

Northfield Land Development Code Article 3: Site Development
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Article 3 of the Land Development Code is the one that gives buildings their properties and location in each of the zoning districts. This section also defines many important relationships of the built to natural environment. These relationships are called “standards”. In this summary the text sections of the code are shown in italics or quotes and my comments are shown in this text font. The parts of the sections discussed are the primary ones that relate to our environmental quality work.

Article 3: Site Development

3.1 Measurements, Computations, and Exceptions

3.2 Site Development Standards

3.3 General Development Standards

3.4 Neighborhood Compatibility Standards

3.5 Landscape, Screening, and Buffering Standards 3.6 Off-Street Parking, Loading, and Mobility

3.7 Pedestrian Access and Circulation

3.1 Measurements, Computations, and Exceptions

This section defines the terms for height, width, and volume of buildings and structures and placement. It gets very specific about architectural elements of these structures and the definition of how they interact with other structures, building lot lines and land features

3.2 Site Development Standards

3.2.1 Purpose

The purpose of these site development standards is to further the purpose of this LDC and the goals and policies of the comprehensive plan. Furthermore, these standards are intended to establish appropriate lot dimensions within each zoning district, provide for appropriate scale of structures, and prescribe how structures will relate to a vibrant, pedestrian friendly streetscape.

3.2.2 Residential Site Development Standards (A) Building Orientation in Residential Districts All residential development shall be located parallel to the associated street or be consistent with existing development patterns rather than being sited at unconventional angles, unless irregular lot layouts require alternative orientations. Such alternative orientations shall be subject to approval by the city planner (Figure 3-9).

This section defines the specific dimensions, and sizing of buildings on the sites for various zoning districts. It also prescribes building density and the building to building setbacks for these districts. As such it dictates how the land is covered as well as acceptable patterns of neighborhood districts. Because one has to get to the structures roads sidewalks and pathways become boundaries that enter into the definitions. Parking related to transportation becomes an important part of this code section. If an architect wanted to design a development that maximized solar panels on a parcel that didn't line up with the sun angles, they would have to petition the city and prove that any "unconventional patterns" are justified. The definition of conventional may need to be explored if buildings are to become more environmentally compatible.

Land use and building density relate to building cost and affordability in each of the districts. Building density affects environmental standards.

3.3 General Development Standards

In this section the dark sky concept is acknowledged and the EQC should look at this in relation to current recommendations. Section 3.3.5 "Performance Standards" is an interesting section. It looks at "operational impacts of land use" and those related to the EQC work are listed below. It is very broad and simple and it would be interesting to find out how often it has been enforced and if enforcement was challenged. It's an important section because it covers many of the nuisance conditions that citizens assume that their city will protect them from thus taking those rule for granted.

3.3.4 Outdoor Lighting Standards

(A) Purpose It is the purpose of these lighting standards to recognize the values as expressed by the International Dark Sky Association and implement lighting standards that will serve to enhance the value of dark sky and minimize ambient lighting to the degree possible.

3.3.5 Performance Standards

- *Air Emissions*
- *Dust*
- *Ground Vibration*
- *Light and Glare see 3.3.4*
- *Liquid Waste*
- *Noise*
- *Odor*
- *Radioactivity, electrical disturbance ,electromagnetic interference*

3.4 Neighborhood Compatibility Standards

3.4.1 Purpose and Intent The purpose of the neighborhood compatibility standards is to protect the character of existing residential neighborhoods in instances where there is a proposed infill development, redevelopment project, or building expansion. The primary focus of these compatibility standards is to ensure that new infill development, redevelopment, or building expansion relates to the massing and scale of the surrounding structures.

This section is architectural in nature and would have some effect on energy use. The EQC should consider looking at this section after the CAP has been adopted.

3.5 Landscape, Screening, and Buffering Standards

This section has an important relation to EQC work. It touches on the work of tree selection and preservation. It provides for a number of conservation standards including standards that affect water and soil conservation. The EQC should consider looking at this section after the CAP has been adopted.

3.5.1 Purpose The purpose of this section is to promote the beautification of Northfield and enhance and establish green infrastructure and generally protect the public welfare, through the city's authority to regulate land use in a method that utilizes the benefits of landscaping. Specifically, it is the purpose of this section to:

(A) Preserve the variety and extent of the city's urban forest as an integral part of this city's identity and infrastructure.

(B) Protect privacy and provide buffering between land uses of differing intensities;

(C) Aid in noise, glare and heat abatement;

(D) Contribute to the process of air purification, ground water recharge, and control of ground water runoff;

(E) Preserve large trees, natural wet lands, and/or other natural features;

(F) Prevent tree loss by eliminating or reducing compaction, filling or excavation near tree roots;

(G) Prevent or reduce soil erosion and sedimentation and storm water runoff;

(H) Enhance energy and water conservation;

(I) Control the urban heat island effect;

(K) Increase the utilization of and expand the use of native landscape species within the City of Northfield.

3.5.9 Buffering Between Zoning District

A) General

(1) Development shall provide a buffer between land uses in accordance with this section. The buffer shall have the width as provided in Table 3.5-3, an amount of vegetation as provided in Table 3.5-4 and other features to properly mitigate the negative effects of contiguous incompatible uses.

3.6 Off-Street Parking, Loading, and Mobility

Like the previous section, parking design also has a huge impact on our environment. I'm not sure if the EQC has looked at standards for use of pervious paving and shadow parking use in the city. Use of these design elements could have a positive effect on the environmental quality for our city. The inclusion of EV charging stations should be considered for this section. Computation of parking is and potential elimination of unnecessary pavement is also an important consideration for EQC input. The EQC should consider looking at this section after the CAP has been adopted.

3.6.1 Purpose

(A) The purpose of the parking regulations is to accommodate the parking needs of motorized and non-motorized traffic in all districts using fiscally and environmentally responsible practices. The standards relating to parking will:

(3) Integrate pedestrian and non-motorized transportation by emphasizing pedestrian circulation, and establishing requirements for bicycle parking;

(4) Provide safe, visually obvious and direct pedestrian routes between streets and vehicular and bicycle parking, between parking and building entrances, between adjacent buildings, and between buildings and the trail networks of adjacent areas including paths outlined in the city's Parks, Open Space and Trail System Plan.

(6) Protect our natural environment by encouraging the use of permeable surfaces, LID storm water infiltration, and best practices for the reduction of air, light and noise pollution.

(B) The parking regulations will implement the following objectives (as paraphrased) from the 2008 Comprehensive Plan.

(2) Encourage a compact development pattern and support infill, redevelopment and land intensification as articulated in land use objective LU3 in the comprehensive plan;

(3) Improve transportation choices and efficiency through sidewalk and parking lot placement and “park once” site designs as articulated in land use objective LU9 in the comprehensive plan;

(4) Be a good steward of the natural environment; protect and enhance water quality. Increase the density of the community’s urban forest; reduce Northfield’s contribution to climate change by including promotion of shading of parking lots as articulated in land use objective LU6, environmental resource objectives ER3, ER9 and ER10 in the comprehensive plan;

3.6.4 Rules for Computation

3.6.8 Modification of Parking Requirements

(C) Shadow Parking A portion of the required parking spaces may remain landscaped and unpaved or paved with pervious (i.e., “green”) pavers provided that the parking and unpaved areas complies with the following standards and is authorized in accordance with Section 3.8.8, Modification of Parking Requirement

3.6.7 Bicycle Parking

The purpose of bicycle parking regulations is to encourage bicycling for personal transportation, to provide access to employment, commercial, residential and other destinations, and to provide safe, convenient bicycle parking located as close as possible to the main entrance of a destination. Provision of bicycle parking is required throughout the city.

3.7 Pedestrian Access and Circulation

The EQC should consider looking at this section in after the CAP has been adopted.

3.7.1 Purpose The purpose of the following pedestrian access and circulation requirements is to ensure effective pedestrian connections and other means of non-motorized transportation through proper site design and land development improvements including walkways, trails and other improvements that link residential and commercial neighborhoods to each other and at the same time link one method of transportation to other methods of transportation throughout the city.