

Design Guidelines Outline for the West Boulevard Historic District

Rapid City, South Dakota

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Introduction

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- E. Policies Underlying the Design Guidelines
- F. Components of Design Guidelines
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This chapter introduces the design guidelines and describes how and when they should be used in the community.

Introduction

Part I: Overview

A. Background

There are these benefits of being in a Historic District:

- Livability and Quality of Life
- Economic Benefits
- Adaptability
- Environmental
- Construction Quality
- Building Construction

B. Preservation Goals

The design guidelines address the following goals from the the Future Land Use Plan 7/17/08 :

- Identify and manage in the public interest's unique cultural and historic areas within Rapid City.
- Improve, maintain, and enhance the cultural and historic character, and the integrity of Rapid City's built and natural environment, through responsible land use planning.
- Protect historic and cultural resources by preventing encroachment by incompatible commercial and industrial uses and excessively high density residential development.

C. Basic Preservation Theory

These are the reasons why and how a property is determined to be historic:

- The Concept of Historic Significance
- Period of Significance
- Concept of Integrity
- Alterations

D. Preservation Principles

There are these preservation principles for the Historic District:

- Respect the historic character of the building.
- Seek uses that are compatible with the historic character of the building.

- Protect and maintain significant features and stylistic elements.
- Preserve any existing original site features or original building materials and features.
- Prepare deteriorate historic features and replace only those elements that cannot be repaired.

E. Planning a Preservation Project

When planning a preservation project, it is important to determine the significance of the property and the degree to which it retains its integrity as a historic resource. Then a specific approach to the overall treatment of the property should be established. The steps in planning a preservation project are presented in this section.

Determine Building Approach

Step 1: Determine Building Significance

Step 2: Determine the Building Integrity

Step 3: Define Program Requirements

Step 4: Determine the Overall Treatment Strategy for a Building Using the Following Treatments:

- Preservation
- Restoration
- Rehabilitation
- Reconstruction

Determine Treatment for Individual Building Features

A treatment strategy for key features of a historic building is then determined. A combination of treatments may be appropriate on one building. The following treatments appear in the order of preference:

Treatment 1: Preserve

Treatment 2: Repair

Treatment 3: Reconstruct

Treatment 4: Replace

Treatment 5: Compatible Alteration

Type of work:

Chapter to use:

Introduction

*Chapter 1: Rehabilitation
Guidelines for Historic Properties*

*Chapter 2. General Design
Guidelines*

*Chapter 3. Guidelines for
New Construction*

1. Alteration of a “contributing property” in the Historic District	✓	✓	✓	✓	
2. Work on a “non-contributing” property in the Historic District	✓		✓	✓	
3. Work on an “individually listed National Register Property” in the Historic District	✓	✓	✓	✓	
4. New infill and construction in the Historic District	✓		✓	✓	

Note: A blank box indicates that the chapter does not apply.

Part II: Design Review System

A. Background of Design Guidelines

- What are Design Guidelines?
- Why have Design Guidelines?

B. Working with the Historic Preservation Commission

Use these “**tips**” for getting a faster approval.

Step 1. Consider professional design assistance.

Step 2. Check other city regulations.

Step 3. Become familiar with the design guidelines.

Step 4. See Preservation Brief 35. Understanding Old Buildings: The Process of Architectural Investigation, before you begin your design.

Step 4. Review the site context.

Step 5. Develop a design concept using the guidelines.

Step 6. Preliminary Review (optional).

Step 7. Prepare complete submittal application for formal 11.1 review that includes appropriate documentation, such as:

Rehabilitation-

- Photographs existing & historic
- Existing & proposed elevation & plan drawings (dimensioned)
- Existing & proposed material descriptions/changes
- Existing a & proposed site plan (dimensioned)
- Color samples

New Construcion-

- Photographs existing site and context
- Proposed elevation & plan drawings (dimensioned)
- Site Plan (dimensioned)
- Material list

C. Path to a “Successful” Project in the West Boulevard Historic District

Consider the following case studies of successful projects in the district:

- Case Study A
- Case Study B

D. Determine Which Guidelines apply?

Use this diagram to determine chapters of the design guidelines that apply to a proposed improvement project. The following property types are addressed:

- Contributing Property
- Non-Contributing Property
- National Register Individual Listing
- New Infill and Construction

E. Policies underlying the design guidelines

The Secretary of the Interior's Standards for the Rehabilitation of Historic Properties are general rehabilitation guidelines established by the National Park Service. It is the intent of this document to be compatible with these standards.

F. Components of Design Guidelines

Each design guidelines typically contains a series of components, all of which are used by the City in determining appropriateness: A typical guideline is illustrated here.

Also the following references are made throughout the document. These are publications issued by the National Park Service. You may obtain these reports from the National Park Service website at: www.nps.gov/history/preservation/htm.

"Click on Publications"

- Preservation Briefs
- Preservation Tech Notes

Chapter 1

Rehabilitation Guidelines for Historic Properties

In this Chapter:

- A. Architectural Details
- B. Materials and Finishes
- C. Individual Building Features
- D. Special Considerations
- E. Energy Efficiency

This chapter focuses on rehabilitation guidelines for historic buildings. The guidelines are divided into sections discussing the overall character-defining features, the materiality of those features and the individual building features. Guidelines also address special considerations regarding historic residential resources.

Chapter 1

Rehabilitation Guidelines for Historic Properties

A. Architectural Details

Architectural details contribute to the character of a structure. Specific types of details are associated with specific architectural styles. Select an appropriate treatment that will provide for proper preservation of significant features. The method that requires the least intervention is preferred.

- 1.1 Preserve significant stylistic and architectural details.
- 1.2 Repair deteriorated features.
- 1.3 When disassembly of a historic element is necessary for its repair, use methods that minimize damage to it.
- 1.4 Use technical procedures for cleaning, refinishing and repairing an architectural detail that will maintain the original finish.
- 1.5 When reconstructing an element is impossible, develop a new design that is a compatible interpretation of it.
- 1.6 Replace an architectural element accurately.
- 1.7 Avoid adding details that were not part of the original building.

Preservation Brief 17. Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character.

B. Materials and Finishes

Primary historic building materials should be preserved in place whenever feasible. If the material is damaged, then limited replacement which matches the original should be considered. These materials should never be covered or subjected to harsh cleaning treatments. Preserving original building materials and limiting replacement to only pieces which are deteriorated beyond repair reduces the demand for, and environmental impacts from, the production of new materials and thus is sound sustainability policy.

Primary historic building materials found in Rapid City include wood, stone, brick, and stucco. These guidelines apply to all such materials:

- 1.8 Preserve original building materials.**
- 1.9 Repair deteriorated primary building materials.**
- 1.10 When replacing materials on primary surfaces, match the original material in composition, profile, scale and finish.**
- 1.11 Do not use synthetic materials, such as aluminum, vinyl or panelized brick, as replacements for primary building materials.**
- 1.12 Covering original building materials with new materials is inappropriate.**
- 1.13 Consider removing later covering materials that have not achieved historic significance.**

Brief 8. Aluminum and Vinyl Siding on Historic Buildings.

Brief 16. The Use of Substitute Materials on Historic Building Exteriors.

Brief 33. The Preservation and Repair of Historic Stained and Leaded Glass.

Brief 39. Holding the Line: Controlling Unwanted Moisture in Historic Buildings.

Brief 47. Maintaining the Exterior of Small and Medium Size Historic Buildings

Cleaning Materials and Methods

1.14 Use the gentlest means possible to clean the surface of a structure.

Preservation Brief 1. The Cleaning and Waterproof Coating of Masonry Buildings.

Preservation Brief 6. Dangers of Abrasive Cleaning to Historic Buildings.

Wood

Wood was used historically for exterior siding, trim and ornamental details. Early woodwork should be retained, and, if necessary repaired. Traditional wood framing and cladding will usually be very desirable. Contemporary replacement wood is unlikely to have the same resilience. When properly maintained, wood has a long lifespan. To preserve external wood, maintain its painted finish.

1.15 Protect wood features from deterioration.

Tech Notes – Exterior Woodwork No. 1: Proper Painting and Surface Preparation. Sharon Park, AIA. (1986)

Tech Notes – Exterior Woodwork No. 4: Protecting Woodwork Against Decay Using Borate Preservatives. Ron Sheetz and Charles Fisher. (1993)

Masonry

Masonry includes stone, brick and stucco. These exist as building walls and site walls. Early masonry should be retained, and, if necessary repaired. When properly maintained, masonry has a long lifespan.

1.16 Brick or stone that was not painted historically should not be painted.

1.17 Repoint mortar joints where there is evidence of deterioration.

Preservation Brief 2. Repointing Mortar Joints in Historic Brick.

Preservation Brief 22. The Preservation and Repair of Historic Stucco. Washington, D.C.: U.S. Government Printing Office, 1990.

Preservation Brief 38. Removing Graffiti from Historic Masonry.

Tech Notes – Masonry No. 3: Water Soak Cleaning of Limestone. Robert M. Powers. (1992)

Tech Notes – Masonry No. 4: Non-destructive Evaluation Techniques for Masonry Construction. Marilyn E. Kaplan, Marie Ennis and Edmund P. Meade. (1997)

Paint

Historically, most wood surfaces on the exterior of a building were painted to protect them from weathering. Concrete and stucco structures also were sometimes painted.

1.18 Plan repainting carefully.

1.19 Using the historic color scheme is encouraged.

Preservation Brief 10. Exterior Paint Problems on Historic Woodwork.

Tech Notes –Exterior Woodwork No. 2: Paint Removal from Wood Siding. Alan O’Bright. (1986)

C. Individual Building Features

Windows

The character-defining features of a historic window, its distinct materials and its location should be preserved. In addition, a new window should be in character with the historic building.

- 1.20 Preserve the functional and decorative features of a historic window.
- 1.21 Preserve the position, number and arrangement of historic windows in a building wall.
- 1.22 Preserve the size and proportion of a historic window opening.
- 1.23 Preserve the historic ratio of window openings to solid wall on a primary facade.
- 1.24 Match a replacement window to the original in its design.
- 1.25 In a replacement window, use materials that appear similar to the original.
- 1.26 Match, as closely as possible, the profile of the sash and its components to that of the original window.

Preservation Brief 9. The Repair of Historic Wooden Windows.

Preservation Brief 13. The Repair and Thermal Upgrading of Historic Steel Windows.

Tech Notes –Windows No. 10: Temporary Window Vents in Unoccupied Historic Buildings. Charles Fisher and Thomas Vitanza. (1985)

Tech Notes –Windows No. 11: Installing Insulating Glass in Existing Wooden Sash Incorporating the Historic Glass. Charles Fisher. (1985)

Tech Notes –Windows No. 19: Repairing Steel Casement Windows. Chad Randl. (2002)

Tech Notes –Windows No. 21: Replacement Wood Sash Utilizing True Divided Lights and an Interior Piggyback Energy Panel. Charles E. Fisher. (2008)

Tech Notes –Windows No. 22: Maintenance and Repair of Historic Aluminum Windows. Kaaren R. Staveteig. (2008)

Doors

The character-defining features of a historic door and its distinct materials and placement should be preserved. In addition, a new door should be in character with the historic building.

1.27 Preserve the decorative and functional features of a primary entrance.

1.28 Maintain the original proportions of a significant door.

1.29 When a historic door is damaged, repair it and maintain its general historic appearance.

1.30 When replacing a door, use materials that appear similar to that of the original.

1.31 When replacing a door, use a design that has an appearance similar to the original door, or a door associated with the building style.

1.32 If energy conservation and heat loss are a concern, consider enhancing the energy efficiency of the door instead of replacing it.

Tech Note – Doors No. 1: Historic Garage and Carriage Doors: Rehabilitation Solutions. Bonnie Halda, AIA. (1989)

Roofs

The character of a historical roof should be preserved, including its form and materials, whenever feasible.

1.33 Preserve the original roof form of a historic structure.

1.34 Preserve the original eave depth of a historic structure.

1.35 Preserve original roof materials.

1.36 New or replacement roof materials should convey a scale and texture similar to those used traditionally.

1.37 Avoid using conjectural features on a roof.

1.38 Minimize the visual impacts of skylights and other rooftop devices.

1.39 If they are to be used, metal roofs should be applied and detailed in a manner that is compatible with the historic character and does not distract from the historic appearance of the building.

Preservation Brief 4. Roofing for Historic Buildings.

Porches

A porch is one of the most important character-defining elements of a facade. It provides visual interest and influences perceived scale. Preserve a porch in its original condition and form.

Repair a deteriorated porch instead of removing or replacing it. This approach is preferred because the original materials contribute to its historic character. Even when replaced with an exact duplicate, a portion of the historic building fabric is lost; therefore, such treatment should be avoided when feasible.

If necessary, replace a missing porch with one that appears similar to that seen historically. The first step is to research the history of the house to determine the appearance and materials of the original porch. The most important aspects of a replacement design are its location, scale and materials. Unless reconstructing a porch from historic documentation, it is not necessary to replicate the details of the original porch or a porch design copied from a similar style house. It is important that new details be compatible (similar form, scale and materials) for the design of the porch and the style of the house.

1.40 Preserve the original porch, when feasible.

1.41 Repair those elements of a porch that are deteriorated.

1.42 If a porch has been altered, consider restoring it back to its original design.

1.43 When replacing a porch is necessary, it should be similar in character, design, scale and materials to those seen traditionally.

1.44 Porch supports should be of an appropriate size to complement the entry and existing structure.

1.45 A new porch should use materials similar to those seen historically.

Preservation Brief 45. Preserving Historic Wooden Porches.

C. Special Considerations

Additions to Residential Properties

An addition should be compatible with the primary structure and not detract from one's ability to interpret its historic character.

1.46 A new addition should respect the mass and scale of the original structure.

1.47 Place an addition at the rear of a building or set it back from the front to minimize the visual impacts.

1.48 The roof form of a new addition should be in character with and subordinate to that of the primary building.

Historic Additions

Some early additions may have taken on historic significance of their own. One constructed in a manner compatible with the original building and associated with the period of significance may merit preservation in its own right. These existing additions should be evaluated for potential re-use.

In contrast, more recent additions that detract from the character of the building should be considered for modification or removal.

1.49 Preserve an older addition that has achieved historic significance in its own right.

Preservation Brief 14. New Exterior Additions to Historic Buildings: Preservation Concerns.

Secondary Structures

Preserving the historic fabric along an alley in a historic district is important. This includes sheds, garages and carriage houses. They are traditionally subordinate in scale and character to the primary structure and are typically located to the rear of the lot. These features should be retained.

1.50 Preserve an existing secondary structure when feasible.

Adaptive Reuse

Converting a building to a new use that is different from that which its design reflects is considered to be “adaptive re-use.” For example, converting a residential building to an office is adaptive re-use. A good adaptive re-use project retains the historic character of the building while accommodating its new function.

1.51 Seek uses that are compatible with the historic character of the building.

Accessibility

Where it applies, owners of historic properties should comply to the fullest extent possible with the Americans with Disabilities Act (ADA) provisions, while also preserving the integrity of the character-defining features of their buildings and sites.

1.52 Generally, creating an accessibility solution that does not alter a building’s historic integrity is encouraged.

Preservation Brief 32. Making Historic Properties Accessible.

D. Energy Efficiency

Building Design

Improvements to enhance energy efficiency and energy collection should be planned to retain and complement the original building.

1.53 Retain and enhance the energy efficiency of the original building.

1.54 Enhance the energy efficiency of original windows and doors.

Preservation Brief 3. Conserving Energy in Historic Buildings.

Preservation Brief 24. Heating, Ventilating, and Cooling Historic Buildings: Problems and Recommended Approaches.

Site Design

Site designs, including landscapes and structures, should take advantage of microclimatic conditions for energy conservation. Consider solar and wind exposure in design decisions.

1.55 Design landscapes and site features to promote energy efficiency.

Chapter 2

General Design Guidelines

In this Chapter:

- A. Street Patterns
- B. Streetscape
- C. Site Design
- D. Other

This chapter covers general design guidelines for all projects. It includes a variety of topics that may arise in rehabilitation projects, new building designs and site improvements.

Chapter 2

General Design Guidelines

This chapter contains general design guidelines that may affect the character of both new infill and historic properties.

A. Street Patterns

Historic settlement patterns seen in street and alley plans often contribute to the distinct character of the historic district and therefore they should be preserved. These street plans influence the manner in which primary structures are sited and they also shape the manner in which secondary structures and landscape features occur.

2.1 Respect historic settlement patterns.

B. Streetscape

Maintain the traditional character of the streetscape and landscape in the public right-of-way. This includes a rich collection of varying street designs, sidewalk types and mature trees.

2.2 Continue the use of planting strips along the public right-of-way.

2.3 Continue the pattern of street trees in the public right-of-way.

2.4 Preserve and maintain mature trees along the public right-of-way.

C. Site Design

Topography

Site work should be planned to protect the assets of the existing topography.

2.5 Minimize the visual impacts of cut and fill on a site.

Parking

The visual impact of parking should be minimized. On site parking should be subordinate to other uses and the front of the lot should not appear to be a parking area.

2.6 Minimize the visual impact of surface parking in residential neighborhoods.

2.7 Provide alley access to parking when feasible.

2.8 Design a new driveway in a manner that minimizes its visual impact.

Hierarchy of Public and Private Space

A key feature of the district is the “hierarchy of space” that is experienced along the street. The hierarchy of public and private space is a progression that begins at the street, which is the most public space, proceeds through the front yard, which appears “semi-private,” and ends at the front door, which is the “private” space. This transition enhances the pedestrian environment, contributes to the character of the district and should be maintained.

2.9 Provide a walkway from the street to the building.

2.10 Provide a front yard.

Alignment

A front yard setback serves as a transitional space between the public sidewalk and the private building entry. When repeated along the street, these yards enhance the character of the district, and provide interest to pedestrians. In many blocks, the relatively uniform alignment of building fronts contributes to the sense of visual continuity and should be maintained.

2.11 Locate a new building within the range of alignments seen traditionally in the block.

Orientation to the Street

Traditionally, the primary entrance of a building faced the street and was sheltered by a one-story porch. This orientation helps to establish a sense of scale to the district and should be continued.

2.12 Maintain the traditional orientation of a building to the street.

Fences and Retaining Walls

Traditionally, front yard fences were relatively low in height (4' max.) and had a "transparent" character that allowed views into yards, providing interest to pedestrian. "Transparency" was achieved by the spacing of vertical boards/pickets. Solid plank wood fences (6' max.) were used occasionally along alley edges. A new or replacement fence should be similar in character with those used traditionally in the neighborhood. In addition, fences should relate in character to the principal structure on the lot.

On some sites retaining walls are also found. They typically align along the edges of sidewalks, and help to establish a sense of visual continuity and should be maintained.

2.13 A new fence should be in character with those seen traditionally.

- Use traditional materials, such as wood.

2.14 A new retaining wall should be in character with those seen traditionally.

Site Lighting

Traditionally, site lighting was limited in residential neighborhoods. This low level of lighting contributes to the area's residential character. Therefore, light spill onto adjacent properties and into the night sky should be minimized.

2.15 Lighting shall be shielded to prevent off-site glare.

D. Other

The visual impact of ancillary improvements within the historic district should be minimized.

2.16 Minimize the visual impact of trash storage and service areas.

2.17 Minimize the visual impact of new mechanical systems.

Chapter 3

New Construction

In this Chapter:

- A. Architectural Character
- B. Building and Roof Form
- D. Building Mass & Scale
- E. Solid-to-Void Ratio
- F. Materials
- G. Secondary Structures
- F. Energy Efficiency in New Design

This chapter provides guidelines for the design of new buildings. These same guidelines also apply to improvements for existing, non-contributing structures. (The intent is that these existing buildings should be compatible with the context, but preservation principles do not apply.)

Chapter 3

New Construction

This chapter contains general design guidelines that may affect the character of both new infill and historic properties.

A. Architectural Character

In order to assure that historic resources are appreciated as authentic contributors to the district, it is important that new buildings be distinguishable from them. Therefore, new construction should appear as a product of its own time, while also being compatible with the historically significant features of the area.

- 3.1 Design a new building to reflect its time period, while respecting key features of its context.**
- 3.2 Contemporary interpretations of traditional designs and details may be considered.**
- 3.3 The exact imitation of older historic styles is discouraged for newer structures.**

B. Building and Roof Form

A similarity of building and roof form contributes to a sense of visual continuity in residential areas. In order to maintain this sense of visual continuity, a new building should have basic building and roof forms similar to those seen traditionally.

- 3.4 Use building and roof forms similar to those seen traditionally in the area.**

C. Building Mass and Scale

Traditionally residential buildings had varied heights, articulated masses and pedestrian-scaled front facades. A new building should continue to provide a variety of pedestrian-friendly scales and visually appealing masses. Buildings should not be monolithic in scale or greatly contrast with the existing scale of those seen traditionally in the district.

A sense of human scale is achieved when one can reasonably interpret the size of a building by comparing features of its design to comparable elements in one's experience. Using a building material of a familiar dimension such as traditional brick or wood lap siding is an example. Using traditional sized building features such as windows, doors and porches is also encouraged.

These features are some of the important characteristics of residential buildings and should appear in all new construction.

- 3.5 Construct a new building to reflect the mass and scale of traditional residential buildings.**
- 3.6 Express facade components in ways that will help to establish a human scale.**
- 3.7 A facade should reflect dimensions similar to traditional buildings in the district.**
- 3.8 Keep the shape and proportions of window and door openings similar to traditional buildings in the district.**

D. Solid-to-Void Ratio

Most buildings had a similar amount of glass resulting in a relatively uniform solid-to-void ratio. On a new building, the amount of facade that is devoted to wall surface, as compared to that developed for openings, should be similar to that of historic buildings within the district.

- 3.9 Use a ratio of solid-to-void (wall-to-window) that is similar to that found on historic buildings within the district.**

E. Materials

Building materials for new structures and additions to existing buildings should contribute to the visual continuity of the district. They should appear similar to those seen traditionally.

3.10 Building materials shall be similar in scale, color, texture and finish to those seen traditionally in the district.

3.11 Use masonry that appears similar in character to that seen traditionally.

3.12 New materials that are similar in character to traditional ones may be acceptable with appropriate detailing.

F. Secondary Structures

The visual impact of ancillary improvements within the historic district should be minimized.

3.13 Locate secondary structures to the rear of the lot.

3.14 Locate a garage such that its visual impacts will be minimized.

3.15 Detached accessory dwellings should remain subordinate, in terms of mass and scale, to the primary structure on the lot.

F. Energy Efficiency in New Design

The conservation of energy is a key objective in site design, building design and orientation, and landscapes. The site design process should include an evaluation of the physical assets of the site to maximize energy efficiency and conservation in the placement and design of a building. Designs should consider seasonal changes in natural lighting and ventilation conditions.

A design should also take into account the potential effect on an adjoining property, in terms of its solar access and ability to implement the same environmental design principles. Careful consideration should be given to balancing sustainable design principles with those related to maintaining the traditional character of the area.

3.16 Locate a new building, or an addition, to take advantage of microclimatic opportunities for energy conservation.

3.17 Design a building, or an addition, to take advantage of energy saving and generating opportunities.

3.18 Maximize solar access for all properties.

3.19 Use landscape designs to promote energy efficiency and water conservation. Appropriate strategies include the following:

Energy Efficiency in Building Massing

A building should be oriented to maximize the potential for natural daylighting as well as solar energy collection. In doing so, careful consideration should be given to first relating the building's mass to the historic context.

3.20 Shape a building's mass to maximize solar energy potential.

3.21 Orient a building to maximize green principles while ensuring compatibility with adjacent, lower-scale structures.

Environmental Performance in Building Elements

The elements that make up a building, including windows, mechanical systems and materials, can significantly impact environmental performance. These should be designed to maximize the building's environmental performance, while promoting compatibility with surrounding sites and structures. New materials that improve environmental performance are appropriate if they have been proven effective in this climate.

3.22 Use green building materials whenever possible.

3.23 Incorporate building elements that allow for natural environmental control.

Solar and Wind Energy Devices

Solar and wind energy devices (i.e., solar panels, wind turbines) should be positioned to have a minimal effect on the character of the district.

3.24 Minimize the visual impacts of energy devices on the character of the district.

