention or retention areas, rain gardens, or other infiltration systems.
- (6) **Tree Requirements**
 - a. **50-foot Rule.** Each parking space must be located within 50 feet of a tree planted within the parking lot interior.
 - b. **5-Space Rule.** For parking lots with more than 40 spaces, a minimum of 1 shade tree for every 5 parking spaces must be planted within the parking lot interior or within 4 feet of the parking lot’s edge.
 - c. **Buffer Trees.** Trees within any required buffer area may not be utilized to meet these requirements.
 - d. **Shading Requirement.** At maturity, tree canopies must shade a minimum of 30 percent of the interior of the parking lot. Refer to [Table 8-2](#) for mature canopy sizes.

102-8130 (e) LANDSCAPE AREAS

Areas in the parking lot not specifically designed for use as drive aisles, parking spaces, loading, refuse, or sidewalks must be unpaved, landscape areas. See [102-850](#) for required ground vegetation.

102-8140 Screening of Refuse & Utility Areas

102-8140 (a) INTENT

To reduce the visibility of open storage, refuse areas, loading, and utility appurtenances from public areas and adjacent properties.

102-8140 (b) APPLICABILITY

All dumpsters, loading areas, open storage, refuse areas, mechanical equipment, and utility appurtenances in all zones must be screened as follows.

102-8140 (c) LOCATION

- (1) **Refuse and Recycling.** See [Article 2](#) and [Article 3](#) for building type regulations, for the allowed location of refuse and recycling areas,
- (2) **Loading.** See [Article 2](#) and [Article 3](#) for building type regulations, for the allowed location of loading areas.
- (3) **Utility Equipment.** See [102-760](#) for the allowed location of mechanical and utility equipment and appurtenances.

102-8140 (d) LOADING AND REFUSE AREAS

- (1) **Concrete Pad.** For all loading, refuse and recycling areas, a concrete pad is required.
- (2) **Opaque Screen.** An opaque screen wall is required around 3 sides of the area to be screened of the following materials:
 - a. If visible from the street or public space, the screen wall must be masonry construction matching any masonry from the building’s street facade design.
 - b. If fully screened from the street, the screen wall may be constructed of wood fencing.
- (3) **Screen Height.** The height of the screen wall must be tall enough to screen the use inside, and a minimum of 6 feet. The zoning administrator may request additional height as needed for complete screening.
- (4) **Visible Openings.** Openings visible from the public way or adjacent properties must include opaque gates.
- (5) **Landscape.** If the area is located within a larger paved area, such as a parking lot, the following applies:
 - a. A landscape buffer at least 5 feet must be located on 3 sides.
 - b. One shade tree must be provided within the landscape buffer.

- c. The shade tree must be located per the island width requirements in XXX. This tree may be utilized to meet the minimum interior parking lot requirements, if located as such.

102-8140 (e) UTILITIES

(1) Large Private Mechanical Equipment.

- a. **Definition.** Large private mechanical equipment includes ground-mounted equipment at least 4 feet in height.
- b. **Fence or Wall.** An opaque wood fence or brick-faced masonry screen wall is required on all sides facing street right-of-way.
- c. **Shade Trees.** Medium or large shade trees are required at a minimum of 40 feet on center, with at least one shade tree required for each segment of buffer.
- d. **Shrubs.** Planting beds consisting of a double row of mixed shrubs with a minimum mature width of 24 inches each, spaced no more than 36 inches on center, and height maintained between 30 and 72 inches.

(2) Small Private Mechanical Equipment.

- a. **Definition.** Small private mechanical equipment includes ground-mounted equipment less than 4 feet in height.
- b. **Screening.** Landscape screening with shrubs spaced no more than 30” on center must be utilized, and the equipment must be fully screened within 2 years.

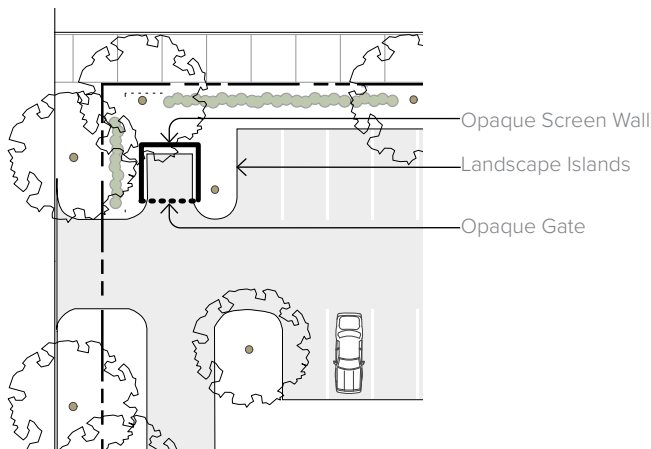


Figure 8-F. Screening of Refuse Area

[page intentionally blank]

ARTICLE 11 SUBDIVISION DESIGN & IMPROVEMENTS

102-1110	General	11-2
102-1120	Comprehensive Plan	11-2
102-1130	Improvements	11-2
102-1140	Streets	11-2
102-1150	Sidewalks	11-4
102-1160	Pedestrian Ways	11-4
102-1170	Water Supply	11-4
102-1180	Sewage Disposal	11-4
102-1190	Drainage	11-4
102-11100	Easements	11-4
102-11110	Street Trees	11-4
102-11120	Street Names	11-5
102-11130	Blocks	11-5
102-11140	Lots	11-5
102-11150	Parkland Dedication	11-5

This article is based on the April 12, 2021 version of the Minnesota Department of Natural Resources Model Floodplain Ordinance. The only changes are renumbering, a couple of section headings, and the relocation of definitions to the "general" section.

102-1110 General
.....

The regulations of this article constitute the minimum design and improvement standards for subdivisions within the city.

102-1120 Comprehensive Plan
.....

All proposed subdivisions must conform to the comprehensive plan.

102-1130 Improvements¹
.....

102-1130 (a) GENERAL

Whenever a subdivision is intended for residential use, the subdivider shall at the subdivider's expense do or perform one or more of the actions specified in this subsection with relation to the preliminary plat.

102-1130 (b) PLANS AND SPECIFICATIONS

The subdivider must submit detailed plans, data specifications and other information indicating the intended method of installation of all required public improvements. Such plans and specifications are subject to review and approval by the engineer.

102-1130 (c) PUBLIC IMPROVEMENTS

- (1) In any proposed subdivision that is intended or zoned for any residential use, the subdivider must at the subdivider's expense, under the supervision and subject to the approval of the city engineer, cause the extension, construction and installation of all required public improvements to every parcel resulting from such subdivision intended for present development.
- (2) The subdivider may petition the city council for such installation under the appropriate state statutes or under the city charter and cause the land benefited from such public improvements to be specially assessed for the cost of such improvements.
- (3) In both cases the subdivider or developer must deposit with the city clerk, either a cash amount or a surety bond approved by the city attorney equal to at least 150 percent of the total cost of such required public improvements including all engineering, legal and other fees and expenses in connection therewith to guarantee the installation of such improvements. The amount of cash or of the surety bond required must be based on an estimate made by the city engineer in the same manner as the method provided by statute in such cases in the engineer's preliminary report necessary for the installation of such utilities by the city, pursuant to

the statutes in such cases. The cash amount or surety bond will not be released until one year after final acceptance as a means to provide a guaranteed one-year maintenance period.

102-1130 (d) INSTALLATION BY SUBDIVIDER

- (1) In all proposed subdivisions other than those intended for residential use, the subdivider may be permitted at the subdivider's expense to install, or cause to be installed, any or all such required public improvements in any part, or all of the subdivision, provided that such construction conforms in all respects with applicable city standards, including applicable statutes and requirements of this development code, and such plans are prepared at the expense of the subdivider by a competent engineer and thereafter submitted to and approved by the city engineer.
- (2) Thereafter, prior to the issuance of any building permit upon any part of such subdivision, the subdivider or the developer must deposit with the clerk either cash or a surety bond approved by the city attorney in an amount determined by the city engineer by the same method as set forth in [102-1130 \(c\)](#), such deposit to guarantee the payment of the entire cost of such proposed installation designed to serve that part of such subdivision covered by the application for such building permit, pursuant to the approved plans on file.
- (3) One year after installation of all such required public improvements, pursuant to such approved plan, such deposit or bond will be returned or canceled by the city in accordance with [102-1130 \(c\)](#) upon proof furnished by such subdivider or developer that the entire cost of such installation and construction as required by the city has been paid in full, and that such installation and construction was completed pursuant to plan and approved by the city engineer.

102-1140 Streets
.....

102-1140 (a) ARRANGEMENT

The arrangement of all streets shall conform to the city plan and provide a continuation of existing and planned streets within and adjacent to the city, provide for a reasonable circulation of traffic and shall be appropriately located in relation to topography, run-off of stormwater and to proposed uses of the land to be served. Where adjoining areas are not subdivided, but may be subdivided, the arrangement of streets shall make provision for the proper projection of streets into adjoining areas.

¹ Editor's note: These provisions seem somewhat confusing/ convoluted. Let's discuss the real intent/meaning.

102-1140 (b) RIGHT-OF-WAY AND PAVEMENT WIDTH

- (1) **Dimensions.** Streets must comply with the minimum right-of-way and pavement widths established in [Table 11-1](#).

Table 11-1. Right-of-Way and Pavement Widths

CLASSIFICATION	MIN. RIGHT-OF-WAY	MIN. PAVEMENT
Marginal Access	60 ft	32 ft
Minor	66 ft	36 ft
Collector	74 ft	48–52 ft
Cul-de-Sac	50 ft (Radius)	40 ft (Radius)
Major Thoroughfare and Arterial	As shown on plan	

- (2) **Deflections.** All centerline gradients shall be at least 0.3 percent and shall not exceed the maximum established in [Table 11-2](#).

Table 11-2. Maximum Grades

CLASSIFICATION	MAXIMUM GRADIENT (%)
Major Thoroughfare, Arterial, Collector, Marginal Access	4
Minor and Service	6

- (3) **Vertical Curves.** Different connecting street gradients must be connected by vertical curves. The minimum length of these curves (in feet) must be at least 20 times the algebraic difference in the percent of grade of the 2 adjacent slopes.
- (4) **Street Jogs.** Street jogs of minor and service streets must have a minimum centerline offset of 150 feet. Street jogs of all other streets are prohibited.
- (5) **Cul-de-Sacs.** Cul-de-sac streets may not exceed 500 feet in length, measured along the cul-de-sac street center line from the intersection of origin to end of right-of-way.
- (6) **Service Streets.** When a subdivision abuts or contains an existing or planned major thoroughfare or a railroad right-of-way, the city council may require a street approximately parallel to and on each side of such right-of-way for adequate protection of properties and to afford separation of through and local traffic. Such service streets must be located at a distance from the major thoroughfare or railroad right-of-way suitable for the appropriate use of the intervening land, as for park purposes in neighborhood (residential) zones, or for mixed-use, commercial, or industrial purposes in other zones. Such distances must be determined with due

regard for the requirements of approach grades and future grade separations.

- (7) **Half Streets.** Half streets are prohibited, except when the city deems them essential to the reasonable development of the subdivision in conformity with the other requirements of this article or when the city finds it will be practicable to require the dedication of the remaining half street when the adjoining property is subdivided. Wherever there is a half street adjacent to a tract to be subdivided, the other half of the street must be platted within such tract prior to the granting of access.
- (8) **Reserve Strips.** Reserve strips controlling access to rights-of-way are prohibited.
- (9) **Private Rights-of-Way.** Private rights-of-way are prohibited and public improvements are prohibited in private rights-of-way.

102-1140 (c) ALLEYS

- (1) **Location.** A public alley may be required in any block where industrial, commercial, mixed-use, or multi-unit residential property abuts only on one major thoroughfare or a major street. Alleys in N-zoned areas are optional.
- (2) **Widths.** Alley right-of-way widths must be at least 20 feet.
- (3) **Grades.** All centerline gradients must be at least 0.5% and may not exceed 6%.

102-1140 (d) INTERSECTIONS

- (1) **Angle.** The angle formed by the intersection of streets may not be less than 60 degrees, with 90 degree intersections preferred.
- (2) **Corners.** Intersections of more than 4 corners shall not be approved.
- (3) **Rounding**
 - a. Street intersections must have a minimum radius of 15 feet, unless otherwise expressly stated in this development code.
 - b. Alley-street intersections must have a minimum radius of 6 feet.
 - c. Corners at the entrances to the turnaround portions of cul-de-sacs must have a minimum radius of 15 feet.

102-1140 (e) CURBS AND GUTTERS

Curb and gutter must be provided on both sides of all

streets as a part of the required street surface improvement in accordance with the standards of the city.

102-1140 (f) BOULEVARD LANDSCAPE

Boulevard sodding or other city-approved landscape treatment must be included as a part of the required street improvements along all boulevard streets.

102-1150 Sidewalks

102-1150 (a) WIDTH

Sidewalks required to be included as part of all required street improvements. Sidewalks must comply with the minimum width standards of [Table 11-3](#) and all other applicable state and federal standards.

Table 11-3. Sidewalk Widths

ZONE	MINIMUM WIDTH (ft)
N, NX, P, and I	6
ALL OTHER	10

102-1150 (b) GRADES

Sidewalks must have a slope of at least one quarter-inch per foot away from the property line. The maximum profile grade may not exceed 6%.

102-1160 Pedestrian Ways

In blocks of over 900 feet in length, pedestrian crosswalks through the blocks, and at least 10 feet in width, may be required by the city council when deemed necessary to public health, convenience and welfare. Pedestrian ways must be surfaced in accordance with standards determined by the city engineer.

102-1170 Water Supply

102-1170 (a) PUBLIC

Extensions of the public water supply system must be designed to provide public water service to each lot within the subdivision. The design of such extensions must be in accordance with the standards of the city.

102-1170 (b) PRIVATE

The design and installation of any private water system is subject to approval of the council. Private water systems and community well systems, where allowed, must be constructed and maintained according to state laws and this development code.

102-1180 Sewage Disposal

102-1180 (a) PUBLIC

Extensions of the public sanitary sewer system must be designed to provide sewer service to each lot within the subdivision. The design of such extensions must be in accordance with the standards of the city and all applicable state codes.

102-1180 (b) PRIVATE

Private or group sewage systems are subject to approval by the city council. When approved, such private systems must comply with state laws and this development code.

102-1190 Drainage

A complete and adequate design drainage system is required for all subdivisions. Such systems must be designed in conformity with all applicable standards of the city and are subject to the approval of the city engineer and other governing agencies.

102-11100 Easements

102-11100 (a) UTILITIES

Easements at least 12 feet wide, centered on rear and other lot lines, must be provided for utilities where necessary. Such easements must be dedicated to the city by appropriate language in the owner's certificate. Utility easements must have continuity of alignment from block to block. Deflection point easements for pole-line anchors must also be provided where necessary. Easements shall be provided along property lines from utility easements on rear lot lines to rights-of-way so as to provide for a street light interval not to exceed 500 feet or as may be required by the city.

102-11100 (b) DRAINAGE

Easements must be provided along each side of the center line of any water course or drainage channel whether or not shown on city plans, to a width sufficient to provide proper maintenance and protection and to provide for stormwater run-off and installation and maintenance of storm sewers. Required drainage easements must shall be dedicated to the city by appropriate language in the owner's certificate.

102-11110 Street Trees

At least one street tree must be provided per lot. Street tree sizes and species must comply with the provisions of this development code.

102-11120 Street Names
.....

Names of new streets may not duplicate existing or platted street names unless a new street is a continuation of or in alignment with the existing or platted street, in which event such street extension must bear the same name of the existing or platted street that is being extended.

102-11130 Blocks
.....

102-11130 (a) LENGTH

Block lengths may not exceed ~~1,800 feet nor be less than 400 600~~ feet in length. ~~In nonresidential areas, block length and width shall be platted as may be determined to be the most suitable for the kind of occupancy intended.~~

102-11130 (b) ARRANGEMENT

Blocks must be so designed as to provide 2 tiers of lots, unless the block adjoins a railroad, major thoroughfare, limited access highway, river or park, in which case the block may have a single tier of lots.

102-11140 Lots
.....

102-11140 (a) LOCATION

All lots shall have frontage on a publicly dedicated street or a street that has received legal status as such.

102-11140 (b) SIZE

The lot dimensions in subdivisions designed shall not be less than the minimum dimensions required to secure the minimum lot area specified in chapter 102. For the purposes of complying with the lot size requirements of the city's subdivision and zoning regulations, no portion of any wetlands in excess of 50 percent of the total area of a lot will be taken into account.

102-11140 (c) BUTT LOTS

Butt lots shall be platted at least five feet wider than the average width of interior lots in the block.

102-11140 (d) CORNER LOTS

Corner lots shall be platted in width to compensate for the increased side yard required over an interior lot for the district in which the land is located.

102-11140 (e) SIDE LOT LINES

Side lines of lots shall be substantially at right angles to the street line.

102-11140 (f) WATERCOURSES

Lots abutting upon a watercourse, drainage way, channel or stream shall have an additional depth or width, as required, to assure house sites that are not subject to flooding.

102-11140 (g) NATURAL FEATURES

In the subdividing of any land, regard shall be shown for all natural features, such as tree growth, watercourses, historic spots or similar conditions, which if preserved will add attractiveness and stability to the proposed development.

102-11140 (h) LOT REMNANTS

All remnants of lots below minimum size after subdividing any tract must be added to adjacent lots, or a plan shown on the plat restricting the purpose and use thereof.

102-11140 (i) LOT SHAPE

Lots shall be substantially square, rectangle or triangular. Lots shall have a minimum of three sides and a maximum of six sides to allow for utilities and drainage easements. The shape of the lots shall generally conform to the lot shapes in the area.

102-11140 (j) FLAG LOTS

Flag lots are prohibited in all subdivisions.

102-11150 Parkland Dedication
.....

102-11150 (a) GENERAL REQUIREMENTS

- (1) The parkland dedication requirements of this section apply to all plats, replats and subdivision of land, including waivers of platting (except simple lot line adjustment), and including plats, replats, subdivision and waivers of platting which combine previously subdivided or platted parcels of land into larger or fewer parcels of land.
- (2) These parkland dedication provisions require that reasonable portion of such land be set aside and dedicated by the owner to the general public as open space for parks, playgrounds, trails, ~~wetlands~~ or usable open space. This required parkland dedication is in addition to the property dedicated for streets, alleys or other public ways.
- (3) It is hereby declared that, as a general rule, it is reasonable to require dedication of land equal in area to the amounts specified in [102-11150 \(b\)](#).
- (4) Land dedicated pursuant to these parkland dedication provisions must be suitable for public use for parks, playgrounds, trails, ~~wetlands~~ or usable open space and the city is not required to accept land that will not be usable for such purposes or that would require extensive expenditure on the part of the public to make them usable.

102-11150 (b) DEDICATION FORMULA.

- (1) **Residential.** The parkland dedication requirements established in [102-11150 \(b\)](#) apply to all residential subdivisions.

Table 11-4. Parkland Dedication (Residential)

DENSITY (Dwelling Units per Acre)	REQUIRED LAND DEDICATION (Percent)
0-5	10
6-10	11
11-15	12
16 or more	13

- (2) **Nonresidential.** Commercial, mixed-use, industrial and other subdivisions must dedicate at least 5% of the total land area.

102-11150 (c) CASH IN LIEU OF LAND DEDICATION.

- (1) Cash in lieu of land dedication may be accepted for residential subdivisions in an amount set by city council resolution.
- (2) Cash in lieu of land dedication may be accepted for nonresidential subdivisions in an amount determined by the estimated fair market value of the property to be dedicated to the city as calculated by the county assessor, as of the date of the approval of the final plat, replat, subdivision or waiver of plating. The estimate of fair market value must include value added to the property by utilities, streets, and other public improvements serving the land, but excludes value added by other improvements to the land.
- (3) The city has the option to require cash contributions in lieu of accepting dedication of land or the city may require a combination of land dedication and cash payment.
- (4) Any cash contribution received pursuant to subsection (g) of this section shall be placed in a separate city fund and used only for park, playground, trail, open space, urban forestry purposes, or for public recreational or cultural facilities as defined and outlined on M.S.A. § 471.191.
- (5) Gifts of real or personal property dedicated for park, playground, trail, open space or urban forestry purposes, that are accepted in accordance with M.S.A. § 465.03 be placed in the same fund established in subsection (i) of this section.

102-11150 (d) CREDITS

In establishing a reasonable portion to be dedicated, the

city may give credit, for open space, park, recreational or common areas and facilities reserved for the subdivision.

102-11150 (e) COMPREHENSIVE PLAN

Land dedicated under these provisions must reasonably conform to the city's comprehensive plan. The planning commission and park board must review proposed land dedications and proposed cash in-lieu payments and recommend to the city council appropriate action.

102-11150 (f) CONVEYANCE

Prior to the dedication of the required property, the subdivider must provide the city with an acceptable title opinion or title insurance policy addressed to the city to ensure the title and the city's proposed interest in the property. In any dedication of required land, the subdivider must record all deeds for conveyance of the property to the city at the same time as the final plat or other appropriate division documents.

102-11150 (g) APPLICABILITY; TIMING

The requirements of this section apply at the time of the final approval of the plat, replat, subdivision or waiver of platting and apply to any plat, replat, subdivision or waiver of platting receiving final approval after the effective date of the ordinance from which this article is derived.

102-11150 (h) WAIVERS AND REDUCTIONS

The city council, at its sole discretion, is authorized to waive or reduce the parkland dedication requirements of this section upon determining that extraordinary, site-specific circumstances exist to justify the waiver or reduction, when the subdivision includes a city-assisted development or redevelopment area or achieves some other public purpose and the requirements would create an undue financial hardship for the project.

ARTICLE 12 FLOOD HAZARD AREAS

102-1210	General Provisions	12-2
102-1220	Districts Established	12-5
102-1230	Generally Applicable Regulations	12-5
102-1240	Floodway District (FW)	12-6
102-1250	Flood Fringe District (FF)	12-7
102-1260	General Floodplain District (GF)	12-8
102-1270	Subdivisions and Developments	12-9
102-1280	Utility & Transportation Facilities	12-9
102-1290	Manufactured Homes and RVs	12-10
102-12100	Administration	12-10
102-12110	Nonconformities	12-13
102-12120	Violations and Penalties	12-13
102-12130	Amendments	12-13

This article is based on the April 12, 2021 version of the Minnesota Department of Natural Resources Model Floodplain Ordinance. The only changes are renumbering, a couple of section headings, and the relocation of definitions to the "general" section.

102-1210 General Provisions
.....

102-1210 (a) STATUTORY AUTHORIZATION

The flood hazard area regulations of this article are adopted pursuant to the authorization and policies contained in Minnesota Statutes, Chapter 103F; Minnesota Rules, Parts 6120.5000 – 6120.6200; the rules and regulations of the National Flood Insurance Program codified as 44 Code of Federal Regulations, Parts 59 -78; and the planning and zoning enabling legislation in Minnesota Statutes Chapter 462.

102-1210 (b) PURPOSE

- (1) The flood hazard area regulations of this article regulate development in the flood hazard areas of the city. These flood hazard areas are subject to periodic inundation, which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base. It is the purpose of the flood hazard area regulations of this article to promote the public health, safety, and general welfare by minimizing these losses and disruptions.
- (2) The flood hazard area regulations of this article are adopted to maintain the community’s eligibility for participation in the National Flood Insurance Program.
- (3) The flood hazard area regulations of this article are also intended to preserve the natural characteristics and functions of watercourses and floodplains in order to moderate flood and stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits and enhance community and economic development.

102-1210 (c) APPLICABILITY

- (1) The flood hazard area regulations of this article apply to all lands within the jurisdiction of the city lying within the boundaries of the Floodway, Flood Fringe and General Floodplain overlay districts.
- (2) The standards imposed in the overlay districts are in addition to any other requirements in the flood hazard area regulations of this article. In case of a conflict, the more restrictive standards will apply.
- (3) Where a conflict exists between the floodplain limits illustrated on the official floodplain maps and actual field conditions, the base flood elevations shall be the governing factor in locating the outer boundaries of the 1-percent annual chance floodplain.

- (4) The regulatory limits of the district boundaries shall be further extended outward based on the horizontal extension of the regulatory flood protection elevation (RFPE).
- (5) Persons contesting the location of district boundaries will be given a reasonable opportunity to present their case to the city and to submit technical evidence.

102-1210 (d) MAPS

The following maps together with all attached material are hereby adopted by reference and declared to be a part of the official zoning map and this development code. The attached material includes the flood insurance study for Hennepin County, Minnesota, and Incorporated Areas, dated November 4, 2016 and the flood insurance rate map panels enumerated below, dated November 4, 2016, all prepared by the Federal Emergency Management Agency. These materials are on file in the office of the city clerk. Effective flood insurance rate map panels:

- (1) 27053C0333F.
- (2) 27053C0334F.
- (3) 27053C0341F.
- (4) 27053C0342F.
- (5) 27053C0343F.
- (6) 27053C0344F.
- (7) 27053C0361F.

102-1210 (e) WARNING AND DISCLAIMER

The flood hazard area regulations of this article do not imply that areas outside the floodplain districts or land uses permitted within such districts will be free from flooding or flood damages. The flood hazard area regulations of this article do not create liability on the part of the city or its officers or employees for any flood damages that result from reliance on the flood hazard area regulations of this article or any administrative decision lawfully made hereunder.

102-1210 (f) DETACHMENTS

The flood insurance rate map panels adopted by reference above will include floodplain areas that lie inside the corporate boundaries of municipalities at the time of adoption of the flood hazard area regulations of this article. If any of these floodplain land areas are detached from a municipality and come under the jurisdiction of [community] after the date of adoption of the flood hazard area regulations of this article, the newly detached floodplain lands will be subject to the provisions of the flood hazard area regulations of this article immediately upon the date of

detachment.

102-1210 (g) DEFINITIONS

The definitions of this section apply in administering, interpreting and enforcing the flood hazard area regulations of this article. If the definitions of this section conflict with the general definitions of terms in ~~XXX~~, the definitions of this section govern.

- (1) **Accessory Use or Structure.** A use or structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal use or structure.
- (2) **Base Flood.** The flood having a one percent chance of being equaled or exceeded in any given year. "Base flood" is synonymous with the term "regional flood" used in Minnesota Rules, Part 6120.5000.
- (3) **Base Flood Elevation (BFE).** The elevation of the base flood or one-percent annual chance flood. The term "base flood elevation" is used in the flood insurance study.
- (4) **Basement.** Any area of a structure, including crawl spaces, having its floor or base subgrade (below ground level) on all four sides, regardless of the depth of excavation below ground level.
- (5) **Conditional Use.** A specific type of structure or land use listed in this development code that may be allowed but only after an in-depth review procedure and with appropriate conditions or restrictions as provided in this development code and upon a finding that:
 - a. Certain conditions as detailed in this development code exist, and
 - b. The structure and/or land use conform to the comprehensive land use plan and are compatible with the existing neighborhood.
- (6) **Critical Facilities.** Facilities necessary to a community's public health and safety, those that store or produce highly volatile, toxic or water-reactive materials, and those that house occupants that may be insufficiently mobile to avoid loss of life or injury. Examples of critical facilities include hospitals, correctional facilities, schools, daycare facilities, nursing homes, fire and police stations, wastewater treatment facilities, public electric utilities, water plants, fuel storage facilities, and waste handling and storage facilities.
- (7) **Development.** Any manmade change to improved or unimproved real estate, including buildings or other structures, mining, dredging, filling, grading,

paving, excavation or drilling operations, or storage of equipment or materials.

- (8) **Equal Degree of Encroachment.** A method of determining the location of floodway boundaries so that floodplain lands on both sides of a stream are capable of conveying a proportionate share of flood flows.
- (9) **Farm Fence.** An open type of fence of posts and horizontally run wire, further defined by Minnesota Statutes, Section 344.02, Subd. 1(a-d), and is not considered to be a structure under the flood hazard area regulations of this article. Fences that have the potential to obstruct flood flows, such as chain link fences and rigid walls, are regulated as structures under the flood hazard area regulations of this article.
- (10) **Flood.** A temporary increase in the flow or stage of a stream or in the stage of a wetland or lake that results in the inundation of normally dry areas.
- (11) **Flood Frequency.** The frequency for which it is expected that a specific flood stage or discharge may be equaled or exceeded.
- (12) **Flood Fringe.** The portion of the one - percent annual chance floodplain located outside of the floodway. Flood fringe is synonymous with the term "floodway fringe" used in the Flood Insurance Study.
- (13) **Flood Hazard Areas.** A general term, referring to any of the Floodway, Flood Fringe, or General Floodplain districts.
- (14) **Flood Insurance Rate Map.** An official map on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).
- (15) **Flood Insurance Study.** The study referenced in [102-1210 \(c\)](#), which is an examination, evaluation and determination of flood hazards, and if appropriate, corresponding surface elevations, or an examination, evaluation, and determination of mudslide (i.e. mudflow) and/or flood-related erosion hazards.
- (16) **Flood Prone Area.** Any land susceptible to being inundated by water from any source.
- (17) **Floodplain.** The beds and the areas adjoining a wetland, lake or watercourse which have been or hereafter may be covered by the base flood.

- (18) **Floodproofing.** A combination of structural provisions, changes, or adjustments to properties and structures subject to flooding, primarily for the reduction or elimination of flood damages.
- (19) **Floodway.** The bed of a wetland or lake and the channel of a watercourse and those portions of the adjoining floodplain which are reasonably required to carry or store the base flood discharge.
- (20) **Lowest Floor.** The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of 44 Code of Federal Regulations, Part 60.3.
- (21) **Manufactured Home.** A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include the term "recreational vehicle."
- (22) **New Construction.** Structures, including additions and improvements, and placement of manufactured homes, for which the start of construction commenced on or after the effective date of the flood hazard area regulations of this article.
- (23) **Obstruction.** Any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel modification, culvert, building, wire, fence, stockpile, refuse, fill, structure, or matter in, along, across, or projecting into any channel, watercourse, or regulatory floodplain which may impede, retard, or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water.
- (24) **Principal Use or Structure.** All uses or structures that are not accessory uses or structures.
- (25) **Reach.** A hydraulic engineering term to describe a longitudinal segment of a stream or river influenced by a natural or man-made obstruction. In an urban area, the segment of a stream or river between two consecutive bridge crossings would most typically constitute a reach.
- (26) **Recreational Vehicle.** A vehicle that is built on a single chassis, is 400 square feet or less when measured at the largest horizontal projection, is designed to be self-propelled or permanently towable by a light duty truck, and is designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use. For the purposes of the flood hazard area regulations of this article, the term recreational vehicle is synonymous with the term "travel trailer/travel vehicle."
- (27) **Regulatory Flood Protection Elevation (RFPE).** An elevation not less than one foot above the elevation of the base flood plus any increases in flood elevation caused by encroachments on the floodplain that result from designation of a floodway.
- (28) **Repetitive Loss.** Flood related damages sustained by a structure on two separate occasions during a ten year period for which the cost of repairs at the time of each such flood event on the average equals or exceeds 25% of the market value of the structure before the damage occurred.
- (29) **Special Flood Hazard Area.** A term used for flood insurance purposes, and synonymous with the term base flood or 1-percent annual chance floodplain.
- (30) **Start of Construction.** Includes substantial improvement, and means the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement that occurred before the permit's expiration date. The actual start is either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, foundations, or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.
- (31) **Structure.** Anything constructed or erected on the ground or attached to the ground or on-site utilities, including, but not limited to, buildings, factories, sheds, detached garages, cabins, decks manufactured homes, recreational vehicles not considered travel ready as detailed in Section 10.22 of the flood hazard area regulations of this article and other similar items.

- (32) **Substantial Damage.** Damage of any origin sustained by a structure where the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- (33) **Substantial Improvement.** Within any consecutive 365-day period, any reconstruction, rehabilitation (including normal maintenance and repair), repair after damage, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures that have incurred “substantial damage,” regardless of the actual repair work performed. The term does not, however, include either:
 - a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
 - b. Any alteration of a “historic structure,” provided that the alteration will not preclude the structure’s continued designation as a “historic structure.” For the purpose of the flood hazard area regulations of this article , “historic structure” is as defined in 44 Code of Federal Regulations, Part 59.1.

102-1220 Districts Established

102-1220 (a) FLOODWAY DISTRICT

Those areas within Zones AE delineated within floodway areas as shown on the Flood Insurance Rate Maps and Flood Boundary and Floodway Maps adopted in [102-1210 \(c\)](#).

102-1220 (b) FLOOD FRINGE DISTRICT

Those areas within Zones AE on the Flood Insurance Rate Map and Flood Boundary and Floodway Maps adopted in [102-1210 \(c\)](#), but located outside of the floodway.

102-1220 (c) GENERAL FLOODPLAIN DISTRICT

Those areas within Zone A and AE areas that do not have a floodway delineated as shown on the Flood Insurance Rate Maps adopted in [102-1210 \(c\)](#).

102-1220 (d) APPLICABILITY

When Floodway and Flood Fringe districts are delineated on the floodplain maps, the standards in [102-1240](#) or [102-1250](#) will apply, depending on the location of a property. Locations where Floodway and Flood Fringe districts are not delineated on the floodplain maps are considered to fall within the General Floodplain district and are subject to

compliance with the standards in [102-1260](#).

102-1230 Generally Applicable Regulations

102-1230 (a) MINIMUM DEVELOPMENT STANDARDS

All new development must be:

- (1) Designed (or modified) and adequately anchored to prevent floatation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) Constructed with materials and equipment resistant to flood damage;
- (3) Constructed by methods and practices that minimize flood damage;
- (4) Constructed with electrical, heating, ventilation, duct work, plumbing, and air conditioning equipment and other service facilities elevated at least up to the Regulatory Flood Protection Elevation (RFPE). Water, sewage, electrical, and other utility lines below the RFPE shall be constructed so as to prevent water from entering or accumulating within them during conditions of flooding;
- (5) Reasonably safe from flooding and consistent with the need to minimize flood damage within the flood-prone area;
- (6) Assured to provide adequate drainage to reduce exposure to flood hazards; and
- (7) Designed so that it is not detrimental to uses in adjoining areas.

102-1230 (b) HYDRAULIC CAPACITY

Floodplain developments must not adversely affect the hydraulic capacity of the channel and adjoining floodplain of any tributary watercourse or drainage system.

102-1230 (c) STORAGE OF HAZARDOUS MATERIALS

Materials that, in time of flooding, are buoyant, flammable, explosive, or could be injurious to human, animal, or plant life shall be stored at or above the flood protection elevation, floodproofed, or protected by structural measures consistent with the standards set forth herein. Furthermore, storage of materials likely to cause pollution of the waters, as defined in Minnesota Statutes, Section 115.01, if subject to flooding are prohibited unless adequate safeguards approved by the state water pollution control agency are provided.

102-1230 (d) LOCATION OF CRITICAL FACILITIES

Critical facilities must be located, so that the lowest floor is not less than 2 feet above the base flood elevation, or the

0.2% annual chance flood elevation, whichever is higher.

102-1240 Floodway District (FW)

102-1240 (a) PERMITTED USES

The following uses are permitted in the floodway district if allowed in the underlying zone. Such uses are subject to the permitted use standards set forth in [102-1240 \(b\)](#),

- (1) General farming, pasture, grazing, farm fences, outdoor plant nurseries, horticulture, forestry, sod farming, and wild crop harvesting.
- (2) Loading areas, parking areas, streets, trails, airport landing strips, railroads, bridges, culverts, utility transmission lines and pipelines.
- (3) Open space uses, including but not limited to private and public golf courses, tennis courts, driving ranges, archery ranges, picnic grounds, boat launching ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, hunting and fishing areas, and single or multiple purpose recreational trails.
- (4) Residential yards, lawns, gardens, parking areas, and play areas, provided these uses do not include associated accessory structures.
- (5) Grading or land alterations associated with stabilization projects.

102-1240 (b) STANDARDS FOR PERMITTED USES

Permitted uses must comply with the standards of this subsection as well as all other applicable standards of this development code:

- (1) The use must have a low flood damage potential.
- (2) The use must not involve structures.
- (3) The use must not obstruct flood flows, or increase velocities, stages, or flood damages, as certified by a registered professional engineer.
- (4) Development that will change the course, current or cross section of protected wetlands or public waters is required to obtain a public waters work permit in accordance with Minnesota Statutes, Section 103G.245 or a utility crossing license in accordance with Minnesota Statutes, Section 84.415, from the Department of Natural Resources, or demonstrate that no permit is required, before applying for a local permit.
- (5) Any facility that will be used by employees or the general public must be designed with a flood warning

system that provides adequate time for evacuation if the area is inundated to a depth and velocity such that the depth (in feet) multiplied by the velocity (in feet per second) would exceed a product of four upon occurrence of the base flood.

102-1240 (c) CONDITIONAL USES

The following uses may be approved as conditional uses in the floodway district if allowed in the underlying zone. Such uses are subject to the conditional use standards of [102-1240 \(d\)](#).

- (1) Structures accessory to permitted use and approved conditional uses.
- (2) Grading, extraction, fill and storage of soil, sand, gravel, and other materials for purposes other than stabilization projects.
- (3) Marinas, boat rentals, permanent docks, piers, wharves, water control structures, and navigational facilities.
- (4) Storage yards for equipment, machinery, or materials.
- (5) Fences that have the potential to obstruct flood flows.
- (6) Levees or dikes intended to protect agricultural crops for a frequency flood event equal to or less than the 10-year frequency flood event.

102-1240 (d) STANDARDS FOR CONDITIONAL USES

Conditional uses in the floodway district must comply with the standards of this subsection as well as all other applicable standards of this development code:

- (1) **Fill; Storage of Materials and Equipment**
 - a. Fill, dredge spoil, and other similar materials deposited or stored in the floodplain must be protected from erosion by the use of mulches or similar materials, with permanent vegetative cover established as soon as possible. Permanent sand and gravel operations and similar uses must be covered by a long-term site development plan.
 - b. Temporary placement of fill, other materials, or equipment that would cause an increase to the stage of the base flood may only be allowed if the city has approved a plan that assures removal of the materials from the floodway based upon the flood warning time available.
- (2) **Accessory Structures.** Accessory structures may be approved, provided that:
 - a. Structures are not intended for human habitation;

- b. Structures will have a low flood damage potential;
 - c. Structures will be constructed and placed so as to offer a minimal obstruction to the flow of flood waters;
 - d. Structures must be elevated on fill or structurally dry floodproofed and watertight to the regulatory flood protection elevation. Floodproofing certifications consistent with [102-12100 \(d\)](#) are required.
 - e. As an alternative, an accessory structure may be floodproofed in a way to accommodate internal flooding. To allow for the equalization of hydrostatic pressure, there shall be a minimum of two openings on at least two sides of the structure and the bottom of all openings shall be no higher than one foot above grade. The openings shall have a minimum net area of not less than one square inch for every square foot of enclosed area subject to flooding, have a net area of not less than one square inch for every square foot of enclosed area subject to flooding, and shall allow automatic entry and exit of floodwaters without human intervention. A floodproofing certification consistent with [102-12100 \(d\)](#) is required.
- (3) **Levees, Dikes, and Floodwalls.** A levee, dike or floodwall constructed in the floodway must not cause an increase to the base flood. The technical analysis must assume equal conveyance or storage loss on both sides of a stream.

land surveyor or other qualified person designated by the community.

- (2) Accessory Structures. As an alternative to the fill requirements of paragraph (1) of this subsection, any enclosed structures accessory to a permitted use must meet the following provisions:
 - a. Accessory structures shall constitute a minimal investment not to exceed 576 square feet in size, and only be used for parking and storage.
 - b. Accessory structures must allow for the equalization of hydrostatic pressure by accommodating for the inundation of floodwaters. There shall be a minimum of two openings on at least two sides of the structure and the bottom of all openings shall be no higher than one foot above grade. The openings shall have a minimum net area of not less than one square inch for every square foot of enclosed area subject to flooding, and shall allow automatic entry and exit of floodwaters without human intervention.
- (3) The cumulative placement of fill or similar material on a parcel must not exceed 1,000 cubic yards, unless the fill is specifically intended to elevate a structure in accordance with paragraph (1) of this subsection.
- (4) All fill must be properly compacted and the slopes must be properly protected by the use of riprap, vegetative cover or other acceptable method.
- (5) All new principal structures must have vehicular access at or above an elevation not more than two feet below the regulatory flood protection elevation, or must have a flood warning /emergency evacuation plan acceptable to the city.
- (6) Accessory uses such as yards, railroad tracks, and parking lots may be at an elevation lower than the regulatory flood protection elevation. However, any facilities used by employees or the general public must be designed with a flood warning system that provides adequate time for evacuation if the area is inundated to a depth and velocity such that the depth (in feet) multiplied by the velocity (in feet per second) would exceed a product of four upon occurrence of the base flood.
- (7) Manufactured homes and recreational vehicles must also meet the standards of [102-1290](#).

102-1250 Flood Fringe District (FF)

102-1250 (a) PERMITTED USES

Permitted uses in the flood fringe district are those uses of land or structures allowed in the underlying zone that comply with the standards in [102-1250 \(b\)](#).

102-1250 (b) STANDARDS FOR PERMITTED USES

Permitted uses must comply with the standards of this subsection as well as all other applicable standards of this development code:

- (1) All structures, including accessory structures, must be elevated on fill so that the lowest floor, as defined, is at or above the regulatory flood protection elevation (RFPE). The finished fill elevation for structures must be no lower than one foot below the regulatory flood protection elevation (RFPE). Fill for residential structures must extend at the same elevation at least 15 feet beyond the outside limits of the structure. Elevations must be certified by a registered professional engineer,

102-1250 (c) CONDITIONAL USES

The following uses may be approved as conditional uses in the flood fringe district if allowed in the underlying zone. Such uses are subject to the conditional use standards of _

102-1250 (d).

- (1) The placement of floodproofed nonresidential basements below the regulatory flood protection elevation.
- (2) The cumulative placement of more than 1,000 cubic yards of fill when the fill is not being used to elevate a structure in accordance with the flood hazard area regulations of this article.

102-1250 (d) CONDITIONAL USE STANDARDS

Conditional uses in the flood fringe district must comply with the standards of this subsection as well as all other applicable standards of this development code:

- (1) The standards for permitted uses in the flood fringe district apply to all conditional uses.
- (2) Residential basements are not allowed below the RFPE.
- (3) All areas of nonresidential structures, including basements, to be placed below the regulatory flood protection elevation must be structurally dry floodproofed, which requires making the structure watertight with the walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A floodproofing certification consistent with 102-12100 (d) is required.
- (4) The placement of more than 1,000 cubic yards of fill or other similar material on a parcel (other than for the purpose of elevating a structure to the regulatory flood protection elevation) must comply with an approved erosion/sedimentation control plan.
 - a. The plan must clearly specify methods to be used to stabilize the fill on site for a flood event at a minimum of the base flood event.
 - b. The plan must be prepared and certified by a registered professional engineer or other qualified individual acceptable to the city.
 - c. The plan may incorporate alternative procedures for removal of the material from the floodplain if adequate flood warning time exists.

102-1260 General Floodplain District (GF)

102-1260 (a) PERMITTED USES

- (1) The uses listed as permitted uses in the floodway district are allowed in the general floodplain district.

- (2) All other uses are subject to the floodway/flood fringe evaluation criteria specified in 102-1260 (b). If the proposed use is determined to be located in the floodway district, the permitted uses of the floodway district are permitted. If the proposed use is determined to be located in the flood fringe district, the permitted uses of the flood fringe district are permitted. Section

102-1260 (b) DETERMINING BOUNDARIES AND BFE

- (1) **Requirements for Detailed Studies.** Developments greater than 50 lots or 5 acres, or as requested by the zoning administrator, shall be subject to a detailed study to determine the regulatory flood protection elevation and the limits of the Floodway District. The determination of the floodway and flood fringe must be consistent with accepted hydrological and hydraulic engineering standards, and must include the following components, as applicable:
 - a. Estimate the peak discharge of the base flood.
 - b. Calculate the water surface profile of the base flood based upon a hydraulic analysis of the stream channel and overbank areas.
 - c. Compute the floodway necessary to convey or store the base flood without increasing flood stages more than one-half (0.5) foot. A lesser stage increase than 0.5 foot is required if, as a result of the stage increase, increased flood damages would result. An equal degree of encroachment on both sides of the stream within the reach must be assumed in computing floodway boundaries, unless development or geographic features warrant other analysis, as approved by the Department of Natural Resources.
- (2) **Alternative Methods.** For areas where a detailed study is not available or required, the base flood elevation must be determined using best available data. Until a floodway determination can be completed, the entire floodplain must be treated as floodway, with allowable activities restricted to those identified as permitted or conditional uses in the floodway district.
 - a. Development allowed in floodways (e.g. bridges, culverts, grading, filling, stabilization projects) must not cumulatively increase flood stages more than one-half foot during a base flood event, as determined by a professional engineer or by using accepted engineering practices approved by the Department of Natural Resources. A stage increase less than one-half foot must be used if increased flood damages would result.

- b. Development prohibited in floodways (e.g. buildings) require a floodway/flood fringe determination to verify the development is within the flood fringe. The floodway/flood fringe determination must be done by a professional engineer or utilize other accepted engineering practices approved by the Department of Natural Resources. Any such proposal must assume a one-half foot stage increase for the purposes of determining the regulatory flood protection elevation to accommodate for future cumulative impacts.
- (3) **Review by Zoning Administrator.** The Zoning Administrator will review the submitted information and assess the technical evaluation and the recommended Floodway and/or Flood Fringe District boundary. The assessment must include the cumulative effects of previous floodway encroachments. The Zoning Administrator may seek technical assistance from an engineer or other expert person, or agency, including the Department of Natural Resources.
- (4) **Permits.** Once the Floodway and Flood Fringe District boundaries have been determined, the Zoning Administrator must process the permit application.

102-1270 Subdivisions and Developments

102-1270 (a) SUBDIVISIONS

No land may be subdivided which is unsuitable for reasons of flooding or inadequate drainage, water supply or sewage treatment facilities. Manufactured home parks and recreational vehicle parks or campgrounds are considered subdivisions under the flood hazard area regulations of this article.

- (1) All lots within the floodplain districts must be able to contain a building site outside of the Floodway District at or above the regulatory flood protection elevation.
- (2) All subdivisions must have road access both to the subdivision and to the individual building sites no lower than two feet below the regulatory flood protection elevation, unless a flood warning emergency plan for the safe evacuation of all vehicles and people during the base flood has been approved by the city. The plan must be prepared by a registered engineer or other qualified individual, and must demonstrate that adequate time and personnel exist to carry out the evacuation.
- (3) For all subdivisions in the floodplain, the Floodway and Flood Fringe District boundaries, the regulatory flood protection elevation and the required elevation of all access roads must be clearly labeled on all required subdivision drawings and platting documents.

- (4) In the General Floodplain District, applicants must provide the information required for determination of flood district boundaries to determine the base flood elevation, the floodway district and flood fringe district boundaries and the regulatory flood protection elevation for the subdivision site.

102-1280 Utility & Transportation Facilities

102-1280 (a) UTILITIES

All utilities and facilities such as gas, electrical, sewer, and water supply systems to be located in the floodplain must be elevated to the regulatory flood protection elevation (RFPE) or located and constructed to minimize or eliminate flood damage.

102-1280 (b) OTHER SERVICE FACILITIES

Where public utilities are not provided:

- (1) On-site water supply systems must be designed to minimize or eliminate infiltration of flood waters into the systems and are subject to the provisions in Minnesota Rules, Part 4725.4350, as amended; and
- (2) New or replacement on-site sewage treatment systems must be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, they must not be subject to impairment or contamination during times of flooding, and are subject to the provisions in Minnesota Rules, Part 7080.2270, as amended.

102-1280 (c) PUBLIC TRANSPORTATION FACILITIES

Railroad tracks, roads, and bridges to be located within the floodplain must comply with applicable floodway and flood fringe district standards. Such transportation facilities must be elevated to the regulatory flood protection elevation where failure or interruption of these facilities would result in danger to the public health or safety or where such facilities are essential to the orderly functioning of the area. Minor or auxiliary roads or railroads may be constructed at a lower elevation where failure or interruption of transportation services would not endanger the public health or safety.

102-1290 Manufactured Homes and RVs

102-1290 (a) MANUFACTURED HOMES

Manufactured homes and manufactured home parks are subject to applicable standards for each floodplain district. In addition:

- (1) New and replacement manufactured homes must be elevated in compliance with Section 6 of the flood hazard area regulations of this article and must be

securely anchored to a system that resists flotation, collapse and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state or local anchoring requirements for resisting wind forces.

- (2) New manufactured home parks and expansions to existing manufactured home parks must meet the appropriate standards for subdivisions in Section 8 of the flood hazard area regulations of this article. New or replacement manufactured homes in existing manufactured home parks must meet the vehicular access requirements for subdivisions in Section 8.12 of the flood hazard area regulations of this article.

102-1290 (b) RECREATIONAL VEHICLES

New recreational vehicle parks or campgrounds and expansions to existing recreational vehicle parks or campgrounds are prohibited in any floodplain district. Recreational vehicles placed in existing recreational vehicle parks, campgrounds or lots of record in the floodplain must either:

- (1) Meet the requirements for manufactured homes, or
- (2) Be travel ready, meeting the following criteria:
 - a. The vehicle must have a current license required for highway use.
 - b. The vehicle must be highway ready, meaning on wheels or the internal jacking system, attached to the site only by quick disconnect type utilities commonly used in campgrounds and recreational vehicle parks.
 - c. No permanent structural type additions may be attached to the vehicle.
 - d. Accessory structures may be permitted in the flood fringe district, provided that they constitute a minimal investment, do not hinder the removal of the vehicle should flooding occur, and comply with the accessory structure standards of [102-1250 \(b\)](#).

102-12100 Administration

102-12100 (a) ADMINISTRATOR

A Zoning Administrator or other official must administer and enforce the flood hazard area regulations of this article.

102-12100 (b) PERMIT REQUIREMENTS

A permit must be obtained from the Zoning Administrator to verify if a development meets all applicable standards outlined in the flood hazard area regulations of this article prior to conducting the following activities:

- (1) The erection, addition, modification, rehabilitation, or alteration of any building, structure, or portion thereof. Normal maintenance and repair also requires a permit if such work, separately or in conjunction with other planned work, constitutes a substantial improvement as defined in the flood hazard area regulations of this article.
- (2) The construction of a dam, on-site septic system, or any fence not meeting the definition of a farm fence
- (3) The change or extension of a nonconforming use.
- (4) The repair of a structure that has been damaged by flood, fire, tornado, or any other source.
- (5) The placement of fill, excavation of materials, or the storage of materials or equipment within the floodplain.
- (6) Relocation or alteration of a watercourse (including stabilization projects or the construction of new or replacement culverts and bridges), unless a public waters work permit has been obtained from the Department of Natural Resources.
- (7) Any other type of “development” as defined in the flood hazard area regulations of this article.

102-12100 (c) PERMIT APPLICATIONS

Permit applications must be submitted to the Zoning Administrator on forms provided by the Zoning Administrator. The permit application must include the following as applicable:

- (1) A site plan showing all pertinent dimensions, existing or proposed buildings, structures, and significant natural features having an influence on the permit.
- (2) Location of fill or storage of materials in relation to the stream channel.
- (3) Copies of any required municipal, county, state or federal permits or approvals.
- (4) Other relevant information requested by the Zoning Administrator as necessary to properly evaluate the permit application.

102-12100 (d) FLOODPROOFING CERTIFICATION

The applicant is required to submit certification by a registered professional engineer, registered architect, or registered land surveyor that the finished fill and building elevations were accomplished in compliance with the provisions of the flood hazard area regulations of this article. Floodproofing measures must be certified by a registered professional engineer or registered architect as being in

compliance with applicable floodproofing standards in the State Building Code. Accessory structures designed in accordance with the accessory structure standards of [102-1250 \(b\)](#) are exempt from certification, provided sufficient assurances are documented. A registered professional engineer is required to certify that any development in established floodways must not cause any increase in flood elevations, and development in the general floodplain district will not cumulatively increase flood stages more than one-half foot, or less if increased damages would result.

102-12100 (e) ZONING COMPLIANCE CERTIFICATE

No building, land or structure may be occupied or used in any manner until a certificate of zoning compliance has been issued by the Zoning Administrator stating that the use of the building or land conforms to the requirements of the flood hazard area regulations of this article.

102-12100 (f) RECORD-KEEPING

The Zoning Administrator must maintain records in perpetuity documenting:

- (1) All certifications referenced in Section 11.22 of the flood hazard area regulations of this article as applicable.
- (2) Records of the elevation to which structures and alterations to structures are constructed or floodproofed.

102-12100 (g) NOTIFICATION OF ALTERATIONS

Before authorizing any alteration or relocation of a river or stream, the Zoning Administrator must notify adjacent communities. If the applicant has applied for a permit to work in public waters pursuant to Minnesota Statutes, Section 103G.245, this will suffice as adequate notice. A copy of the notification must also be submitted to the Chicago Regional Office of the Federal Emergency Management Agency (FEMA).

102-12100 (h) NOTIFICATION TO FEMA

As soon as is practicable, but not later than six months after the date such supporting information becomes available, the Zoning Administrator must notify the Chicago Regional Office of FEMA of the changes by submitting a copy of the relevant technical or scientific data.

102-12100 (j) VARIANCES

- (1) **Applications.** An application for a variance to the provisions of the flood hazard area regulations of this article will be processed and reviewed in accordance with applicable State Statutes and the zoning variances procedures of this development code.
- (2) **State Standards.** A variance must not allow a use that is not allowed in that district, permit a lower degree of flood protection than the regulatory flood protection

elevation for the particular area, or permit standards lower than those required by state law.

- (3) **Additional Variance Criteria.** The following additional variance criteria of the Federal Emergency Management Agency must be satisfied:
 - a. Variances must not be issued by a community within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.
 - b. Variances may only be issued by a community upon:
 - 1. A showing of good and sufficient cause,
 - 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant, and
 - 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - c. Variances may only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (4) **Flood Insurance Notice.** The Zoning Administrator must notify the applicant for a variance that::
 - a. The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage; and
 - b. Such construction below the base flood level increases risks to life and property. Such notification must be maintained with a record of all variance actions.
- (5) **General Considerations.** The city may consider the following variables, and consider imposing conditions on variances and conditional uses:
 - a. The potential danger to life and property due to increased flood heights or velocities caused by encroachments;
 - b. The danger that materials may be swept onto other lands or downstream to the injury of others;
 - c. The proposed water supply and sanitation systems, if any, and the ability of these systems to minimize the

potential for disease, contamination and unsanitary conditions;

- d. The susceptibility of any proposed use and its contents to flood damage and the effect of such damage on the individual owner;
 - e. The importance of the services to be provided by the proposed use to the community;
 - f. The requirements of the facility for a waterfront location;
 - g. The availability of viable alternative locations for the proposed use that are not subject to flooding;
 - h. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future;
 - i. The relationship of the proposed use to the Comprehensive Land Use Plan and flood plain management program for the area;
 - j. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - k. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.
- (6) **Submittal of Hearing Notices to DNR.** The Zoning Administrator must submit hearing notices for proposed variances to the Department of Natural Resources sufficiently in advance to provide at least 10 days' notice of the hearing. The notice may be sent by electronic mail or U.S. Mail to the respective area hydrologist.
- (7) **Submittal of Final Decisions to DNR.** A copy of all decisions granting variances must be forwarded to the Department of Natural Resources within ten days of such action. The notice may be sent by electronic mail or U.S. Mail to the respective area hydrologist.
- (8) **Record-Keeping.** The Zoning Administrator must maintain a record of all variance actions, including justification for their issuance, and must report such variances in an annual or biennial report to the Administrator of the National Flood Insurance Program, when requested by the Federal Emergency Management Agency.

102-12100 (j) CONDITIONAL USES

- (1) **Administrative Review.** An application for a conditional use permit under the provisions of the flood hazard area regulations of this article will be processed and

reviewed in accordance with the conditional use permit procedures of this development code.

- (2) **Factors Used in Decision-Making.** In passing upon conditional use applications, the city must consider all relevant factors and applicable standards in the flood hazard area regulations of this article.
- (3) **Conditions Attached to Conditional Use Permits.** In addition to the standards identified in the flood hazard area regulations of this article, the city may attach such conditions to the granting of conditional use permits as it deems necessary to fulfill the purposes of the flood hazard area regulations of this article. Such conditions may include, but are not limited to, the following:
- a. Limitations on period of use, occupancy, and operation.
 - b. Imposition of operational controls, sureties, and deed restrictions.
 - c. Requirements for construction of channel modifications, compensatory storage, dikes, levees, and other protective measures.
- (4) **Submittal of Hearing Notices to DNR.** The Zoning Administrator must submit hearing notices for proposed conditional uses to the Department of Natural Resources sufficiently in advance to provide at least ten days' notice of the hearing. The notice may be sent by electronic mail or U.S. Mail to the respective area hydrologist.
- (5) **Submittal of Final Decisions to DNR.** A copy of all decisions granting conditional uses must be forwarded to the Department of Natural Resources within ten days of such action. The notice may be sent by electronic mail or U.S. Mail to the respective area hydrologist.

102-12110 Nonconformities

102-12110 (a) CONTINUANCE

A use, structure, or occupancy of land which was lawful before the passage or amendment of the flood hazard area regulations of this article but which is not in conformity with the provisions of the flood hazard area regulations of this article may be continued subject to the following conditions. Historic structures, as defined in Section 2.643(b) of the flood hazard area regulations of this article, are subject to the provisions below.

102-12110 (b) EXPANSIONS AND ALTERATIONS

- (1) A nonconforming use, structure, or occupancy must not be expanded, changed, enlarged, or altered in a way

that increases its flood damage potential or degree of obstruction to flood flows except as provided in 12.12 below. Expansion or enlargement of uses, structures or occupancies within the Floodway District is prohibited.

- (2) Any addition or structural alteration to a nonconforming structure or nonconforming use that would result in increasing its flood damage potential must be protected to the regulatory flood protection elevation in accordance with any of the elevation on fill or floodproofing techniques (i.e., FP1 thru FP4 floodproofing classifications) allowable in the State Building Code, except as further restricted in 12.14 below.

102-12110 (c) LOSS OF NONCONFORMING STATUS

- (1) If any nonconforming use, or any use of a nonconforming structure, is discontinued for more than one year, any future use of the premises must conform to the flood hazard area regulations of this article.
- (2) If any structure experiences a substantial improvement, then the entire structure must meet the applicable district standards. If the proposed development, including maintenance and repair during the previous 365 days, plus the costs of any previous alterations and additions since the first Flood Insurance Rate Map exceeds 50 percent of the market value of any nonconforming structure, the entire structure must meet the applicable district standards.
- (3) If any nonconformity is substantially damaged, as defined in the flood hazard area regulations of this article, it may not be reconstructed except in conformity with the provisions of the applicable flood hazard area regulations of this article.
- (4) If any nonconforming use or structure experiences a repetitive loss, it shall be considered substantially damaged and must not be reconstructed except in conformity with the provisions of the flood hazard area regulations of this article.

102-12120 Violations and Penalties

102-12120 (a) MISDEMEANOR

Violation of the provisions of the flood hazard area regulations of this article or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of variances or conditional uses) constitute a misdemeanor and will be punishable as defined by law.

102-12120 (b) OTHER LAWFUL ACTION

Nothing in the flood hazard area regulations of this article restricts the [community] from taking such other lawful action

as is necessary to prevent or remedy any violation. If the responsible party does not appropriately respond to the Zoning Administrator within the specified period of time, each additional day that lapses will constitute an additional violation of the flood hazard area regulations of this article and will be prosecuted accordingly.

102-12120 (c) ENFORCEMENT

Violations of the provisions of the flood hazard area regulations of this article will be investigated and resolved in accordance with the provisions of [Article XXX](#). In responding to a suspected ordinance violation, the city may utilize the full array of enforcement actions available to it including but not limited to prosecution and fines, injunctions, after-the-fact permits, orders for corrective measures or a request to the National Flood Insurance Program for denial of flood insurance availability to the guilty party. The [community] must act in good faith to enforce these official controls and to correct ordinance violations to the extent possible so as not to jeopardize its eligibility in the National Flood Insurance Program.

102-12130 Amendments

102-12130 (a) MAP REVISIONS

The floodplain district regulations must be amended to incorporate any revisions by the Federal Emergency Management Agency to the floodplain maps adopted in [102-1210 \(c\)](#) of the flood hazard area regulations of this article.

102-12130 (b) REQUIRED APPROVAL

All amendments to the flood hazard area regulations of this article must be submitted to and approved by the Department of Natural Resources prior to adoption.

[page intentionally blank]

ARTICLE 13 STORMWATER MANAGEMENT

102-1310	General Provisions	13-2
102-1320	Stormwater Management Plans	13-3
102-1330	Maintenance Agreements	13-4
102-1340	Approval Standards	13-5
102-1350	Protection of Drainage Facilities	13-6
102-1360	Enforcement	13-6

This article is based on existing Article XIV, with no substantive changes. The regulations have been edited and slightly reorganized.

102-1310 General Provisions

102-1310 (a) FINDINGS

The city council finds that uncontrolled stormwater runoff and construction site erosion from land development and land disturbing activities can have significant adverse impacts upon local and regional water resources, diminishing the quality of public health, safety, public and private property and natural resources of the community.

102-1310 (b) PURPOSE

- (1) The general purpose of the stormwater management regulations of this article is to establish regulatory requirements for land development and land disturbing activities aimed at minimizing the threats to public health, safety, public and private property and natural resources within the city resulting from construction site erosion and post-construction stormwater runoff.
- (2) These regulations are further intended to meet the current construction site erosion and sediment control and post-construction stormwater management regulatory requirements for construction activity and small construction activity (NPDES permit) as defined in 40 CFR part 122.26(b)(14)(x) and (b)(15), respectively.

102-1310 (c) STATUTORY AUTHORIZATION

The stormwater management regulations of this article are adopted pursuant to the authorization and policies contained in M.S.A. chs. 103B and 462; Minn. Admin. Rules 6120.2500—6120.3900, Minn. Admin. Rules chs. 8410, 8420.

102-1310 (d) ENGINEERING DESIGN GUIDELINES

The latest version of the City of Hopkins *Engineering Design Guidelines* is hereby incorporated into this article as if fully set forth herein. The guidelines constitute the official guide for stormwater principles, methods, and practices for proposed development and redevelopment activities.

102-1310 (e) APPLICABILITY, EXEMPTIONS, WAIVERS

- (1) **Approval Required Prior to Permit.** Every application for a conditional use permit that involves construction of a building, subdivision approval or a permit to allow land disturbing activities must be accompanied by a stormwater management plan. No conditional use permit, subdivision approval or permit to allow land disturbing activities shall be issued until approval of the stormwater management plan or a waiver of the \ requirements has been obtained in strict conformance with the provisions of this article. The provisions of [102-1350](#) apply to all land, public or private, located within the city.
- (2) **State Pollution Control Agency (MPCA).** The MPCA is the permitting authority for land disturbing activities

requiring an NPDES permit for construction activity, including the requirements for developing and implementing an SWPPP. Where required, the NPDES permit is in addition to permits required by the city.

- (3) **Exemptions.** The stormwater management regulations of article do not apply to:
 - a. Any part of a subdivision if a plat for the subdivision has been approved by the city council on or before the effective date of the ordinance from which this article is derived;
 - b. Any land disturbing activity for which plans have been approved by the watershed management organization and the city within 6 months prior to the effective date of the ordinance from which this article is derived;
 - c. A lot for which a conditional use permit or building permit has been approved on or before the effective date of the ordinance from which this article is derived;
 - d. Installation of fence, sign, telephone and electric poles and other kinds of posts or poles;
 - e. Waiver of plat, re-plat, platting of a developed lot, or a single lot division;
 - f. Construction of a single-unit to four-unit house;
 - g. An addition to an existing building that does not require a conditional use permit;
 - h. Construction of a detached accessory building that does not require a conditional use permit;
 - i. Emergency work to protect, life, limb or property; or
 - j. The improvements involve the enlargement of a building that is less than ten percent of the total floor area of the existing building or 5,000 square feet, whichever is less.
- (4) **Waivers.** The city council, upon recommendation of the planning commission, may waive any requirement of this article upon making a finding that compliance with the requirement will involve an unnecessary hardship or the project does not have any significant alterations of existing stormwater conditions and the waiver of such requirement will not adversely affect the standards and requirements set forth in [102-1320](#). The city council may require as a condition of the waiver, such dedication or construction, or agreement to dedicate or construct as

may be necessary to adequately meet the standards and requirements set forth in [102-1320](#).

102-1320 Stormwater Management Plans
.....

102-1320 (a) GENERAL

A written application for stormwater management plan approval, along with the proposed stormwater management plan, shall be filed with the planning department, and shall include a statement indicating the grounds upon which the approval is requested, that the proposed use is permitted by right or as an exception in the subject zone and adequate evidence showing that the proposed use will conform to the standards set forth in this article. Prior to applying for approval of a stormwater management plan, an applicant may have the stormwater management plan reviewed by the appropriate department of the city.

102-1320 (b) REQUIRED INFORMATION.

- (1) Two sets of clearly legible blue or black lined copies of drawings and required information shall be submitted to the planning department and shall be accompanied by a receipt from the city evidencing the payment of all required fees for processing and approval as set forth in [102-1320 \(c\)\(5\)](#). A bond will be required in accordance with [102-1320 \(c\)\(4\)](#) if the improvements have not been completed at the time the certificate of occupancy has been completed. Drawings shall be prepared to a scale appropriate to the site of the project and suitable for the review to be performed. At a minimum the scale shall be one inch equals 100 feet.
- (2) Unless otherwise exempted by this article, an application for stormwater management approval shall include the following as a condition for its consideration:
 - k. A stormwater management plan; and
 - l. A maintenance agreement.
- (3) The stormwater management plan shall be prepared to meet the approval standards of [102-1340](#) as well as the requirements within the city's *Engineering Design Guidelines*; the maintenance agreement shall be prepared to meet the requirements of [102-1330](#).
- (4) In lieu of preparation of a stormwater management plan, major single-family residential projects and minor expansion projects may install a rain garden or similar stormwater improvement as described in the city's *Engineering Design Guidelines*.

102-1320 (c) PROCESS.

- (1) **Plan Submittal.** A stormwater management plan meeting the requirements of [102-1320](#) shall be submitted

by the planning department to the planning commission for review in accordance with the approval standards of [102-1340](#). The commission shall recommend approval, recommend approval with conditions or recommend denial of the stormwater management plan. Following planning commission action, the stormwater management plan along with the conditional use permit and/or subdivision approval shall be submitted to the city council at its next available meeting. City council action on the stormwater management plan must be accomplished within 120 days following the date the application for approval is filed with the planning department unless there has been a delay caused or requested by the applicant.

- (2) **Duration.** Approval of a plan submitted under the provisions of this article shall expire one year after the date of approval unless construction has commenced in accordance with the plan; however, if prior to the expiration of the approval the applicant makes a written request to the planning department for an extension of time to commence construction, setting forth the reasons for the requested extension, the planning department may grant one extension of not greater than one single year. Receipt of any request for an extension shall be acknowledged by the planning department within 15 days. The planning department shall make a decision on the extension request within 30 days of receipt. Any plan may be revised in the same manner as originally approved.
- (3) **Conditions.** A stormwater management plan may be approved subject to compliance with reasonable conditions necessary to ensure that the requirements contained in this article are met. Such conditions may, among other matters, limit the size, kind or character of the proposed development, require the construction of structures, drainage facilities, storage basins and other facilities, require replacement of vegetation, establish required monitoring procedures, stage the work over time, require alteration of the site design to ensure buffering, and require the conveyance to the city or other public entity of certain lands or interests therein.
- (4) **Performance Bond.** Prior to approval of any stormwater management plan, the applicant shall submit an agreement to construct such required physical improvements, to dedicate property or easements, or to comply with such conditions as may have been agreed upon. If the improvements have not been constructed at the time the certificate of occupancy is issued, the applicant shall provide a bond to cover the established cost of complying with the agreement. The agreement and bond shall guarantee completion and compliance

with conditions within a specific time, which time may be extended in accordance with [102-1330](#). The adequacy, conditions and acceptability of any agreement and bond shall be determined by the city council or any official of the city as may be designated by resolution of the city council.

- (5) **Fees.** All applications for stormwater management plan approval shall be accompanied by a process and approval fee, as established in chapter 14.

102-1330 Maintenance Agreements

102-1330 (a) AGREEMENT

- (1) The responsible party shall enter into a maintenance agreement with the city that documents all responsibilities for operation and maintenance of all stormwater treatment practices. Such responsibility shall be documented in a maintenance plan and executed through a maintenance agreement. The maintenance agreement shall be executed and recorded against the parcel.
- (2) The stormwater maintenance agreement shall be in a form approved by the city and shall describe the inspection and maintenance obligations of this section and shall, at a minimum:
 - m. Designate the responsible party, which shall be permanently responsible for maintenance of the structural or nonstructural measures.
 - n. Pass responsibility for such maintenance to successors in title.
 - o. Grant the city and its representatives the right of entry for the purposes of inspecting all stormwater treatment practices as described in [102-1360 \(a\)](#) and [102-1360 \(b\)](#).
 - p. Allow the city the right to repair and maintain the facility if necessary maintenance is not performed after proper and reasonable notice to the responsible party as described in subsection (a)(2)f of this section.
 - q. Include a maintenance plan that contains, but is not limited to, the following:
 - 1. Identification of all structural stormwater treatment practices.
 - 2. A schedule for regular inspection, monitoring and maintenance for each practice. Monitoring shall verify whether the practice is functioning as

designed, and may include, but is not limited to, quality, temperature and quantity of runoff.

- 3. Identification of the responsible party for conducting the inspection, monitoring and maintenance for each practice.
- r. Identify a schedule and format for reporting compliance with the maintenance plan to the city.

102-1330 (b) INSPECTIONS

- (1) Inspection programs shall be established on any reasonable basis, including, but not limited to, routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the National Pollutant Discharge Elimination System (NPDES) stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to, reviewing maintenance and repair records; sampling discharges, surface water, groundwater and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other stormwater treatment practices.
- (2) When any new stormwater treatment practice is installed on private property, or when any new connection is made between private property and a public drainage control system, sanitary sewer or combined sewer, the property owner shall grant to the city the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. This includes the right to enter a property when the city has a reasonable basis to believe that a violation of this article is occurring or has occurred, and to enter when necessary for abatement of a public nuisance or correction of a violation of this article.
- (3) The director of public works, or designated representative, shall inspect all stormwater management facilities during construction, during the first year of operation and at least once every five years thereafter. The inspection records will be kept on file at the public works department for a period of six years. It shall be the responsibility of the applicant to obtain any necessary easements or other property interests to

allow access to the stormwater management facilities for inspection and maintenance purposes.

102-1330 (c) RECORD-KEEPING

The responsible party shall make records of the installation and of all maintenance and repairs of the stormwater treatment practices, and shall retain the records for at least three years. These records shall be made available to the city during inspection of the stormwater treatment practice and at other reasonable times upon request.

102-1330 (d) FAILURE TO MAINTAIN

If a responsible party fails or refuses to meet the requirements of the maintenance agreement, the city, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the stormwater treatment practice in proper working condition. In the event that the stormwater treatment practice becomes a danger to public safety or public health, the city shall notify the responsible party in writing. Upon receipt of that notice, the responsible party shall have 30 days to perform the maintenance and repair of the facility in an approved manner. After proper notice, the city may specially assess the owners of the stormwater treatment practice for the cost of repair work and any penalties; and the cost of the work shall be assessed against the property and collected along with ordinary taxes by the county.

102-1340 Approval Standards
.....

102-1340 (a) GENERAL

Stormwater management plans that fail to meet the standards contained in this section may not be approved by the city council.

102-1340 (b) LAND DISTURBING ACTIVITIES

Projects with land disturbing activities of one acre or greater shall meet the current requirements for stormwater management as specified by the city's engineering design standards and state pollution control agency (MPCA) construction general permit. All land disturbing activities within the city disturbing less than one acre and down to 10,000 square feet, or which will result in more than 200 cubic yards of cut or fill are only required to follow the construction site stormwater runoff control standards set within the city's *Engineering Design Guidelines*. The standards should follow the following requirements:

- (1) Erosion control.
- (2) Sediment control practices.
- (3) Temporary sediment basins.
- (4) Dewatering and basin draining.

- (5) Inspection and maintenance.
- (6) Pollution management measures/construction site waste control.
- (7) Final stabilization.
- (8) Training.

102-1340 (c) PERFORMANCE CRITERIA

Unless determined by the city to be exempt or granted a waiver, all site designs shall establish stormwater management practices to control the peak flow rates and pollutants of stormwater discharge associated with specified design storm and runoff volumes, as detailed in the city's *Engineering Design Guidelines*.

- (1) New development; rate control, volume control, and water quality standards shall apply to all new development. There shall be no net increase from pre-project conditions (on an average annual basis) of total volume, TSS and TP. New development projects shall retain a runoff volume equal to one inch times the area of the proposed increase of impervious surfaces on-site.
- (2) Redevelopment; rate control, volume control and water quality standards shall apply to all redevelopment. There shall be a net reduction in the amount of TP, TSS and stormwater runoff volume leaving the site as compared with pre-project conditions. For redevelopment projects where the project proposer intends to add more impervious surfaces, the new development treatment requirements must be applied to the net increase of impervious surfaces. Additional treatment must also be included to reduce the volume, TP and TSS loads from the existing impervious surfaces.

102-1340 (d) DESIGN STANDARDS

Stormwater detention facilities constructed in the city shall be designed according to the most current technology as reflected in this article and the city's *Engineering Design Guidelines*.

102-1340 (e) WETLANDS.

- (1) Runoff shall not be discharged directly into wetlands without pre-settlement of the runoff.
- (2) A protective buffer strip of natural vegetation must be retained in accordance to the standards given within the city's *Engineering Design Guidelines*.
- (3) Wetlands must not be drained or filled, wholly or partially, unless replaced by restoring or creating wetland areas of at least equal public value. Replacement must be guided by the following principles in descending order of priority:

- s. Avoiding the direct or indirect impact of the activity that may destroy or diminish the wetland;
- t. Minimizing the impact by limiting the degree or magnitude of the wetland activity and its implementation;
- u. Rectifying the impact by repairing, rehabilitating, or restoring the affected wetland environment;
- v. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the activity; and
- w. Compensating for the impact by replacing or providing substitute wetland resources or environments.

102-1340 (f) STEEP SLOPES

No land disturbing or development activities shall be allowed on slopes of 18 percent or more.

102-1340 (g) CATCHBASINS

All newly installed and rehabilitated catchbasins shall be provided with a sump area for the collection of coarse-grained material. Such basins shall be cleaned when they are half filled with material.

102-1340 (h) DRAIN LEADERS

All newly constructed and reconstructed buildings will route drain leaders to pervious areas wherein the runoff can be allowed to infiltrate. The flow rate of water exiting the leaders shall be controlled so no erosion occurs in the pervious areas.

102-1340 (i) METHODOLOGIES & COMPUTATIONS

Hydrologic models and design methodologies used for the determination of runoff and analysis of stormwater management structures shall be approved by the director of public works. Plans, specification and computations for stormwater management facilities submitted for review shall be sealed and signed by a registered professional engineer. All computation shall appear on the plans submitted for review, unless otherwise approved by the director of public works.

102-1340 (j) WATERSHED & GROUNDWATER MANAGEMENT PLANS

Stormwater management plans shall be consistent with adopted watershed management plans and groundwater management plans prepared in accordance with M.S.A. §§ 103B.23, subd. 1 and 103B.255 respectively, and as approved by the state board of water soil resources in accordance with state law.

102-1340 (k) EASEMENTS

If a stormwater management plan involves direction of some or all runoff off of the site, it shall be the responsibility of the applicant to obtain from adjacent property owners any necessary easements or other property interests concerning flowage of water.

102-1350 Protection of Drainage Facilities

102-1350 (a) GENERAL

No person shall apply fertilizer to or deposit grass clippings, leaves, or other vegetative material on impervious surfaces, or within stormwater drainage systems, natural drainage ways, or within wetland buffer areas.

102-1350 (b) UNIMPROVED LAND AREAS

Except for driveways, sidewalks, patios, areas occupied by structures or areas which have been improved by landscaping, all areas shall be covered by plants or vegetative growth.

102-1350 (c) FERTILIZER CONTENT

Except for the first growing season for newly established turf areas, no person shall apply liquid fertilizer which contains more than one-half percent by weight of phosphorus, or granular fertilizer which contains more than three percent by weight of phosphorus, unless the single application is less than or equal to one-tenth pound of phosphorus per 1,000 square feet. Annual application amount shall not exceed one-half pound of phosphorus per 1,000 square feet of lawn area.

102-1350 (d) BUFFER ZONE

Fertilizer application shall not be made within one rod (16½ feet) of any wetland or water resource.

102-1360 Enforcement

102-1360 (a) INSPECTIONS

- (1) **Notification.** The erosion control inspector shall make inspections as hereinafter required and either shall approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the erosion and sediment control plan as approved
- (2) **Procedure.** The applicant is responsible for regular inspections and record keeping needed to document compliance with the permit requirements. The applicant must inspect the construction project once per week and within 24 hours after a rain event greater than one half-inch. The city may conduct inspections as needed to ensure that both erosion and sediment control and stormwater measures are properly installed and maintained prior to construction, during construction,

and at the completion of the project. The applicant shall notify the city a minimum of 72 hours prior to the following required city inspections:

- x. **Initial Inspection.** When all erosion and sediment control BMPs are installed. This inspection must be completed before a building permit can be issued.
 - y. **Project Complete Inspection.** When the project is complete, including, but not limited to, final grading, installation of all stormwater management facilities, and final stabilization measures are complete. The one-year warranty begins after inspector approves project.
 - z. **Warranty Inspection.** Completed one year later to confirm that permanent site stabilization methods have been successful and vegetation has been established.
- (3) **Reporting.** The applicant shall submit reports to the administrator under the following circumstances and shall submit recommendations for corrective measures, if appropriate, with such reports:
- aa. There are delays of more than seven days in obtaining materials, machinery, services or manpower necessary to the implementation of the stormwater management plan as scheduled.
 - ab. There are delays of seven days in land disturbing or filling activities or soil storage.
 - ac. The work is not being done in conformance with the approved plans and permit. Any changes to the approved plan must be submitted to the administrator for review and approval before work can commence.

102-1360 (b) RIGHT-OF-ENTRY.

- (1) **Permit grants right-of-entry.** The issuance of a permit constitutes a right-of-entry for the city or its contractor to enter the construction site. The applicant shall allow the city and its authorized representatives to:
- ad. Enter the permitted site for the purpose of obtaining information, examining records, or conducting investigations or surveys;
 - ae. Bring such equipment on the site as is necessary to conduct such surveys and investigations;
 - af. Examine and copy any books, papers, or digital files pertaining to activities or records required to be kept under the terms and conditions of the permitted site;

- ag. Inspect the stormwater pollution control measures;
 - ah. Sample and monitor any items or activities pertaining to stormwater pollution control measures;
 - ai. Correct deficiencies in stormwater and erosion and sediment control measures consistent with the city's ordinances and the engineering guidelines.
- (2) **Search Warrants.** If city employees have been refused access to any part of the premises from which stormwater is discharged, and the employees are able to demonstrate probable cause to believe that there may be a violation of this article or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this article or any order issued hereunder or to protect the overall public health, safety, and welfare of the community, the city may seek issuance of a search warrant from any court of competent jurisdiction.

102-1360 (c) PENALTIES

- (1) **General.** Any person, firm or corporation violating any provision of this article shall be fined not less than \$5.00 or more than \$500.00 for each offense, and a separate offense shall be deemed committed on each day during or on which a violation occurs or continues.
- (2) **Notice of Violation.** When the city determines that an activity is not being carried out in accordance with the requirements of this article, it shall issue a written notice of violation to the owner of the property. The notice of violation shall contain:
- aj. The name and address of the owner or applicant.
 - ak. The address when available or a description of the land upon which the violation is occurring.
 - al. A statement specifying the nature of the violation.
 - am. A description of the remedial measures necessary to bring the development activity into compliance with this article and a time schedule for the completion of such remedial action.
 - an. At statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed.
 - ao. A statement that the determination of violation may be appealed to the city by filing a written notice of appeal within 15 days of service notice of violation.
- (3) **Stop Work Orders.** Persons receiving a notice of violation will be required to halt all construction

activities. This stop work order will be in effect until the city confirms that the land disturbance activity is in compliance and the violation has been satisfactorily addressed. Failure to address a notice of violation in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this article.

- (4) **Civil and Criminal Penalties.** In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this article shall be guilty of a misdemeanor and subject to prosecution. Such person shall be guilty of a separate offense for each day during which the violation occurs or continues.
- (5) **Restoration of Lands.** Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the city may take necessary corrective action, the cost of which may, after notice and opportunity for hearing, be specially assessed against the property and collected along with the ordinary taxes by the county.

102-1360 (d) APPEALS.

Any person aggrieved by the action of any official charged with the enforcement of this article as the result of the disapproval of a properly filed application for approval, issuance of a written notice of violation, or an alleged failure to properly enforce the ordinance in regard to a specific application, shall have the right to appeal the action to the city.

- (1) The applicant shall submit the appeal in writing and include supporting documentation.
- (2) City staff shall make a decision on the appeal within 15 business days of receipt of a complete appeal application.
- (3) The applicant may appeal the decision of city staff to the city council. This appeal must be filed with the city within 30 days of city staff's decision.

ARTICLE 16 NONCONFORMITIES

102-1610	General	16-2
102-1620	Nonconforming Lots	16-2
102-1630	Nonconforming Uses	16-2
102-1640	Nonconforming Structures	16-3
102-1650	Loss of Nonconforming Status	16-3
102-1660	Nonconforming Signs	16-3
102-1670	Nonconforming Development Features	16-3

102-1610 General
.....

102-1610 (a) SCOPE

The regulations of this article govern nonconformities, which are lots, uses, buildings, and other structures and improvements that were lawfully established but—because of the adoption of new or amended zoning regulations—no longer comply with one or more provisions of this development code.

102-1610 (b) PURPOSE

Occasionally, lots, uses, buildings, and other structures and improvements that were lawfully established (i.e., in compliance with all zoning regulations in effect at the time of their establishment) are made nonconforming because of changes in the zoning regulations that apply to the subject property (e.g., through amendments to the zoning map or the text of applicable zoning regulations). The regulations of this article are intended to clarify the effect of this “nonconforming” status and avoid confusion with “illegal” uses and activities (i.e., those established in violation of applicable zoning regulations). The regulations of this article are also intended to:

- (1) Recognize the interests of landowners in continuing to use their property for uses and activities that were lawfully established;
- (2) Promote maintenance, reuse and rehabilitation of existing buildings; and
- (3) Place reasonable limits on nonconformities that have the potential to adversely affect surrounding properties.

102-1610 (c) AUTHORITY TO CONTINUE

Any nonconformity that existed on the effective date specified in [102-110 \(b\)](#) or any situation that becomes nonconforming upon adoption of any amendment to this development code may be continued in accordance with the regulations of this article unless otherwise expressly stated.

102-1610 (d) DETERMINATION OF STATUS

- (1) The burden of proving that a situation has nonconforming status rests entirely with the subject landowner.
- (2) The zoning administrator is authorized to determine whether adequate proof of nonconforming status has been provided by the subject landowner.
- (3) Appeals of the zoning administrator’s decision on nonconforming status determinations may be appealed in accordance with the appeal procedures of ~~XXX~~.

102-1610 (e) REPAIRS AND MAINTENANCE

- (1) Nonconformities must be maintained to be safe and in good repair.
- (2) Repairs and normal maintenance that do not increase the extent of nonconformity and that are necessary to keep a nonconformity in sound condition are permitted unless otherwise expressly prohibited by this development code.¹
- (3) Nothing in this article is intended to prohibit:
 - a. Modifications to nonconforming structures that are necessary to bring them into compliance with the Americans with Disabilities Act (ADA); or
 - b. Modifications to nonconforming structures necessary to ensure their structural integrity and safe condition, as directed in an order from a duly authorized town official.

102-1610 (f) CHANGE OF TENANCY OR OWNERSHIP

Nonconforming status runs with the land and is not affected merely by change of title or possession or by right of possession of property.

102-1620 Nonconforming Lots
.....

102-1620 (a) DESCRIPTION

A nonconforming lot is a lawfully created lot that does not comply with currently applicable minimum lot area or minimum lot width regulations of the zone in which the lot is located.

102-1620 (b) USE OF NONCONFORMING LOTS

A nonconforming lot may be used in accordance with the use regulations of the subject zone, and buildings may be erected on such a nonconforming lot, subject to compliance with all other applicable regulations of this development code.²

102-1630 Nonconforming Uses
.....

102-1630 (a) DESCRIPTION

A nonconforming use is a land use that was lawfully established in accordance with all zoning regulations in effect at the time of its establishment but that is no longer allowed by the use regulations of the zone in which the use is now located. Lawfully established uses that do not comply with any applicable separation (or spacing) distance

¹ Proposed change--Existing code (102-6(b)) limits repairs to no more than 50% of FMV)

² Proposed change--Existing code includes more complicated "lot" regulations and focuses exclusively on residential zones.

requirements (e.g., those that require one land use to be located a certain minimum distance from another zone or land use) are also deemed to be nonconforming uses.

102-1630 (b) CHANGE OF USE

A nonconforming use may be changed to another use only if the new (replacement) use is allowed in the subject zone.³

102-1630 (c) EXPANSION OF USE

Nonconforming uses may not be expanded or extended unless the expansion reduces or eliminates the nonconformity.

102-1630 (d) LOSS OF NONCONFORMING STATUS

A nonconforming use may be continued, including through repair, replacement, restoration, maintenance, or improvement, but not including expansion, except as expressly stated in Minnesota Statutes, section 462.357, subd. 1e(a)(1) and (2).⁴

102-1640 Nonconforming Structures

102-1640 (a) DESCRIPTION

A nonconforming structure is any building or structure, other than a sign, that was lawfully established but no longer complies with applicable building/structure siting and height regulations of the zone in which it is located.

102-1640 (b) USE

A nonconforming structure may be occupied by any use allowed in the zone in which the structure is located, including a lawfully established nonconforming use.

102-1640 (c) ALTERATIONS AND EXPANSIONS

Alterations, including enlargements and expansions, are prohibited unless the proposed alteration or expansion complies with all applicable building siting and height regulations, and does not increase the extent of the existing nonconformity. A building with a nonconforming side setback, for example, may be expanded to the rear as long as the expansion complies with applicable rear setbacks and all other building siting and height regulations. On the other hand, building additions on the side, may not increase or extend the side setback nonconformity.

102-1640 (d) MOVEMENT

A nonconforming structure may be moved to another location on the lot only if the movement or relocation

³ Proposed change--Existing code (102-6(c)) allows change to a less intensive nonconforming use.

⁴ Statutes state that nonconforming use rights are lost if (1) the nonconformity is discontinued for a period of more than one year; or (2) the use is destroyed by fire or other peril to the extent of greater than 50 percent of its estimated market value....

eliminates or reduces the extent of nonconformity.

102-1650 Loss of Nonconforming Status

A nonconforming structure may be continued, including through repair, replacement, restoration, maintenance, or improvement, but not including expansion, except as expressly stated in Minnesota Statutes, section 462.357, subd. 1e(a)(1) and (2).⁵

102-1660 Nonconforming Signs

See [102-10140](#) for regulations governing nonconforming signs.

102-1670 Nonconforming Development Features

102-1670 (a) DESCRIPTION

A nonconforming development feature is any aspect of a development—other than a nonconforming lot, nonconforming use, nonconforming structure, or nonconforming sign—that was lawfully established, in accordance with zoning regulations in effect at the time of its establishment but that no longer complies with one or more regulations of this development code. A common example is a site that does not comply with current landscaping or screening requirements.

102-1670 (b) GENERAL

Nonconforming development features may remain, but the nature and extent of nonconforming site features may not be increased.

⁵ Statutes state that nonconforming rights are lost if (1) the nonconformity is discontinued for a period of more than one year; or (2) the structure is destroyed by fire or other peril to the extent of greater than 50 percent of its estimated market value....

[page intentionally blank]

LEGEND

Neighborhoods

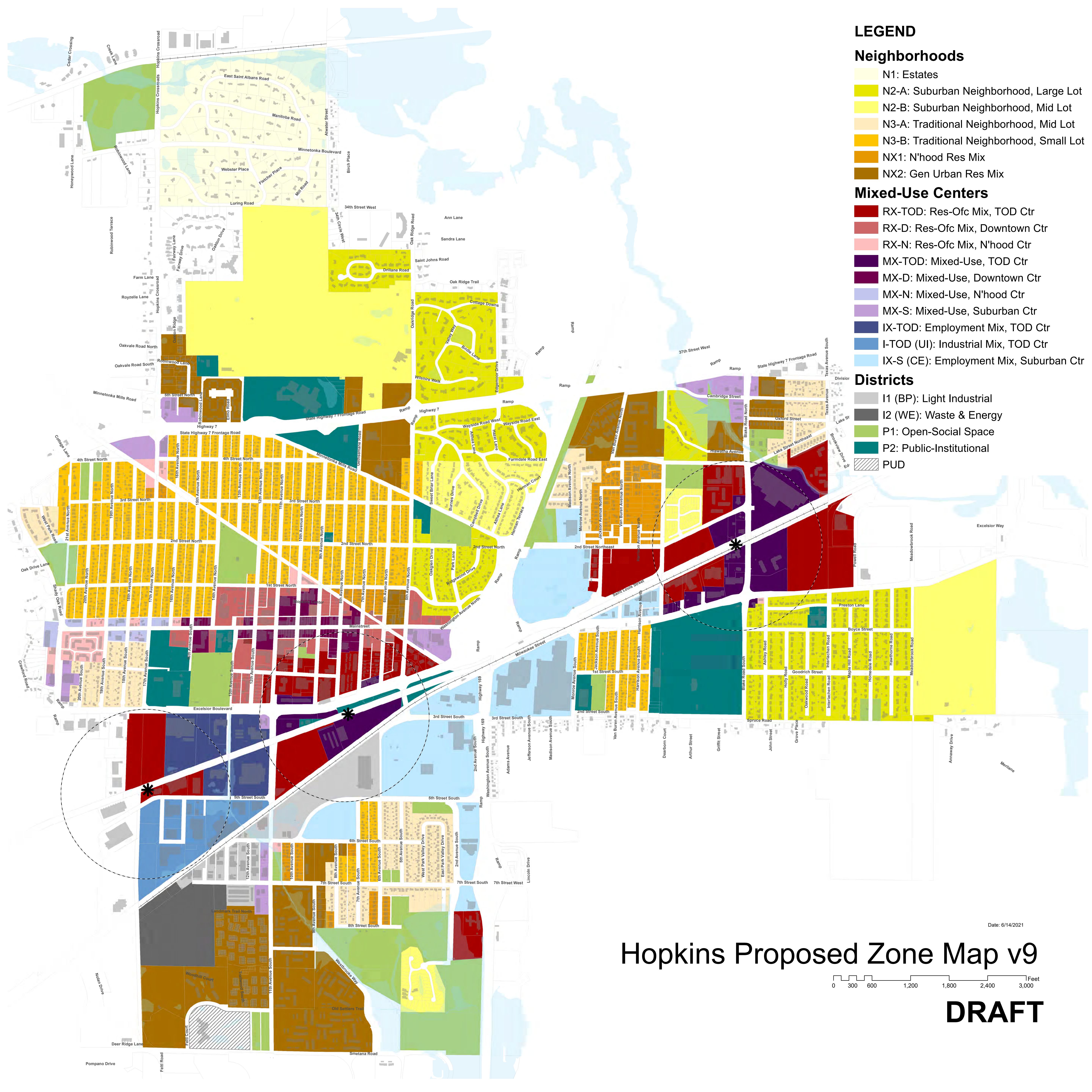
- N1: Estates
- N2-A: Suburban Neighborhood, Large Lot
- N2-B: Suburban Neighborhood, Mid Lot
- N3-A: Traditional Neighborhood, Mid Lot
- N3-B: Traditional Neighborhood, Small Lot
- NX1: N'hood Res Mix
- NX2: Gen Urban Res Mix

Mixed-Use Centers

- RX-TOD: Res-Ofc Mix, TOD Ctr
- RX-D: Res-Ofc Mix, Downtown Ctr
- RX-N: Res-Ofc Mix, N'hood Ctr
- MX-TOD: Mixed-Use, TOD Ctr
- MX-D: Mixed-Use, Downtown Ctr
- MX-N: Mixed-Use, N'hood Ctr
- MX-S: Mixed-Use, Suburban Ctr
- IX-TOD: Employment Mix, TOD Ctr
- I-TOD (UI): Industrial Mix, TOD Ctr
- IX-S (CE): Employment Mix, Suburban Ctr

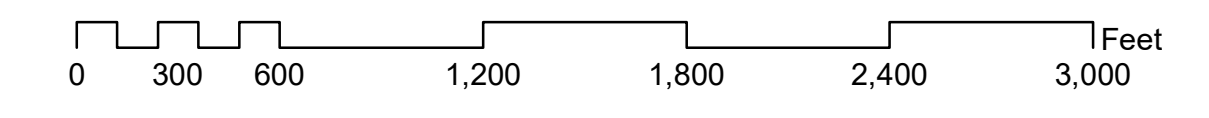
Districts

- I1 (BP): Light Industrial
- I2 (WE): Waste & Energy
- P1: Open-Social Space
- P2: Public-Institutional
- PUD



Date: 6/14/2021

Hopkins Proposed Zone Map v9



DRAFT