

**To:** Historic Landmarks Board

**From:** James Reitz (AICP) Senior Planner  
 jreitz@forestgrove-or.gov (503) 992-3233

**Re:** February 27 Agenda

**Date:** February 20, 2018



## Memorandum

### ACTION ITEMS -

- A. Appoint subcommittee to prepare CEP application: The application will be available March 1<sup>st</sup>.
- B. Discuss potential Stewart Award recipient: Please think about possible recipients.
- C. Media Outreach and Editorial Calendar: Kelsey will provide an update.
- D. Draft Context Statement: It is to be submitted for our review by this Friday the 23<sup>rd</sup>; see below.
- E. Mock Design Review Hearing: see attached report.

### INFORMATION ITEMS -

**Original Town Resurvey** – The HPNW team have revised their schedule as follows:

The draft Context Statement will be submitted by February 23. *We'll have two weeks to edit (by March 9).*  
 HPNW will incorporate the edits and return a draft by March 16. *Final edits will be due by March 23.*  
 A final Context Statement will be presented at the March 27 meeting.

#### District Boundary

A potential downtown district boundary will be prepared by March 2. *We'll have two weeks to edit (by March 16).*  
 A final preliminary historic district boundary will be presented at the March 27 meeting.

#### Survey

The resurvey data will be submitted by June 15. *We'll have two weeks to edit (by June 29).*  
 HPNW will incorporate the edits and return a final survey by July 13.

**Vacancy** – Council interviews for open positions are occurring as the Council has time. At least two candidates have requested appointment to the Board.

**Legal Training** - Two sessions have been scheduled for **March 19** and **April 9**, 5:30-7:00 pm. If you haven't already scheduled your attendance with the city recorder, please do so as soon as possible. Training will focus on 1) the role of appointed officials, 2) conflicts of interest and ethics, 3) campaigning and 4) miscellaneous.

**Knowledge Pub** – Attached is a copy of George's notes.

**Preservation Grants:** For FY 2017-18, the City Council awarded the Board **\$7,675**. Of that, **\$7,425** has been awarded, leaving **\$250** available. No new applications have been filed.

<u>Building</u>	<u>Address</u>	<u>Grant \$</u>	<u>Project</u>	<u>Status</u>	<u>Notes</u>
"Morrison" House	1827 Douglas Street	\$ 675	Painting	Completed	CEP 17-18
"Renzema" House	1903 22 <sup>nd</sup> Avenue	\$ 450	Chimney	Approved	CEP 17-18
Rasmussen House	1653 Birch Street	\$1,000	Soffit Repair	Completed	CEP 17-18
Burlingham House	1306 Birch Street	\$1,000	Structural	Completed	CEP 17-18
Shultz House	2204 15 <sup>th</sup> Avenue	\$1,000	Painting	Completed	CEP 17-18
"Monroy" House	2213 15 <sup>th</sup> Avenue	\$1,000	Painting	Completed	CEP 17-18
Chandler House	1839 Ash Street	\$1,000	Re-Roof	Completed	CEP 17-18
Moore House	2103 15 <sup>th</sup> Avenue	\$ 300	Porch Repair	Completed	CEP 17-18
Todd House	1638 Main Street	\$1,000	Seismic	Approved	CEP 17-18

## 2018-19 CALENDAR - UPCOMING AGENDA ITEMS

### **March 27, 2018**

- HPNW Report
- Review and finalize CEP grant application (due March 30<sup>th</sup>)
- Select Stewart Award recipient
- Preservation Month planning

### **April 24, 2018**

- Preservation Month planning (continued)

### **May 22, 2018 (fourth Tuesday)**

- Historic Month Proclamation (May 14 CC meeting)
- Honor Stewart Award recipient (May 14 CC meeting)
- Review July-December 2018 Editorial Calendar

### **June 26, 2018**

- Preservation Grant reviews
- Restore Oregon nominations
- National Night Out planning
- Adopt July-December 2018 Editorial Calendar

### **July 24, 2018 (fourth Tuesday)**

- Preservation Grant reviews
- National Night Out planning

### **August 21, 2018**

- Public Safety Open House planning (October 13)

### **September 25, 2018**

- Public Safety Open House planning (October 13)

### **October 23, 2018 (fourth Tuesday)**

- No items scheduled at this time

### **November 27, 2018**

- No items scheduled at this time

### **December 18, 2018 (third Tuesday)**

- Prepare annual report and presentation for January boards and commissions reception (not to exceed 5 minutes)
- Annual website review
- 2019 work plan
- Prepare January-June 2019 Editorial Calendar

### **January 22, 2019 (fourth Tuesday)**

- Review and adopt 2019 work plan
- Review and adopt January-June 2019 Editorial Calendar
- Annual elections

### **February 26, 2019**

- Appoint subcommittee to prepare CEP application
- Discuss potential Stewart Award recipient
- Mock Design Review Hearing



# Mock Historic Landmark Review Staff Report and Recommendation

Community Development Department, Planning Division

**Report Date:** February 20, 2018  
**Hearing Date:** February 27, 2018  
**Request:** Commercial Remodel including removal of an existing storefront and the installation of new masonry, new windows and doors, and a new steel canopy  
**File Number:** 311-18-00001X-PLNG  
**Property Location:** 1234 Main Street  
**Legal Description:** Washington County Tax Lot 1S3 6BB-100000  
**Applicant:** George Cushing, QUE Construction, Inc.  
2700 SE 35<sup>th</sup> Circle - Suite A, Portland, Oregon 97222  
**Comprehensive Plan and Zoning Map Designations:** Town Center Core (TCC)  
Town Center Core (TCC)  
**Applicable Standards and Criteria:** City of Forest Grove Development Code:  
§10.5.220 *Procedure for Review of Proposed Work Affecting the Exterior of Landmarks*  
  
City of Forest Grove Design Guideline Handbook:  
Focus Area Section V *Historic District Design Guidelines*  
**Reviewing Staff:** James Reitz (AICP) Senior Planner  
**Recommendation:** The HLB must decide whether to require retaining the existing façade, or allowing a new façade based on the architecture of similar buildings on the block.  
Staff has developed recommendations for both alternatives.

## I. BACKGROUND

The W. T. Grant Company Building was constructed in 1921. As was common with commercial buildings following World War II, the facade was remodeled and modernized with more contemporary materials. It was further remodeled in the 1980s with a back-lit vinyl awning, the framework of which remains today (see Exhibit B for historic and contemporary photos). The applicant wishes to remodel the façade to make it more closely resemble the architecture of its 1920s-era neighbors on the block.

No photos of the original architecture have been discovered, and the applicant's investigation to date indicates that the original façade was not just covered over, but was in fact removed. The applicant has therefore submitted plans for a new façade based on the general town center architecture of the 1920s as well as on some of the Grant Company Building's contemporaries that retain much of their architectural integrity, including two buildings located directly across the street from the applicant's site (see photos in Exhibit B).

## II. PROJECT DESCRIPTION AND ANALYSIS

- a) Description of Proposal: The applicant is proposing a significant remodel to the Grant Company Building. The ground floor would be gutted and remodeled for use by a software development company. An additional ground floor tenant space with separate entrance would also be created.

The second floor would also be gutted. No tenant has as yet been identified for this space.

Proposed exterior changes include:

- Entirely removing the existing Main Street façade.
  - Construction of an entirely new façade, including all new brick, a new ground floor storefront system, and a new steel awning (see Exhibit A Sheet A-2 Exterior Elevations).
- B. Site Examination: The building is sited mid-block on Main Street. The entire site is occupied by the building. Main Street has been fully improved to City standards.
- C. Preservation Briefs: The National Park Service has prepared a series of Preservation Briefs. *Rehabilitating Historic Storefronts* addresses new storefronts as follows (see Exhibit C for the entire brief):

*Once a decision is made to rehabilitate a historic commercial building, a series of complex decisions faces the owner, among them:*

- *If the original storefront has survived largely intact but is in a deteriorated condition, what repairs should be undertaken?*
- *If the storefront has been modernized at a later date, should the later alterations be kept or the building restored to its original appearance or an entirely new design chosen? (emphasis added)*
- *If the building's original retail use is to be changed to office or residential, can the commercial appearance of the building be retained while accommodating the new use?*

As noted above, the original storefront has been removed. The date of the replacement is unknown, but based on the aluminum siding material and the anodized aluminum storefront, a 1950s or early 1960s timeframe would be a reasonable supposition. As such, because it would exceed the standard 50-year threshold commonly used to determine whether a building (or in this case, façade) is potentially historic, and because the architecture and materials used are representative of 1950s-1960s storefronts and is architecturally significant, the first

question for the HLB to consider is whether the existing façade should be retained and restored, versus removed and replaced.

For potential replacement storefronts, the Brief suggests the following:

### ***Designing Replacement Storefronts***

*Where an architecturally or historically significant storefront no longer exists or is too deteriorated to save, a new front should be designed which is compatible with the size, scale, color, material, and character of the building. Such a design should be undertaken based on a thorough understanding of the building's architecture and, where appropriate, the surrounding streetscape. For example, just because upper floor windows are arched is not sufficient justification for designing arched openings for the new storefront. The new design should "read" as a storefront; filling in the space with brick or similar solid material is inappropriate for historic buildings. Similarly the creation of an arcade or other new design element, which alters the architectural and historic character of the building and its relationship with the street, should be avoided. The guidelines (below) can assist in developing replacement storefront designs that respect the historic character of the building yet meet current economic and code requirements.*

### ***Guidelines for Designing Replacement Storefronts***

1. ***Scale:*** Respect the scale and proportion of the existing building in the new storefront design.
2. ***Materials:*** Select construction materials that are appropriate to the storefronts; wood, cast iron, and glass are usually more appropriate replacement materials than masonry which tends to give a massive appearance.
3. ***Cornice:*** Respect the horizontal separation between the storefront and the upper stories. A cornice or fascia board traditionally helped contain the store's sign.
4. ***Frame:*** Maintain the historic planar relationship of the storefront to the facade of the building and the streetscape (if appropriate). Most storefront frames are generally composed of horizontal and vertical elements.
5. ***Entrances:*** Differentiate the primary retail entrance from the secondary access to upper floors. In order to meet current code requirements, out-swinging doors generally must be recessed. Entrances should be placed where there were entrances historically, especially when echoed by architectural detailing (a pediment or projecting bay) on the upper stories.
6. ***Windows:*** The storefront generally should be as transparent as possible. Use of glass in doors, transoms, and display areas allows for visibility into and out of the store.
7. ***Secondary Design Elements:*** Keep the treatment of secondary design elements such as graphics and awnings as simple as possible in order to avoid visual clutter to the building and its streetscape.

*A restoration program requires thorough documentation of the historic development of the building prior to initiating work. If a restoration of the original storefront is contemplated, old photographs and prints, as well as physical evidence, should be used in determining the form and details of the original. Because storefronts are particularly susceptible to alteration in response to changing marketing techniques, it is worthwhile to find visual documentation from a variety of periods to have a clear understanding of the evolution of the storefront. Removal of later additions that contribute to the character of the building should not be undertaken.*

*A key to the successful rehabilitation of historic commercial buildings is the sensitive treatment of the first floor itself. Wherever possible, significant storefronts (be they original or later alterations), including windows, sash, doors, transoms, signs and decorative features,*

*should be repaired in order to retain the historic character of the building. Where original or early storefronts no longer exist or are too deteriorated to save, the commercial character of the building should nonetheless be preserved - either through an accurate restoration based on historic research and physical evidence or a contemporary design which is compatible with the scale, design, materials, color and texture of the historic building. The sensitive rehabilitation of historic storefronts will not only enhance the architectural character of the overall building but will contribute to rejuvenating neighborhoods or business districts as well.*

### III. APPROVAL CRITERIA, FINDINGS AND ANALYSIS

Development Code §10.5.220(C) *HLB Review* requires HLB review of work that would not comply with the standards of §10.5.220(D) *Procedure for Review of Proposed Work Affecting the Exterior of Landmarks – Review Standards*. This project must be reviewed by the HLB because 1) either the existing façade would be retained and restored, or 2) a new façade, not based on any known evidence of the building's original appearance, would be created.

DC §10.5.220(D) requires that the proposal complies with the following criteria. The action of the Board to approve the application shall be accompanied by specific findings of fact indicating how each of the criteria in §10.5.220(D) are satisfied or, if the Board acts to disapprove the proposal, indicating how the proposal fails to satisfy one or more of the criteria.

In acting on an application submitted pursuant to this section for work affecting the exterior of a landmark or construction of a new building within a district, the (HLB) shall approve the proposal if findings are made demonstrating that the following standards are met:

#### 1. General Review Standards

- a) Every reasonable effort shall be made in the proposal to provide a compatible use for the property which requires minimal alteration of the structure, or to use the property for its originally intended purpose.

*Finding: Use of the property is not proposed to change. It would retain its function as a commercial structure.*

- b) The distinguishing original qualities or character of the structure shall not be destroyed. The removal or alteration of historic material or distinctive architectural features shall be avoided when possible.

*Finding: No material from the original 1920s-era façade remains.*

*Finding: The building was remodeled and the façade significantly changed. The date of remodel is unknown, but based on the aluminum siding and anodized aluminum storefront units, a 1950s-60s timeframe would be a reasonable supposition. As such, it would exceed the standard 50-year threshold commonly used to determine whether a building (or in this case, façade) is potentially historic, and the architecture and materials used are representative of those used on 1950s-1960s*

EXHIBIT B - Photos



ABOVE – The Grant Building in the 1950s.

BELOW – The Grant Building today.



*storefronts. The request, if approved, would allow for the removal of historical material and distinctive architectural features.*

- c) All structures shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.

*Finding: The Grant Company Building dates from 1921. The proposed alternations are based on the building's original architecture and do not seek to create the appearance of an older building.*

*Finding: The building was remodeled and the façade significantly changed. The date of remodel is unknown, but based on the aluminum siding and anodized aluminum storefront units, a 1950s-60s timeframe would be a reasonable supposition. As such, it would exceed the standard 50-year threshold commonly used to determine whether a building (or in this case, façade) is potentially historic, and the architecture and materials used are representative of those used on 1950s-1960s storefronts. The request, if approved, would seek to create an earlier appearance i.e., one more similar to the original 1920s-era façade.*

- d) Changes which may have taken place in the history and development of the structure shall be recognized and respected.

*Finding: The building was remodeled and the façade significantly changed. The date of remodel is unknown, but based on the aluminum siding and anodized aluminum storefront units, a 1950s-60s timeframe would be a reasonable supposition. As such, it would exceed the standard 50-year threshold commonly used to determine whether a building (or in this case, façade) is potentially historic, and the architecture and materials used are representative of those used on 1950s-1960s storefronts. The request, if approved, would replace the current façade with one more representative of the 1920s era when the building was originally constructed.*

*Finding: The building was further remodeled in the 1980s with a back-lit vinyl awning, the framework of which remains today. Because the awning is less than 50 years old, it is not considered a historic feature.*

- e) Distinctive stylistic features or examples of skilled craftsmanship which characterizes the structure shall be treated with sensibility.

*Finding: The aluminum siding and the anodized aluminum storefront are distinctive stylistic features of a 1950s-60s era commercial facade. The request, if approved, would replace the current façade with one more representative of the 1920s era when the building was originally constructed.*

- f) Deteriorated architectural features shall be repaired if practicable; if not, they should be replaced in-kind. Where replacement of features is proposed, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or

pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

*Finding: The building has been vacant for a number of years, and has suffered from deferred or absent maintenance. However, due to the durability of the aluminum façade material, it has not deteriorated structurally and does not need to be repaired or replaced. The façade materials could be restored with a simple cleaning.*

- g) Proposed surface cleaning, if any, of structures shall be undertaken with the least damaging means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

*Finding: Because the proposal is to remove and replace the existing façade, no surface cleaning is proposed. If the existing façade is retained, staff is recommending a **condition** to require compliance with this provision.*

- h) Every reasonable effort shall be made to protect and preserve archeological landmarks affected by, or adjacent to, the landmark.

*Finding: No known archeological resources would be affected by this application.*

- i) A design which may be proposed for alterations and additions to the structure shall not be discouraged when such alterations and additions do not destroy significant historical, architectural, or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood, and environment.

*Findings: The Grant Company Building was constructed in 1921. Its original façade and architectural detailing are no longer extant, having been removed sometime during the 1950s.*

*Finding: The Secretary of the Interior's Standards for the Treatment of Historic Properties lists various Standards for Rehabilitation. Standard #11 notes "Where an architecturally or historically significant storefront no longer exists or is too deteriorated to save, a new front should be designed which is compatible with the size, scale, color, material, and character of the building." The proposed design would be compatible, as it is based on the architecture of nearby buildings also erected in the 1920s.*

*Finding: Standard for Rehabilitation #9 notes, "New additions, exterior alterations, or related new construction will not destroy historic material, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment." The proposed exterior alteration would destroy historic material and features, i.e., the 1950s-era façade.*

- j) Wherever possible, new additions or alterations to any structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

*Finding: The essential form and integrity of the building remains intact despite the earlier remodel, and it would remain intact with the proposed remodel.*

- k) Attempts to improve or enhance the exterior appearance of a landmark by installing decorative features, such as shutters, shall be avoided unless it can be established that the feature existed on the landmark at its inception.

*Finding: No decorative features are proposed to be added.*

#### 4. Building Design

##### a) Height

- i. Height Limit at Eave or Parapet: The height from grade at the building line to the predominant roof eave that exists for historic buildings on the block face up to a maximum of 25 feet. Historic non-contributing buildings may be used if there are no historic contributing buildings on the block face.
- ii. Height Limit at Ridge: The height from grade at the building line to the main roof ridge that exists for historic buildings on the block face up to 10 feet above the allowable eave height.
- iii. The maximum number of above grade stories is 2½.
- iv. The height or number of stories of the front portion of historic buildings may not be increased.
- v. The ground floor of a historic building may be raised no more than 3 feet from its existing height.
- vi. The maximum height from grade at the building line to the main level for new development is 4 feet.
- vii. Basements are allowed for all buildings. The site may not be substantially re-graded for basement use.

*Finding: No changes to the existing height of the building are proposed.*

##### b) Width

- i. The width of a new building front may not vary more or less than 20% from the range that exists for historic buildings on the block.
- ii. The front width of historic buildings may not be increased more than 10%.

*Finding: No changes to the existing width of the building are proposed.*

##### c) Shape

- i. The overall primary building shape and that of additions must be representative of existing historic buildings on the block face.

- ii. Additions to historic buildings shall be designed to be secondary to the main building.
- iii. Oblique, skewed and non-orthogonal front walls are not allowed on the primary building.
- iv. Rounded walls or porches are allowed on secondary sides or additions.

*Finding: No changes to the existing shape of the building are proposed.*

d) Roof

- i. Roof forms for the main structure, additions and wings where visible are to be gabled or hipped. Shed roofs are not allowed for the main building portion. Parapets and non-visible roofs are not allowed for the main roof unless represented by historic buildings on the block. Other roof forms such as gambrel, clipped gable or clipped hip may be allowed upon review.
- ii. Roof shape shall be consistent with other historic buildings on the block in style, configuration and pitch.
- iii. Roofs shall have a minimum 12-inch overhang or the average eave width of historic buildings on the block face.
- iv. Gable roofs shall have matching roof slopes.
- v. Porches or bays may have lower sloped roofs than that of the main roof. These roofs may be gabled, hipped, shed or more complex. Shallow stepped gable roofs: a maximum of two are allowed.
- vi. The roof shape and slope of the main portion on historic buildings as visible shall not be changed.
- vii. Roofing types not allowed where visible: Sheet metal, clay, concrete or metal tile, single-ply types.
- viii. Gutters and Downspouts:
  - Types allowed: painted sheet metal, copper.
  - Types not allowed: vinyl or plastic, except as a downspout receiver hub visible for a maximum of 12 inches above grade.

*Finding: No changes to the existing roof of the building are proposed.*

e. Dormers and Roof Features

- i. Dormers on all buildings shall match the existing building style, shape and relative proportion. Dormers shall intersect the main roof below the main ridge.
- ii. New dormers are not allowed on a front-sloping roof of historic buildings.
- iii. A maximum of two dormers are allowed on the front of new development.
- iv. The total area for all dormers on a particular slope is limited to 33% for gable-roofed dormers and 50% for shed-roofed dormers.

- v. New decorative roof feature additions such as cupolas, towers, crestings, and railings are not allowed.
- vi. Chimneys on historic buildings: Retain and repair above the roofline.
- vii. Skylights are not allowed on the front sloping roof or on a visible side.
- viii. Solar panels, satellite dishes, and mechanical equipment are not allowed on the roof or walls of the front building portion. This includes the front and sides extending back 10 feet.

*Finding: No dormers, skylights, chimneys, solar panel, satellite dishes, decorative features or mechanical equipment visible from the street are proposed.*

f. Porches

- i. New porches shall comply with the above requirements for spacing, setback, building form, shape, and roofs.
- ii. New front porches shall have access to the front street.
- iii. New porches on all buildings are to match the existing building style, shape and relative proportion.
- iv. Porches on historic buildings shall not be removed or relocated.
- v. New development (including accessory dwelling units) shall incorporate a porch or architecturally-defined entry for each main level unit unless sharing an existing porch or entry. The minimum porch dimensions are four feet by four feet and sixteen square feet per dwelling unit.
- vi. Porches shall have roofs and are to be integrated with the building and finished accordingly. They shall be consistent with the main building's style. Front porches and roofs shall serve the main level and be one-story in height.
- vii. Raised front and visible side porches require finished enclosures or skirting below their walk structure consistent with the main building style.
- viii. Front porches on historic buildings may not be enclosed.
- ix. Side porches serving the main or basement level are allowable. They are to be secondary but consistent in style and detail with the front porch.
- x. Porches above the main level on the front of the building are not allowed unless existing elsewhere on historic buildings on the block face.
- xi. New exterior stairs are allowed for ground floor entrances only.
- xii. Raised decks visible from the street are not allowed.
- xiii. Materials Not Allowed:
  - Exposed Structure: steel stair members, steel and concrete types of stairs.
  - Enclosure Members: cable, glass, or vinyl.
  - Roofing: metal roofs.

*Finding: No porches are proposed.*

g. Front, Side and Rear Building Elevations

- i. The front façade orientation and access for historic buildings shall be maintained. The major defining features including entry, porches, roofline, bays and dormers shall be retained on the front and visible sides of historically contributing buildings.
- ii. The front façade orientation and access for new buildings shall be consistent with historic building examples on the block.
- iii. Front Façade: New buildings shall avoid very flat, wide and tall front and visible side walls with minimal relief and level parapets. The front shall create relief by a limited use of projections and recesses such as a porch, bay, wing, or the roof slope.
- iv. Openings: New buildings shall have windows on the front and visible sides of habitable rooms at each level. Each room shall have a minimum of one window.
- v. Rear Elevation: Unless specifically denoted as significant, the rear and non-visible side elevations of historic buildings may be altered. Those alterations must be consistent with the overall building design and use products and materials noted as acceptable in the Standards.

*Finding: The front façade orientation to Main Street would be retained.*

*Finding: The major defining features of the existing façade would be removed and replaced with a façade more representative of the building's original 1920s-era architecture, which would be consistent with historic building examples on the block.*

*Finding: The existing façade, dating from the 1950s-1960s, is very flat, wide and tall with minimal relief, which is characteristic of storefronts of that era. The proposed replacement façade would not have any additional projections or recesses, aside from a new steel canopy.*

*Finding: The existing façade has no openings on the second floor. The proposed replacement façade would have new windows on both floors facing Main Street across the entire façade. Each room would have multiple windows.*

*Finding: The rear elevation is not denoted as significant.*

h. Outbuildings and Garages

- i. New garages and accessory buildings shall be historically consistent with the primary building in style, size, materials, and roof.
- ii. Replacement garages: Retain and repair over replacement for both structure and materials.
- iii. Location and Orientation: Where an alley exists, locate the garage for alley access. Garages and outbuildings shall be located in the rear. Garages may be located in the side yard or may be attached if recessed

- behind the primary building face by a minimum of six feet and if meeting the side yard setback and spacing requirements.
- iv. Garage Doors: Total width is limited to 1/3 of the primary building face width if facing a street. Height is limited to eight feet. Construction, style and materials shall be consistent with the main building. A maximum of one double garage door or two single doors facing the street is allowed per 50 feet of lot width. There is no width constraint if the garage faces an alley.
  - v. Carports and Breezeways: Carports are allowed where consistent with the building style and age. Breezeways may be used for connection to garages, carports or outbuildings. Design of these structures must be consistent with the primary building in style, size, construction, materials and detail.
  - vi. Materials and Types Not Allowed: Flush, open grate-mesh, and mostly glass garage doors.

*Finding: No outbuildings are proposed.*

- i. Exterior Siding and Decorative Architectural Details
  - i. Historic buildings and landmarks shall retain and repair existing siding, architectural features, and details.
  - ii. Replacement siding, moldings, and other decorative architectural details shall match the material, pattern, detail and dimension of either the existing or the original siding or material.
  - iii. Front and visible sides of new buildings shall have the following minimum wall trim: window and door casings, top of wall to roof overhang on gable sides.
  - iv. Siding Patterns Allowed: A maximum of three wood siding or shingle patterns and types; may also have one type of masonry or plaster.
  - v. Siding, decorative architectural details and exposed materials that are not allowed:
    - Aluminum or metal; vinyl; scored plywood; sheet siding.
    - Alternative engineered siding not matching original profiles.
    - Plastic, foam or polymer trim.
    - Cultured stone or synthetic masonry.
    - Use of stains and clear finishes is acceptable only for doors and sidelights, and utility structures.
    - Mill or clear finish aluminum or stainless steel is not allowed as an exposed finish.
  - vi. Removal of non-historic features or reconstruction of historic features, with documentation, is allowed on historic buildings and landmarks.

*Finding: The building was remodeled and the façade significantly changed. The date of remodel is unknown, but based on the aluminum siding and anodized aluminum storefront units, a 1950s-60s timeframe would be a reasonable supposition. As such, it would exceed the standard*

*50-year threshold commonly used to determine whether a building (or in this case, façade) is potentially historic.*

*Finding: The architecture and materials used on the existing façade are representative of those used on 1950s-1960s storefronts. The request, if approved, would remove these historic features.*

*Finding: The building was further remodeled in the 1980s with a back-lit vinyl awning, the framework of which remains today. Because the awning is less than 50 years old, it is not considered a historic feature, and may be removed.*

j. Doors and Windows

- i. Original openings on visible sides of historic buildings shall be retained.
- ii. New main and upper level window or door openings on front or visible sides of historic buildings are not allowed.
- iii. New basement windows or doors are allowed on side walls.
- iv. New window types and materials not allowed at front-facing or visible sides: sliding glass units, glass block, vinyl, fiberglass, between glass grids, commercial-type windows.
- v. New or replacement windows and doors on historic buildings shall match the style, configuration, dimensions, and materials of existing or originals. Not Allowed: Window shapes other than rectangular.
- vi. Retain and repair existing historic window and door parts and trim. Wholesale replacement of windows or sash in good condition on historic buildings is not allowed.
- vii. New or replacement windows and doors on historic buildings shall match the style, configuration, dimensions, and materials of existing or originals.
- viii. Storm windows are acceptable on interior or exterior. If on the exterior they shall match the window shape, style, basic configuration, and shall be a comparable color. Exterior storm doors are allowed.
- ix. Windows and doors on new buildings shall be appropriate to the style of the building and as found on historic buildings the block face. This includes their design, materials, pattern, grouping, and configuration.

Not allowed: window shapes other than rectangular, vertically asymmetric, individual window division or configuration.

- x. Glazing on visible building sides and front shall be clear. Reflective or tinted glass or films are not allowed; decorative or stained glass replacement is excepted. Obscure glass is allowed at bathrooms.
- xi. Doors and Sidelights: New decorative or stained glass is allowed.
- xii. New door types not allowed: Flush metal doors, metal and glass storefront or commercial-type doors.

*Finding: Original ground floor openings facing Main Street would be retained. There are no openings in the second floor façade.*

*Finding: New main and upper level window openings are proposed on the Main Street façade, along with new doors at the ground level. These would be intended to re-create the architecture of the original 1920s-era façade and would match the style, configuration, dimensions, and materials of similar-era historic buildings on the same block.*

k. Foundations

- i. On historic buildings: Repairs and replacements shall match the original foundation appearance, materials and height at visible faces. A new foundation may have a veneer matching the original masonry but installed over structural concrete, concrete block unit [CMU], or steel.
- ii. Retain or repair existing porch and entry steps, and foundation openings including windows, doors, and vents on historic buildings.
- iii. New or replaced foundations and footings shall meet current structural and seismic requirements.
- iv. Original solid masonry foundations may have non-visible concrete or metal support.
- v. Visible foundations for new buildings shall match the range of visible heights of historic buildings on the block face and may be CMU or concrete.
- vi. Below grade or otherwise hidden foundations, piers and footings may be concrete or other materials.

*Finding: No changes to the existing foundation are proposed.*

#### IV. ALTERNATIVES

The HLB has a fundamental choice to make before discussing potential approval conditions:

- Because the 1950s-era remodel has become historic in its own right, should it be retained? Or -
- Should the 1950s-era remodel be removed, and a new storefront created?

The Historic Landmarks Board may:

1. Approve the request to recreate a 1920s-era façade as submitted, if it can make written findings, supported by substantial evidence in the record, that the request meets the criteria of DC §10.5.220(D).
2. Approve the request with modifications or conditions, if it can make written findings, supported by substantial evidence in the record, that the request meets the criteria of DC §10.5.220(D).

3. Deny the request (and thereby retain the existing façade), if it can make written findings, supported by substantial evidence in the record, that the request does not meet the criteria of DC §10.5.220(D).
4. Continue the matter to a date certain for further considerations.

## V. POTENTIAL APPROVAL CONDITIONS

If the HLB concludes that the application to replace the 1950s-era façade with a 1920s-era design complies with the approval criteria above, staff recommends that approval of the application with the following conditions:

1. The applicant shall be bound to the project description and all representations made by the applicant during the application and decision-making proceeding.
2. The applicant shall comply with all applicable City building codes and standards.
3. Requests for architectural modifications or a different selection of materials shall be reviewed by the HLB prior to construction.

If the HLB concludes that the 1950s-era façade should be retained, staff recommends approval of the application with the following conditions:

1. The applicant shall be bound to the project description and all representations made by the applicant during the application and decision-making proceeding.
2. The applicant shall comply with all applicable City building codes and standards.
3. Remove the 1980s-era back-lit vinyl awning and frame, and repair the façade where it was attached.
4. Surface cleaning shall be undertaken with the least damaging means possible. Sand-blasting and other cleaning methods that would damage the historic building materials shall not be undertaken.

## VI. LIST OF EXHIBITS

The following exhibits were received, marked, and entered into the record as evidence for this application at the time this staff report was written. Exhibits received after the date of this report will be marked beginning with the next consecutive letter and will be entered into the record at the time the hearing is opened, prior to oral testimony.

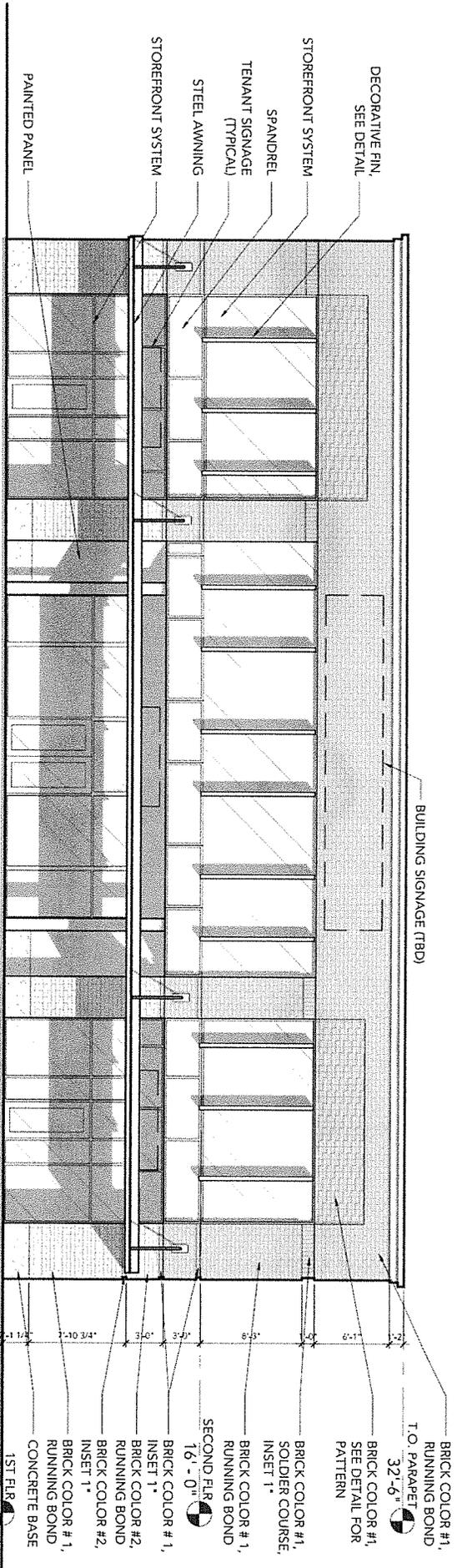
**Exhibit A**     Application Materials, submitted by the applicant

**Exhibit B**     Historic Photo; current and proposed elevations

**Exhibit C**     NPS TPS *Rehabilitating Historic Storefronts*

## EXHIBIT A

Application Materials, submitted by the applicant



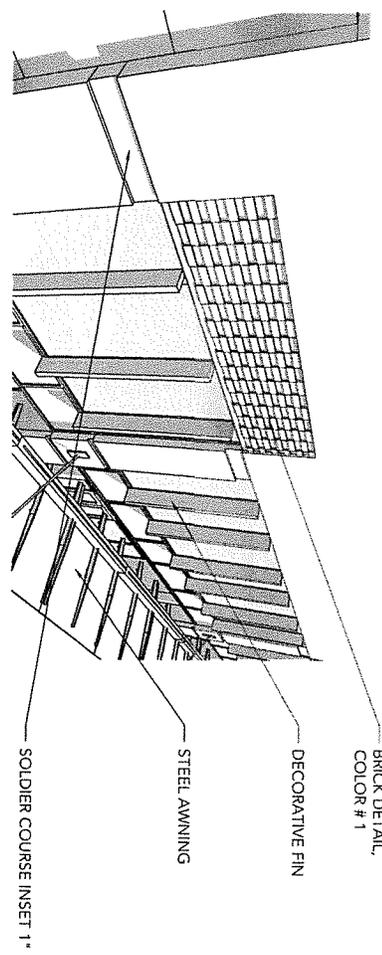
1

SCALE: 1/8" = 1'-0"

ELEVATION

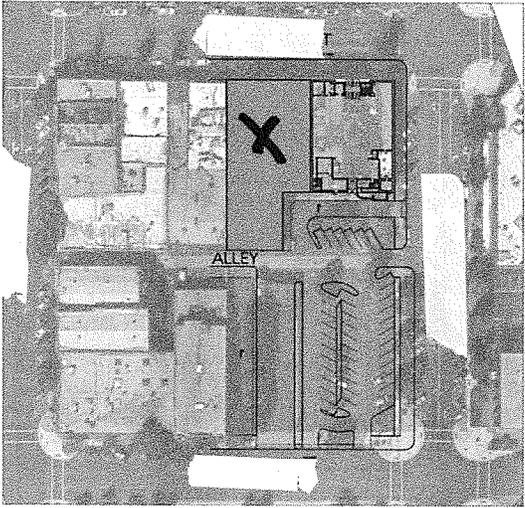
2

DETAIL @ BRICK

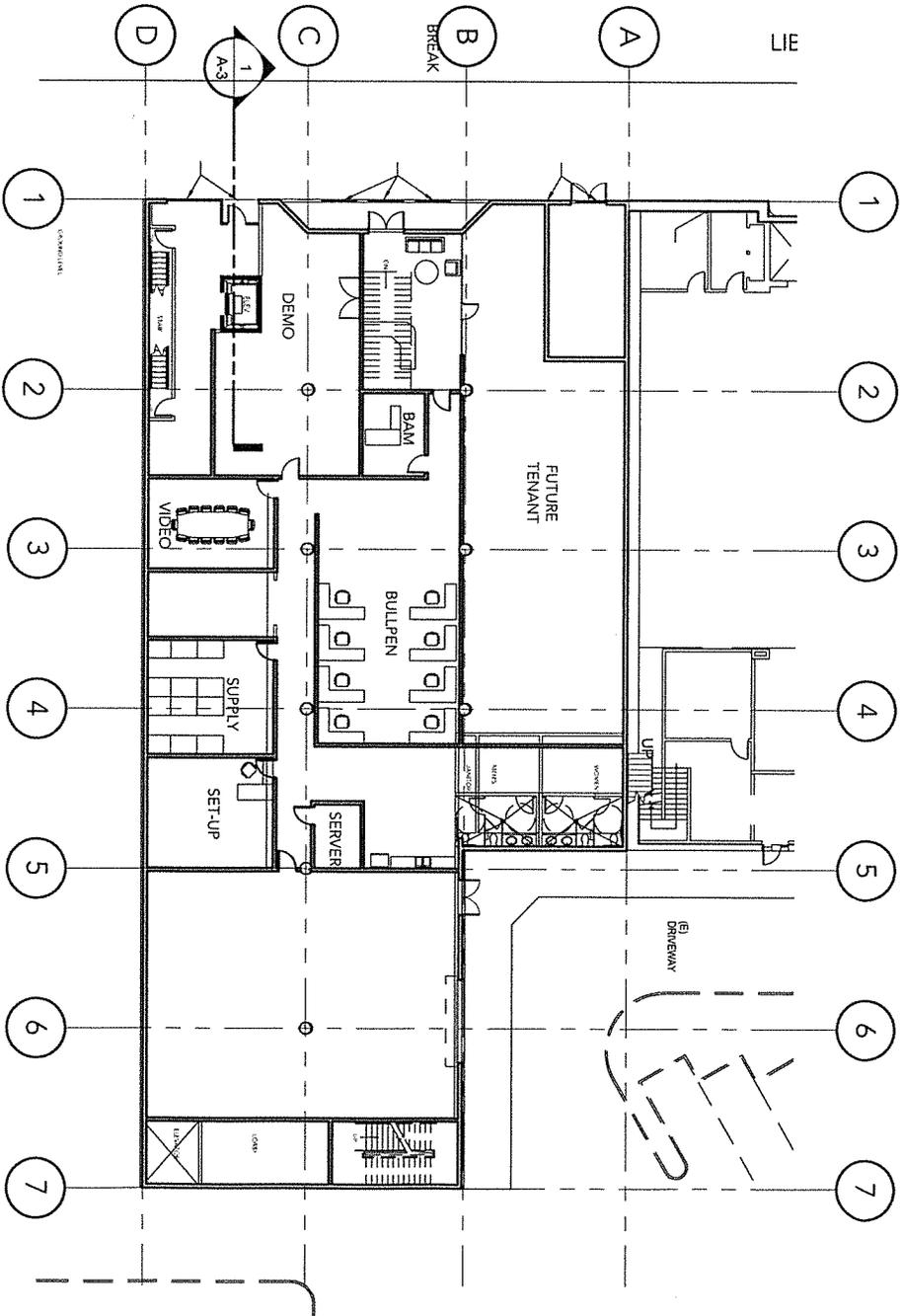


A-2

EXTERIOR ELEVATIONS



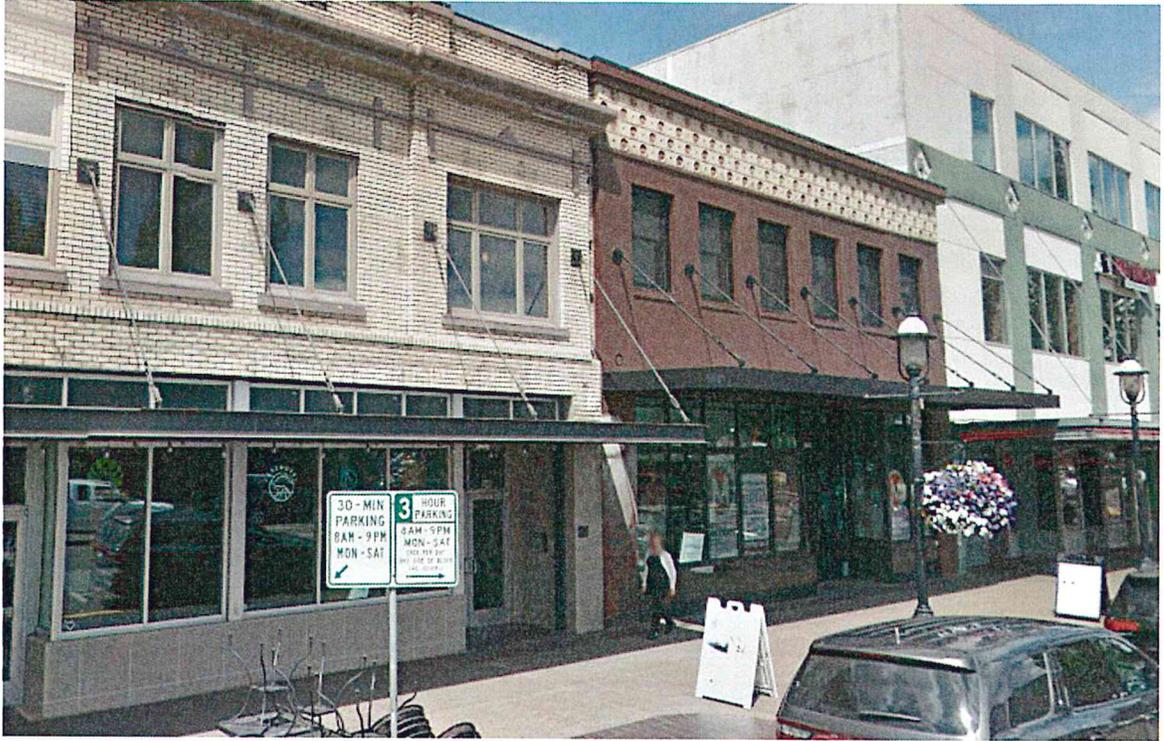
VICINITY MAP



FIRST FLOOR PLAN

SCALE: 1" = 20'-0"

A-1  
VICINITY MAP & 1ST  
FLOOR PLAN



ABOVE – Buildings located across the street from the Grant Building BELOW – The proposed facade



## EXHIBIT C

NPS TPS *Rehabilitating Historic Storefronts*

## Technical Preservation Services

National Park Service  
U.S. Department of the Interior

[Home](#) > [How to Preserve](#) > [Preservation Briefs](#) > 11 Storefronts

Some of the web versions of the Preservation Briefs differ somewhat from the printed versions. Many illustrations are new and in color; Captions are simplified and some complex charts are omitted. To order hard copies of the Briefs, see [Printed Publications](#).

### PRESERVATION BRIEFS

# 11

## Rehabilitating Historic Storefronts

H. Ward Jandl

[Historical Overview](#)

[Evaluating the Storefront](#)

[Deciding a Course of Action](#)

[Rehabilitating Metal Storefronts](#)

[Rehabilitating Wooden Storefronts](#)

[Rehabilitating Masonry Storefronts](#)

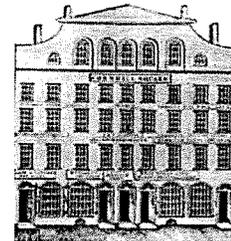
[Designing Replacement Storefronts](#)

[Other Considerations](#)

[Summary and References](#)

[Reading List](#)

[Download the PDF](#)



The Joy Building from "Early Illustrations and Views of American Architecture" by Edmund V. Gillon, Jr. Photo: Courtesy, Dover Publications, Inc.

**The storefront is the most important architectural feature of many historic commercial buildings.** It also plays a crucial role in a store's advertising and merchandising strategy to draw customers and increase business. Not surprisingly, then, the storefront has become the feature most commonly altered in a historic commercial building. In the process, these alterations may have completely changed or destroyed a building's distinguishing architectural features that make up its historic character.

As more and more people come to recognize and appreciate the architectural heritage of America's downtowns, however, a growing interest can be seen in preserving the historic character of commercial buildings. The sensitive rehabilitation of storefronts can result not only in increased business for the owner but can also provide evidence that downtown revitalization efforts are succeeding.

Once a decision is made to rehabilitate a historic commercial building, a series of complex decisions faces the owner, among them:

- if the original storefront has survived largely intact but is in a deteriorated condition, what repairs should be undertaken?
- if the storefront has been modernized at a later date, should the later alterations be kept or the building restored to its original appearance or an entirely new design chosen?
- if the building's original retail use is to be changed to office or residential, can the commercial appearance of the building be retained while accommodating the new use?

This Preservation Brief is intended to assist owners, architects, and planning officials in answering such questions about how to evaluate and preserve the character of historic storefronts. In so doing, it not only addresses the basic design issues associated with storefront rehabilitation, but recommends preservation treatments as well. Finally, although the Brief

focuses on storefront rehabilitation, it is important to review this specific work in the broader context of preserving and maintaining the overall structure. Money spent on storefront rehabilitation may be completely wasted if repair and maintenance problems on the rest of the building are neglected.

## Historical Overview

Commercial establishments of the 18th and early 19th centuries were frequently located on the ground floor of buildings and, with their residentially scaled windows and doors, were often indistinguishable from surrounding houses. In some cases, however, large bay or oriel windows comprised of small panes of glass set the shops apart from their neighbors. Awnings of wood and canvas and signs over the sidewalk were other design features seen on some early commercial buildings. The ground floors of large commercial establishments, especially in the first decades of the 19th century, were distinguished by regularly spaced, heavy piers of stone or brick, infilled with paneled doors or small paned window sash.

Entrances were an integral component of the facade, typically not given any particular prominence although sometimes wider than other openings.

The ready availability of architectural cast iron after the 1840s helped transform storefront design as architects and builders began to experiment using iron columns and lintels at the ground floor level. Simultaneous advances in the glass industry permitted manufacturing of large panes of glass at a reasonable cost. The combination of these two technical achievements led to the storefront as we know it today—large expanses of glass framed by thin structural elements. The advertisement of the merchant and his products in the building facade and display windows quickly became critical factors in the competitive commercial atmosphere of downtowns. In the grouping of these wide-windowed facades along major commercial streets, the image of America's cities and towns radically changed.

The first cast iron fronts were simple post-and-lintel construction with little decoration. As iron craftsmen became more adept and as more ornate architectural styles became popular, cast iron fronts were given Italianate, Venetian Gothic, and French Second Empire details. Cast iron storefronts could be selected directly from catalogs, which began to appear in the early 1850s. Standardized sills, columns, and lintels could be arranged to create fronts of all sizes, styles and configurations. In the 1870s sheet metal storefronts became popular; they were also sold in standardized sizes and configurations through manufacturers' catalogs.

The typical 19th century storefront consisted of single or double doors flanked by display windows. The entrance was frequently recessed, not only to protect the customer from inclement weather but to increase the amount of space in which to display merchandise. In some cases an additional side door provided access to the upper floors. Thin structural members of cast iron or wood, rather than masonry piers, usually framed the storefront. The windows themselves were raised off the ground by wood, cast iron or pressed metal panels or bulkheads; frequently, a transom or series of transoms (consisting of single or multiple panes of glass) were placed above each window and door. The signboard above the storefront (the fascia covering the structural beam) became a prominent part of the building. Canvas awnings, or in some cases tin or wooden canopies, often shaded storefronts of the late 19th century. Iron fronts were frequently put onto existing buildings as a way of giving them an up-to-date appearance. Except for expanding the display window area to the maximum extent possible and the increasing use of canvas awnings, few major technical innovations in storefront design can be detected from the 1850s through 1900.

The first decades of the 20th century saw the growing use of decorative transom lights (often using small prismatic glass panes) above display windows; in some cases, these transoms could be opened to permit air circulation into the store. Electric incandescent lights enabled storeowners to call attention to their entrance and display windows and permitted nighttime shopping. In the 1920's and 1930s a variety of new materials were introduced into the storefront, including aluminum and stainless steel framing elements, pigmented structural glass (in a wide variety of colors), tinted and mirrored glass, glass block and neon.

A bewildering number of proprietary products also appeared during this period, many of which went into storefronts including Aklo, Vitrolux, Vitrolite, and Extrudalite. Highly colored and heavily patterned marble was a popular material for the more expensive storefronts of this period. Many experiments were made with recessed entries, floating display islands, and curved glass. The utilization of neon lighting further transformed store signs into elaborate flashing and blinking creations. During this period design elements were simplified and streamlined; transom and signboard were often combined.



This cast iron storefront from the late 19th century has been well maintained over the years. Photo: NPS files.

Signs utilized typefaces for the period, including such stylized lettering as "Broadway," "Fino" and "Monogram." Larger buildings of this period, such as department stores, sometimes had fixed metal canopies, with lighting and signs as an integral component of the fascia.

Because commercial architecture responds to a variety of factors—environmental, cultural, and economic—distinct regional variations in storefronts can be noted. Fixed metal canopies supported by guy wires, for example, were common in late 19th and early 20th century storefronts in southern states where it was advantageous to have shaded entrances all year long. Such a detail was less common in the northeast where moveable canvas awnings predominated. These awnings could be lowered in summer to keep buildings cooler and raised in winter when sunlight helps to heat the building.



This 1930s Moderne storefront has gained significance over time and should be preserved. Photo: NPS files.

### Guidelines for Rehabilitating Existing Historic Storefronts

1. **Become familiar with the style** of your building and the role of the storefront in the overall design. Don't "early up" a front. Avoid stock "lumberyard colonial" detailing such as coach lanterns, mansard overhangings, wood shakes, nonoperable shutters and small paned windows except where they existed historically.
2. **Preserve the storefront's character** even though there is a new use on the interior. If less exposed window area is desirable, consider the use of interior blinds and insulating curtains rather than altering the existing historic fabric.
3. **Avoid use of materials that were unavailable when the storefront was constructed;** this includes vinyl and aluminum siding, anodized aluminum, mirrored or tinted glass, artificial stone, and brick veneer.
4. **Choose paint colors based on the buildings historical appearance.** In general do not coat surfaces that have never been painted. For 19th century storefronts, contrasting colors may be appropriate, but avoid too many different colors on a single facade.

## Evaluating the Storefront

The important key to a successful rehabilitation of a historic commercial building is planning and selecting treatments that are sensitive to the architectural character of the storefront.



Storefronts of the 1940s, 50s, and 60s were frequently installed by attaching studs or a metal grid over an early front and applying new covering materials. Photo: Bob Dunn.

As a first step, it is therefore essential to identify and evaluate the existing storefront's construction materials; architectural features; and the relationship of those features to the upper stories. This evaluation will permit a better understanding of the storefront's role in, and significance to, the overall design of the building. A second and equally important step in planning the rehabilitation work is a careful examination of the storefront's physical conditions to determine the extent and nature of rehabilitation work needed. In most cases, this examination is best undertaken by a qualified professional.

***The following questions should be taken into consideration in this two-part evaluation:***

#### **Construction Materials, Features, and Design Relationships**

**Storefront's Construction Materials:** What are the construction materials? Wood? Metal? Brick or other masonry? A combination?

**Storefront's Architectural Features:** What are the various architectural features comprising the storefront and how are they arranged in relationship to each other?

#### **Supporting Columns/Piers**

What do the columns or piers supporting the storefront look like? Are they heavy or light in appearance? Are they flush with the windows or do they protrude? Are they all structural

elements or are some columns decorative?

#### **Display Windows and Transoms**

Are the display windows and transoms single panes of glass or are they subdivided? Are they flush with the facade or are they recessed? What is the proportion of area between the display windows and transom? Are there window openings in the base panels to allow natural light into the basement?

#### **Entrances**

Are the entrances centered? Are they recessed? Is one entrance more prominent than the others? How is the primary retail entrance differentiated from other entrances? Is there evidence that new entrances have been added or have some been relocated? Are the doors original or are they later replacements?

### Decorative Elements

Are there any surviving decorative elements such as molded cornices, column capitals, fascia boards, brackets, signs, awnings or canopies? Is there a beltcourse, cornice, or fascia board between the first and second floor? Are some elements older than others indicating changes over time?

**Storefront's Relationship to Upper Stories:** Is there a difference in materials between the storefront and upper stories? Were the storefront and floors above it created as an overall design or were they very different and unrelated to each other?

It is also worthwhile to study the neighboring commercial buildings and their distinctive characteristics to look for similarities (canopies, lighting, signs) as well as differences. This can help determine whether the storefront in question is significant and unique in its own right and/or whether it is significant as part of an overall commercial streetscape.

### Physical Condition

#### Mild Deterioration

Do the surface materials need repair? Is paint flaking? Are metal components rusting? Do joints need recaulking where materials meet glass windows? Mild deterioration generally requires only maintenance level treatments.

#### Moderate Deterioration

Can rotted or rusted or broken sections of material be replaced with new material to match the old? Can solid material (such as Carrara glass) from a non-conspicuous location be used on the historic facade to repair damaged elements? Do stone or brick components need repointing? Is the storefront watertight with good flashing connections? Are there leaky gutters or air conditioner units which drip condensation on the storefront? Is caulking needed? Moderate deterioration generally requires patching or splicing of the existing elements with new pieces to match the deteriorated element.

#### Severe Deterioration

Have existing facing materials deteriorated beyond repair through vandalism, settlement, or water penetration? Is there a loss of structural integrity? Is the material rusted through, rotted, buckling, completely missing? Are structural lintels sagging? Are support columns settled or out of alignment? Severe deterioration generally requires replacement of deteriorated elements as part of the overall rehabilitation.

In evaluating whether the existing storefront is worthy of preservation, recognize that good design can exist in any period; a storefront added in 1930 may have greater architectural merit than what is replaced. In commercial historic districts, it is often the diversity of styles and detailing that contribute to the character; removing a storefront dating from 1910 simply because other buildings in the district have been restored to their 1860s appearance may not be the best preservation approach. If the storefront design is a good example of its period and if it has gained significance over time, it should be retained as part of the historical evolution of the building (this architectural distinctiveness could also be an economic asset as it may attract attention to the building).

## Deciding a Course of Action

The evaluation of the storefront's architectural features and physical condition will help determine the best course of action in the actual rehabilitation work. The following recommendations, adapted from the Secretary of the Interior's "Standards for Rehabilitation" and the accompanying interpretive guidelines, are designed to ensure that the historic commercial character of the building is retained in the rehabilitation process.

**If the original or significant storefront exists**, repair and retain the historic features using recommended treatments (see following sections on rehabilitating metal, wood and masonry storefronts as well as the guidelines for rehabilitating existing historic storefronts).

**If the original or significant storefront no longer exists** or is too deteriorated to save, undertake a contemporary design which is compatible with the rest of the building in scale, design, materials, color and texture; or undertake an accurate restoration based on historical research and physical evidence (see section on "Replacement Storefronts"). Where an original or significant storefront no longer exists and no evidence exists to document its early appearance, it is generally preferable to undertake a contemporary design that retains the commercial "flavor" of the building. The new storefront design should not draw attention away from the historic building with its detailing but rather should respect the existing historic character of the overall building.



By evaluating the components of a storefront as well as their existing condition, a successful rehabilitation is more likely. Photo: HABS collection, NPS.

A new design that copies traditional details or features from neighboring buildings or other structures of the period may give the building a historical appearance which blends in with its neighbors but which never, in fact, existed. For this reason, use of conjectural designs, even if based on similar buildings elsewhere in the neighborhood or the availability of different architectural elements from other buildings or structures, is generally not recommended.

## Rehabilitating Metal Storefronts

Rehabilitating metal storefronts can be a complex and time-consuming task. Before steps are taken to analyze or treat deteriorated storefronts, it is necessary to know which metal is involved, because each has unique properties and distinct preservation treatments. Storefronts were fabricated using a variety of metals, including cast iron, bronze, copper, tin, galvanized sheet iron, cast zinc, and stainless steel. Determining metallic composition can be a difficult process especially if components are encrusted with paint. Original architect's specifications (sometimes available from permit offices, town halls, or records of the original owner) can be important clues in this regard and should be checked if at all possible.

**Iron**—a magnetic, gray-white malleable metal, readily susceptible to oxidation. Cast iron, most commonly found in storefronts, is shaped by molds and can withstand great compressive loads. Rolled sheet iron, sometimes galvanized with zinc, also was used in store-front construction. Stainless steel began to appear in storefronts after 1930.

**Zinc**—a medium-hard, bluish-white metal, widely used as a protective coating for iron and steel. It is softer than iron and is nonmagnetic.

**Copper**—a nonmagnetic, corrosion-resistant, malleable metal, initially reddish-brown but when exposed to the atmosphere turns brown to black to green.

**Bronze and brass**—nonmagnetic, abrasive-resistant alloys combining copper with varying amounts of zinc, lead, or tin. These copper alloys, more commonly found in office buildings or large department stores, range in color from lemon yellow to golden brown to green depending on their composition and are well suited for casting.

**Aluminum**—a lightweight, nonmagnetic metal commonly found on storefronts dating from the 1920s and 30s. Its brightness and resistance to corrosion has made it a popular storefront material in the 20th century.

### Repair and Replacement of Metal

Simply because single components of a storefront need repair or replacement should not be justification for replacing an entire storefront. Deteriorated metal architectural elements can be repaired by a variety of means, although the nature of the repair will depend on the extent of the deterioration, the type of metal and its location, and the overall cost of such repairs. Patches can be used to mend, cover or fill a deteriorated area. Such patches should be a close match to the original material to prevent galvanic corrosion. Splicing—replacement of a small section with new material—should be undertaken on structural members only when temporary bracing has been constructed to carry the load. Reinforcing—or bracing the damaged element with additional new metal material—can relieve fatigue or overloading in some situations.

If metal components have deteriorated to a point where they have actually failed (or are missing), replacement is the only reasonable course of action. If the components are significant to the overall design of the storefront, they should be carefully removed and substituted with components that match the original in material, size and detailing.

Before going to the expense of reproducing the original, it may be useful to check salvage yards for compatible components. Missing parts of cast iron storefronts can be replaced by new cast iron members that are reproductions of the original. New wooden patterns, however, usually need to be made if the members are large. This procedure tends to be expensive (it is usually impossible to use existing iron components as patterns to cast large elements because cast iron shrinks 1/5 inch per foot as it cools). In some situations, less expensive substitute materials such as aluminum, wood, plastics, and fiberglass, painted to match the metal, can be used without compromising the architectural character of the resource.

### Cleaning and Painting

Cast iron storefronts are usually encrusted with layers of paint which need to be removed to restore crispness to the details. Where paint buildup and rust are not severe problems, handscraping and wire-brushing are viable cleaning methods. While it is necessary to remove all rust before repainting, it is not necessary to remove all paint. For situations involving extensive paint buildup and corrosion, mechanical methods such as low-pressure gentle dry grit blasting (80-100 psi) can be effective and economical, providing a good surface for paint. Masonry and wood surfaces adjacent to the



This finely detailed bronze storefront is typical of many constructed during the 1920s. The original grilles, spandrel panel and windows are all intact. Photo: NPS files.

cleaning area, however, should be protected to avoid inadvertent damage from the blasting. It will be necessary to recaulk and putty the heads of screws and bolts after grit blasting to prevent moisture from entering the joints. Cleaned areas should be painted immediately after cleaning with a rust-inhibiting primer to prevent new corrosion. Before any cleaning is undertaken, local codes should be checked to ensure compliance with environmental safety requirements.

Storefronts utilizing softer metals (lead, tin), sheet metals (sheet copper), and plated metals (tin and terneplate) should not be cleaned mechanically (grit blasting) because their plating or finish can be easily abraded and damaged. It is usually preferable to clean these softer metals with a chemical (acid pickling or phosphate dipping) method. Once the surface of the metal has been cleaned of all corrosion, grease, and dirt, a rustinhibiting primer coat should be applied. Finish coats especially formulated for metals, consisting of lacquers, varnishes, enamels or special coatings, can be applied once the primer has dried. Primer and finish coats should be selected for chemical compatibility with the particular metal in question.

Bronze storefronts, common to large commercial office buildings and major department stores of the 20th century, can be cleaned by a variety of methods; since all cleaning removes some surface metal and patina, it should be undertaken only with good reason (such as the need to remove encrusted salts, bird droppings or dirt). Excessive cleaning can remove the texture and finish of the metal. Since this patina can protect the bronze from further corrosion, it should be retained if possible. If it is desirable to remove the patina to restore the original surface of the bronze, several cleaning methods can be used: chemical compounds including rottenstone and oil, whiting and ammonia, or precipitated chalk and ammonia, can be rubbed onto bronze surfaces with a soft, clean cloth with little or no damage. A number of commercial cleaning companies successfully use a combination of 5% oxalic acid solution together with finely ground India pumice powder. Fine glass-bead blasting (or peening) and crushed walnut shell blasting also can be acceptable mechanical methods if carried out in controlled circumstances under low (80-100 psi) pressure. Care should be taken to protect any adjacent wood or masonry from the blasting.

The proper cleaning of metal storefronts should not be considered a "do-it-yourself" project. The nature and condition of the material should be assessed by a competent professional, and the work accomplished by a company specializing in such work.

## Rehabilitating Wooden Storefronts

The key to the successful rehabilitation of wooden storefronts is a careful evaluation of existing physical conditions. Moisture, vandalism, insect attack, and lack of maintenance can all contribute to the deterioration of wooden storefronts.



Rather than replace an entire wooden storefront, a new wooden component can be pieced-in, as seen in this column base. Photo: NPS files.

Paint failure should not be mistakenly interpreted as a sign that the wood is in poor condition and therefore irreparable. Wood is frequently in sound physical condition beneath unsightly paint. An ice pick or awl may be used to test wood for soundness—decayed wood that is jabbed will lift up in short irregular pieces; sound wood will separate in long fibrous splinters.

### Repair and Replacement of Wood

Storefronts showing signs of physical deterioration can often be repaired using simple methods. Partially decayed wood can be patched, built up, chemically treated or consolidated and then painted to achieve a sound condition, good appearance, and greatly extended life.

To repair wood showing signs of rot, it is advisable to dry the wood; carefully apply a fungicide such as pentachlorophenol (a highly toxic substance) to all decayed areas; then treat with 2 or 3 applications of boiled linseed oil (24 hours between applications).

Afterward, fill cracks and holes with putty; caulk the joints between the various wooden members; and finally prime and paint the surface.

Partially decayed wood may also be strengthened and stabilized by consolidation, using semirigid epoxies which saturate porous decayed wood and then harden. The consolidated wood can then be filled with a semirigid epoxy patching compound, sanded and painted. More information on epoxies can be found in the publication "Epoxies for Wood Repairs in Historic Buildings," cited in the bibliography.

Where components of wood storefronts are so badly deteriorated that they cannot be stabilized, it is possible to replace the deteriorated parts with new pieces. These techniques all require skill and some expense, but are recommended in cases where decorative elements, such as brackets or pilasters, are involved. In some cases, missing edges can be filled and rebuilt using wood putty or epoxy compounds. When the epoxy cures, it can be sanded smooth and painted to achieve a durable and waterproof repair.

### Repainting of Wood

Wooden storefronts were historically painted to deter the harmful effects of weathering (moisture, ultraviolet rays from the sun, wind, etc.) as well as to define and accent architectural features. Repainting exterior woodwork is thus an inexpensive way to provide continued protection from weathering and to give a fresh appearance to the storefront.

Before repainting, however, a careful inspection of all painted wood surfaces needs to be conducted in order to determine the extent of surface preparation necessary, that is, whether the existing layers of paint have deteriorated to the point that they will need to be partially or totally removed prior to applying the new paint.

As a general rule, removing paint from historic exterior woodwork should be avoided unless absolutely essential. Once conditions warranting removal have been identified, however, paint can be removed to the next sound layer using the gentlest method possible, then the woodwork repainted. For example, such conditions as mildewing, excessive chalking, or staining (from the oxidization of rusting nails or metal anchorage devices) generally require only thorough surface cleaning prior to repainting. Intercoat peeling, solvent blistering, and wrinkling require removal of the affected layer using mild abrasive methods such as hand scraping and sanding. In all of these cases of limited paint deterioration, after proper surface preparation the exterior woodwork may be given one or more coats of a high quality exterior oil finish paint.

On the other hand, if painted wood surfaces display continuous patterns of deep cracks or if they are extensively blistering and peeling so that bare wood is visible, the old paint should be completely removed before repainting. (It should be emphasized that because peeling to bare wood—the most common type of paint problem—is most often caused by excess interior or exterior moisture that collects behind the paint film, the first step in treating peeling is to locate and remove the source or sources of moisture. If this is not done, the new paint will simply peel off.)

There are several acceptable methods for total paint removal, depending on the particular wooden element involved. They include such thermal devices as an electric heat plate with scraper for flat surfaces such as siding, window sills, and doors or an electric hot-air gun with profiled scraper for solid decorative elements such as gingerbread or molding. Chemical methods play a more limited, supplemental role in removing paint from historic exterior woodwork; for example, caustic or solvent-base strippers may be used to remove paint from window muntins because thermal devices can easily break the glass. Detachable wooden elements such as exterior shutters, balusters and columns, can probably best be stripped by means of immersion in commercial dip tanks because other methods are too laborious. Care must be taken in rinsing all chemical residue off the wood prior to painting or the new paint will not adhere.

Finally, if the exterior woodwork has been stripped to bare wood, priming should take place within 48 hours (unless the wood is wet, in which case it should be permitted to dry before painting). Application of a high quality oil type exterior primer will provide a surface over which either an oil or latex top coat can be successfully used.

## Rehabilitating Masonry Storefronts

Some storefronts are constructed of brick or stone, and like their metal and wooden counterparts, also may have been subjected to physical damage or alterations over time. Although mortar may have disintegrated, inappropriate surface coatings applied, and openings reduced or blocked up, careful rehabilitation will help restore the visual and physical integrity of the masonry storefront.

### Repair and Replacement of Masonry

If obvious signs of deterioration—disintegrating mortar, spalling bricks or stone—are present, the causes (ground moisture, leaky downspouts, etc.) should be identified and corrected. Some repointing may be necessary on the masonry surface, but should be limited to areas in which so much mortar is missing that water accumulates in the mortar joints, causing further deterioration. New mortar should duplicate the composition, color, texture, and hardness, as well as the joint size and profile of the original. Badly spalling bricks may have to be replaced. Deteriorated stone may be replaced in kind, or with a matching substitute material; in some cases where not visually prominent, it may be covered with stucco, possibly scored to resemble blocks of stone.

### Cleaning Masonry

Inappropriate cleaning techniques can be a major source of damage to historic masonry buildings. Historic masonry should be cleaned only when necessary to halt deterioration or to remove graffiti and stains, and always with the gentlest means possible, such as water and a mild detergent using natural bristle brushes, and/or a non-harmful chemical solution, both followed by a low-pressure water rinse.

It is important to remember that many mid-19th century brick buildings were painted immediately or soon after construction to protect poor quality brick or to imitate stone. Some historic masonry buildings not originally painted were painted at a later date to hide alterations or repairs, or to solve recurring maintenance or moisture problems. Thus, whether for reasons of historical tradition or practicality, it may be preferable to retain existing paint. If it is readily apparent that paint is not historic and is a later, perhaps unsightly or inappropriate treatment, removal may be attempted,

but only if this can be carried out without damaging the historic masonry. Generally, paint removal from historic masonry may be accomplished successfully only with the use of specially formulated chemical paint removers. No abrasive techniques, such as wet or dry sandblasting should be considered. If nonhistoric paint cannot be removed without using abrasive methods, it is best to leave the masonry painted, although repainting in a compatible color may help visually.

Removing unsightly mastic from masonry presents a similarly serious problem. Its removal by mechanical means may result in abrading the masonry, and chemical and heat methods may prove ineffective, although solvents like acetone will aid in softening the hardened mastic. If the mastic has become brittle, a flat chisel may be used to pop it off; but this technique, if not undertaken with care, may result in damaging the masonry. And even if total removal is possible, the mastic may have permanently stained the masonry. Replacement of these masonry sections marred by mastic application may be one option in limited situations; individual pieces of stone or bricks that have been damaged by inappropriate alterations may be cut out and replaced with new pieces that duplicate the original. However, since an exact match will be nearly impossible to achieve, it may be necessary to paint the repaired masonry in order to create a harmonious facade. Replacement of a large area with new materials may not be acceptable as it may give the building a new, nonhistoric appearance inappropriate to the building style and period.

## Designing Replacement Storefronts

Where an architecturally or historically significant storefront no longer exists or is too deteriorated to save, a new front should be designed which is compatible with the size, scale, color, material, and character of the building. Such a design should be undertaken based on a thorough understanding of the building's architecture and, where appropriate, the surrounding streetscape. For example, just because upper floor windows are arched is not sufficient justification for designing arched openings for the new storefront. The new design should "read" as a storefront; filling in the space with brick or similar solid material is inappropriate for historic buildings. Similarly the creation of an arcade or other new design element, which alters the architectural and historic character of the building and its relationship with the street, should be avoided. The guidelines on page 8 can assist in developing replacement storefront designs that respect the historic character of the building yet meet current economic and code requirements.



This photograph shows the impact of preserving historic storefronts. The one on the right has been totally obscured by a "modern" front added in the 1950s. Photo: NPS files.

### Guidelines for Designing Replacement Storefronts

1. **Scale:** Respect the scale and proportion of the existing building in the new storefront design.
2. **Materials:** Select construction materials that are appropriate to the storefronts; wood, cast iron, and glass are usually more appropriate replacement materials than masonry which tends to give a massive appearance.
3. **Cornice:** Respect the horizontal separation between the storefront and the upper stories. A cornice or fascia board traditionally helped contain the store's sign.
4. **Frame:** Maintain the historic planar relationship of the storefront to the facade of the building and the streetscape (if appropriate). Most storefront frames are generally composed of horizontal and vertical elements.
5. **Entrances:** Differentiate the primary retail entrance from the secondary access to upper floors. In order to meet current code requirements, out-swinging doors generally must be recessed. Entrances should be placed where there were entrances historically, especially when echoed by architectural detailing (a pediment or projecting bay) on the upper stories.
6. **Windows:** The storefront generally should be as transparent as possible. Use of glass in doors, transoms, and display areas allows for visibility into and out of the store.
7. **Secondary Design Elements:** Keep the treatment of secondary design elements such as graphics and awnings as simple as possible in order to avoid visual clutter to the building and its streetscape.

A restoration program requires thorough documentation of the historic development of the building prior to initiating work. If a restoration of the original storefront is contemplated, old photographs and prints, as well as physical evidence, should be used in determining the form and details of the original. Because storefronts are particularly susceptible to alteration in response to changing marketing techniques, it is worthwhile to find visual documentation from a variety of periods to have a clear understanding of the evolution of the storefront. Removal of later additions that contribute to the character of the building should not be undertaken.

## Other Considerations

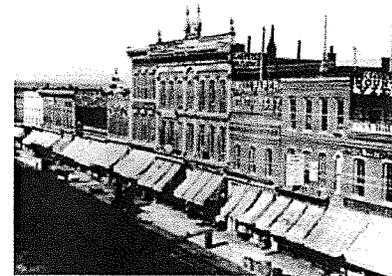
### Pigmented Structural Glass

The rehabilitation of pigmented structural glass storefronts, common in the 1930's, is a delicate and often frustrating task, due to the fragility and scarcity of the material. Typically the glass was installed against masonry walls with asphaltic mastic and a system of metal shelf angles bolted to the walls on three-foot centers. Joints between the panels were filled with cork tape or an elastic joint cement to cushion movement and prevent moisture infiltration.

The decision to repair or replace damaged glass panels should be made on a case-by-case basis. In some instances, the damage may be so minor or the likelihood of finding replacement glass so small, that repairing, reanchoring and/or stabilizing the damaged glass panel may be the only prudent choice. If the panel is totally destroyed or missing, it may be possible to replace with glass salvaged from a demolition; or a substitute material, such as "spandrel glass," which approximates the appearance of the original. Although pigmented structural glass is no longer readily available, occasionally long-established glass "jobbers" will have a limited supply to repair historic storefronts.

### Awnings

Where based on historic precedent, consider the use of canvas awnings on historic storefronts. Awnings can help shelter passersby, reduce glare, and conserve energy by controlling the amount of sunlight hitting the store window, although buildings with northern exposures will seldom functionally require them. Today's canvas awnings have an average life expectancy of between 4 and 7 years. In many cases awnings can disguise, in an inexpensive manner, later inappropriate alterations and can provide both additional color and a strong store identification. Fixed aluminum awnings and awnings simulating mansard roofs and umbrellas are generally inappropriate for older commercial buildings. If awnings are added, choose those that are made from soft canvas or vinyl materials rather than wood or metal; be certain that they are installed without damaging the building or visually impairing distinctive architectural features and can be operable for maximum energy conservation effect.



Try to locate old photographs or prints to determine what alterations have been made to the storefront and when they were undertaken. Awnings were common elements of storefronts at the turn of the century. Photo: NPS files.

### Signs

Signs were an important aspect of 19th and early 20th century storefronts and today play an important role in defining the character of a business district. In examining historic streetscape photographs, one is struck by the number of signs—in windows, over doors, painted on exterior walls, and hanging over (and sometimes across) the street. While this confusion was part of the character of 19th century cities and towns, today's approach toward signs in historic districts tends to be much more conservative. Removal of some signs can have a dramatic effect in improving the visual appearance of a building; these include modern backlit fluorescent signs, large applied signs with distinctive corporate logos, and those signs attached to a building in such a way as to obscure significant architectural detailing. For this reason, their removal is encouraged in the process of rehabilitation. If new signs are designed, they should be of a size and style compatible with the historic building and should not cover or obscure significant architectural detailing or features. For many 19th century buildings, it was common to mount signs on the lintel above the first story. Another common approach, especially at the turn of the century, was to paint signs directly on the inside of the display windows. Frequently this was done in gold leaf. New hanging signs may be appropriate for historic commercial buildings, if they are of a scale and design compatible with the historic buildings. Retention of signs and advertising painted on historic walls, if of historic or artistic interest (especially where they provide evidence of early or original occupants), is encouraged.

### Paint Color

Paint analysis can reveal the storefront's historic paint colors and may be worth undertaking if a careful restoration is desired. If not, the paint color should be, at a minimum, appropriate to the style and setting of the building. This also means that if the building is in a historic district, the color selection should complement the building in question as well as other buildings in the block. In general, color schemes for wall and major decorative trim or details should be kept simple; in most cases the color or colors chosen for a storefront should be used on other painted exterior detailing (windows, shutter, cornice, etc.) to unify upper and lower portions of the facade.

### Windows

Glass windows are generally the most prominent features in historic storefronts, and care should be taken to ensure that they are properly maintained. For smaller paned windows with wooden frames, deteriorated putty should be removed manually, taking care not to damage wood along the rabbet. To reglaze, a bead of linseed oil-based putty should be laid

around the perimeter of the rabbet; the glass pane pressed into place; glazing points inserted to hold the pane; and a final seal of putty beveled around the edge of the glass. For metal framed windows, glazing compound and special glazing clips are used to secure the glass; a final seal of glazing compound then is often applied. If the glass needs replacing, the new glass should match the original in size, color and reflective qualities. Mirrored or tinted glass are generally inappropriate replacements for historic storefronts. The replacement of cracked or missing glass in large windows should be undertaken by professional glaziers.

### Code Requirements

Alterations to a storefront called for by public safety, handicapped access, and fire codes can be difficult design problems in historic buildings. Negotiations can be undertaken with appropriate officials to ensure that all applicable codes are being met while maintaining the historic character of the original construction materials and features. If, for instance, doors opening inward must be changed, rather than replace them with new doors, it may be possible to reverse the hinges and stops so that they will swing outward.

## Summary and References

A key to the successful rehabilitation of historic commercial buildings is the sensitive treatment of the first floor itself. Wherever possible, significant storefronts (be they original or later alterations), including windows, sash, doors, transoms, signs and decorative features, should be repaired in order to retain the historic character of the building. Where original or early storefronts no longer exist or are too deteriorated to save, the commercial character of the building should nonetheless be preserved—either through an accurate restoration based on historic research and physical evidence or a contemporary design which is compatible with the scale, design, materials, color and texture of the historic building. The sensitive rehabilitation of historic storefronts will not only enhance the architectural character of the overall building but will contribute to rejuvenating neighborhoods or business districts as well.

### Acknowledgements

Special thanks go to Kay D. Weeks and Sharon C. Park, AIA, for providing technical and editorial direction in the development of this Preservation Brief. The following individuals are also to be thanked for reviewing the manuscript and making suggestions: Norman Mintz, New York, N Y.; Judith Kitchen, Columbus, Ohio; Jim Vaseff, Atlanta, Georgia; and Tom Moriarity, Washington, D C. Finally thanks go to Technical Preservation Service Branch staff members, especially Martha A. Gutrick, Michael J. Auer and Anne E. Grimmer, whose valuable comments were incorporated into the final text and who contributed to the publication of the brief.

This publication has been prepared pursuant to the National Historic Preservation Act of 1966, as amended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. Technical Preservation Services (TPS), National Park Service prepares standards, guidelines, and other educational materials on responsible historic preservation treatments for a broad public.

September 1982

---

## Reading List

Bryan, John M. and the Triad Architectural Associates. *Abbeville, South Carolina: Using Grant-in-Aid Funds for Rehabilitation Planning and Project Work in the Commercial Town Square*. Washington, D.C.: Technical Preservation Services Division, U.S. Department of the Interior, 1980.

Gayle, Margot and Edmund V. Gillon, Jr. *Cast Iron Architecture in New York*. New York: Dover Publications, Inc., 1971.

Gayle, Margot and David W. Look and John G. Waite. *Metals in America's Historic Buildings: Uses and Preservation Treatments*. Washington, D.C.: Technical Preservation Services Division, U.S. Department of the Interior, 1980.

Gelbloom, Mara. "Old Storefronts." *The Old House Journal* VI, No. 3 (March 1978), pp. 2534.

Grimmer, Anne E. "Dangers of Abrasive Cleaning to Historic Buildings." (Preservation Briefs 6), Washington, D.C.: Technical Preservation Services Division, U.S. Department of the Interior, 1979.

Guthrie, Susan. *Main Street Historic District, Van Buren, Arkansas: Using Grant-in-Aid Funds for Storefront Rehabilitation*. Washington, D.C.: Technical Preservation Services Division, U.S. Department of the Interior, 1980.

Hartmann, Robert R. *Design for the Business District, Part I*. Racine, Wisconsin: Racine Urban Aesthetics, Inc., 1979.

Hensley, Tom. *The Preservation of Historic Pigmented Structural Glass (Vitrolite and Carrara Glass)*. Denver: Rocky Mountain Regional Office, National Park Service, 1981.

Marsh, Ellen. "An Introduction to Storefront Rehabilitation. *Conserve Neighborhoods, No. 7* (Summer 1979).

Mintz, Norman. "A Practical Guide to Storefront Rehabilitation. *Technical Series No. 2.*: Albany, N.Y.: Preservation League of New York State, 1977.

Myers, John H. "The Repair of Historic Wooden Windows." (Preservation Briefs 9). Washington, D.C.: Technical Preservation Services Division, U.S. Department of the Interior, 1980.

Park, Sharon C. *Storefront Rehabilitation: A 19th Century Commercial Building*. Washington, D.C.: Technical Preservation Services Division, U.S. Department of the Interior, 1980.

Phillips, Morgan W. and Dr. Judith E. Selwyn. *Epoxies for Wood Repairs in Historic Buildings*. Washington, D.C.: Technical Preservation Services Division, U.S. Department of the Interior, 1978.

Rifkind, Carole. *Main Street: The Face of Urban America*. New York: Harper and Row, 1977.

*The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*. Washington, D.C.: Technical Preservation Services Division, U.S. Department of the Interior, 1980.

Weeks, Kay D. and David W. Look. "Exterior Paint Problems on Historic Woodwork." (Preservation Briefs 10). Washington, D.C.: Technical Preservation Services, U.S. Department of the Interior, 1982.

---



nps.gov

EXPERIENCE YOUR AMERICA™

## Knowledge Pub - January 23, 2018

### Water After The Quake

Presenter Stacy Metzger Forest Grove Fire and Rescue Support volunteer discussed how to prepare for basic needs after the quake.

She noted that minimum water needs are one gallon per person per day and recommended to have supplies for a minimum of 14 days. It was noted on average people use a minimum of 9 gallons per day. And Rob Foster city engineer noted Forest Grove uses more than 100 gallons per day per person but that includes industrial use; he also noted that the figure goes up in the summer.

She noted water was available in gallon jugs for as low as \$1.00 per gallon, she noted that water can be stored in soda or water bottles after sanitizing, but that milk jugs are not recommended. She noted that self-stored water should be replaced every 90 days but she said purchased bottled water could be stored almost indefinitely.

Metzger noted the main concerns with water are Protozoa, virus, bacteria and toxins. She noted that filters effectively remove bacteria and protozoa but not viruses; for protection against viruses it is recommended to use chlorine bleach or boiling. She noted there is not a very effective way to remove toxins such as gasoline.

She recommended in the event of a quake first ensure the safety of your family, then turn off the gas supply and turn off the water supply in your house, not at the street. It can be advisable to turn off electric as well till ensured the electrical system is safe.

She recommends a 3/30/20 challenge. In that in 30 minutes prepare emergency supplies for 3 days for less than \$20 is a very doable goal.

She recommended emergency supplies to include a manual can opener, first aid supplies, flashlight, matches or lighter for camp stove, knife, fork, spoon, bowl, mug, and cleaning wipes, medications, and sanitation supplies. Make copies of important information. She also recommended a NORAD radio that has flashlight manual crank to charge the battery and noted they have a charge port for cell phones.

Cynthia Debar of Washington County emergency preparedness discussed sanitation needs with the PEE and POOP buckets. She noted you need at least two 5-gallon buckets and a good supply of heavy duty 13-gallon plastic garbage bags 9 mil or thicker. She explained one bucket is for liquids and one is for solids, and that using two separate buckets helps to prevent obnoxious odors. She explained the liquid bucket can be dumped on lawns or other similar areas. The solids should be double bagged and stored in a sealed garbage can until city services can remove them. She noted that the county emergency radio frequency is AM 1360.

Rob Foster public works engineer gave some information about city water uses. He noted that 1.5 million gallons of water are used per day in forest grove and 2.5 million gallons in the summer. He noted with industrial use that is about 100 gallons per person per day. He noted in the summer that amount goes to 6 million gallons of water per day of use. He noted that about  $\frac{1}{4}$  of that use is for toilets.

Foster noted they are working to get a portable water purification trailer that would provide about 1 gallon of water per person per day that unit cost is \$1 million; it is in the budget. He noted they have an army surplus unit they paid \$1,000 for but its capacity is very small.

Foster noted that if services are still working the city will be able to function but in the event of a total loss of power their capacity would be very limited. He noted the fire department is tasked with emergency services in the event of a natural disaster.