



COMMUNITY DEVELOPMENT

DESCHUTES COUNTY HISTORIC LANDMARKS COMMISSION

5:30 PM, MONDAY, NOVEMBER 18, 2024

Barnes Sawyer Rooms - Deschutes Services Bldg - 1300 NW Wall St - Bend

(541) 388-6575 | www.deschutes.org

AGENDA

MEETING FORMAT

The Historic Landmarks Commission will conduct this meeting electronically, by phone, in person, and using Zoom.

Members of the public may view this meeting in real time via the Public Meeting Portal at www.deschutes.org/meetings.

Members of the public may listen, view, and/or participate in this meeting using Zoom. Using Zoom is free of charge. To login to the electronic meeting online using your computer, copy this link:

<https://us02web.zoom.us/j/84117981935?pwd=KL6FSXbQZSzyZeSpbSFO2pae09pfMn.1>

Passcode: 054199

Using this option may require you to download the Zoom app to your device.

Members of the public can access the meeting via telephone, dial: 1-312-626-6799. When prompted, enter the following Webinar ID: 841 1798 1935 and Passcode: 054199. Written comments can also be provided for the public comment section to planning@deschutes.org by 4 PM on November 18. They will be entered into the record.

I. CALL TO ORDER

II. APPROVAL OF MINUTES - August 5, 2024

III. PUBLIC COMMENT

IV. ACTION ITEMS

1. State Historic Preservation Office Presentation – Kuri Gill, SHPO
- [2.](#) Guidelines and Recommendations for Wildfire Resiliency of Historic Resources in Sisters – Emelia Shoup, City of Sisters
3. Goal 5 Cultural Areas Rulemaking Update – Tanya Saltzman

4. Subcommittee Roundup
5. 2025-6 CLG Grant – Preliminary Discussion

V. HISTORIC LANDMARKS COMMISSION AND STAFF COMMENTS

VI. ADJOURN



Deschutes County encourages persons with disabilities to participate in all programs and activities. This event/location is accessible to people with disabilities. If you need accommodations to make participation possible, please call (541) 617-4747.



MEMORANDUM

DATE: November 12, 2024
TO: Deschutes County Historic Landmarks Commission
FROM: Tanya Saltzman, AICP, Senior Planner
RE: November 18, 2024 - Historic Landmarks Commission Meeting

The Historic Landmarks Commission (HLC) will conduct a meeting on November 18, 2024 at 5:30 p.m. in the Deschutes Services Center, Barnes and Sawyer rooms, in-person, electronically and by phone. This memorandum will serve as an outline of all agenda items.

Please note: the Deschutes County Meeting Portal is located at the below link. All meeting materials as well as live video may be found there:

<https://www.deschutes.org/meetings>

- I. Call to Order**
- II. Public Comment**
- III. Approval of Minutes – August 5, 2024**
- IV. Action Items**

1. State Historic Preservation Office Presentation – Kuri Gill, SHPO

Kuri Gill, Grants and Outreach Coordinator, Oregon State Historic Preservation (SHPO), will present an overview of Oregon’s preservation program and the Certified Local Government program.

2. Guidelines and Recommendations for Wildfire Resiliency of Historic Resources in Sisters – Emelia Shoup, City of Sisters

The primary task of the most recent cycle of CLG grant was the creation of the report, “Guidelines & Recommendations for Wildfire Resiliency of Historic Resources in Sisters.” This task was

undertaken by a consultant, BUILD LLC, along with planning staff. Emilia Shoup, Associate Planner, will present a summary of the report. The report is included as an attachment in this meeting packet.

3. Goal 5 Cultural Areas Rulemaking Update – Tanya Saltzman

Staff is providing the Historic Landmarks Commission with an update to the DLCD Goal 5 Cultural Areas rulemaking process. Since staff's general overview of the process and content at the previous HLC meeting,¹ the Department of Land Conservation and Development held its first public hearing and hosted additional webinars. Both events presented additional details on the rulemaking process, some of which are shared here. No comments were provided to DLCD by either the Board of County Commissioners or members of the HLC.

As a reminder, the timeline is as follows:

- September 1, 2024: Draft rules noticed with Secretary of State
- September 26-27, 2024: First LCDC hearing planned
- October 15, 2024: Public comment period ends
- Early October 2024: Final RAC meeting planned
- December 5-6, 2024: Second/final LCDC hearing planned

A recording of the first hearing is available at approximately the 4:14 timestamp at the following link: <https://www.youtube.com/live/q2fPacOGB9U>

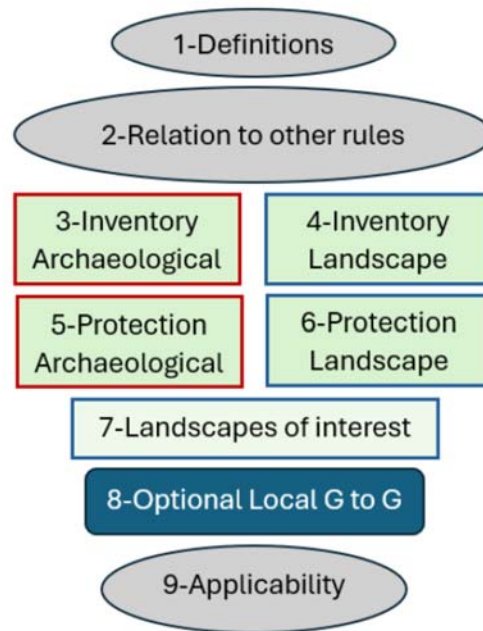
Overview/concepts

As noted previously, the guiding principles of the rulemaking include improving awareness of and reducing impacts to culturally important areas, while also respecting permitting timelines that are part of Oregon law and supporting the Governor's housing production guidelines.

These rules also intended to be restorative: when the initial Goal 5 rules were put in place, many tribes had already been officially terminated via the 1954 Western Oregon Indian Termination Act, which terminated federal services promised to tribal nations, closed reservations, and erased the legal status of 61 tribes. Without those tribes, there could be little to no recognition of culturally important areas. This rule provides a mechanism for communication and recognition of areas that were previously undocumented.

DLCD created the following diagram of the rule structure, which illustrates the various sections of the rule. Staff provided an overview of the various sections at the last HLC meeting and is highlighting additional points below.

¹ <https://mccmeetingspublic.blob.core.usgovcloudapi.net/deschutes-meet-7fdd5d509e94459b8a3e0a14c42078a8/ITEM-Attachment-001-520b7cab6124c30b4f819e3114af927.pdf>



Of the most importance is the identification of two tracks: one for archeological resources, and the other for landscape features of cultural interest. As per the general Goal 5 process, the first step is to inventory the potential resource(s); the second is to determine the program to protect the resource. The proposed rulemaking outlines two different paths for these processes for archeological resources and for landscape features.

Archeological resources

- **Inventories** are generally already identified at the state level and are managed in a SHPO database.
- **Protections** are based on existing state statutes (ORS 97.740, ORS 358.905-358.961, ORS 390.235, OAR 736-051-0090); new rulemaking states that “Local governments shall support awareness and compliance with these state laws and rules.”
- **Permit applications** will include language stating that it is unlawful to alter archeological sites without a permit
- **Notice** will be provided to tribes of applications involving ground disturbance that are reviewed through a public process (tribes will identify what locations/types of applications they will want to receive)

Landscape features

- **Inventories** are essentially a new category of cultural resource that can be (but are not required to be) inventoried by local governments and will live in the local government comprehensive plan, like most other Goal 5 resources. These are expected to grow in number over time as local governments identify these areas.

- **Protections** would follow the standard Goal 5 process, utilizing an ESEE (economic, social, environmental, and energy) analysis to determine applicable protections.
- **Notice** will be provided (once resources are inventoried) to tribes of applications occurring on rural lands: notice of initial application and subsequent notice once application is deemed complete. This notice is intended to provide applicants the opportunity to change their application to avoid/minimize disturbance.

Other items of note

- The proposed rule would become effective January 1, 2026. This would give time for implementation guidance, including model code, model language to include in application documents, sample notices, and so on. This date will also give time for consultation between the tribes and the Legislative Commission on Indian Services to determine which tribes would like to receive notice from which areas.
- There may be some potential for funds and technical assistance for counties to update their Goal 5 cultural inventories; however, this rule does not require a comprehensive cultural inventory to be created.
- DLCDC is still considering how to address cultural significance for non-tribal areas. For instance, a Chinatown area or the Across the Bridge community in Eugene, a predominantly Black neighborhood that was demolished to make way for a new bridge. How would a government determine what is significant to different non-tribal groups? Currently, DLCDC noted that there appears to be more support for including more culturally identified groups rather than excluding those groups.
- If other government-to-government (or tribe) agreements are already in place, these can potentially take the place of the notification measures in the rule.

Next Steps

DLCDC will be reviewing public comments received and will make staff recommendations to LCDC, which will conduct its next hearing on December 5-6.

4. Subcommittee Roundup

Subcommittees have the opportunity to provide updates on their activities since the last meeting. Those committees are as follows:

1. Cultural resource work
2. Wildfire and preservation issues
3. Camp Abbot
4. General public awareness issues

5. 2025-6 CLG Grant – Preliminary Discussion

It is never too early to begin thinking about the next cycle of CLG grants. The application deadline for the 2025 grant is expected to be in late February 2025. Staff asks commissioners to begin brainstorming potential projects for the grant, which generally requires a 1:1 match and historically has been up to approximately \$15,000, depending on the number of applicants.

The HLC will have an opportunity to discuss in detail at its early February meeting before staff finalizes the application and meets with the Board of County Commissioners for final approval. It is possible staff will schedule a special January meeting if more discussion is warranted.

SHPO's general eligibility language is as follows:

PROJECTS:

These grants support projects that support the preservation of historic properties and archaeological sites.

- Survey – the documentation of historic properties and archaeological sites
- Designation – Designating a historic property or archaeological site to the local landmarks list or National Register of Historic Places.
- Pre-Development – Building preservation plans, structural reports, designs, etc. for historic properties.
- Development – Rehabilitation of properties listed on the National Register of Historic Places.
- Planning – Community preservation plans, archaeology studies, etc.
- Review and compliance – Management of the CLG's preservation program, processing design review applications, design guidelines, etc. This should generally be matching source, this grant is not intended to fund the operation of the preservation program.
- Public Education – Preservation month activities, speakers and trainings, historic property walking tours, mobile device tours, scanning of historic property photos, maps, etc. Signs and interpretive panels are NOT eligible for funding.
- Other activities – Trainings and conferences for staff and commissioners, membership in preservation organizations to access resources, training materials, etc. National Alliance of Preservation Commissions membership and trainings are highly recommended.

In recent years, Deschutes County's grant projects have been primarily centered on public education and planning—whether websites, Preservation Month, reports, or similar. After the preliminary discussion this evening, staff will follow up by requesting additional information from commissioners or by proceeding with further project scope development as needed.

V. Staff and Commissioner Comments

VI. Adjourn

Attachment

1. Guidelines & Recommendations for Wildfire Resiliency of Historic Resources in Sisters

CITY OF SISTERS

GUIDELINES & RECOMMENDATIONS FOR WILDFIRE RESILIENCY OF HISTORIC RESOURCES IN SISTERS, OREGON

Sisters, Deschutes County, Oregon

Prepared for

Deschutes County
Historic Landmarks Commission
&
City of Sisters

Prepared by

City of Sisters Community Development
Sisters, Oregon 97759

BUILD LLC
Sisters, Oregon 97759

August 26, 2024

ACKNOWLEDGEMENTS

CERTIFIED LOCAL GOVERNMENT GRANT (2023 – 2024)

This publication has been funded with the assistance of a matching grant-in-aid from the Oregon State Historic Preservation Office and the Historic Preservation Fund, National Park Service, Department of the Interior. Any opinion, findings, and conclusions or recommendations expressed in this material do not necessarily reflect the views of the Department of the Interior. Regulations of the U.S. Department of the Interior strictly prohibit unlawful discrimination on the basis of race, color, national origin, age or handicap. Any person who believes he or she has been discriminated against in any program, activity, or facility operated by a recipient of Federal assistance should write to: Office of Equal Opportunity, National Park Service, 1201 Eye Street, NW (2740) Washington, DC 20005”

“The activity that is the subject of this report has been financed in part with Federal funds from the National Park Service, U.S. Department of the Interior. However, the contents and opinions do not necessarily reflect the views or policies of the Department of the Interior, nor does the mention of trade names or commercial products constitute endorsement or recommendation by the Department of the Interior.

STATE OF HISTORIC PRESERVATION OFFICE

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DESCHUTES COUNTY

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CITY OF SISTERS

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EXECUTIVE SUMMARY

The *Guidelines & Recommendations for Wildfire Resiliency of Historic Resources in Sisters* report was undertaken at the time when the City Council's goal for Wildfire Mitigation and Community Resiliency identified the outcome to update defensible space and structural hardening requirements in the Sisters Development Code. However, this effort to protect Sisters' built environment and residents from increasingly more frequent and intense wildfire events presented a conflict with retaining the architectural integrity of existing buildings that are or may become designated historic resources.

Community resiliency also shares a nexus with historic preservation. The National Institute of Building Sciences cites the 2013 United Nations global report on Heritage and Resilience:

"The symbolism inherent in heritage is a powerful means to help victims recover from the psychological impact of disasters. In such situations, people search desperately for identity and self-esteem", and find it in reclaiming their heritage and historic places. It further stated, "Heritage contributes to social cohesion, sustainable development, and psychological well-being. Protecting heritage promotes resilience." (WBDG, 2019).

In addition to reducing the risk and severity of wildfire impacting the community of Sisters, taking measures to protect and preserve our historic resources can be vital to promoting community resiliency if a catastrophic event were to occur.

Sisters has a variety of historic resources, with existing structures dating back to as early as 1908 (Hardy Allen Home at 401 E Main Avenue), including one nationally registered building (Sisters Administration Building at 525 E Cascade Avenue) and a total of four locally registered buildings. Now that over 50 years has passed since the adoption of the Western Design Theme ordinance occurring in 1973, which was a significant event in the history of Sisters, there will soon be an increasing number and concentration of western-themed buildings that could be evaluated for historic designation eligibility.

Given this unique context of Sisters' commercial core including both western-themed and non-western historic buildings, this report has focused on reviewing building hardening and defensible space guidelines through the lens of the Western Design Theme standards and makes recommendations that would still be relevant to any existing building constructed of flammable building materials. This report is intended to be a reference for future considerations of text amendments to the Sisters Development Code regarding wildfire mitigation measures, the Western Design Theme (SDC 2.15.2600), and historic resources, as well as a resource to builders and property owners considering redevelopment and rehabilitation of their existing buildings that may be a historic resource.

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SECTION 1: INTRODUCTION

PURPOSE

The primary purpose of this report is to support the City Council goal to adopt building hardening and defensible space standards by preparing a set of guidelines and recommendations that are sensitive to buildings that are designated as historic resources or have historic value. In Sisters, many of the historic and western-themed buildings are constructed of building materials and architectural features that are inherently flammable and therefore would be in direct conflict with wildfire hazard mitigation efforts.

The intended outcome of this report is to inform future text amendments that plan for resiliency while preserving the cultural heritage and community identity that makes Sisters, Sisters.

The purpose of this report is further supported by the Sisters 2040 Comprehensive Plan that outlines the following goals, objectives and policies:

GOAL 4 – LIVABILITY

OBJECTIVE 4.1 – COMMUNITY IDENTITY

Policy 4.1.1 – The City shall recognize and conserve the environment and natural resources that enhance the community’s identity, including open spaces, natural landscapes, outdoor recreation areas, historic structures, architectural styles, and public art.

Policy 4.1.7 – The City shall conduct public education and outreach of the historic resources in Sisters and encourage property owners to nominate their eligible properties to the Deschutes County Inventory of Historic Sites and/or National Historic Register.

GOAL 6 – ENVIRONMENT

OBJECTIVE 6.2 – NATURAL HAZARD MITIGATION & RESILIENCE

Policy 6.2.1.5 – The City shall support a program to support fire resistant retrofits of commercial and residential buildings with emphasis on buildings that are designated historic or have historic value, as determined through historic survey.

RESEARCH DESIGN

This report was created in support of funding made available through Deschutes County Historic Landmarks Commission via the Certified Local Government (CLG) Grant. These funds were used to pay for professional consultant services with BUILD LLC to compile research and criteria for building hardening and defensible space standards, produce visual renderings that demonstrate those concepts, and review the Sisters Development Code Section 2.15.2600 Western Frontier Architectural Design Theme for compatibility with those standards. Further details on the consultant’s research methods are described on the following pages in Section 2 Research Methods.

Another important resource was the 2018 Reconnaissance Level Survey prepared by Diane Painter that conducted a high-level survey of the historic value of buildings within Sisters downtown core. Additional resources were utilized to illustrate historic preservation practices, themes, and priorities, which are identified in Section 6 Bibliography of this report.

Special thanks to Kuri Gill, Oregon Heritage Grants & Outreach Coordinator, and Tanya Saltzman, Deschutes County Senior Planner, for ensuring the final report complied with the terms of the CLG Grant.

SECTION 2: RESEARCH METHODS

METHODOLOGY

The first task in creating this report was to collect information about how to make buildings resistant to wildfires. The main resource used in collecting fire-hardening information is the “Firewise USA” program by the National Fire Protection Association (NFPA). The Firewise program offers guidance for residents and local jurisdictions to take action to increase the ignition resistance of their homes and community buildings. The recommendations of the program are based in science, stemming from years of research by the US Forest Service and the Insurance Institute for Business and Home Safety.

Another method of information gathering used in the creation of this report was the referencing guidelines instituted by other jurisdictions. In 2020, the state of California signed into law Senate Bill 190 – “Fire safety: building standards: defensible space program.” This law mandates home sellers to provide a National Hazard Disclosure (NHD) report that contains information on the property’s fire risk. The law also provides rules for residences within State Responsibility Areas (SRA). These rules include creating a defensible buffer around homes and constructing using fire-resistant materials.

The next task in the creation of this report was to create a list of applicable fire-hardened building materials and methods of construction based upon the research listed above. Many of these are outlined clearly by the Firewise program. However, while some materials are appropriate for a fire-hardened roof, for example, they are inappropriate for wall cladding or a walking surface. Each building material and construction method was analyzed and then either included or removed from our list of recommendations based upon its suitability in Central Oregon.

The last task was application of the collected fire hardened building materials to the Western Frontier Architectural Design Theme (a.k.a, “Western Design Theme”). While certain construction methods are fire-resistant, they may not meet the Western Design Theme. For example, while a concrete wall is essentially fireproof, it would be inappropriate for a downtown commercial business façade in Sisters, Oregon because it does not meet the design guidelines. Conversely, while exposed natural wood may be in-line with the design standards, it increases a building’s susceptibility to fire damage.

GUIDELINES & CRITERIA

The primary goal of this report is to provide guidance into building materials and practices that reduce a building’s vulnerability to wildfire. There are two main aspects in creating a “fire-hardened building” – reduce the flammability of the building and reduce exposure to wildfire. Reducing the flammability of the building is achieved by using fire-proof materials and building methodologies. Reducing the exposure to wildfire is achieved by the implementation of defensible space. This is essentially a gap between the building and surrounding flammable features like landscaping, other buildings, fences and boardwalks. Guidelines have been created to address both of these main criteria for fire-hardening.

The secondary goal of this report is to assess how the fire-hardening guidelines can be compatible with the Western Frontier Architectural Design Theme, and ultimately, existing and potentially historically significant buildings in the Sisters downtown core. Certain fire-resistant materials like brick cladding and

standing seam metal roofs are easily in conformance with both the western design theme and fire-hardening guidelines. However, other materials like wood cladding frequently used on historic and western-themed buildings would require alterations and specific treatments to become fire-resistant. Guidelines have been created to ensure that fire-hardening materials and building practices are in alignment with the western design standards that are unique to the City of Sisters.

SURVEY BOUNDARY

These guidelines apply to the Western Frontier Architectural Design Theme as defined in SDC 2.15.2600 which applies to all new, reconstructed or remodeled uses in all Commercial Districts (i.e., Highway Commercial, Downtown Commercial, Sun Ranch Tourist Commercial). Per the 2018 Reconnaissance Level Survey (RLS) Report there are non-western-themed buildings that are designated historic or identified as having historic value within the survey area roughly bounded by Adams Avenue, Locust Street, St. Helens Avenue, and Pine Street.

While the fire-hardening guidelines in this report are specific to the Western Frontier Design Theme, they are also applicable and effective in fire-hardening any buildings in the area.

SECTION 3: HISTORIC RESOURCES OVERVIEW

Historical Context of Sisters Development

The historical context of the Sisters downtown is comprised of a variety of development eras with extant buildings dating back to as early as 1908 (e.g., Hardy Allen House at 401 E Main Avenue), and includes more recent development trends such as the significant event in Sisters' history occurring in 1973 when the 1880s Western Frontier Architectural Design Theme ordinance was adopted by City Council. This overview relies heavily on the compiled research and findings for buildings that are designated historic or may have historic value as identified in the 2018 Reconnaissance Level Survey (RLS) Report.

Development Eras of Sisters:

- Sisters Beginnings (1865 – 1919)
- Early Development (1920 – 1949)
- Post-War (1950 – 1969)
- Recent Trends (1970 – 2018)

In the 2018 RLS Report, many of the western theme buildings were identified as “not eligible/out of period” meaning they were not considered to have historic value at the time of the survey. Now that over 50 years has passed since the adoption of the western design theme ordinance, some of these buildings may be coming into a “Period of Significance”. Over time, a concentration of these historically significant buildings could result in an “Area of Significance” that may be eligible for designation as a historic district.

The guidelines and recommendations in this report focus primarily on the western design theme code standards (SDC 2.15.2600), however, there are numerous extant buildings constructed prior to 1973 that reside within the Downtown Commercial District in which these design standards are applicable. By outlining historically sensitive building materials that meet both the western design theme and the fire hardening guidelines, the City hopes to preserve existing historically designated buildings and those of historic value that could one day contribute to a historic designation.

Significance of the Western Design Theme

The adoption of Sisters' Western Frontier Architectural Design Theme came at a time when the city's population was at an all-time low after the bust of the timber industry in 1953, which had been the backbone of the local economy. According to Census data, the Sisters' population in 1950 was 723 people and by 1970 it had dropped to 516. This drop in population had followed the closure of the last lumber mill in Sisters in 1963 and the closure of the Sisters High School in 1967.

As one economic industry died, the city identified the economic opportunity of its location at the “gateway of the Cascades” where Sisters had always been a community centered on accommodating visitors, such as providing overnight accommodations and provisions to fur traders, sheepherders and cattle drivers. By 1970, Black Butte Ranch and other nearby residential communities were being built by a developer, Brooks Resources. This company desired a place for its residents and visitors to shop and patron locally. So, in coordination with the City Council, Brooks Resources envisioned a plan to help the Sisters downtown core reinvent itself by offering a \$5,000 loan to build false storefronts of western theme to any existing business

in Sisters, or to new construction that honored the theme. This would give Sisters a unique image and enhance its attraction. If a business owner kept the western theme frontage for 10 years, the loan was forgiven. Out of this idea, Sisters was able to adopt the Western Design Theme ordinance in 1973 and develop a strong identity that began to attract people to Sisters as a tourism destination. As the economy strengthened, the population returned to 700 residents in the 1980s, and by 1992, the Sisters School District was able to re-open a local high school after 25 years of Sisters students attending Redmond High School in its absence.

Over 50 years has passed since the adoption of the western design theme ordinance, in which western-themed commercial buildings are coming into a “period of significance” where they may be eligible for historic designation. Though these buildings are not constructed in 1880 and are not necessarily authentic to the architectural period of western frontier, the adoption of the western theme was a significant event in the history of Sisters and these buildings’ ability to relate to this local western theme is what gives them architectural integrity and eligibility as a significant contributing resource.

The guidelines and recommendations outlined in this report for fire-resilient buildings can apply to all buildings in any area of Sisters, however, emphasis has been put on the western themed buildings to preserve the opportunity of future historic designation of these western-themed buildings. The building hardening and defensible space standards can be in direct conflict with the western design theme ordinance, and the conflict may result in the western-themed buildings becoming more difficult to maintain and preserve, and therefore they can lose their architectural integrity and eligibility for future designation as historic resources on an individual and district level.

SECTION 4: GUIDELINES & RECOMMENDATIONS

LOCAL CONTEXT

Sisters, Oregon is in a wildfire prone area where the frequency and intensity of wildfires have been increasing. In the 2023 City of Sisters Environmental Sustainability Report, it is stated that buildings could see an increase in the potential for wildfire exposure, and that wildfire preparedness and resiliency should be considered regarding more resilient construction techniques and landscaping. The Council’s focus for Fiscal Year 2024-2025 is to complete the work on updating the City’s building hardening requirements and defensible space codes and continue to collaborate with agency partners to increase public awareness and public information about wildfire preparedness. The guidelines and recommendations outlined in this report support the expressed Council goal.

BUILDING HARDENING

While there are many ways to make a building resistant to wildfire damage, not all methods are compatible with the City of Sisters Western Design Theme. This section contains the fire-hardening building practices and appropriate building materials that are in-line with the theme. This section has been divided by different building components.

Roofing

Building Practice Guidelines:

Roof design is one of the most important factors in deterring a wildfire from a building. In general, complicated roof designs lead to more roof surface area, which leads to more areas for embers to land and start a fire. Therefore, simpler roof designs with less surface area are inherently more resistant to the spread of fire.

In addition to the outer roofing material, the roof assembly is important as well. In the event that an ember gets past the outer material, the following items within the overall roof assembly can help stop the spread of fire:

- Gypsum sheathing
- Fire-rated panel sheathing
- Mineral wool insulation

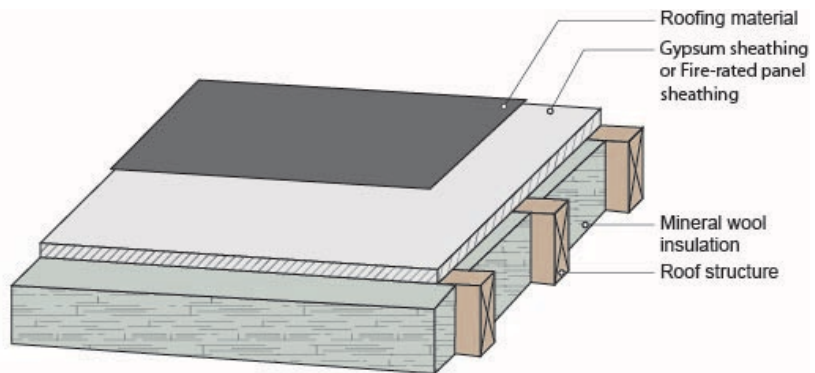


Figure 1: Fire-Resistant Roof Components

Roofing Material Recommendations:

Roof covering fire ratings are Class A, B, C, or unrated; with Class A providing the best performance. It is recommended that only Class A materials are used. Fire-resistant roofing materials that are in-line with the Western Design Theme include:

1. Aluminum standing seam
2. Slate roofing
3. Copper shingles and standing seam
4. Architectural asphalt composite shingles – Class A. Each brand of asphalt roofing shingles has different fire ratings (Class A, B, & C) – only Class A is recommended.
5. Sheet metal standing seam



1. Aluminum Standing Seam



2. Slate roofing



3. Class A asphalt roof shingles



4. Copper Shingles



5. Sheet metal standing seam

The following roofing materials are flammable and should not be allowed:

- 'Green roofs' or 'vegetated roofs'. Plants die, get dried out, and become flammable.
- Wood shingles



Figure 2: Example of wood shingles used at 130 S Elm Street. These building facades are incorporated into the southside of the “Palace Hotel” building located at 101 E Cascade Avenue originally built in 1915, which is listed on the local historic register.

Gutters

Building Practice Guidelines:

Gutters collect leaves and needles which dry out in the sun and create highly flammable areas for embers to land and spread a fire. If gutters are being used, they should be paired with a gutter cap such as “Leafguard” or similar to prevent organic flammable material from accumulating within the gutters.

Gutter Material Recommendations:

It is recommended that metal gutters are used rather than vinyl or plastic gutters. In the event of a fire catching in the gutter, a metal gutter will stay in place and contain the fire to the non-combustible roof edge. Conversely, plastic (or vinyl) gutters will quickly melt and detach in the event of a fire and spread the fire to the ground and wall cladding below.

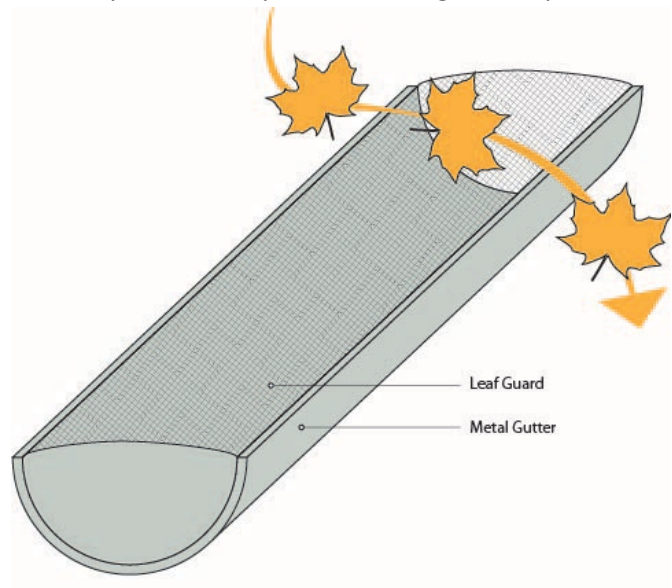


Figure 3: Leaf Guards

Overhanging Projections

Building Practice Guidelines:

Sloped eaves provide areas for smoke to become trapped. It is recommended that, should eaves be implemented in the building design, they are “boxed” to not trap smoke. A “boxed-eave” can still align with the western theme because it allows a building to have overhangs and porch roofs while making sure embers are able to travel out and away from the flat soffit.

Projection Material Recommendations:

Eave materials should be consistent with the wall cladding options listed in the “Exterior Walls” section below. In general, fiber cement panels provide the easiest and safest fire-hardening option. If a flammable material such as wood is preferred, it is recommended that a layer of exterior-rated gypsum sheathing is used in a layer beneath the wood soffit.

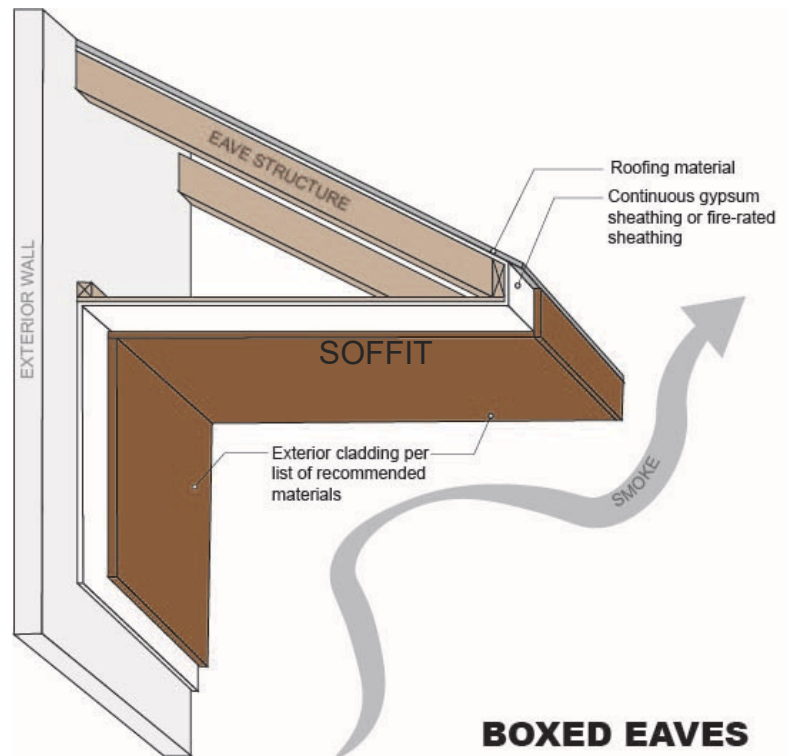


Figure 4: Boxed Eaves

Venting

Building Practice Guidelines:

Vents are required building components but offer open pathways for embers to enter the building and spread a fire inside. There are several ways to fire-harden building vents. First, metal vents should be used rather than plastic or vinyl vents. Ideally, a “fire-rated” metal vent should be used – such as “Vulcan Vents”. Second, 1/8” – 1/16” metal mesh screen should be installed over vent openings. The older standard of 1/4” mesh screen is large enough so that sparks and embers can enter the building, so it should no longer be used in fire-prone areas like Sisters.

Exterior Walls

Building Practice Guidelines:

There are several building practice guidelines for exterior walls which are simple, effective, and can be implemented while still being cohesive with the Western Design Theme. Ultimately, the more ledges (or horizontal protruding trim elements) a building has, the more opportunities embers have to land on the building and start a fire. The “Sisters Bakery” building at 251 E Cascade Avenue is an example of a building in-line with the Western Design Theme that has a simple façade and does not have any ledges.



Figure 5: The “Sisters Bakery” at 251 E Cascade Avenue. Listed on the local historic register in 1985 due to its association with the Leithauser family that constructed it to be used as a grocery market in 1925.

The following design techniques should be used to increase a building’s level of protection against a wildfire:

- Reduce ledges on the façade where embers can collect. This is a similar principle as reducing roof surface area and covering gutters, whereas the fewer areas on a building for embers to land, the more fire-resistant the building will be.
- Elevate the exterior siding at least 6” above the ground so that there is separation between any flammable brush on the ground and the wall cladding. This is accomplished by raising the foundation stem walls above the ground level.
- In addition to using the fire-rated materials listed below, the addition of fire-resistant exterior continuous insulation and/or exterior gypsum sheathing behind the cladding will help fire-harden a building.

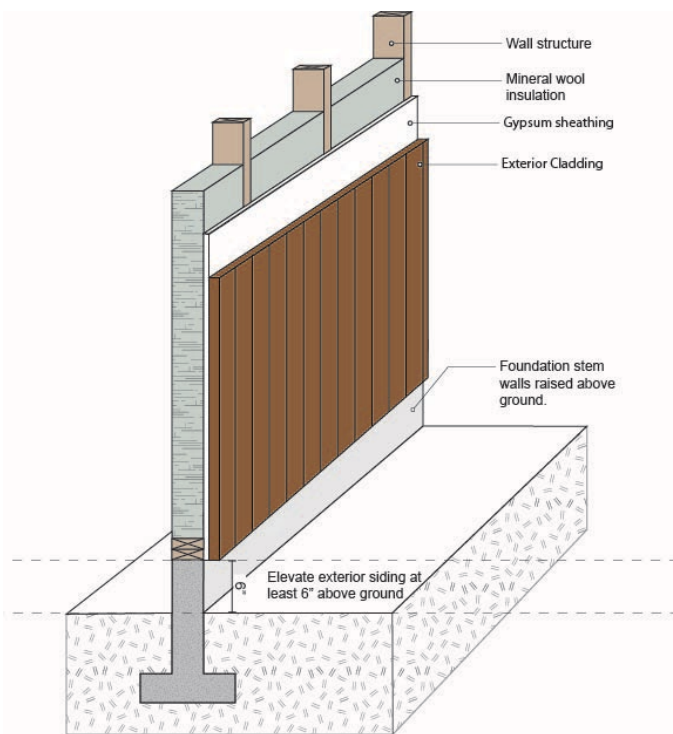
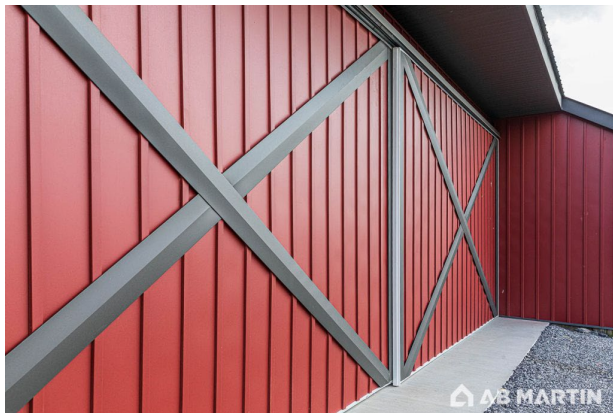


Figure 6: Fire-Resistant Exterior Walls

Exterior Wall Material Recommendations:

There are several exterior cladding materials that are fire-resistant while still being aligned with the Western Design Theme.

1. Sheet metal siding. There are sheet metal patterns that also mimic the board and batten style, in a slightly more modern way.
2. Fiber cement siding. While this may not feel like it aligns with the western design theme of Sisters, fiber cement siding can be arranged in a board and batten pattern, similar to the classic wood board and batten siding.
3. Masonry. Brick and stone siding are extremely fire-resistant and fit in easily with the Western Design Theme.



1. Metal board and batten pattern siding



2. Fiber Cement board and batten style siding



3. Brick Masonry siding used on the 301 E Main Avenue building.

Wood Cladding

While wood is perhaps the most ubiquitous exterior cladding material within the Western Design Theme, it is the most unsafe in the event of a fire. If wood is going to be used as a cladding material, it is highly recommended that the builder takes as many of the following precautions as possible:

- Use fire-resistant exterior continuous insulation behind the wood cladding.
- Use exterior gypsum sheathing behind the cladding.
- Use shou sugi ban. Shou sugi ban is the process of charring wood siding before installation. This charring process removes much of the flammable material from the siding and increases the fire resistance of the wood.
- Use mass timber. Mass timber takes a long time to ignite due to its size.
- Use fire-treated wood. There are many fire-treated wood products on the market that have been pre-treated by the manufacturer. Pre-treated fire-retardant lumber products protect the wood by altering its chemistry. When heat is applied, the chemical releases water and carbon dioxide, resulting in a char layer that slows down the burn, the spread of flames, and smoke development.
- Apply fire-retardant coating product on wood that doesn't come pre-treated.



Figure 7: Example of shou sugi ban treated wood which can give the appearance of oiled, weathered wood cladding as recommended in the Western Design Theme.

Fencing

Building Practice Guidelines:

Screening can be used as a shield to reduce or prevent radiant heat from a fire, thus protecting the building. If a flammable material such as wood is used as fencing, it should be at least 5 feet away from the building.

Fencing Material Recommendations:

- Welded wire panels with metal posts
- Steel or aluminum panels with metal posts
- Concrete wall. Concrete masonry units or cast-in-place.
- Brick wall.
- Stone wall. Gabion cages or stacked.
- Wood fence. If a wood fence is used, it should follow the same guidelines as in the exterior cladding section: apply a fire-retardant coating, use shou-sugi ban, or use fire-treated wood products.



Figure 8: This trash enclosure is constructed of nonflammable materials (i.e., masonry brick wall, corrugated metal panel gates), 310 E Cascade Avenue.

Decks and Walking Surfaces

Building Practice Guidelines:

Wooden porches are ubiquitous with the Western Design Theme. However, they offer an easy path for fire to spread and threaten a building. The easiest way of solving this issue is by using fire-resistant materials. If that is not an option due to the aesthetic of a building, exterior decks and walking surfaces should be separated from the building so that if the deck catches fire it does not spread to the building. This can also be achieved by using fire-resistant walls to separate the patio deck from the building.

Deck Material Recommendations:

- Brick
- Cementitious pavers
- Cast-in-place concrete
- Rock or Flagstone
- If wood is used, it should be at least 2" thick. Mass timber takes longer to ignite than thinner wood, thus slowing the spread of a fire.



Figure 9: Stone columns and wainscotting used on the covered walkway at 161 E Cascade Avenue.

Glazing

Building Practice Guidelines:

While fire-rated glazing options exist, they are extremely cost-prohibitive. Rather than requiring one of these options, it is recommended that dual-pane windows are used (which would be required to meet energy code anyway).

The second recommendation is to use window screens on all operable windows. In the event that a window breaks during a fire, a window screen with a 1/8" – 1/16" mesh will prevent large embers from entering the building. Installing screens may be the recommended option in situations where replacing the historic glazing on extant buildings may affect the building's architectural integrity and historic designation.



Figure 10: Example of a window screen placed over an old window or historic “glazing”.

DEFENSIBLE SPACE

“Defensible space” is a term used to describe the area around a building in which fire has a difficult time spreading through. There are multiple components that make the area around a building defensible. The first is the use of nonflammable landscaping within 5’ of the building. This includes gravel, concrete, and stone. There should not be flammable furniture, mulch, or plants within 5’ of the building.

The second component in creating defensible space is the choice of landscaping materials and plants beyond 5’ from the building. Within this zone, there should be a horizontal and vertical separation between trees and shrubs so that a groundfire cannot climb up trees. In effect, that involves shorter shrubs combined with tall trees, rather than a homogenous mix of medium-sized hedges.

The last component is the proper maintenance of the garden. Dead needles and leaf litter should be constantly removed. Trees should be trimmed so that there are no dead lower branches and so that there are no branches hanging over a building’s roof. Lastly, grass should always be cut to be below 4” in height.

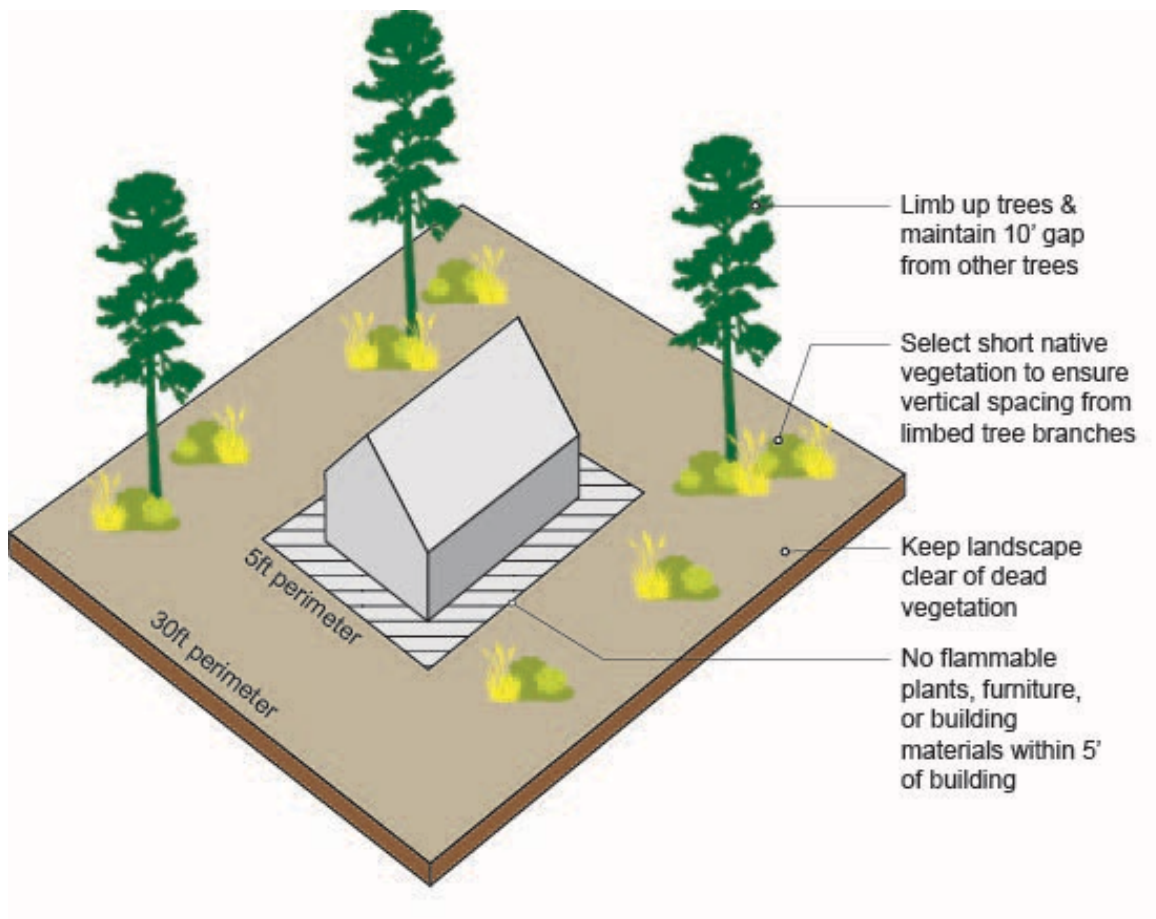


Figure 11: Defensible Space

SECTION 5: COMPATIBILITY ASSESSMENT

ASSESSMENT OF THE WESTERN DESIGN THEME CODE

In anticipation of Council’s goal to improve wildfire mitigation and community resiliency, this section reviews the Western Frontier Architectural Design Theme (SDC 2.15.2600) through the lens of complying with the guidelines for building hardening and defensible space and outlines recommendations for existing buildings of historic value and/or western-themed buildings could comply, and to be considered in the event of future text amendments.

This analysis is included in Appendix B on the following pages.

Summary of Findings

- 8 out of the 22 architectural elements of the Western Design Theme would meet the guidelines for wildfire mitigation.
- 14 of the 22 architectural elements are either not applicable or not compliant with the guidelines for wildfire mitigation, (e.g., untreated wood siding and trims, fabric awnings, second story ledges or balconies, oil surfaces, wood benches and fencing close to buildings).
- Of those 14 elements, all can comply with the fire-hardening and defensible space guidelines through the use of recommended alternatives as described in Section 4.
- In the instances where fire-hardening building materials and other similar alternatives might not be appropriate, such as to preserve a building’s historic integrity, defensible space standards could be used to improve the existing site’s overall wildfire risk.

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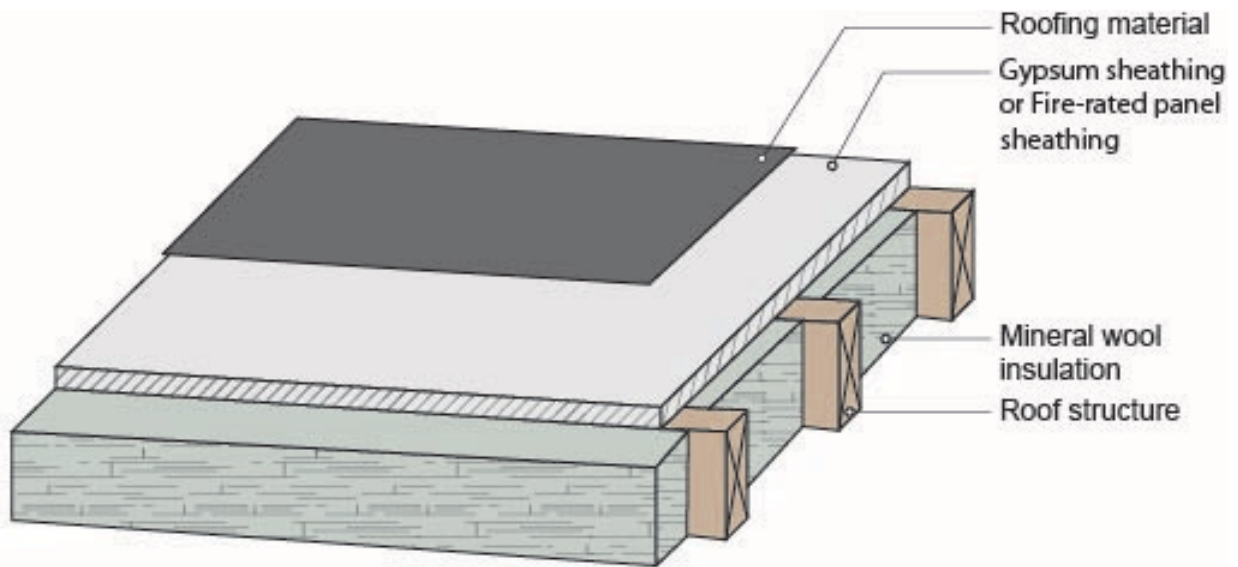
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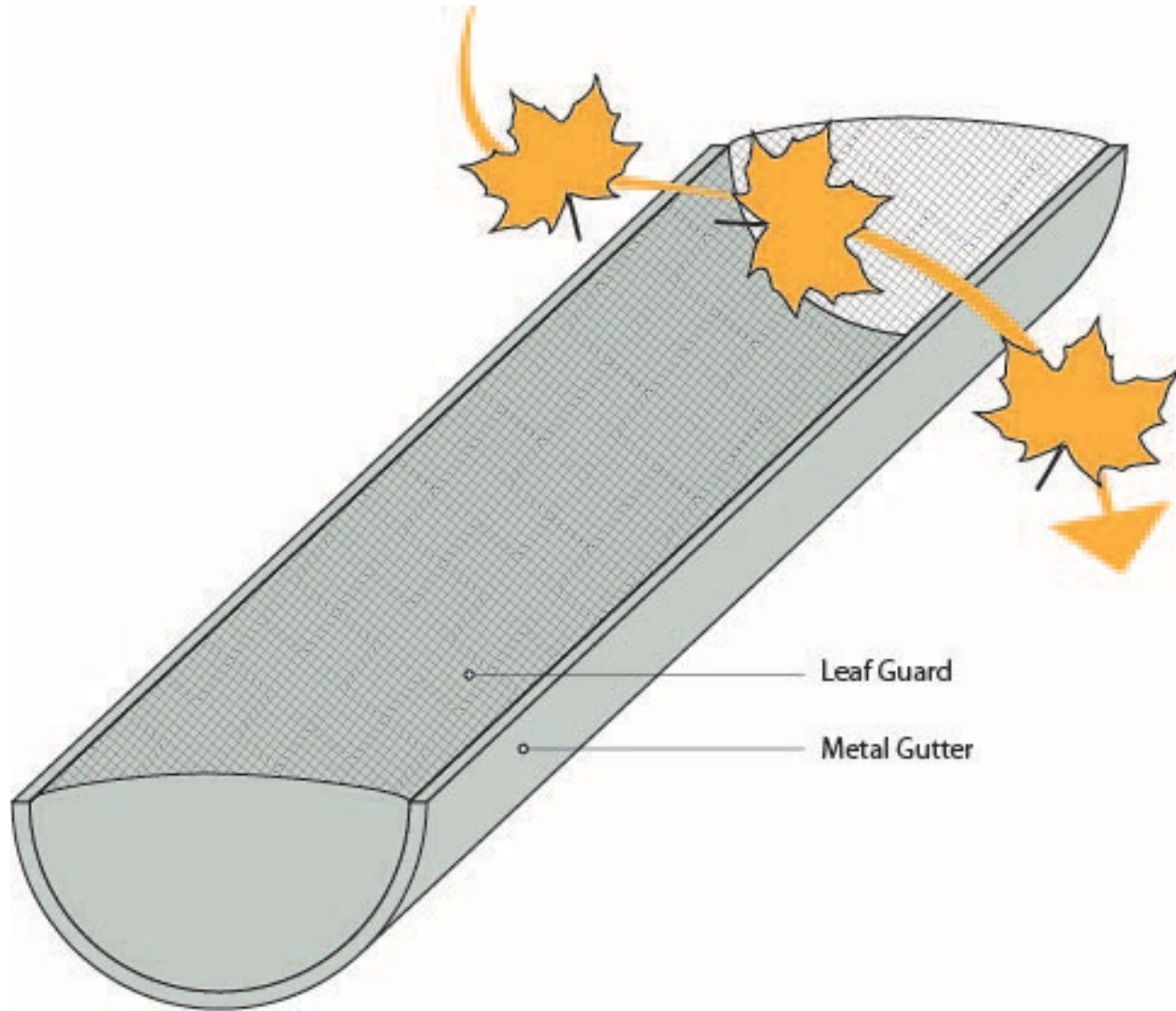
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APPENDICES

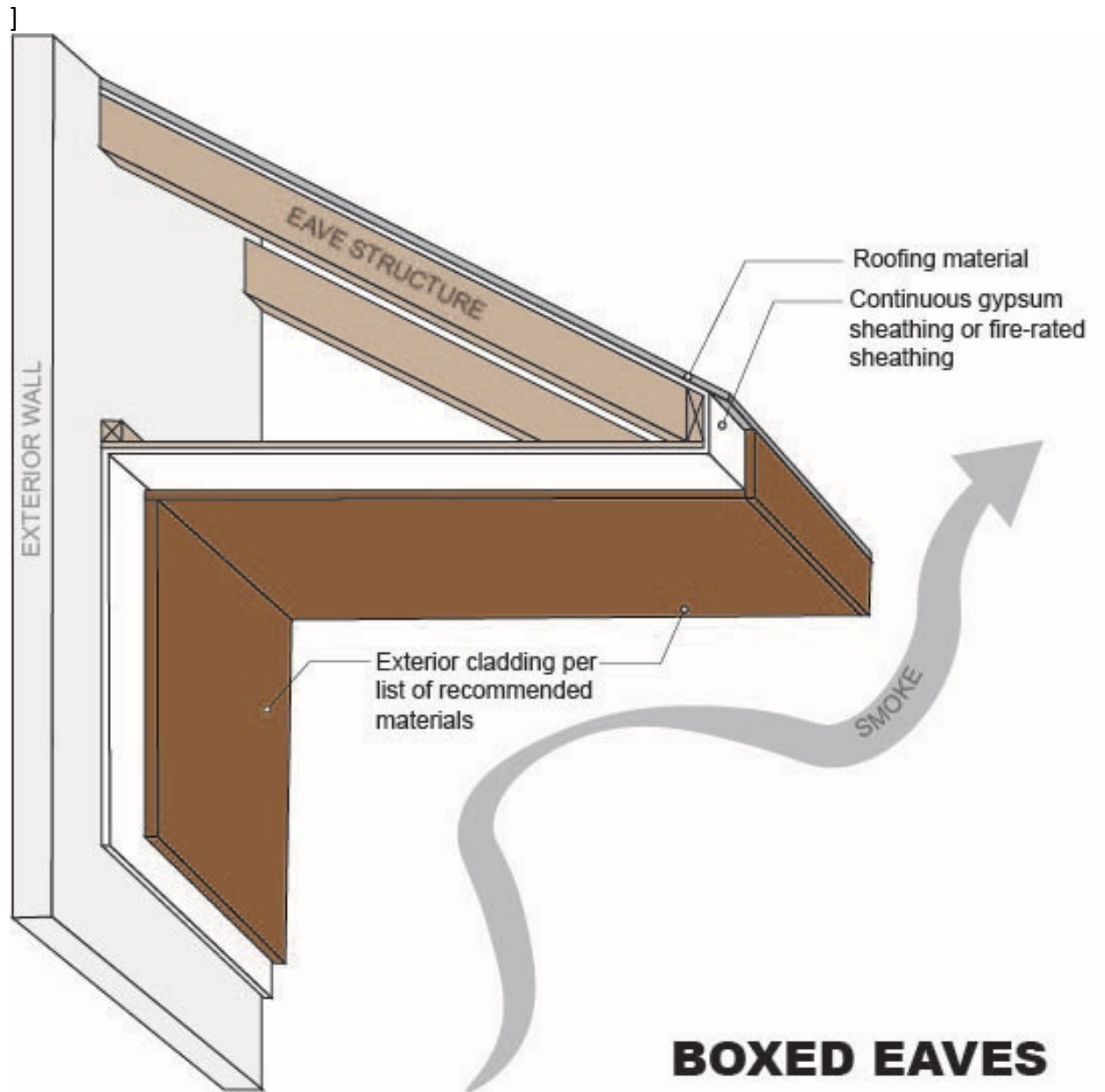
APPENDIX A: FIGURES FROM BUILD LLC

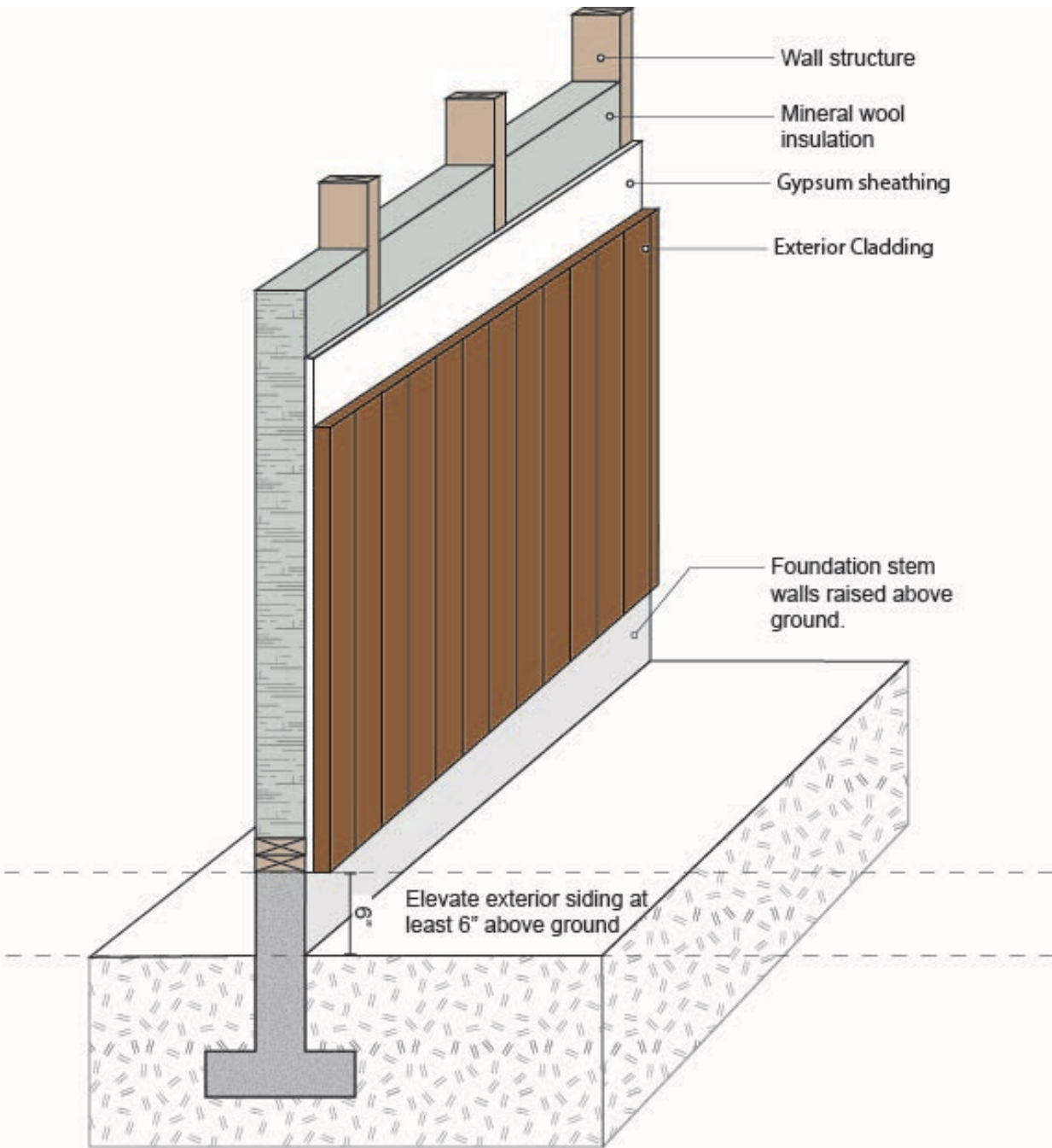


FIRE-RESISTANT ROOF COMPONENTS



LEAF GUARD ON METAL GUTTERS





FIRE-RESISTANT EXTERIOR WALLS

APPENDICES

APPENDIX B: COMPATIBILITY OF THE WESTERN DESIGN THEME WITH BUILDING HARDENING & DEFENSIBLE SPACE GUIDELINES MATRIX

[See attached on the following pages]

Compatibility of the Western Design Theme (SDC 2.15.2600) with Building Hardening & Defensible Space Guidelines

Architectural Elements	Western Design Theme Code Excerpts	Building Hardening Compliant (Yes / No / NA)	Defensible Space	Recommendations	
Exterior Materials & Finishes	Paint	During the period, there was a lack of high gloss finishes, therefore color applications were generally flat in nature. To duplicate this character, flat or low gloss products currently on the market should be utilized. Applied surface colors were predominately flat white for most buildings. Large area surface colors other than white were primarily flat earthy ochres, yellows, browns and reds. Trim was found at the cornices, vertical corner trim of a building, windows and doors, porch and balustrade.	NA	NA	NA
	Stains / Sealants	Where the exterior is not painted the exterior is to be oiled and/or stained to protect the surface materials. This is practical with the use of cedar or redwood which both contain natural oils that protect the wood. As a practical matter for extended protection of any board and batten surface, the use of sealer or oil base of solid color stain is warranted. The same is true of vertical surfaces finished with cedar shingles. Horizontal wood drop siding was normally finished with paint, however, in many instances no finish was applied. Here a sealer or stain would be appropriate in lieu of a painted surface. Rough sawn or milled boards and batten, particularly cedar and redwood, may be may be left unfinished and which may ultimately weather to silver gray in color.	N	NA	Certain oils increase flammability. If wood is used, it should be treated with a fire-resistant sealant. If wood is left unfinished, it should either be "mass timber" (greater than 2 inches thick) or backed with gypsum or fire-resistant sheathing.
	Wood	Typical materials are varieties of actual or simulated horizontal wood siding, vertical board and batten (rough sawn or surfaced four sides) and cedar shingles. Any T-111 (grooved) plywood siding is prohibited. Smooth plywood shall not be used as an exterior finish material. Logs or rough-sawn plywood may be used as exterior finish material. Board and batten applications with battens shall have no less than nominal 1 x 2 dimension, placed on centers not exceeding 12 inches when plywood is used, and all vertical plywood joints and seams shall be covered by battens, and no plywood edges shall be left exposed. Wood-clad windows.	N	NA	Wood is the most unsafe material in the event of a fire. Recommended alternatives include: fire-resistant exterior continuous insulation behind any wood cladding, exterior gypsum sheathing behind the cladding, 'shou sugi ban' charred wood siding, mass timber, fire-treated wood, or applying a fire-retardant coating product on wood.
	Metal	Ornamental iron trim and details; non-reflective metal roofs	Y	Y	There are sheet metal patterns that also mimic the board and batten style, in a slightly more modern way.
	Masonry	Brick or stone masonry facade or variety of materials.	Y	Y	Brick and stone siding are extremely fire-resistant and fit in easily with the Western Design Theme.
	Imitative Materials	Durable synthetic or manufactured building materials that simulate wood, stone or masonry are permitted. Simulated wood siding or doors is acceptable in commercial construction provided that it replicates the appearance of wood.	Y	NA	Sheet metal siding or fiber cement siding can be arranged to mimic the board and batten style.
rs / Openings	Windows	Wood sash windows are typical, to include double hung, casement, horizontal sliding and fixed sash. Simulated wood is acceptable in commercial construction provided that it replicates the appearance of wood. This is particularly true for large expanses of glass which are permitted in commercial storefronts and will undoubtedly require special foundation.	N	NA	Simulated wood, fire-treated wood or non-flammable materials would need to be selected. Use window screens on all operable windows with a 1/8" – 1/16" mesh to prevent large embers from entering the building. Installing screens may be the recommended option in situations where replacing the historic glazing on extant buildings may affect the building's architectural integrity and historic designation.
	Doors	Combination glass and wood panel doors are typical and are available in certain standard types, in single and divided glass lights. Synthetic or simulated wood is acceptable as it provides durability, but must have the appearance of authentic 1880's western design.	N	NA	Simulated wood, fire-treated wood or non-flammable materials would need to be selected.

Windows / Doo	Vents	<i>No excerpts to include, but generally is applicable.</i>	N	NA	Metal vents should be used rather than vinyl, and 1/8" or 1/16" metal mesh screens should be installed over vent openings. The old standard of 1/4" mesh screen is large enough so that sparks and embers can enter the opening.
	Entrances	Entrances to the building shall be recessed from the sidewalk to provide for an entryway not in conflict with the pedestrian circulation on the sidewalk.	NA	NA	NA
	Awnings / Canopies	The Sisters Hotel (190 E Cascade Avenue)... an awning over the storefront windows, and white trim. Note the false second floor balcony used to enhance the separation between floors.	N	N	The more ledges (or horizontal protruding trim elements) a building has, the more opportunities embers have to land on the building and start a fire. Avoid awnings made of fabric, untreated wood, or other flammable materials.
	Architectural Details	Attention to detail is of significant importance. Lighting fixtures, gates, exterior window treatments, use of material and color must be considered relative to the western frontier period for authenticity and detail.	Y	NA	Simulated wood, fire-treated wood or non-flammable materials would need to be selected.
Roofs	Gutters	<i>No excerpts to include, but generally is applicable.</i>	N	NA	Gutters collect leaves and needles which dry out in the sun and create highly flammable areas for embers to land and spread a fire. If gutters are being used, they should be paired with a gutter cap. Metal gutters are recommended over vinyl or plastic gutters that may quickly melt and detach in the event of a fire and spread the fire to the ground and wall cladding below.
	Overhangs / Porch Roofs	<i>No excerpts to include, but generally is applicable.</i>	N	NA	It is recommended that, should eaves be implemented in the building design, they are "boxed" to not trap smoke. A "boxed eave" can still align with the western theme because it allows a building to have overhangs and porch roofs while making sure embers are able to travel out and away from the flat soffit.
	Roofs	Coverings shall be non-reflective metal, tile, asphalt, and other appropriate materials. All roofing shall meet all applicable Fire and Building Codes.	Y	NA	It is recommended that only Class A materials are used. Fire resistant roofing materials that are in-line with the Western Design Theme include: 1) Aluminum standing seam. 2) Slate roofing. 3) Copper shingles and standing seam. 4) Architectural asphalt composite shingles – Class A only. 5) Sheet metal standing seam. Tiles should only be used if there are no gaps between tiles for embers to get through.
	Flat roof	The Sisters Hotel (190 E Cascade Avenue) is characterized by horizontal lap siding, flat roof...	Y	NA	Simpler roof designs with less surface area are inherently more resistant to the spread of fire. In addition to the outer roofing material, the roof assembly is important as well. In the event that an ember gets past the outer material, the following items within the overall roof assembly can help stop the spread of fire: 1) Gypsum sheathing; 2) Fire-rated panel sheathing; 3) Mineral wool insulation.

	Pitched roof	The Aitken Drug Store (Palace Hotel)... has a false front facade with corbels on the top / front of the false facade, a pitched roof, and covered pedestrian walkway. The Three Creek Professional Building at 220 SW Ash Street is a simple log structure style... with a moderate to steeply-pitched roof, a small covered pedestrian area, wood-clad windows, and an exterior stairway leading to the upper floor.	Y	NA	In general, complicated roof designs lead to more roof surface area, which leads to more areas for embers to land and start a fire. Therefore, simpler roof designs with less surface area are inherently more resistant to the spread of a wildfire event.
Storefronts	Covered Walkways	Awnings, porches, canopies or other additions to a structure shall be reviewed and approved by the city, and shall be compatible with the western frontier theme. Such additions on corner buildings shall be continuous around the corner. The Sisters Coffee Company building is characterized by treated natural board and batten wood siding, a covered pedestrian walkway with wood supports, wood-clad windows, and a false facade.	N	N	Wooden porches and covered walkways offer an easy path for fire to spread and threaten a building. The easiest way of solving this issue is by using fire-resistant materials. If that is not an option due to the aesthetic of a building, exterior decks and walking surfaces should be separated from the building so that if the deck catches fire it does not spread to the building. This can also be achieved by using fire-resistant walls to separate the patio deck from the building.
	False-front Façade	First American Title building – 392 E. Main Avenue... This building also used false facades on the sides of the building. This style was quite popular for courthouses and university campuses in the late nineteenth and early twentieth century.	Y	NA	Simpler roof designs with less surface area (like ledges) are inherently more resistant to the spread of fire. Where needed, elevate the exterior siding at least 6” above the ground so that there is separation between any flammable brush on the ground and the wall cladding.
	Strip Mall	Antique Mall Building – 261 W. Cascade Avenue. This architectural style is characterized by the use of board and batten siding; wood-clad windows, false facade, and muted earth-tone colors. Covered pedestrian overhangs are commonly found with this architectural style.	N	N	Fire-resistant exterior continuous insulation and/or exterior gypsum sheathing behind the cladding will help fire-harden a building.
Site Amenities	Fencing & Trash Enclosures	Fences and gates shall be constructed of wood and may contain ornamental iron details. Fence designs shall be consistent with the overall architectural style of the development, and shall meet all applicable clear vision, Fire and Building Code requirements. All trash enclosures shall meet all applicable Fire and Building codes for placement and materials used.	N	N	If untreated wood fences or enclosures are used, they should be more than 5 feet away from the building. Any fence or gate within 5 feet of the building should be metal or wood treated with a fire-suppressant coating.
	Benches	Benches should be provided in both buildable and private pedestrian areas and walkways.	N	N	Only nonflammable landscaping should be used within 5 feet of the building. This includes gravel, concrete, and stone. There should not be flammable furniture, mulch, or plants within this 5-ft buffer. If benches are used, non-flammable materials should be used.