



Nacogdoches Historic Landmark Preservation Committee

Monday, August 2, 2021 at 4:00 PM

THE NACOGDOCHES HISTORIC LANDMARK PRESERVATION COMMITTEE WILL MEET IN REGULAR SESSION ON AUGUST 2, 2021 AT 4:00 P.M. IN THE CITY COUNCIL CHAMBERS, AT 202 EAST PILAR STREET TO CONSIDER:

Please Note: A quorum of the Nacogdoches City Council may attend the above stated board meeting.

1. Call to order.
2. Approval of minutes
 - A. Approval of minutes: July 14, 2021
3. Regular Agenda
 - A. Discuss and consider Certificate of Appropriateness for property located at 318 E. Main Street.
COA #2021-006
4. Adjourn.

The City Council Chambers is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please contact the Community Services Director, Brian W. Bray, at 936-559-2960 for further information.

CERTIFICATION

This agenda is posted as required under G.C. Section 551.041. For more information or a copy of the Open Meetings Act, please contact the Attorney General of Texas at 1-800-252-8011; the City Secretary at 936-559-2506 or visit the City of Nacogdoches website at www.nactx.us.

The City Council Chambers are wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please contact Director of Community Services, Brian W. Bray, at 936-559-2960 or email recreation@nactx.us for further information.



CERTIFICATION

I certify that the above notice was posted on the public notice board at City Hall, 202 East Pilar Street, Nacogdoches, Texas on July 30, 2021 at 5:00 P.M. I further certify that the following News Media were properly notified of this meeting as stated above: The Daily Sentinel, KTRE-TV, KLSB-TV, and Pine Log.

Jan Vinson, City Secretary

I certify that the attached notice and agenda of items to be considered by the Historic Landmark Preservation Committee was removed by me from posting at City Hall on the _____ day of _____, 2021.

Name: _____ Title: _____

MINUTES
Nacogdoches Historic Landmark Preservation Committee
July 14, 2021 – 4:00 p.m. – Nacogdoches City Council Chambers
202 E. Pilar Street, Nacogdoches, Texas, 75961

Commissioners Present: Carol Walsh, Perky Beisel, Judith Kugle, Gretchen Patterson, Anne Keehnen

Commissioners Absent: Paul Sandul, Brad Maule

Others Present: Hanna Andersen (City staff), Brian W. Bray (City staff), John and Debbie Wayland (applicants)

1. Call to Order

Commissioner Walsh calls the meeting to order at 4:00 p.m.

2. Approval of Minutes: April 14, 2021

Commissioner Beisel makes a motion to approve the minutes as written. Commissioner Keehnen seconds and the motion passes unanimously.

3. Discuss and consider Certificate of Appropriateness for property located at 216 N. Mound. Church. COA #2021-005

Mrs. Andersen reviews the application and describes the significance of the building, which was built by Dietrich Rulfs in 1912. Commissioner Keehnen asks if there will be runoff issues from the large expanse of concrete. Mr. Bray reminds the Board that they are reviewing historic preservation issues only, and the applicants will be required to get permits and approvals from all applicable departments.

Commissioner Kugle asks if the alterations are visible from adjoining property and the applicant answers that there is a fence but it will be visible. Commissioner Beisel says the inclusion of Sanborn Fire Insurance maps in the packet is helpful. Commissioner Patterson asks for clarification of the brick removal. The applicant says the large majority of the patio will remain as it is. Commissioner Walsh says the changes will make the property more livable for the owner and will do nothing to alter the historic building itself.

Commissioner Keehnen makes a motion to approve COA #2021-005. Commissioner Kugle seconds and the motion passes unanimously.

4. Adjourn.

Commissioner Walsh adjourns the meeting at 4:09 p.m.

Attest: Hanna Andersen
Asst. Community Services Director

Commissioner: Carol Walsh



Certificate of Appropriateness Application

1 message

Google Forms <forms-receipts-noreply@google.com>
To: recreation@nactx.us

Wed, Jul 28, 2021 at 11:40 AM

Thanks for filling out [Certificate of Appropriateness Application](#)

Here's what was received.

Certificate of Appropriateness Application

Due 3rd Monday of the month by 4:00 PM

Email *

recreation@nactx.us

Legal Description of Property: Lot / Block / Subdivision / City Block

You can find this information here: [http://nacocad.org/\(S\(o2ufipgqihdyuodqm0r4tk0g\)\)/search.aspx?clientid=nacogdochescad](http://nacocad.org/(S(o2ufipgqihdyuodqm0r4tk0g))/search.aspx?clientid=nacogdochescad)

Lot 7-A / Block 15

Property Address: *

318 E. Main

Applicant Name: *

John Sloane

Applicant Address: *

[REDACTED]

Applicant Phone Number: *

[REDACTED]

Owner of Property, if different from applicant:

.....

Owner Address:

.....

Owner phone number:

Please Check the Appropriate Construction Activity: *

☒ Restoration/remodel

☐ Fencing

☐ Painting

☐ New Construction

☐ Signage

☐ Roofing

☐ Other:

Proposed Work: *

Please describe your proposed work simply and accurately including work to be done and materials to be used. Attach extra sheets and supplemental material as needed.

see attached sketch - replicate architectural features of 422 E. Main to this property
.....

Please upload any photos or related documentation.

Submitted files



Design Assistance Supporting Documents_Page_7 - Hanna Andersen.jpg

[Create your own Google Form](#)

[Report Abuse](#)

Nacogdoches Historic Landmark Preservation Committee

STAFF REPORT

CASE NUMBER: COA 2021-006

NAME OF APPLICANT: John Sloane

LOCATION: 318 E. Main

REQUESTED ACTION: Certificate of Appropriateness

PROPOSED WORK:

Applicant is requesting to:

- Rehabilitate the primary building facade, detailed below
- Replicate all architectural elements from 422 E. Main (currently Cowboy Jack's Saloon)
 - Remove upper casement windows
 - Remove standing seam metal canopy/awning
 - Reconfigure primary entrance to be flush with sidewalk (not recessed as current)
 - Construct balcony with access to second story apartment
 - Install three window/door openings in upper story

STAFF COMMENTS:

The commercial building at 318 E. Main was built c. 1900-1910 and is listed as non-contributing to the Downtown Historic District due to significant alterations to the primary facade. Using Sanborn Fire Insurance Maps, staff surmise that the current building footprint first appears in 1946; however, there has been a building in this location since c. 1900. From 1906 through 1945, the building was a single story masonry structure.

Photographs of the building exist from the 1960s, which show a modernization typical of that era, including a slipcover with horizontal siding which covers most of the facade. The slipcover was removed in 2013 and the current state of the building shows a recessed entrance, metal canopy, several large multi-pane windows, and brick walls.

Staff consulted with other city departments regarding the interior plans, specifically the possibility of an apartment in the upper story. While HLPC does not review interior alterations, or anything to do with code, building permits, etc., we felt it was important to head off any difficulties for the applicant later in the process. For a habitable dwelling, the minimum for a classic efficiency apartment is 220 square feet with a ceiling height of seven feet. Some of the other requirements for an apartment include a sprinkler system, full bathroom, and full kitchen.

In January 2021, staff requested, on behalf of the applicant, design assistance for this property from the Texas Historical Commission. The resulting Design Report is included in this agenda packet for the Board's perusal, but here are a couple notable excerpts:

The paint on the upper facade appears to be flaking in numerous areas. If possible, consider carefully removing the paint, and clean per the guidelines below to prevent further deterioration. The techniques for removing paint from brick are similar to those for cleaning masonry buildings: always use the gentlest means possible, so that the masonry is not damaged. In most cases, a proprietary chemical paint remover is applied to the masonry

Nacogdoches Historic Landmark Preservation Committee

STAFF REPORT

surface for a specific time, and then removed by low pressure washing. If it is determined that the removal will cause further damage to the masonry, then it is recommended to repaint.

A distinct brick bonding pattern is present along the upper facade. This unique brick detailing is important in defining the overall historic character of the building and should not be altered or obscured.

The casement windows remain intact and may require significant repairs. Further investigation should be conducted in order to determine the windows' material and condition. Replacements for missing or severely damaged windows should be reconstructed in kind.

While the existing storefront may not be the original design nor the desired aesthetic, the changes that were made to the building were completed over 50 years ago, which makes them historic in their own right. In this case, replicating the architectural elements from 422 East Main Street will create a false sense of historical development that was never present on 318 East Main Street. Replicating the features from a different property also destroys and/or diminishes the historic character that is currently present at 318 East Main Street. The proposed alterations provided in the sketch should not be undertaken.

The distinctive materials present in this property, such as the aluminum and Norman brick, including the recessed configuration, and construction techniques, characterize this property and have become a part of the historical evolution. Before any conservation technique is considered, it is important to first evaluate the overall conditions of the aluminum storefront in order to determine whether more than protection and maintenance is required. Based on the photographs, it appears to be in relatively good condition with a couple of glass panes that will require replacement. Further investigation should also be conducted in order to determine and confirm the type of metal and condition.

Staff find that City Ordinance Criteria c, d, e, g, and k (listed below) relate to the proposed construction.

(c) (2) Preservation of distinguishing qualities. The distinguishing original qualities or character of a building, structure, object, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.

(d) (3) Consistency of alterations with styles. All buildings, structures, objects, and sites 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.

(e) (4) Previous alterations. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, object, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

(g) (6) Repair and replacement of features. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. If replacement is necessary, the new material should reflect the material being replaced in composition, design, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historical, physical, or pictorial evidence, rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

Nacogdoches Historic Landmark Preservation Committee

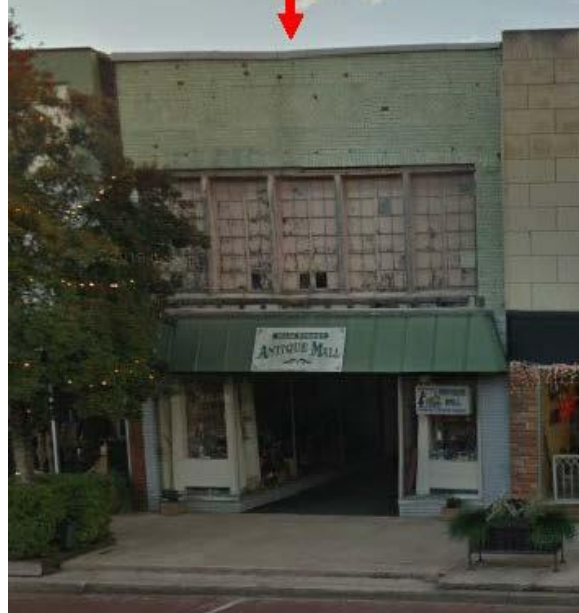
STAFF REPORT

(k) (10) Preservation of historic features with new alterations. Wherever possible, new additions or alterations to buildings, structures, objects, or sites 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 building, structure, object, or site would be unimpaired.

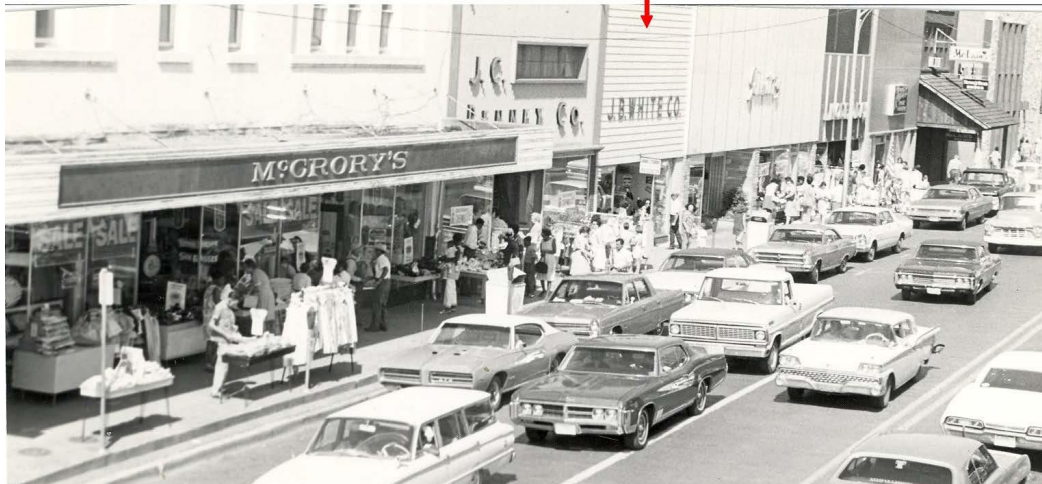
Historic and current photographs of the building:



2013 - Slipcover removed shortly after this photo was taken



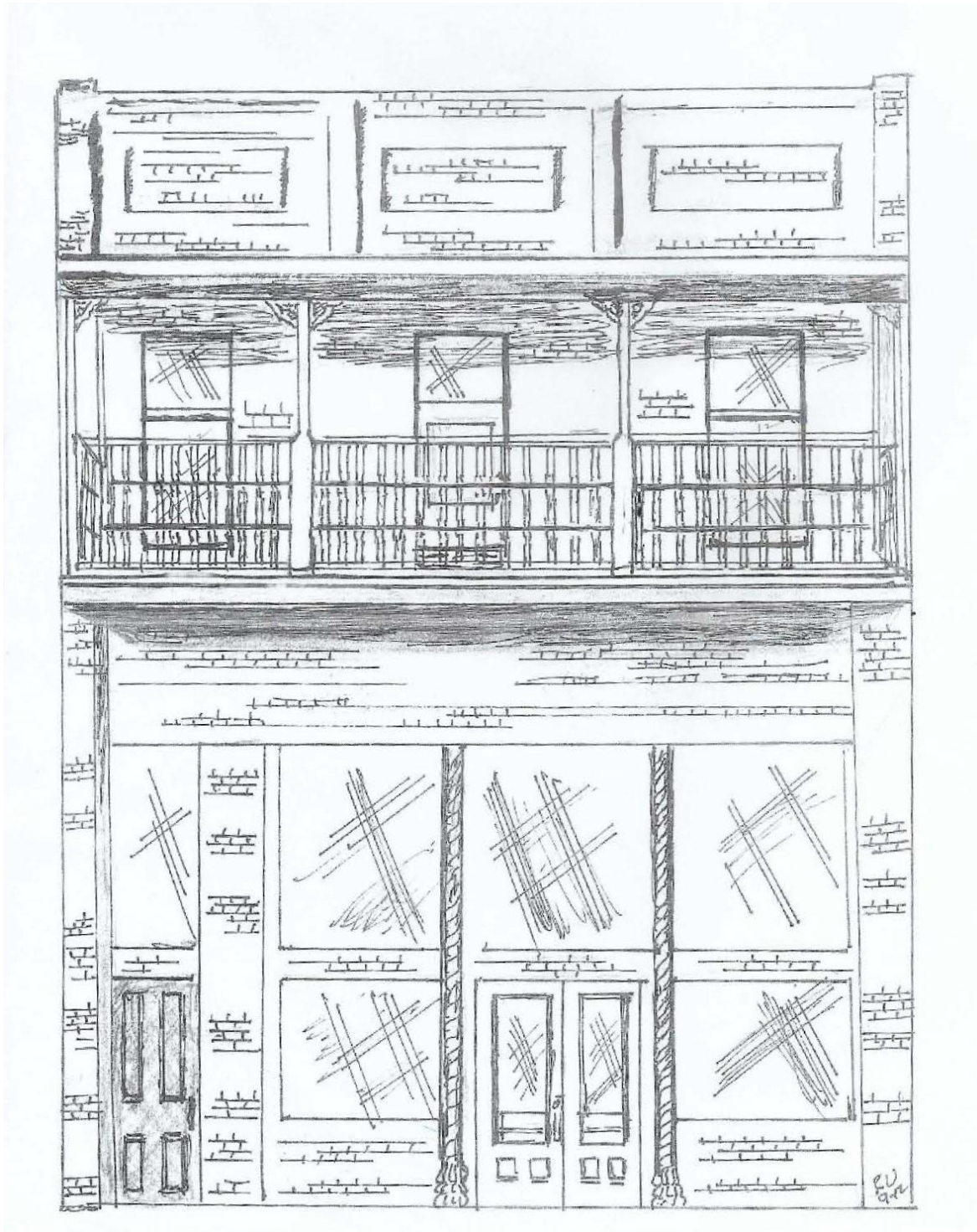
2021 - current status



1960s photograph showing slipcover and recessed entrance

Nacogdoches Historic Landmark Preservation Committee
STAFF REPORT

Design sketch for both 422 East Main and 318 East Main:



Nacogdoches Historic Landmark Preservation Committee STAFF REPORT

Photographs of remodel of 422 East Main, applicant's design inspiration for 318 East Main:



Before

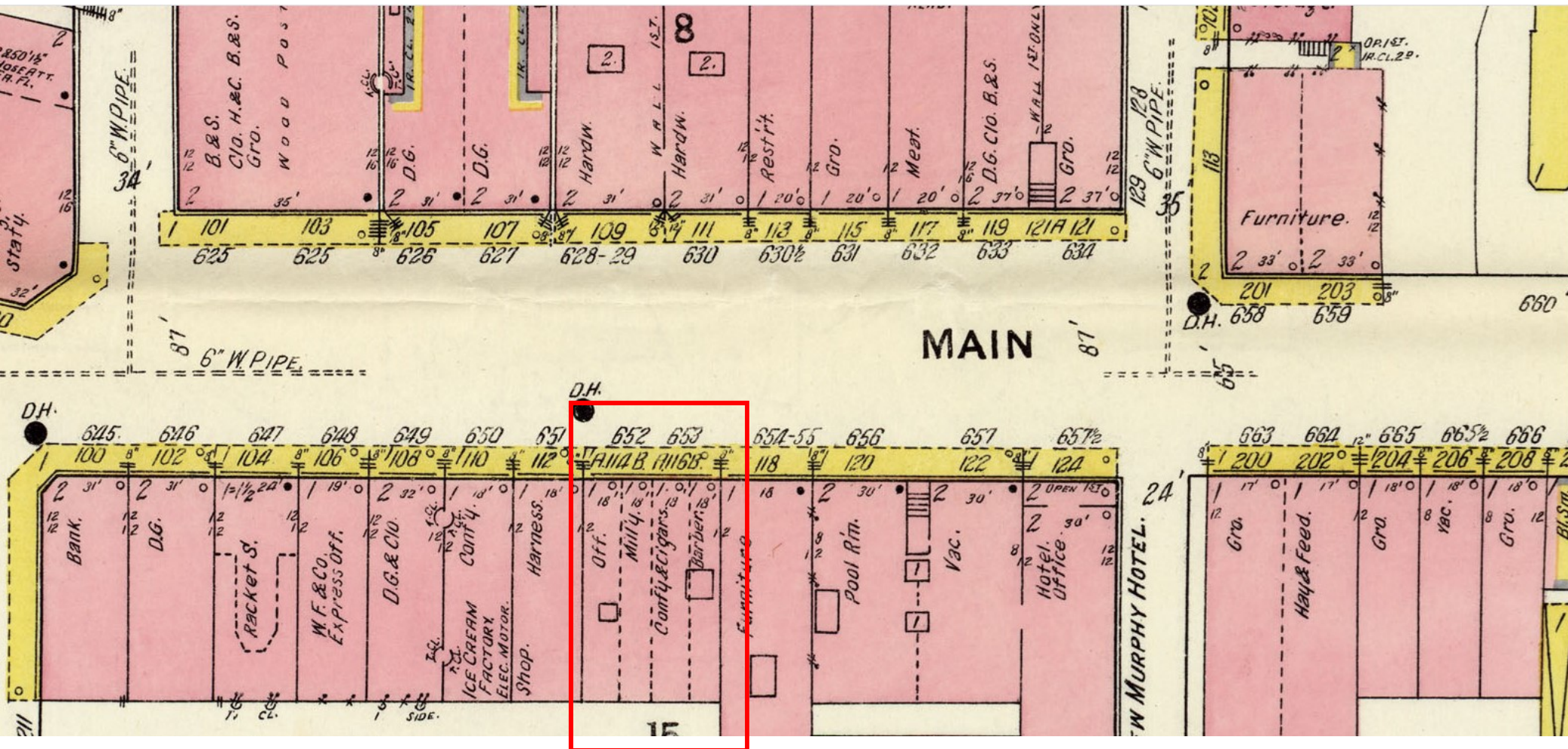


After



Today

1912 Sanborn Map



1986 and 2007 Historic Sites Survey

318 E. Main 2007 National Register Information

- **Address:** 318 E. Main
- **Name:** Main Street Antique Mall
- **Date:** 1900
- **Type:** Two part

Contributing: No

318 E. Main 1986 Survey Information

- **Address:** 318 E. Main
- **Name:** Greer's
- **Date:** 1910
- **Block:** 15
- **Lot:** 7-A
- **Condition:** Fair; some alterations.
- **Description:** 1-1/2 story rectangular brick commercial structure with flat roof; applied siding covers second level facade; street level facade has inset metal and glass entry doors flanked by plate glass display area; standing seam metal awning.

Significance: Shown on 1912 Sanborn Fire Insurance Map as 1-story brick with frame awning, divided into four long and narrow shops, office, millinery, confectioner and cigar shop, and barber shop.

2013 Image
Wood siding removed shortly after to expose
upper windows (next picture)



318 East Main Street



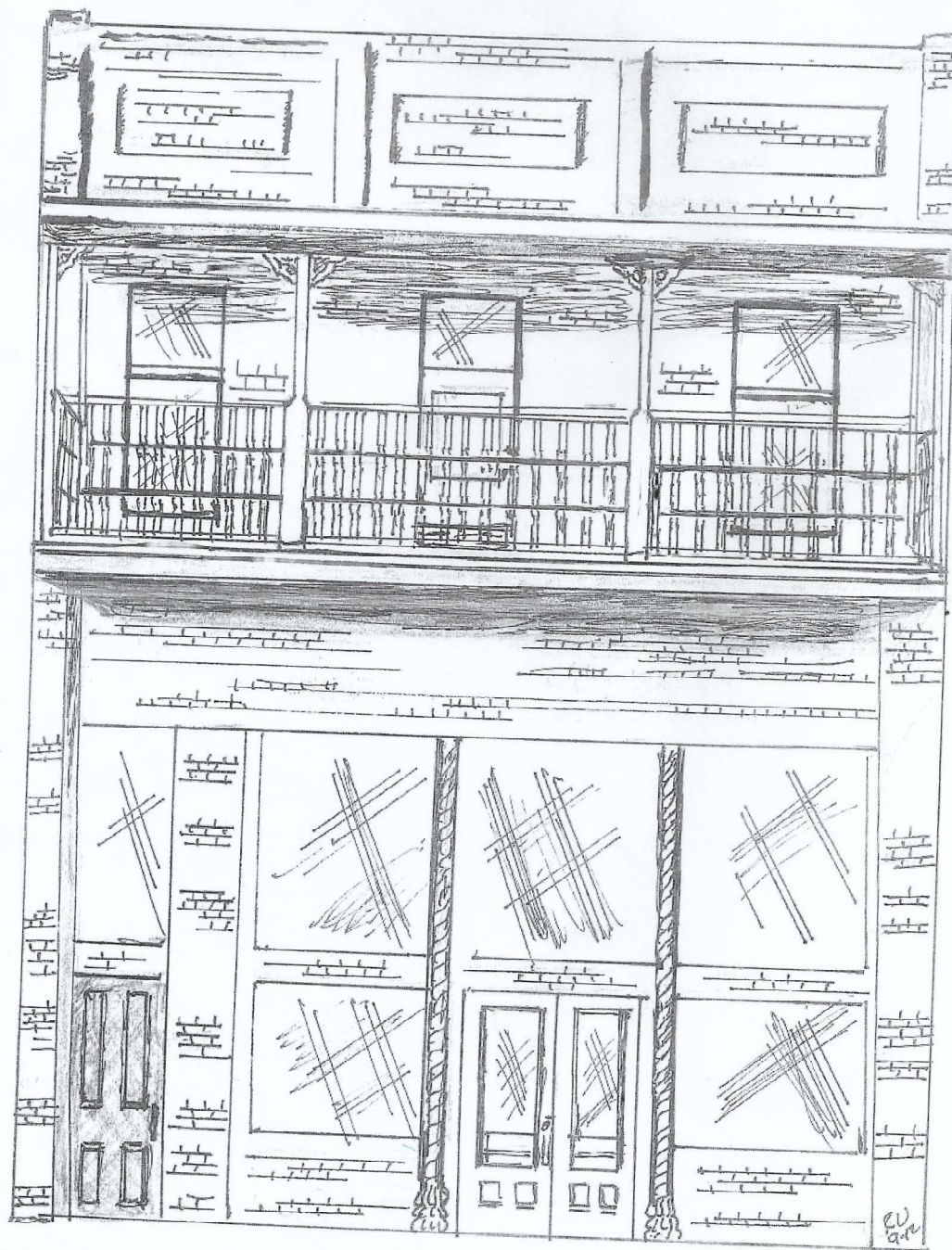
Historic Photos



Historic Photos



The property owner restored a building in the 400 block of East Main to look exactly like this rendering. The design was appropriate for that building and greatly improved the façade. He really likes this design and would like to use it on the building at 318 East Main. We have found no evidence of a balcony on the building at 318 East Main and we understand that the architecture of the two buildings are very different. The building owner is thinking about putting an apartment upstairs and would like to add a secondary entrance to the building. Any guidance you could give would be appreciated.



318 East Main Street | Nacogdoches, Texas | January 2021

EXISTING CONDITIONS

A design request was submitted by the Main Street Manager for the property owner of 318 East Main Street in Nacogdoches, Texas. The owner is interested in rehabilitating both interior and exterior of the property in order to accommodate retail space on the ground floor and residential on the upper floor. A tenant for the retail space was not specified in the request.

Per the National Register Nomination Form, the property is listed as non-contributing to the Nacogdoches Downtown Historic District. However, it is considered locally and any exterior alterations must comply with the adopted [Code of Ordinances](#)/Design Guidelines for the City of Nacogdoches. A [Certificate of Appropriateness\(COA\)](#) must be obtained before commencing any exterior work. While the building has been altered, if properly rehabilitated, this building could be considered for reclassification as a contributing member of the district.

It is important to note that the recommendations provided in this report are focused on the preservation and repair of the existing façade, including the modernized storefront. Despite not being the original storefront design, the majority of these alterations were completed over 50 years ago and have gained Historic Significance due to when they occurred, which is covered in greater detail later in this report. Facade rehabilitation recommendations are outlined on the following pages.

With a current prohibition on travel due to the COVID-19 pandemic, all recommendations provided are limited to photo analysis and historic documentation available.

PROPOSED DESIGN

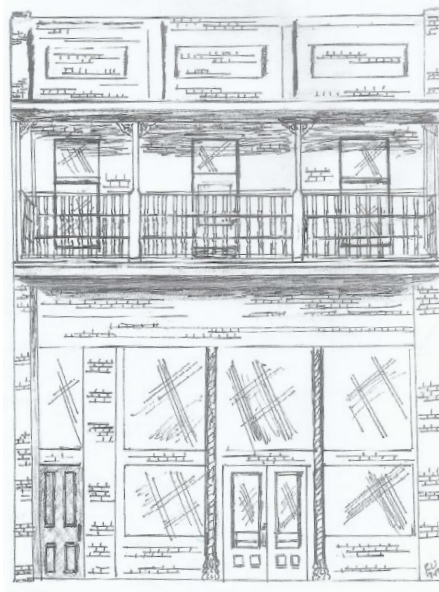
SUBMITTED BY OWNER:

422 East Main Street

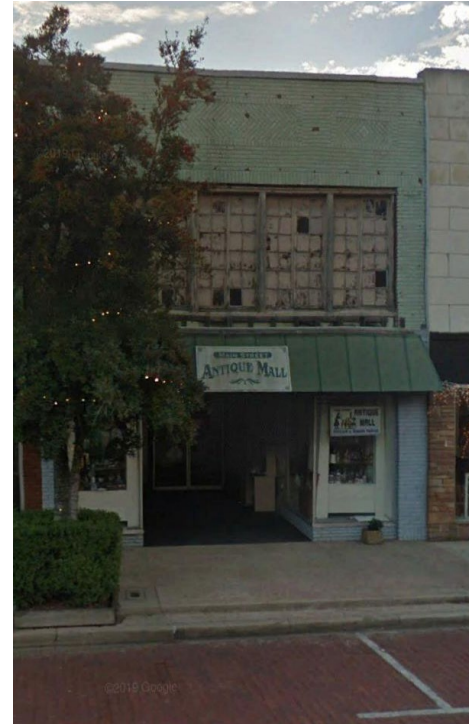
Per the design request submitted and sketch provided by the owner, shown on the right, the owner would like to replicate all architectural elements present on the 422 East Main Street facade to the 318 East Main Street property. While duplicating the same aesthetic is desired, it is important that all proposed alterations for the property at 318 E Main Street comply with the City of Nacogdoches' Code of Ordinances, Division 5 Certificate of Appropriateness, [Section 50-157 - Criteria for approval](#).

When comparing both properties, they significantly differ in overall proportion, scale, materials, and stylistic features. In addition to the differences aesthetically, there is no physical evidence or supporting historical documentation available that justifies the removal and replacement of the existing elements with conjectural features from another property.

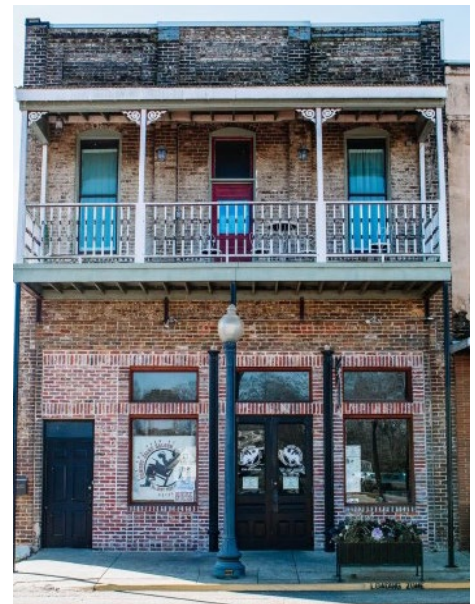
Sketch:



318 East Main Street, Existing Conditions:



422 East Main Street, Existing Conditions:



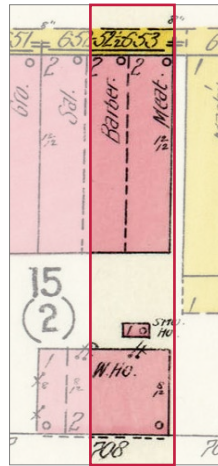
HISTORY

Sanborn Fire Insurance Maps were created from the late 1800s to mid-1900s to determine fire insurance liability in urbanized areas across the United States. These maps include detailed information about a building including number of stories, openings, and construction materials, unique features, and types of businesses that occupied them. Today, we use these maps to learn more about the history of downtown buildings.

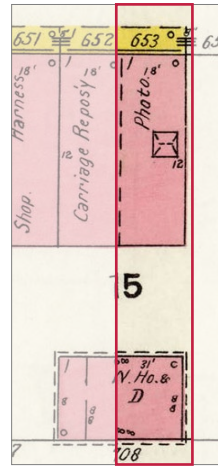
The last Sanborn Map of the area documents the building's footprint that is present today. Based on the maps, it is likely that portions of this two-part commercial block were constructed in the early 1900s, though it has been severely altered throughout the decades. In the early 1900s, the building's footprint is half the size in length, but significantly differs in width, height and overall configuration. At the southern end of the property, a two story masonry warehouse remains present until the 1920s. For two decades, the property changed use which brought forth other interior alterations to the space, as well as the noted change in building height, additional window openings and wooden canopy. With the exception of the 1900s map, from 1906 until 1945, the building is also noted as single story masonry structure.

By 1946, the Sanborn Map documents the expansion of the building's footprint, identical to what remains present today. With the building's change in use, the property appears to have also experienced additional alterations to the facade such as the removal of the wooden canopy. It is likely that during this time the storefront may have also been reconfigured and modernized, a popular and common post-war trend. While an exact date of the existing storefront's modernization is unknown, an estimation can be determined based on the 1960s photograph. The change in tenant during this time, J.B. White's department store, brought forth another significant alteration that is visible on the upper facade: the installation of a slipcover which in this case is horizontal siding that covers all features below. Based on the photographs, this slipcover remained until its removal in 2013.

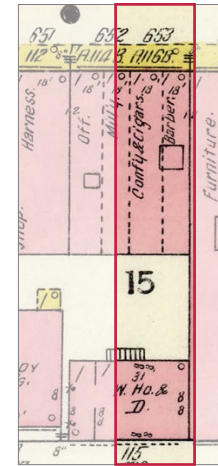
1900



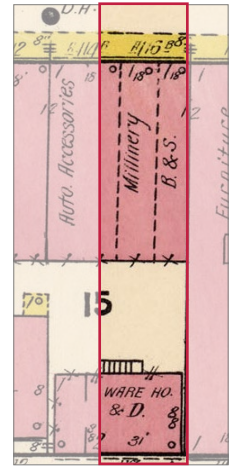
1906



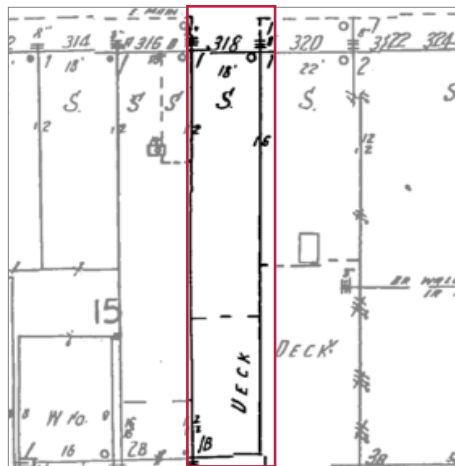
1912



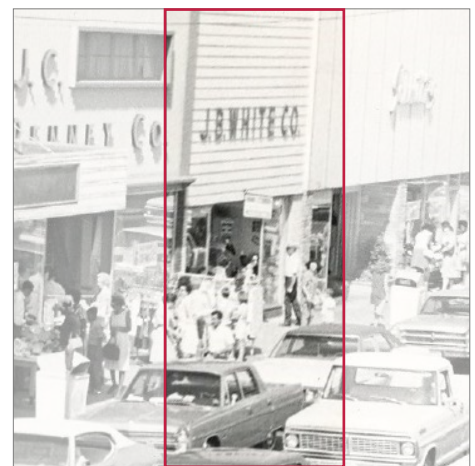
1922



1946



1960s



2000s



2013



REHABILITATION RECOMMENDATIONS + ANALYSIS

When rehabilitating a historic building, the [Secretary of the Interior's Standards](#) should be considered. The Standards for Rehabilitation are a series of concepts about maintaining, repairing, and replacing historic materials, as well as designing new additions or making alterations. They provide a framework and guidance for decision-making about work or changes to a historic property. All changes and modifications to the building should comply with the Standards and the City of Nacogdoches' local design guidelines. It is important that any future modifications are carefully selected without impacting the integrity of the historical building.

Refer to the following recommendations for resources and guidelines when executing all suggestions in this report:

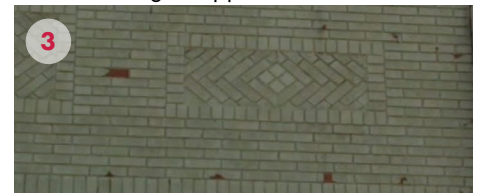
The Secretary of the Interior's Standards for the Treatment of Historic Properties do not recommend the painting of historically unpainted brick, however, some buildings that have been previously painted are often repainted as part of a regular or differed maintenance plan. Due to the damaging effects of water saturation and freeze-thaw cycles, painting historically unpainted brick can eventually destroy it. Historically unpainted brick was not coated because the materials had sufficient strength without paint. The natural finish of the brick was also a popular aesthetic for commercial buildings. When brick is painted, it significantly decrease the brick's natural breathability and water can get trapped in the material leading to significant damage. As water freezes it expands, which can cause stress cracks and spalling in the brick, and ultimately failure. Painted brick can also lead to condensation and mold issues on the interior of the building. In unpainted brick buildings, the porous brick absorbs water and allows the water to evaporate, leaving the brick intact even with years of exposure. In this case, it appears a thin, single coat of paint was applied to the facade which has also flaked through out. If possible, consider carefully removing the paint. Further guidance is provided below.

Brick: Based on the photographs, the paint on the upper facade appears to be flaking in numerous areas. (2) For reference, the window jambs and a small portion of the piers remain unpainted, exposing the original wire cut brick color and texture. If possible, consider carefully removing the paint, and clean per the guidelines below to prevent further deterioration. The techniques for removing paint from brick are similar to those for cleaning masonry buildings: always using the gentlest means possible, so that the masonry is not damaged. In most cases, a proprietary chemical paint remover is applied to the masonry surface for a specific time, and then removed by low pressure washing. As with any chemical cleaning, the manufacturer's recommendations regarding application procedures should always be tested in an inconspicuous location to verify that it will not damage brick underneath. If the gentler methods are not strong enough to do the job, and if the masonry in question will be further damaged by stronger methods, then paint removal should not be attempted. If this is the case, then it is appropriate to only repaint the areas that are currently painted. It is important to understand that masonry surfaces, once painted, require constant upkeep since paints usually don't permanently adhere to exterior masonry surfaces. When any masonry surface is repainted, any flaking paint, dirt, and debris should be removed and the surface carefully washed, as paint will not adhere well to an unclean surface. This can be addressed by cleaning masonry surfaces using the gentlest method possible, such as low pressure washing with a mild detergent, and/or using a natural bristle brush. Power washing should not exceed 300 PSI (pounds per square inch) because higher pressure could damage the hard exterior of the brick, as well as the areas that are currently damaged. If the hard-exterior surface is damaged, the softer interior of the brick is left exposed and vulnerable to deterioration. Note: Abrasive cleaning can also destroy, or substantially diminish decorative detailing on the building, such as the tool marks and the surface texture on the wire cut brick. For this reason, brick should NEVER be sandblasted. Similar to the paint removal process, a test patch should be conducted in a small, discreet location to verify that it will not damage the brick.

(3) As shown in the photo, a distinct brick bonding pattern is present along the upper facade. This unique brick detailing is important in defining the overall historic character of the building and should not be altered or obscured. Additional on site investigation should also be conducted in order to verify the extent of the damage caused by the removal of the slipcover to the brick's surface. When the horizontal siding or slipcover was directly applied to the upper facade, the framework that was built and anchored into the building appears to have severely damaged small portions of the brick's face. (1) Remnants of some of the nails can be seen in the first photograph. (4) In addition to the above, further investigation is also required in the area surrounding the canopy. Consider carefully removing the siding that remains in place. Further guidance on the removal of the existing mansard canopy is provided on the following page. Additional information on how to clean historic masonry building and chemically removing paint can be found in the [National Park Service Preservation Brief #1](#) and [#6: Dangers of Abrasive Cleaning](#) as well as the U.S. General Services Administration technical document for [Chemically Removing Paint and Repaint Brick Masonry](#).



Brick Detailing at Upper Facade

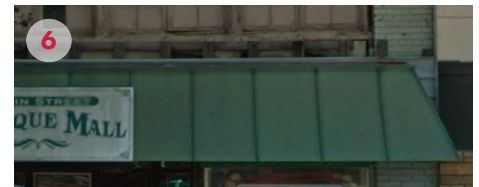


Repointing Mortar: Mortar is essential in keeping a brick wall together and for the overall structural stability of a building. The mortar allows for contraction and expansion of the masonry wall during different weather conditions. If mortar joints are deteriorated or empty, the owner should consider repointing the joints prior to any repainting or after paint is removed. Based on the available photographs, it does not appear that significant repointing may be required. However, it is important that this is further investigated on site. Repointing is the process of removing deteriorated mortar from the joints of a masonry wall and replacing it with new mortar. Properly done, repointing restores the visual and physical integrity of the masonry. For additional guidance, please refer to the [National Park Service Preservation Brief #2](#).

Casement Windows (Upper Floor): As shown in the photograph, (5) the casement windows remain intact and may require significant repairs. Further investigation should be conducted in order to determine the windows' material and condition. This is important to know prior to executing any conservation techniques. The windows are important to the overall character of the property, and attempts to repair the windows needs to be undertaken first before replacement is considered. Replacements for missing or severely damaged windows should be reconstructed in kind.



Canopy Removal: Based on the documentation provided, (6) the mansard roof style, standing seam canopy appears to be a recent alteration. While an exact date of this installation is unknown, it is likely this may have been added sometime in the 1980s - 90s. If the owner decides to remove this feature, it is important to first investigate and assess the conditions of the area behind the canopy, including any damage that may be caused by the removal of the framework. If transom windows are found intact, repair and preserve feature.



Storefront: (7) While the existing storefront may not be the original design nor the desired aesthetic, the changes that were made to the building were completed over 50 years ago, which makes them historic in their own right. This is supported by the Secretary of the Interior Standards for Rehabilitation and the Nacogdoches Design Guidelines. For additional guidance on the Certificate of Appropriateness requirements, refer to the City of Nacogdoches' Code of Ordinances, *Division 5 Certificate of Appropriateness, Section 50-157. - Criteria for approval: (e) Previous alterations*. Both Standards #3 & #4, specifically support the preservation and repair of the existing storefront. Per [Standard 3](#): Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken. [Standard 4](#): Changes to a property that have acquired historic significance in their own right will be retained and preserved. In this case, replicating the architectural elements from 422 East Main Street will create a false sense of historical development that was never present on 318 East Main Street. Replicating the features from a different property also destroys and/or diminishes the historic character that is currently present at 318 East Main Street. The proposed alterations provided in the sketch should not be undertaken. (8) The distinctive materials present in this property, such as the aluminum and Norman brick, including the recessed configuration, and construction techniques, characterize this property and have become a part of the historical evolution. Before any conservation technique is considered, it is important to first evaluate the overall conditions of the aluminum storefront in order to determine whether more than protection and maintenance is required. Based on the photographs, it appears to be in relatively good



condition with a couple of glass panes that will require replacement. Further investigation should also be conducted in order to determine and confirm the type of metal and condition. This is important to know prior to restoring because each metal type has its own properties and may require a different treatment. If it is determined that the storefront is severely deteriorated and beyond repair, then the owner may consider an appropriate replacement. However, simply because a single component of a storefront needs repair, this should not be a justification for replacing an entire storefront. In the case that the majority is beyond repair and metal components have deteriorated to a point where they have actually failed or are completely missing, replacement is the only reasonable course of action. If it is determined that this is the case, the new design should be compatible with the size, scale, color, material, and character of the building. The new design should also maintain the historic planar relationship of the storefront to the facade of the building. If using the same material is not technically or economically feasible, then a compatible substitute material may be considered. Refer to the [National Park Service: Preservation Brief #11: Rehabilitating Historic Storefronts](#) for guidance. During this process, it is recommended to follow-up with Texas Main Street staff for further assistance.



Floor Surface at Entry: (9) Further investigation is required in order to determine the conditions of the floor material that is located beneath the carpet at the entry. Depending on the surface material found, TMS staff may be able to provide further assistance by providing additional resources for the restoration process.



Color Scheme: (10) Consider the history of the building and the historic context when selecting your colors. As recommended on [page 3](#), we highly encourage the removal of the existing paint. However, if it is determined that the removal will cause further damage to the masonry, then it is recommended to repaint. Before fully applying any paint, consider testing your paint selections on the brick. It's a common rule of thumb to select 3 colors or less to compose the palette and in these general proportions: 60% Body Color (Majority of the façade), 30 % Major Trim, and 10 % Minor Trim/Accent Color.



Signage: Install signage that compliments the architecture. In this case, a tenant nor business was provided in the request. However, the examples provided in the renderings coordinate with the existing building's aesthetic and comply with the City of Nacogdoches' Design Guidelines. If needed, design staff can also provide assistance with signage and branding to the business who occupies the space in the future. Refer to the section on New Signs and Historic Buildings in the [National Park Service Preservation Brief #25: The Preservation of Historic Signs](#).

Lighting Recommendations: Exterior lighting in a historic downtown provides comfortable and safer conditions at night for pedestrians. Lighting should also be coordinated with the installation of the signage to make the business visible at night. Examples are provided in the design concepts shown on the following pages

In addition to the guidance provided, Texas Main Street Staff highly recommends working with an architect, engineer, and other professionals to complete the project. They can manage the project and work through the complexities of code requirements and constraints of the existing building. If questions arise or additional designs are needed, please contact your local Main Street Manager for assistance.

DESIGN RECOMMENDATIONS

The renderings shown on the following pages, illustrate the recommendations described in this report. In both options the casement windows and storefront are repaired and preserved. Additional options can be explored upon request.

CONCEPT 1

Color Scheme: Removal of the majority of the paint is shown, with the exception of the Norman brick at the storefront. The body color, the largest proportion of the main facade, is the unpainted brick. The Norman brick at the storefront was repainted in an off-white tone in order to coordinate with the casement windows on the upper floor and metal coping at the parapet. For an accent color, the green in the panel sign and vinyl at the storefront, compliment and further contrast the brick's red tone.

Canopy Removal: In the rendering, it was assumed that the brick continues directly below the canopy and remains in good condition. It was also assumed that transom windows do not remain in place. However, the condition is unknown. Further investigation is required.

Signage: The primary panel sign is shown in a sans-serif font, centered and carefully attached. If a sign is attached to the facade, fittings should penetrate the mortar joints rather than brick in order to prevent irreparable damage to the masonry. If the sign is removed in the future, the mortar can then be repointed. The proportions of the sign align with the width of the existing opening. A three dimensional appearance is also created by layering materials, **(1)** similar to the first example provided on the lower right. If an illuminated sign is preferred, then fabrication adjustments for lighting to be incorporated should be considered. **(2)** For the entry doors, vinyl signage at a smaller scale can indicate store hours and the building's address. **(3)** Additional vinyl signage may also be applied to the lower area of the display windows, similar to the example provided.

For additional information, refer to the brick, mortar, signage, canopies & awnings, windows and paint guides included on the final pages of the report.



DESIGN RECOMMENDATIONS

CONCEPT 2

Color Scheme: Remains similar to the first concept. This concept differs in the accent color, which is shown in the light green fabric awning. The fabric's color can be modified to coordinate with the future tenant.

Fabric Awning + Signage: In the rendering, it was assumed that transom windows do not remain intact, and portions of the brick are in repairable condition after the removal of the canopy. However, the condition is unknown. Further investigation is required. **(1)** The primary signage can be incorporated into the awnings design, similar to the first example shown on the lower right. **(2)** For the entry, vinyl signage at a smaller scale can indicate store hours and the building's address.

For additional information, refer to the brick, mortar, signage, canopies & awnings, windows and paint guides included on the final pages of the report.



NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION

The purpose of this report is to provide ideas and schematic designs for projects. Main Street Staff works with the plans of business and property owners to provide designs that meet their objectives while still respecting the historic building. For official [tax credit review](#), a separate process must be followed and may involve modified design plans to meet the criteria.

Prior to making any improvements to the building facade(s), the building owner should perform a thorough review of the major structural components including the roof, walls, and foundation. All mechanical and electrical systems should be well maintained in conformity with applicable codes and ordinances. Building uses and interior arrangements of program spaces should also be in conformity with applicable codes and ordinances.

Report By:



Daniela Cantu

Project Design Specialist II, Texas Main Street Program
Community Heritage Development Division
P.O. Box 12276, Austin, Texas 78711-2276
Phone: +1 512 463 9129

thc.texas.gov



BRICK

OVERVIEW

In Texas, most historic commercial buildings found in a Main Street District are constructed with **load-bearing masonry**, meaning the walls support themselves, the roof, the floors, and everything in between. Each brick wall is several wythes (layers) thick and does not rely on an underlying framework or stud system. In load bearing masonry walls, typically, a header course (a row of rotated bricks with the short side faced outward) was used every 7-9 courses to tie the wythes of brick together.

Unlike the very uniform bricks produced today, **historic bricks range in size, quality, and hardness**. Before 1870, brick clays were pressed into molds and were often unevenly fired in a kiln on site or within the surrounding area. The quality of brick depended on the type of clay available in the region and its location within the kiln during firing. Bricks exposed to higher heat would be harder. Experienced masons sorted the brick into grades, using the softer ones inside the building and the harder ones on the exterior. After the 1870s, the extrusion process was perfected making bricks more uniform and durable, although not as strong as contemporary bricks.

Historic brick walls were also designed to breathe, taking in moisture and allowing it to evaporate. Therefore, painting, sealing, or coating brick that is in good condition will prevent the brick wall from breathing, causing it to retain water and lead to deterioration. Sometimes, stucco or certain kinds of coatings can be used to protect already damaged masonry. This approach should only be done as a last resort and in collaboration with a preservation professional.

INVESTIGATION

Regular inspection of load-bearing brick walls ensures required maintenance and/or problems can be addressed quickly. Cracks in the wall between bricks and brick deterioration are two common problems, which can be caused by building movement, moisture, unstable soils, or mortar issues. A structural engineer or masonry specialist with experience in historic, load-bearing masonry will be able to verify the integrity of the structure and provide solutions to problems that arise.

CLEANING

Periodic cleaning of brick walls will help remove stains, dirt, and biological growth. Cleaning can improve the overall appearance of your building and prevent future deterioration. Cleaning must be undertaken using the **gentlest means possible by a qualified professional** to ensure that the historic building will not be damaged.

Investigation: Before cleaning can be completed, the source of the staining or deterioration must be understood. Smoke or stains caused by pollution require a different kind of cleaning agent to remove than biological growth such as mold or mildew.

Test Panels: Before selecting a cleaning method, test several methods on a small patch of brick in an inconspicuous location to verify that the selected approach will not damage the brick.

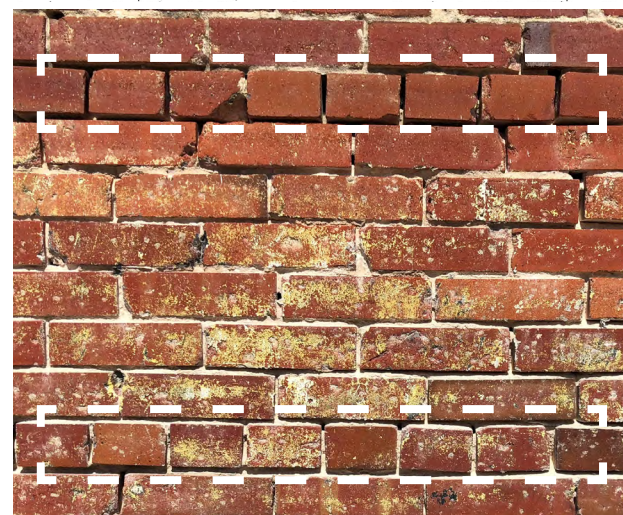
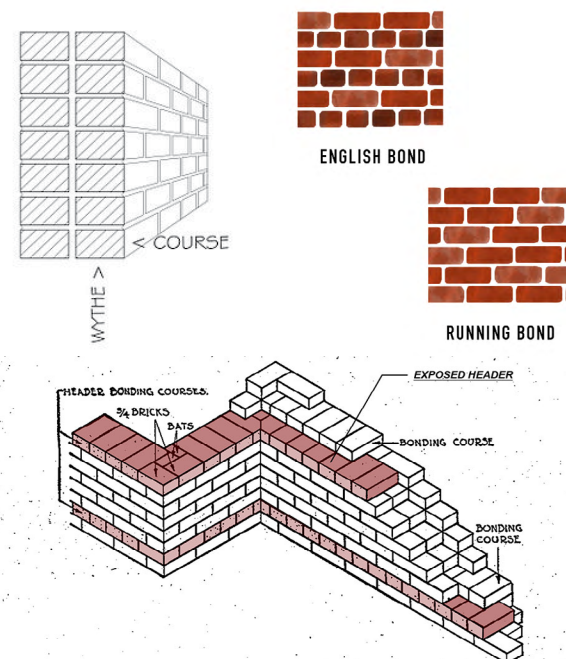
Mechanical Cleaning: Manually scrubbing the brick with plain water and a soft bristle brush should be attempted first to remove dirt, grime, and other substances that may stain or discolor the brick.

Power Washing: If manual scrubbing is not sufficient, power washing with a mild detergent or chemical cleaner can be considered. **Power washing should NOT exceed 400 PSI** (pounds per square inch), as higher pressures can damage the hard exterior of each brick and leave the softer interior exposed. **Similarly, brick should NEVER be sandblasted.**

Chemical Cleaning: Many types of chemicals are available for different types of staining and paint removal. Chemicals can be harmful to people and the environment, so follow manufacturer instructions carefully to ensure that the correct safety precautions are taken in advance. After cleaning, thoroughly rinse the treated masonry with water in order to prevent bleaching, staining, or other adverse effects. In all cases, it's best to clean masonry during the spring and summer to avoid freezing temperatures.

For more information on cleaning methods, please visit:

- [Preservation Brief #1: Assessing, Cleaning, and Water-Repellent Treatments for Masonry](#)
- [General Cleaning of Exterior Brick Masonry](#)





Above: Van Zandt Abstract Company in Canton, Texas carefully removed layers of paint from their front facade using Dumond Peel Away Poultice system.

Below: This process revealed the natural color of the brick and a ghost sign.



DO NOT PAINT OR SEAL MASONRY

When painted or sealed on the interior or exterior, brick walls are unable to breathe, causing moisture to be trapped in the wall. This leads to severe damage to the historic building. Therefore, **unpainted masonry should never be painted**. Similarly, water repellent coatings are typically not necessary if the building is kept in good repair. If brick buildings are inappropriately sealed, condensation and mold can form on interior surfaces, which will cause indoor air quality issues. Water trapped within a wall expands when frozen, causing stress cracks between bricks and spalling of individual brick units. This can eventually lead to structural failure. If masonry has been painted in the past, repainting the same area does not cause increased risk for damage. Removing the paint should be carefully considered. In rare cases, paint or a water repellent can be used to protect soft brick that was incompletely fired during the manufacturing process or bricks that have been severely damaged. This decision should be made in consultation with a qualified professional.

REMOVE VINES AND VEGETATION

Vines and other vegetation growing on building exteriors can cause damage to masonry and mortar. Branches and tendrils can erode mortar, grow into mortar joints, hold in unwanted moisture, block gutters and downspouts, and scour soft wall surfaces.

To remove the vegetation, it's best NOT to pull off the live plant. Sever the plant near the ground or apply a natural / chemical plant killer near the roots, while protecting the building. Wait for the plant to die, and then remove the dried tendrils and branches gently. The General Services Administration tech note to the right can provide additional direction.

MORTAR

Mortar is essential to hold a brick wall together and for the overall structural stability of a historic building. The mortar allows for contraction and expansion of the masonry wall in varying weather conditions, making the appropriate mortar type to be very important. If mortar joints are deteriorated or empty, the owner should consider repointing the joints. **See the Mortar tech note for additional information on how to properly repoint mortar joints.**

ADDITIONAL RESOURCES

Content in this document was drawn from the resources listed below. These guides provide detailed instructions on how to clean and protect your brick building, including tools and products to use in the process.

- [Chemically Removing Paint](#)
- [Paint Removal in Paris, Texas](#) (page 6)
- [Monitoring and Evaluating Cracks in Masonry](#)
- [Removing and Replacing Deteriorated Brick](#)
- [Removing Salts/Efflorescence](#)
- [Preservation Brief #38: Removing Graffiti](#)
- [Removing Vines and Creepers](#)
- [Glossary of Historic Masonry Deterioration Problems](#)

Cleaned and repointed brick on the Goodman Building in Downtown Austin, Texas.





COMMON TYPES OF BRICK DETERIORATION

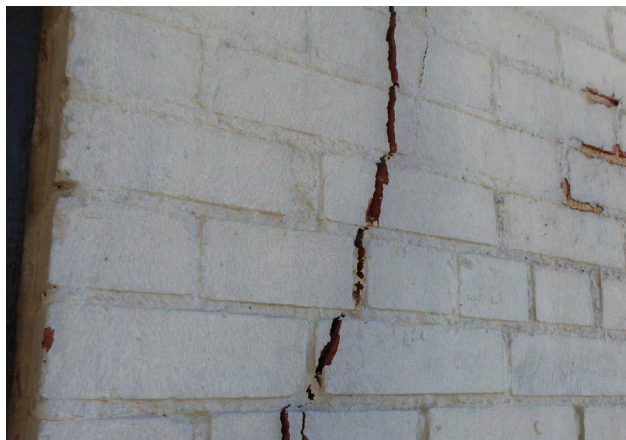
While brick is one of the most durable of historic building materials, it is susceptible to damage from a range of causes, including building movement, trapped moisture, improper maintenance or repair, and harsh cleaning techniques. The following images highlight the most common problems with load bearing masonry brick structures found in Texas's historic downtown districts. Structures should be examined at least twice per year and after freezing weather. If problems are detected, consult Main Street design staff and/or a qualified mason with experience in historic structures.



Efflorescence: excessive moisture within the masonry wall causes salt to seep to the surface, leaving white deposits known as efflorescence.



Vines and Vegetation: Plant life growing on exterior walls causes a range of problems, including mortar deterioration and blocking of gutters and downspouts.



Cracking: Structural cracks between and through bricks may result from building settling, excessive loading, or incorrect mortar proportions.



Painting: Brick walls are unable to breathe when painted, causing moisture to be trapped and leading to damage. Individual bricks begin to deteriorate and cause structural instability.



Missing Mortar: Mortar should be repointed every 10 years. If mortar is not repointed, loose bricks begin to fall out of the wall construction.



Rising Damp: Excessive moisture in the ground, crawl space, or basement is visible on wall surfaces, as the brick appears visibly darker when damp (above left). Moisture causes brick deterioration (above right). Additional drainage around the building or drying of interior spaces is needed.



Improper Mortar Mixture: Mortar ingredients should be carefully proportioned to match the original mix. Too much Portland cement in the mix causes the mortar to be too strong, and leads to structural cracks.



Abrasive Cleaning: The exterior brick surfaces have been destroyed due to sandblasting or harsh chemicals, leaving the softer, brick interior exposed.



Missing Downspouts, Gutters, or Roof Flashing: Excessive water running down the face of brick walls quickly causes eroded joints and structural failure.

MORTAR

OVERVIEW

Mortar is essential for the overall structural stability of a brick or stone building. Mortar allows for contraction and expansion of the masonry wall during different weather conditions. Mortar waterproofs the brick wall while allowing for the free evaporation of moisture preventing it from being trapped within the system. Mortar beds the bricks, which accounts for the difference in the size and shape of each brick unit making the wall system stronger. Mortar can be repaired and was designed to be the weak link in the natural weathering of the building to reduce the deterioration of the brick. Mortar may seem insignificant, but it plays an important role in the health of a masonry building. This is why the appropriate mortar mixture is very important.

Early mortar formulas were primarily lime, sand, and water. Other ingredients that were available locally were sometimes added to strengthen the mixture. These ingredients could include clay, shells, animal hair. The standard mortar mixture remained largely unchanged until the creation of Portland cement, which was first used in the United States in 1872 as a minor ingredient to accelerate mortar set time. According to the National Park Service, most masons used a 1:1 ratio of Portland Cement and lime putty, by the 1930s. Because of this, mortar mixes found in masonry buildings throughout a historic downtown can vary greatly.

REPOINTING

Repointing is the process of removing deteriorated mortar from the joints of a masonry wall and replacing it with new mortar. Properly done, repointing restores the visual and physical integrity of the masonry.

Using a compatible mortar mixture when repointing a historic building is one of the most important things a building owner can do to ensure the life of their building. Today, mortar is rated by type based on strength and can be purchased in ready-mix bags from any home improvement or construction supply store. However, these ready-mix bags are often filled with a high concentration of Portland cement, which creates mortar that is too strong for soft, handmade bricks found in historic buildings and will damage the brick if used to repoint. To repoint a historic building properly, the

age of the building and original mortar mixture must be understood first. Follow these steps to ensure that the appropriate mortar mixture is used:

1. Consult an architect, architectural conservator, mason, or lime mortar company that specializes in historic properties. These experts can help determine the composition of the original mortar.
2. Base the new mortar mixture off the analysis of the original mortar formula when possible.
3. Produce mock up samples of the mortar mixture before embarking on a full-scale repointing project.
4. Only work with qualified historic restoration mason to repoint your historic building. They must understand the intricacies of the work and will take extreme care when repointing.
5. When in doubt, consult your local Main Street program or Texas Main Street Design Staff, who can advise you on your rehabilitation.

The chart to the right was developed by the National Park Service to outline when and where specific types of mortar can be used on a historic building. This chart should be used as guidance in the mortar analysis process but should not replace the crucial step of determining the original composition of the historic mortar.



Mortar Strengths

Hard, High Strength M - 2,500 psi

S - 1,800 psi

N - 750 psi

O - 350 psi

Soft, Flexible

K - 75 psi

Mortar Types (measured by volume)

Designation	Cement	Hydrated Lime or Lime Putty	Sand
M	1	1/4	3 - 3 3/4
S	1	1/2	4 - 4 1/2
N	1	1	5 - 6
O	1	2	8 - 9
K	1	3	10 - 12
"L"	1	1	2 1/4 - 3

Suggested Mortar Types for Different Exposures

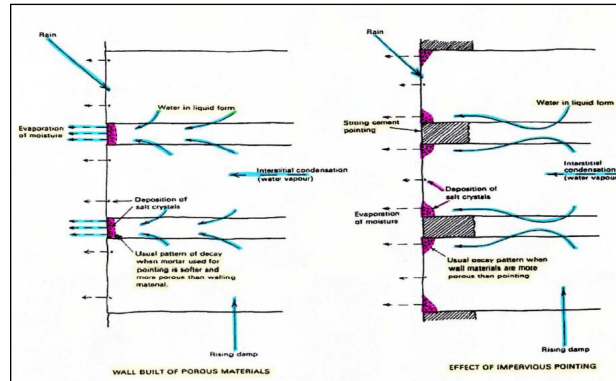
Masonry Material	Exposure:	Sheltered	Moderate	Severe
Very Durable Granite, Hard-Cored Brick		O	N	S
Moderately Durable Limestone, Durable Stone, Molded Brick		K	O	N
Minimally Durable Soft Hand-Made Brick		"L"	K	O

Chart Information Courtesy of National Park Service



BREATHABILITY

Although a masonry wall is strong, masonry units are porous. This means that ground water, rain water, condensation, etc. can be absorbed into the wall at any given time. Eventually, the water evaporates. This cycle is often referred to as “breathing.” The diagram to the right illustrates this process. Historic mortar is soft and porous, which means water can also evaporate out of the joints as well as the brick unit. When soft mortar is replaced with new mortar that is too strong, the mortar joints’ porosity is reduced, and the natural salt crystals within the system are deposited within the masonry unit instead of the mortar, which leads to deterioration of the brick, as seen in the image on the far right.



TOOLING

The tooling style is also very important. Mortar is not typically flush with the surface of the brick. It is recessed and shaped in various ways based on the chosen aesthetic. Examining the building for evidence of the original tooling style. Pointing styles may differ from one facade to another, as often front walls were given greater attention and detail than the sides or rear. The image to the right shows an example of messy repointing where the mortar was smeared over the brick. The diagram on the far right illustrates correct and incorrect tooling styles.



COLOR

Secondary to strength, the color of the new mortar should be considered, because the mortar color can greatly change the appearance of the building. Mortar that is too bright can visually draw the eye away from the brick and make the joints the focal point. Take note of color of the original mortar. The sand is the primary material that gives mortar its color. Typically, when mortar is analyzed and a mixture is created to match the strength of the original, the new mixture will also match in color and texture. When specifying sand for repointing, it may be necessary to obtain sand from several sources to create the correct color. Brick dust, crushed stone, or clay were sometimes added to the mixture, which would also affect the mortar’s color. If a color match cannot be achieved through the use of natural sand or other aggregates, a modern mortar pigment can be considered.



ADDITIONAL RESOURCES

Content in this document was drawn from the resources listed below. Each of these resources provides additional detailed information about repointing and mortar mixtures.

- [Preservation Brief #2 – Repointing Mortar Joints](#)
- [Preparing Lime Mortar for Repointing Masonry](#)

CANOPIES + AWNINGS

OVERVIEW

Canopies and awnings are traditional elements of Texas Main Streets that are both decorative and functional. These elements provide shade and protection for pedestrians and buildings, often with integrated signage or pops of color. **When repairing or designing canopies and awnings, a building owner should consider a range of factors, including the building's significant features, orientation, annual rainfall, maximum size / dimensions, and overall appearance.**

Canopies and awnings provide much needed regulation of sunlight coming into storefront windows. Based on the sun's path and building orientation, a northern orientation does not warrant a canopy or awning, as light will always be reflected rather than direct rays. With a southern orientation, the sun will shine directly on the façade most months of the year and times of day, so a horizontal shading device is very helpful. **Eastern and western light is the most challenging to control and may warrant a canopy or awning with vertical shading devices for storefront windows, like interior shades or exterior shutters.** Throughout the block and Main Street district, street trees are another source of shade for buildings and pedestrians.

They are also helpful in controlling water. **They provide protection from the rain for pedestrians and block water from reaching portions of the façade.** This building protection leads to longer lasting materials and paint, especially for windows. When designing a canopy for rain protection, it is important to consider the distance it extends from the building and where the water will go as it sheds off the surface. **Water should always be directed away from the building and diverted away from walking surfaces.**

Canopies and awnings impact the overall composition of the façade. If a canopy or awning was present historically, these elements should be aligned with the size and shape of the original design. Modifying the height or angle may mask other façade elements or block transom windows. Alternatively, awnings can disguise inappropriate alterations to historic facades, most commonly transom windows.

TIE ROD CANOPY

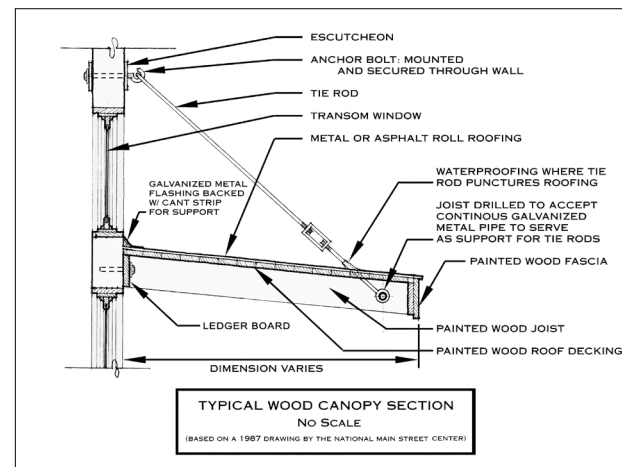
Tie Rod Canopies, the most common canopy type, have a flat roof surface that is suspended from tie-rods and anchored into the masonry mortar joints. **Historic tie rod canopies had a wood structure and sheet metal roof sheathing.** The metal was either rolled or standing seamed. Tie rods were attached by: puncturing the metal roof surface and attaching to the internal structure, or anchored into the front edge of the canopy. Depending on the architectural style and building type, some canopies had decorative edging and integrated signage. When constructing or rehabilitating a canopy, Main Street staff discourages the use of corrugated metal with a "squared" profile. The appearance is not historically correct, gives the impression of inferior quality, and lacks visual appeal.

ROLLED TIN + METAL AWNINGS

Rolled tin awnings utilize a series of wall mounted metal brackets to support a rolled tin roof surface. Similarly, contemporary metal awnings utilize brackets to support a standing seam metal roof surface. In contrast to the tie rod canopies, these awning types are lighter visually and physically, and their roof surfaces are at a greater slope.

FABRIC AWNING

Fabric awnings, commonly the most affordable option, use a metal frame to support a fabric roof surface. These awnings are open on the ends, allowing them to remain secondary to elements of the historic façade. **Fabric awnings can be fixed or operable, also called roll out options.** A range of fabric colors and patterns can bring pops of color to the streetscape and provide additional opportunities for signage. In contrast to metal, fabric is the most susceptible to damage and deterioration and will require maintenance and replacement more often. The most common problems with awnings are fading, stretching, and staining. Color and life span should be carefully considered.



Above: In the diagram, tie rods puncture the roof surface. In the image below, the tie rods are attached to the front edge of the canopy. Either attachment style can be used on a new canopy. The tie rods attach to the building with an anchor bolt that passes through the entire thickness of the masonry wall. Anchor bolts should be placed at the mortar joint so that the hole it creates does not damage the brick.





Wall mounted brackets to support a rolled tin roof surface.



Rolled tin roof surface



Metal awning



Fabric Awning



Fabric awning with wall mounted metal frame



Operable fabric awning, also called roll out.



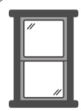
Contemporary tie rod canopy



Contemporary tie rod canopy to support metal roof surface.



Contemporary tie rod canopy with wood soffit.



WINDOWS

OVERVIEW

Windows are a character-defining feature of every historic building and downtown streetscape. Historic windows are hand-crafted with quality materials that were meant to last for decades with the proper care and maintenance. Historically, windows were the primary source of light, fresh air, and ventilation, which made them an important factor on an occupant's comfort.

With the addition of air conditioning, electric lights, and other modern conveniences, windows were often improperly sealed or covered over. Today, preserving and repairing original windows is a top priority in every preservation project. Repairing historic windows, rather than replacing, retains the cultural, economic, and environment value of these unique architectural elements and the integrity of a downtown's historic fabric. Removal can have a negative impact on the integrity of the structure, the authenticity of a property's historic identity, and loss of valuable construction materials.

WINDOW TYPES

On a typical main street building, windows were used in three ways to serve a specific purpose:

- Display / Storefront - A major component of a lower facade that provided visibility into a business and showcased merchandise for sale along the sidewalk.
- Transom – Located above the display windows and/or canopy, the transom windows allowed light into the first floor before electric lights were installed. Transoms can be fixed or operable with clear, colored, or patterned glass. Prism glass was utilized to reflect light farther into the interior space.
- Upper Story – On the upper level(s), typically windows were punctured into the masonry wall in a regular, rhythmic pattern. They were often “hung” with weighted pulley systems, so the windows could be opened for ventilation. Ornamentation was also incorporated around upper story windows with multiple panes of glass, hoods, brickwork, or other decorative features.

As popular architectural styles and technology changed, the design and materials of windows changed, too. The diagram to the right illustrates the most common types of windows found in downtown.

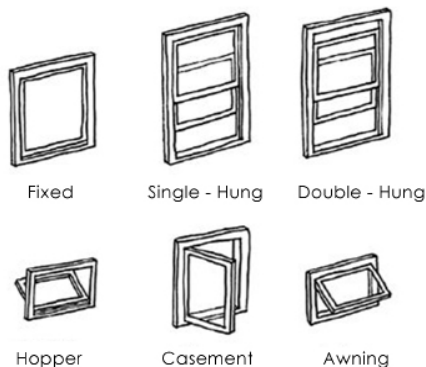
WOOD WINDOWS

Wood windows are the most common window material found in historic buildings and were designed with repair in mind. Framing elements, such as rails or stiles can be removed or repaired without replacing the entire window unit. Glazing putty deteriorates but can be reapplied on site. Most wood windows were made of old-growth wood, which possesses greater resistance to deterioration and greater strength than newer growth wood. Wood windows will function for another 100+ years if they are maintained regularly.

METAL WINDOWS

According to the National Park Service, the second most common window construction material is steel, which became popular by the late 1890s, when new technology made metal windows more cost competitive. Steel is also fire resistant and stronger than wood alternatives, which allows for larger window panes. Historic steel casement windows use steel made from iron ore, which made them more rust resistant and structurally stable than today's steel windows. Today, steel windows are still fabricated, yet less popular. Starting after World War I, aluminum became the most common window material and still dominate the market.

COMMON TYPES OF WINDOWS



The images above and below show the before and after of a window restoration in Cuero, Texas.





REPAIR BEFORE REPLACE

Always attempt to repair historic windows. If a window appears to be deteriorating, careful investigation is needed to determine the severity, as visual damage is likely a paint issue. Historic windows were made to be repaired and damaged or missing pieces can be repaired by splicing in new pieces or replacing components, rather than replacing the entire window (see images below). Consolidants can be used on wood that is damaged or shows signs of rot to prolong their lifespan.

Common Repair Types for wood windows are:

- Consolidation - A thin, clear, two-part epoxy is used to saturate the wood in the decayed area. This will petrify the rotted fibers into a durable surface.
- Patching - Wood putty or epoxy is used to fill voids or large cracks in wood.
- Splice/Dutchman - Replacing severely deteriorated parts with new matching pieces (see below).

The Additional Resources section to the right provides detailed information on how to repair historic windows. Several contractors throughout the state also specialize in historic window repair. Contact your local Main Street manager for more information.

UNCOVERING WINDOWS

Windows, especially transom windows, were often covered or removed when a building was modernized with HVAC and electric lights. The first step in restoring covered windows is to determine how much original material remains and its condition. Carefully investigate above drop ceilings, behind paneling, etc. to determine the current conditions.



EXAMPLE REPAIR

A portion of the wood window sill is rotten on the window below. The rotten wood is cut out, just beyond the damaged area. A new piece of wood is spliced into the existing sill. The sill is then primed and painted to match the surrounding trim. This repair approach addressed the problem without removing or replacing the historic window, and can be similarly used on window components or other wood architectural features.

Photo Credit: Joe Lawniczak, Wisconsin Main Street



ADDITIONAL RESOURCES

Content in this document was drawn from the resources listed below. Each of these resources provides detailed information about the preservation and repair of historic windows.

Repair Guides for historic WOOD WINDOWS:

- [Preservation Brief #9: Historic Wooden Windows](#)
- [Restoring Wood Window Sash and Frames](#)
- [Rehabilitating Wood Windows](#)
- [Epoxy Repair for Deterioration and Decay In Wood](#)
- [Surface Preparation for Painting Wood](#)

Repair Guides for historic METAL WINDOWS:

- [Preservation Brief #13: Steel Windows](#)
- [Cleaning and Painting Steel Windows](#)
- [Repainting Steel Windows](#)
- [Repairing Steel Casement Windows](#)
- [Installing Insulating Glass in Existing Steel Windows](#)
- [Repair and Retrofitting Industrial Steel Windows](#)

Below: Red River Restorations uses wood epoxy and small wood dowels to fill holes and deteriorated portions of a historic wood window sash.





SIGNAGE

Signage is an important component to every downtown building and business. The quality and location of the sign can influence the way consumers perceive downtown, its businesses, and the overall feeling of welcome in the district. An effective sign is easy to read, well-designed, and high quality. The message is clear and the sign is placed in a prominent location to make it visible for pedestrians and cars. A sign should be an extension of the business image/brand, while complementing the building's design at the same time. When creating signage for your business, keep the following rules of thumb in mind:

1. Signage should be a full package of several signs that complement each other and attract people from different vantage points. The sign above the display windows or canopy should be large enough to be seen across the street and from passing cars. Tag lines or additional information about the business can be added to the façade using window signage. A pedestrian sign can be hung below the canopy so that the business is visible to people on the sidewalk. Fonts and colors should coordinate across all signs.



2. Carefully consider the size, shape, and location of your sign and verify that it meets city code requirements. Covering up significant architectural features with a sign not only detracts from the building, it also reduces the overall visual quality of the business.

Size: The size of a sign is directly related to the location of a sign. For example, a window sign should be large enough to be read by a pedestrian but should not obscure the display area. For the primary sign, it is not necessary for signage to have billboard size letters to be readable to passing motorists or pedestrians. Eight-inch letters can be read from a distance of 250' while 12" letters are readable from up to 400'.

Location: There are several options for the location of a sign. Lettering and graphics can be painted on storefront windows. Wooden or metal panels or 3-D letters can be flush-mounted above the storefront but below the second story windows. Projecting signs can also be attached to the facade. Canopies also provide an alternate location for signage.



3. Use quality materials and fabrication methods.

A simple, high quality sign is more attractive than an extravagant but poorly made sign. Investing in a good quality sign will add to the appearance of your business and will last for years to come. Signs can be constructed of wood, metal, solid plastic, foam, stone, neon, canvas, paint or vinyl graphics on glass, etched or stained glass and many fabrication methods are available to choose from. Work with a local sign maker that can work through these details with you and ask to see sample of their work.





4. The colors and fonts of your sign should be influenced by your business brand. For colors, inspiration may also be taken from your building materials. Generally, three colors or less should be used for the main portions of the signs. A graphic or illustration might allow for additional colors. Light colored letters on a dark background are easier for the human eye to read, while a solid white background can look unfinished. For window signs, light colors or gold leafed letters with a dark outline are very effective. Lettering should reinforce the personality of your business while maintaining readability. There are three basic type styles from which to choose from: serif, sans serif, and script.

Serif

Traditional with decorative “serifs” or strokes at the edges of a letter

Sans Serif

Contemporary with bold, clean lines

Script

Decorative and/or handwritten, often used for painted signs or gold-leaf

5. Lighting must be coordinated with the design and installation of a sign to make the business visible at night. This not only helps your business, it adds security and ambiance to the entire downtown district. Signs can be illuminated from any angle using spotlights. Lighting can also be integrated into the design of your sign if it is planned at the beginning of the project. Remember to keep the light source as inconspicuous as possible and avoid flashy or gaudy techniques. These serve as distractions and lessen the effectiveness of the sign.



6. Limit clutter. Too many signs can send mixed signals and confuse potential customers. Limit signage to your business name, business hours on the doors, and a few other key words that tell people about what you do or sell. Limit flyers and promotion paper signs to one door or interior bulletin board.

7. Finally, remember to take care when installing the sign to prevent damage to the historic building and ensure the safety of pedestrians. Signage can be attached to the surface of the façade; however, architectural details should not be covered. Anchors and fittings should penetrate the mortar joints rather than brick to prevent irreparable damage to the masonry. If the sign is removed in the future, the mortar can then be repointed. Signage can also be attached to the top of the canopy; however, the structural soundness of the canopy should be determined first.





PANEL SIGNS

Materials: Wood, Metal, High Density Urethane Foam

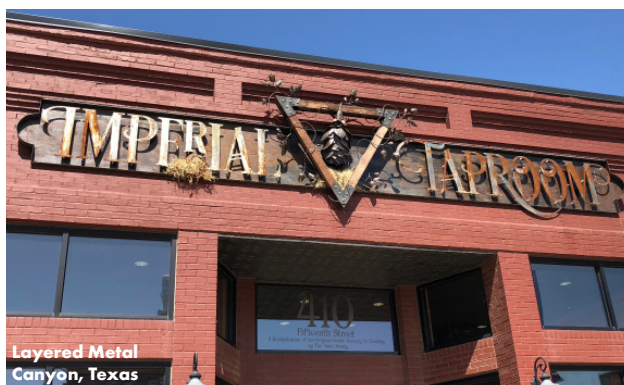
Fabrication Methods: Panel signs can be printed or hand painted on a flat surface. Elements can also become three dimensional by layering material.



Metal Panel with Cutout Letters



Panel with Stained Glass Medallion
Georgetown, Texas



Layered Metal
Canyon, Texas



Painted Sign
Taylor, Texas



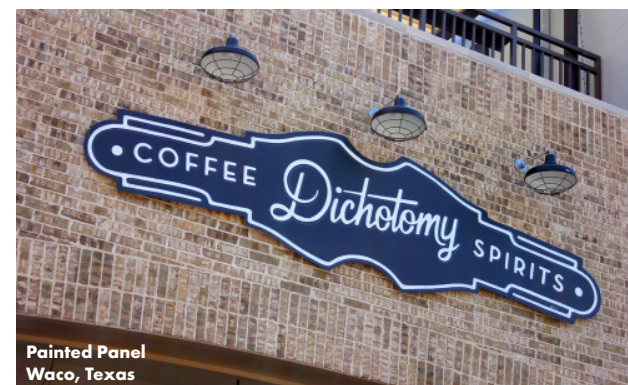
Sandblasted Wood
Bastrop, Texas



Layered Wood and Metal
Paso Robles, California, Photo Credit



Cut out Metal
Buda, Texas



Painted Panel
Waco, Texas



INDIVIDUAL LETTERS

Materials: Wood, Metal, Solid Plastic

Fabrication Methods: Individual letters should be a solid material that can withstand the elements. Use letters that are clean and simple. Use spotlights or reverse halo lighting to illuminate letters. Plastic faced channel letters are low quality and reduce the overall appearance of a business.



Georgetown, Texas



Canyon, Texas



Bastrop, Texas



New Braunfels, Texas



Canyon, Texas



Charleston, South Carolina



Nacogdoches, Texas



Portland, Oregon



PAINT

OVERVIEW

In Texas Main Street communities, one of the most frequently asked questions from building owners is “What color should I paint my building?” **For those brick and stone buildings that have not been painted or have less than 50% painted, the answer is easy. DO NOT PAINT!** Remove the paint that is there, then give your entire building a good washing. The results will surprise you when all the years of dirt and smog are removed. But, if your building is already painted and/or the paint will not come off without further deteriorating the brick, you have a range of paint color options for stone, brick, wood and metal trim.

The selection of paint colors is a personal decision, as future changes can be made to the palette without impacting the integrity of the historic building. It's a common rule of thumb to select 3 colors or less to compose the palette and in these general proportions: body color (60%), major trim (30%), minor trim / accent (10%). To select colors, a handful of factors can guide the decision-making process.

Consider the history of the building and the historic context. Research on the building era will reveal a range of commonly used colors. Historic photographs may indicate the original palette and/or color relationships if the images are black-and-white. On-site investigation, including scraping of a small area to uncover hidden layers, may reveal the original color. Look closely at the natural landscape and street your building is a part of, noticing the larger color palette. **Your final paint selections will impact your neighbors and the visual appearance of the area.** Identify any local guidance and/or regulation in your community regarding paint colors in the historic district.

With a historical perspective in-hand, consider your priorities and the starting point for the selection process. If exposed building materials, such as brick or stone, or roof materials are a visual component of the facade, these static colors and textures should be considered at the start. For example, the color of a brick facade would automatically be the body color to base the selection of the other colors on. Other starting points from your process might be a business logo or an awning fabric that you'd like to incorporate into the facade.

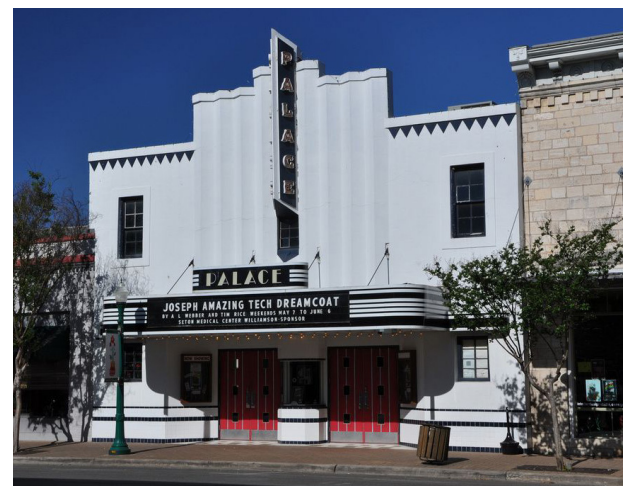
A strong palette pulls together the visual appearance of the building, connecting the facade design with the current use and interior space. The body color, the largest proportion of the facade, is likely a neutral or color similar to the original facade material. This background allows the trim and accent colors to highlight notable elements on the facade or signage to stand out. In general, a lighter body color causes a building to appear visually larger, while a darker color causes a building to appear smaller. The body color also impacts heat gain, as the darker colors will cause heat to be absorbed, rather than reflected by lighter colors. The accent color, the smallest portion of the facade, is commonly the visual pop or color used to highlight smaller elements on the facade. In some cases, an accent color is not used - allowing the body and trim color to compose the palette.

There are many resources available to assist in your color selection. Roger Moss in his book “Paint in America: The Color of Historic Buildings” surveys 250 years of paint history. Many major paint companies have composed historic paint palettes for use by consumers, as well as tools to visualize paint colors on your building's facades. You may consider hiring a design or historic preservation professional to provide a color consultation for more complex projects.

To test your selections, purchase a quart or smaller quantities of paint to cover a portion of the facade. Review the selections over several days in natural light, both in full sun and shade, to determine any differences. Remember, colors can't be seen in isolation. When selecting colors with paint chips, you'll be visually influenced by other colors on the surrounding chips, light conditions, etc. Similarly, the colors and materials around your building will impact the way your building is seen – such as the sky, sidewalk, street, plants, neighboring buildings, etc. You'll likely need to adjust your selections once you've tested the palette in place.



Above: 26 Main Street in Elgin, Texas.
Below: Georgetown Palace Theatre in Georgetown, Texas.





Above: Thatcher in Buda, Texas. Your final paint selections will impact your neighbors and the visual appearance of the area.
Below: Main Street, Denison, Texas



PAINTING THE BUILDING

Painting can be one of the most impactful improvements you can make to your building. Understanding the proper process is necessary before you begin, to ensure the paint is long lasting and visually appealing. In your planning, consider the time of year and temperature to identify the best times to undertake the project.

To prepare for painting, all needed repairs should be addressed first, such as replacing rotten wood, repointing brick mortar, and repairing window glazing putty. On all surfaces to be painted, peeling and loose paint should be removed. A wire brush, scraper, or heat gun can be used carefully and with the appropriate safety precautions. If the building was painted before 1978 years old, the paint may contain lead and should be tested. The Environment Protection Agency's website provides guidance on the appropriate removal of lead-based paint.

Following any paint removal, the surfaces should be washed by hand or with a pressure washer set to less than 400 psi. Historic buildings should never be sandblasted.

If possible, all surfaces should be primed to increase the likelihood the new paint will properly adhere. In selecting the paint, consider the advantages and disadvantages of oil and latex paints. Oil paints are more durable and may adhere better, yet they are more difficult to clean up. Latex paints are less durable, easier to apply, and easier to clean up. Problems can arise in switching back and forth between the different types of paint, so it is important to investigate the previous type of paint used. Also, consider the level of shine: gloss, semi-gloss, eggshell, or matte. Follow all manufacturer's instructions when applying.

COLOR INTERACTIONS

Color, either found inherently in building materials or applied with paint, can never be viewed in isolation. Our eyes always see color in combination and our perception is affected. It's helpful to have a basic understanding of complementary colors and the way they interact. The basic color wheel sets up **three complementary color pairings: red + green, orange + blue, purple + yellow**. If a red swatch is placed next to a blue-green swatch - because red and green are complementary - the blue-green will appear more green, as our eye pulls the green out. Also, our eyes prefer to view each of the complementary colors in varying portions.

For example, **our eyes prefer 5 parts red to 5 parts green, yet only one part yellow to 9 parts purple**. These interactions and proportions explain why we prefer certain color schemes over others.



ADDITIONAL RESOURCES

The guides below provided detailed instructions on how to clean and protect your brick building. They also include tools and products to use in the process.

- [Exterior Paint Problems on Historic Woodwork](#)
- [Exterior Paint - Finishes](#)

Nacogdoches Historic Landmark Preservation Committee
STAFF REPORT

CASE NUMBER: COA 2012-034

DATE: 24 October 2012

NAME OF APPLICANT: John Sloane

LOCATION: 422 E. Main

REQUESTED ACTION: Certificate of Appropriateness

PROPOSED WORK:

The applicant is requesting to do the following work;

1. Applicant proposes to restore front façade by removing the remaining stucco, replacing the existing doors with the original doors and redoing the façade, including the pillars, to be in keeping with the style of the buildings downtown.

STAFF REPORT:

Staff Comments are italicized and in blue.

*Below are the City Ordinance Criteria for Approval, found in Sec. 50-157. (in alphabetic order). The Secretary of the Interiors Standards for Rehabilitation are similar in wording to each of the 10 items listed below. The number listed in **red** is in reference to the Secretary Standard that has similar wording as that found in the City Ordinance.*

(b) **(1)** Minimal alterations. Every reasonable effort shall be made to adapt the property in a manner which requires minimal alteration of the building, structure, object, or site and its environment.

Applies. No original photographs exist of the building, but original features will be used, and the façade will be in keeping with the style of downtown.

(c) **(2)** Preservation of distinguishing qualities. The distinguishing original qualities or character of a building, structure, object, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible

Applies.

(d) **(3)** Consistency of alterations with styles. All buildings, structures, objects, and sites 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

Applies. No photographs exist of the original structure.

(e) **(4)** Previous alterations. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, object, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

Unknown

Nacogdoches Historic Landmark Preservation Committee
STAFF REPORT

(f) **(5)** Stylistic features and craftsmanship. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, object, or site shall be kept where possible.

Applies.

(g) **(6)** Repair and replacement of features. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. If replacement is necessary, the new material should reflect the material being replaced in composition, design, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historical, physical, or pictorial evidence, rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

Applies.

(h) **(7)** Cleaning of structures. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

This section does not apply to this proposal.

(i) **(8)** Archaeological resources. Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to, any project.

This section does not apply to this proposal.

(j) **(9)** Acceptability of contemporary designs for alterations. Contemporary design for alterations and additions to existing properties 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, material, and character of the property, neighborhood or environment

Unknown.

(k) **(10)** Preservation of historic features with new alterations. Wherever possible, new additions or alterations to buildings, structures, objects, or sites 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 building, structure, object, or site would be unimpaired.

Unknown

Design Guidelines Chapter 5, Guidelines for New Construction and Chapter 6, Guidelines for Additions/Alterations also apply to this case.