



DESIGN GUIDELINES

Town of Northborough, MA
July 2012

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I. PURPOSE

The Northborough Zoning Bylaw provides for a design review process in order to preserve historic land uses and structures and promote architectural and ecological considerations for the betterment of the community. Administered by the Design Review Committee, design review works in conjunction with site plan approval and special permits with site plan approval. In business districts, design review applies to new construction and exterior alterations or expansion of any commercial, municipal, institutional, or multi-family structure. In the Downtown Neighborhood District, design review applies to new construction and exterior alterations or expansion of any multi-family structure or any structure requiring a special permit. (See Section 7-03-060 of the Zoning Bylaw for additional information on the design review process.)

The purpose of these guidelines is to assist property owners, proponents, architects, and landscape architects with project planning and developing submissions for design review, and to assist the Design Review Committee with meeting its responsibilities under the Zoning Bylaw. These guidelines supplement the site development standards in Section 7-09-20 of the Zoning Bylaw and articulate the following design objectives:

1. Strengthen the character of Downtown Northborough as the focal point of a prosperous rural New England community and as a destination for shopping, services, and government;
2. Encourage development that is distinctive and appropriate to locations within other business districts, supportive of the function of the Highway Business District and Business South District as gateways into Northborough, and supportive of the function of the Business East and Business West Districts as neighborhood business areas and as gateways to Downtown Northborough;
3. Encourage development within the Downtown Neighborhood District that respects the character of established neighborhoods; and encourage that more intensive uses, where they occur, draw upon appropriate local or regional models of traditional neighborhood design; and
4. Assure that future construction, alterations, or additions maintain a relationship to the historic development of the Town through appropriate design.

Applicants are encouraged to consider sustainability objectives across all aspects of the project, from site design and building placement to lighting and materials selections.

II. PROCESS

The proponent should meet with the Design Review Committee early and often. Incorporating recommendations from the Design Review Committee throughout the design process can help streamline the review process, potentially leading to time and cost savings for the proponent. The Design Review Committee recommends a minimum of two informal meetings before the final design review. The meetings should occur during the schematic design stage of a project. At this stage, the proponent should have conceptual designs of the site plan and proposed building(s), but the design should not be engineered or finalized. The proponent should bring any sketches of potential site plans or designs to these informal meetings.

The proponent must submit the proposed project for design review as part of the site plan approval or special permit with site plan approval process. There are several design review submission requirements, which are outlined below and in the attached checklist. After reviewing the proposed project, the Design Review Committee will provide written recommendations to the applicable issuing authority.

III. REQUIRED SUBMITTAL MATERIALS

When a project requires design review, the proponent must submit the following materials to the permit granting authority and Design Review Committee. A checklist of required submittal materials can be found at the end of this document.

1. A site plan prepared by a Massachusetts registered professional architect, landscape architect, or registered professional engineer showing the following:
 - a. All property boundaries; the use and ownership of adjacent land; and a locus map, at a scale of 1 inch equals 100 feet, showing the project within the town and the location and use of any building within 300 feet of the boundary of the subject property. The Town of Northborough Assessor Maps, as amended to the date of filing the site plan, are acceptable to show the required land use information.
 - b. All existing and proposed buildings, structures, parking spaces, driveways, driveway openings, loading areas, and service areas on the subject property.
 - c. Provisions for screening surfacing, lighting, and landscaping, including fences, walls, planting areas, and walks.
 - d. Provisions for waste disposal, drainage, dust, erosion control, and other utilities.
 - e. Location of all signs on the property, the size and type of all signs, and the hours of operation.
 2. For projects involving changes to existing buildings, the following additional materials are required:
 - a. Photographs of existing buildings showing location of proposed alterations/renovations and of adjacent areas.
 - b. Drawings of exterior elevations.
 - c. Outline plans.
 - d. Landscaping plan showing all proposed changes and describing all materials including plantings.
 - e. Schedule of all exterior materials and colors.
 - f. Manufacturers' brochures with illustrations and specifications for new materials, components, or assemblies to be used.
 3. For projects involving construction of new buildings, the following additional materials are required:
 - a. Site plan locating the structure and showing existing and proposed grades.
 - b. Drawings of exterior elevations.
 - c. Schematic floor plans.
 - d. Landscaping plan as described above.
 - e. Schedule of all exterior materials and colors.
 - f. Manufacturers' brochures as described above.
 - g. Photographs of adjacent buildings.
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4. Drawings need to be professionally prepared and must:
 - a. Be drawn to scale.
 - b. Show all exterior features completely and accurately.
 - c. Show finish grades and floor elevations.
 - d. Indicate all materials, colors, and unusual details.
 - e. Be legible.
 5. Examples of previous work from architect and/or owner.
 6. All submitted photographs must be recent, in color, and no smaller than 8 by 10 inches. Several different views are necessary, including those of adjacent properties.
 7. Samples, models, mock-ups, etc., may be requested by the Design Review Committee.
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IV. DESIGN GUIDELINES

Building Placement and Orientation

- » The front building façade should be oriented toward the street. Where appropriate, the building may be oriented around a courtyard or respond in design to another prominent feature (7-09-020(D)(1)(a)). Buildings should not be oriented toward parking lots. During renovations, consider reorienting building entrances that face parking lots.
- » The main entrance of the building must face the street and be clearly articulated through the use of architectural detailing. For residential buildings in the Downtown Neighborhood District, the front entrance must be defined by at least one of the following: a porch of at least 6 feet in width and depth, pent roof, roof overhang, hooded front door, or similar architectural elements (7-09-020(E)(1)).
- » To create a unified and defined street, a consistent alignment of buildings is encouraged, especially in the Downtown Business District. The front building line must be within the minimum and maximum front setbacks established in Table 2 of the Zoning Bylaw and should be sensitive to the placement of adjacent buildings.

ENCOURAGED



Building oriented to street with defined entrance

DISCOURAGED



Building with undefined entrance oriented to parking lot

Setbacks & Buffer Areas

- » Table 2 of the Zoning Bylaw establishes minimum front, side, and rear yard setbacks as well as maximum front yard setbacks for most business districts (see table below). Yards serve as buffers from adjacent uses and can enhance the attractiveness of the building and streetscape.

Minimum and Maximum Front, Side, and Rear Yard Setbacks

District	Minimum Yard Setbacks (feet)			Maximum Front Setback (feet)
	Front	Side	Rear	
Downtown Neighborhood	15	20	20	30
Downtown Business	6	none	none	20
Business East	15	20	25	25
Business West	15	20	25	25
Business South	40	25	25	none
Highway Business	50	25	25	none

Excerpt from Table 2 of the Zoning Bylaw.

- » Landscaping is encouraged, especially for the front and side yards, and should be a mix of noninvasive, drought-resistant plantings including ground cover, trees, flowers, shrubs, succulents, and ornamental grasses.
- » Yards may not be used for storage or display or abandonment of merchandise, lumber, building material, equipment, salvage secondhand items, or any type of junk, scrap, trash, rubble, or discarded or abandoned equipment or materials (7-08-030(C)(1)).

ENCOURAGED



Landscaped front yard

DISCOURAGED



Front yard with no landscaping

Open Space

- » A minimum percentage of the site must be left as open space (see table below) to provide buffers between properties, enhance the streetscape, and minimize the impact of the project on land and water resources (required front, side, and rear yards are considered “open space”).

Open Space Requirements

District	Minimum Open Space
Downtown Neighborhood	20%
Downtown Business	15%
Business East	20%
Business West	20%
Business South	25%
Highway Business	25%

Excerpt from Table 2 of the Zoning Bylaw.

- » Open space should be designed to be visually and physically accessible to the extent feasible and should enhance the visual impact of the project and adjacent properties. At least 50 percent of the minimum open space must be located in front of or beside the principal building(s) facing the street (7-09-020(D)(4)).
- » Where appropriate, existing vegetation should be retained.
- » Open space areas may be used for stormwater management practices (7-09-020(C)(4)(d)).

ENCOURAGED



Open space that enhances the streetscape

DISCOURAGED



Underutilized open space

Pedestrian Accommodations

- » Projects should be designed to provide efficient and safe pedestrian circulation within the site. Pedestrian connections are required between focal points of pedestrian activities such as sidewalks, parking areas, public spaces, and building entrances (7-09-30(E)(2)). Where possible, pedestrian linkages should be made to adjacent properties.
- » Pedestrian walkways should be integrated into internal landscaping wherever possible. Walkways must feature adjoining landscaped areas that include trees, shrubs, benches, flower beds, ground covers, or other similar materials for at least 50 percent of their length (7-09-030(E)(2)).
- » To aid pedestrians in crossing traffic within the lot, crosswalks should be clearly defined through use of raised, textured, or color treatments (7-09-030(E)(3)).
- » In locations not currently served by a public sidewalk, projects should provide a sidewalk at least 5 feet in width along the frontage of the parcel, located between the principal structure facing the street and the road right-of-way.
- » To create a sense of safety and enclosure for pedestrians, sidewalks should be separated from the street with a landscaped strip at least 5 feet in width. The landscaped strip may not include bituminous concrete or concrete paving except for sidewalks and driveways. Trees and other plantings are encouraged in the landscaped strip. Trees must be at least 2.5 inches in caliper 6 feet above grade, a noninvasive species of canopy or shade tree, tolerant of future site conditions, and reach an ultimate height of at least 30 feet. At least one such tree should be provided per 25 linear feet of frontage. Where feasible and appropriate, canopy and ornamental trees, shrubs, planters, and ground cover shall be arranged in groupings that reduce the optical width of the road. Shrubs and bushes should be planted at a minimum ratio of 12 per tree. Landscape treatments must not obstruct clear sight distance (7-09-30(E)(7)).
- » Existing projects that lack adequate pedestrian accommodations such as sidewalks and crosswalks should consider adding these elements during exterior building renovations or as part of site improvement efforts.

ENCOURAGED



Landscaped buffer between road and sidewalk



Clearly defined crosswalk

DISCOURAGED



No sidewalk or buffer between road and parking



Poorly defined crosswalk

Parking

- » To create a strong street edge and an inviting pedestrian environment, parking should be placed to the rear or side of the building. Parking should not be located closer to the front lot line than the principal structure. If feasible, underground parking is preferred.
- » When a building with a front parking lot is renovated, proponents should explore options for mitigating the impact of the parking on the streetscape, such as adding additional landscaping or architectural design elements.
- » Parking facilities with more than 5 parking spaces must be bordered on all sides with a landscaped buffer strip at least 10 feet in width. The buffer strip should incorporate natural vegetation and landforms where possible. The strip can include vegetated swales or noninvasive, drought-resistant trees, which must be at least 6 feet in height and at least 2 inches in trunk diameter immediately after planting (7-09-030(C)(4)).
- » Parking areas for all uses except single-family or two-family dwellings must include bicycle parking facilities (7-09-030(F)(1)).
- » To separate parking areas from abutting streets, provide areas for snow disposal, break up expanses of paved areas, and to provide beautification, at least 10 percent of the paved area of a parking facility with more than 30 parking spaces must be landscaped open space. At least one noninvasive, drought-resistant tree for every 10 parking stalls must be provided. Trees must be at least 2 inches in trunk diameter at the time of planting and must be located in planting beds at least 6 feet in diameter. To preserve landscaped areas from damage by parked cars and snow removal operations, bumper overhang areas with permeable ground cover not damaged by bumpers or vehicle drippings must be provided, and all landscaped open space must have suitable curbing (7-09-030(C)(5)).

ENCOURAGED



Strong street edge created when parking is placed to the side of the building

DISCOURAGED



Weak street edge created when parking abuts the street

Building Massing

- » Building massing should be consistent with the surrounding environment, where appropriate, and within the floor area ratio (FAR) and height requirements in Table 2 of the Zoning Bylaw (see table below). To help create a compact, walkable, and vibrant town center, a higher FAR is allowed in the Downtown Business District.

Building Massing Requirements

District	Maximum FAR	Maximum Stories	Maximum Height (feet)
Downtown Neighborhood	-	-	36 for single family or two family; up to 40 (with special permit) for other uses
Downtown Business	1.50	-	45
Business East	0.85	3.0	45
Business West	0.85	3.0	45
Business South	0.20	3.0	45
Highway Business	-	-	-

Excerpt from Table 2 of the Zoning Bylaw.

- » For buildings that are larger than the adjacent buildings, the apparent scale of the larger building can be reduced through design elements such as introducing smaller-scaled architectural features, creating an irregular footprint, varying building height and massing, and incorporating roof articulations or changes in slope.

ENCOURAGED



Large building visually reduced through design

DISCOURAGED

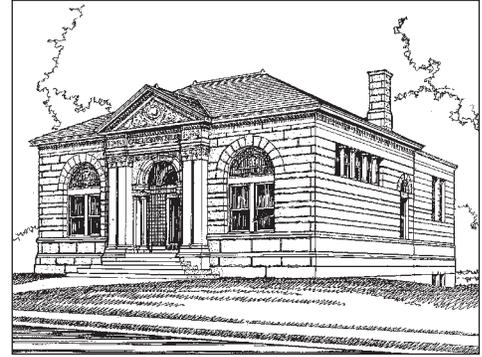
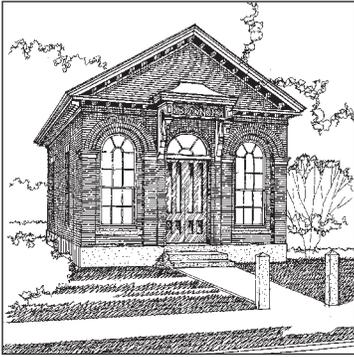


Large building with minimal design features

Historical

- » Existing structures of historical or architectural value should be preserved if possible. Alterations or renovations to historical structures should incorporate measures to protect and preserve the historic character and features. Proponents should refer to The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings and should incorporate as many standards as possible in projects involving historic buildings.
- » The architectural character of new buildings should respect the character of adjacent, existing historical buildings.

NORTHBOROUGH BUILDINGS WITH HISTORICAL SIGNIFICANCE



ENCOURAGED



Successful renovation of historic building

DISCOURAGED



Less successful renovation of historic building

Materials

- » Materials used for building exteriors and landscaping features (e.g., fences) should be consistent with the traditional New England building vernacular. There is a strong preference for authentic natural materials, specifically brick, stone, wooden shingles, and clapboard.
- » Any synthetic materials used should closely approximate natural materials.
- » Durable, eco-friendly materials should be used whenever possible.
- » Mixing of building materials is encouraged to add visual interest to building exteriors.

ENCOURAGED



Mixing of building materials

DISCOURAGED



Uniform building material with no architectural detail

EXAMPLES OF APPROPRIATE MATERIALS



Façade

- » Buildings must be designed to avoid unarticulated and monotonous façades that will be viewed from the street as continuous or blank walls (7-09-020(D)(1)).
- » Design elements that add depth and visual interest to building façades such as mixing materials and colors, decorative trim and molding, cornice details, stepped façades, and columns are encouraged. Decorative elements should be consistent with the architectural character of the building, scaled appropriately, and compatible with adjacent historic buildings.
- » Inauthentic, inoperable shutters are inappropriate for historical buildings and are discouraged on new structures.
- » The main architectural treatments of a building's front façade, including the materials used, must be continued around all sides of the building that are visible from a street or pedestrian plaza (7-09-020(D)(1)).
- » Buildings on corner lots should be designed with high-quality façades facing both streets. If one street is more heavily used, the façade facing that street may be more architecturally detailed than the façade that faces a side street.
- » The colors of exterior materials should complement the surrounding environment.

ENCOURAGED



Detailed, articulated façade

DISCOURAGED



Unarticulated façade

EXAMPLES OF APPROPRIATE EXTERIOR COLORS



Storefronts

- » Retail storefronts can contribute to the vitality of the streetscape. Storefronts should face the street and make generous use of clear, non-mirrored, non-opaque glass. Store interiors and goods should be visible from the sidewalk and should not be obstructed by landscaping or architectural features.
- » Awnings, appropriately scaled signage, and lighting are encouraged to enhance the storefront's appearance.

ENCOURAGED



Inviting storefronts

DISCOURAGED



Uninviting storefronts

Windows and Doors

- » Building façades should have a sufficient quantity of appropriately scaled windows and doors.
- » With the exception of retail storefronts, modestly scaled, vertically proportioned windows articulated with muntins are most appropriate. Windows and glass portions of front doors should be clear, non-mirrored, non-opaque glass.

ENCOURAGED



Appropriate windows

DISCOURAGED



Inappropriate windows

Roofs

- » Roofs should be pitched or gabled, and overhanging eaves should be provided wherever possible. Roof overhangs may not extend further than 2 feet into the minimum required side or rear yard. Flat roofs are discouraged in all business areas. In the Downtown Neighborhood District a flat roof structure is permitted only if it is capped by an architectural parapet design that acts as a structural expression of the building façade and materials (7-09-020(E)(1)).
- » Roof articulations such as dormers, chimneys, and cupolas are encouraged, especially on larger structures.

ENCOURAGED



Articulated roofs

DISCOURAGED



Unarticulated roofs

Landscaping

- » Landscaping can be used to enhance the attractiveness of storefronts and entrances, define spaces, and improve the pedestrian experience. Landscaping should be composed of noninvasive, drought-resistant plantings that may include trees, flowers, shrubs, succulents, and ornamental grasses (7-09-020(D)(5)). A variety of types, scales, textures, and colors of plantings are encouraged, and landscaping should be designed for year-round appeal. Where possible, landscape design should embrace natural site features such as rock outcroppings, topography, etc.
- » In business districts, high water use turf may not exceed 20 percent of all landscaped areas or open space on the site (7-09-020(D)(5)(a)).
- » Landscaping should not obscure building façades.
- » When a building with minimal landscaping is renovated, proponents are encouraged to incorporate landscaping upgrades into the building renovation.

ENCOURAGED



Landscaping that enhances building, streetscape

DISCOURAGED



Poorly designed landscaping

Lighting

- » Outdoor lighting fixtures should complement the building's architecture and should be appropriately scaled to the building and site.
- » Pedestrian-scaled light fixtures, preferably affixed to the building, storefronts, canopies, or awnings, are most appropriate for lighting sidewalks, pedestrian walkways, and areas adjacent to buildings. Tall light posts should not be placed adjacent to buildings.
- » Light posts should be installed so that the pillar bases are near flush with the ground.
- » Energy-efficient lighting, such as LEDs, should be used whenever possible.

ENCOURAGED



Lighting fixtures that complement building architecture and are appropriately scaled

DISCOURAGED



Lighting fixtures that are incongruous with building architecture and located too close to building



Correctly installed light post



Incorrectly installed light post

Utilities and Mechanical Equipment

- » Exposed storage areas, machinery, garbage dumpsters, service areas, truck loading areas, and utility buildings and structures must be screened from the view of abutting properties and streets using plantings, fences, and other approved methods (7-09-020(C)(5)).
- » Screening should be designed to be inconspicuous and visually blend in with the surroundings.

ENCOURAGED



Example of appropriate utility screening

DISCOURAGED



Unscreened utilities

V. USEFUL REFERENCES

Traditional New England Architectural Styles

- *A Field Guide to American Houses* by, Virginia and Lee McAlester (1984)
- *Traditional Construction Patterns* by, Stephen Mouzon (2004)
- *Get Your House Right* by, Marianne Cusato (2011)

Historic Preservation

- The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. Available at http://www.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm
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NORTHBOROUGH DESIGN REVIEW CHECKLIST

Pre-Design Review Recommendations	
• First informal meeting with the Design Review Committee at schematic design stage	
• Second informal meeting with the Design Review Committee at schematic design stage	

Design Review Requirements	
• Meeting with the Design Review Committee	

<i>Submission Requirements</i>	
• Site plan	
• Examples of previous work from architect and/or owner	
• Samples, if required	

<i>Changes to Existing Buildings</i>		<i>Construction of New Buildings</i>	
» Photographs of existing buildings		» Site plan locating the structure and showing existing and proposed grades	
» Drawings of exterior elevations		» Drawings of exterior elevations	
» Outline plans		» Schematic floor plans	
» Schedule of exterior materials and colors		» Schedule of all exterior materials and colors	
» Landscaping plan		» Landscaping plan	
» Manufacturers' brochures for new materials, components or assemblies to be used		» Manufacturers' brochures for new materials, components or assemblies to be used	
		» Photographs of adjacent buildings	

For additional information, please contact:

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