



City of Tarpon Springs, Florida

Heritage Preservation Board

324 East Pine Street

Tarpon Spring, Florida 34689

(727) 938-3711

<http://www.ctsfl.us/agenda.htm>

REGULAR SESSION AGENDA AGENDA

MONDAY, JUNE 3, 2024

6:30 PM - CITY HALL AUDITORIUM

1. CALL TO ORDER

2. ROLL CALL

3. PUBLIC COMMENTS

4. MINUTES

- a. April 1, 2024, Minutes for Approval

5. QUASI-JUDICIAL ANNOUNCEMENT AND SWEARING IN OF SPEAKERS

6. APPLICATION(S)

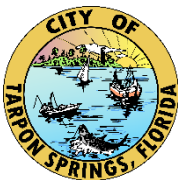
- a. **Application 23.153:** 158 Read Street: Certificate of Approval (CA) to demolish the contributing altered structure on the property.
- b. **Application 24-20:** 317 S Spring Boulevard: Request for Certificate of Approval for a Driveway.
Withdrawn by Applicant
- c. **Application 24-22:** 20-26 Hibiscus Street: Applicant is requesting an after-the-fact Certificate of Approval (CA) to alter previously approved façade plans at the contributing structure located in the Tarpon Springs Historic District.

7. BOARD AND STAFF COMMENTS

8. ADJOURNMENT

This meeting is open to the public. Any person who decides to appeal any decision of the Board with respect to any matter considered at this meeting will need a record of the proceedings, and for such purpose may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. The City of Tarpon Springs is committed to providing reasonable accommodation for access for the disabled. Anyone needing assistance regarding this meeting should contact the City Clerk's Office at (727) 938-3711, fax a written request to (727) 942-5619, or email a written request to

cityclerk@ctsfl.us at least two days prior to the meeting. For further information regarding this meeting, please contact the Planning and Zoning Department at (727) 942-5611 or clanford@ctsfl.us



**MINUTES
HERITAGE PRESERVATION BOARD
CITY OF TARPON SPRINGS, FLORIDA
APRIL 1, 2024**

The Heritage Preservation Board of the City of Tarpon Springs, Florida, Met in Regular Session Agenda in the City Hall Auditorium/Commission Chambers, 324 E. Pine Street, on Monday, April 1, 2024 At 6:30 PM with the Following Present:

Member Kathleen Hallett
Member William Sprecher
Member Rita Kaplan

Absent: Prior Notice Given

Chairperson Jean Dinoff
Vice Chairperson Phillip Mrozinski

Absent: No Prior Notice Given

Member Michelle Ryan

Also Present:

Caroline Lanford Principal Planner
Dan Lewis Board Attorney
Kimberly Creighton Board Secretary

CALL TO ORDER

Acting Chairperson Sprecher called the meeting to order at 6:30 P.M.

ROLL CALL

Board Secretary Creighton called the roll.

PUBLIC COMMENTS

There were no members of the public who wished to speak.

MINUTES

1. March 4, 2024, Minutes for Approval

MOTION: Member Kaplan

SECOND: Member Hallett

To approve Minutes for March 4, 2024, as presented.

Vote on Motion – Upon roll call vote, the motion Passed as follows:

Yes: Member Hallett
Member Sprecher
Member Kaplan

No: None

QUASI-JUDICIAL ANNOUNCEMENT AND SWEARING IN OF SPEAKERS

Board Attorney Lewis read the Quasi-Judicial Announcement and swore in all who wished to testify. He asked if there was any ex parte communication; there was none.

APPLICATION(S)

1. **APPLICATION 24.09: 127 N Grosse Avenue; Construct a single family detached structure;**
(Continued from March 4, 2024, @6:30 P.M., Regular Meeting of the Heritage Preservation Board)

Staff:

Ms. Lanford gave background information and noted that Staff recommended approval of the project, including the following condition:

1. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.

Applicant:

Charles Armstrong, 715 E Spruce Street, Land Development Project Manager with Habitat for Humanity, noted Caroline described the application nicely.

MOTION: Member Hallett

SECOND: Member Kaplan

To approve application 24.09, 127 N Grosse Avenue as Presented.

Vote on Motion – Upon roll call vote, the motion Passed as follows:

Yes: Member Hallett
Member Sprecher
Member Kaplan

No: None

2. **APPLICATION 24.17: 440 Cypress Street; Exterior renovations and addition.**

Staff:

Ms. Lanford gave background information and noted that Staff recommended approval of the project, including the following condition:

1. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.

Applicant:

Katherine Ayers, 471 Cypress Street, noted that Ms. Lanford's presentation was great.

Public:

Mike Waters, 455 Cypress Street, noted that the improvements to 440 Cypress Street would really help the street to look better.

MOTION: Member Hallett

SECOND: Member Kaplan

To approve application 24.17 440 Cypress Street as Presented

Vote on Motion – Upon roll call vote, the motion Passed as follows:

Yes: Member Kaplan
Member Hallett
Member Sprecher

No: None

BOARD AND STAFF COMMENTS

There were no Board or Staff comments.

ADJOURNMENT

Acting Chairperson Sprecher adjourned the meeting at 06:53 PM.

Chairperson Jean Dinoff

***Secretary's Note:** The preceding are action minutes and are not the official meeting record.

DRAFT



CITY OF TARPON SPRINGS
HERITAGE PRESERVATION BOARD
JUNE 3, 2024

STAFF REPORT, April 29, 2024

Application No. / Project Title: 23-153 / Marterie
Staff: Caroline Lanford, AICP CTP
Principal Planner
Applicant / Owner: Robin Hancock, Applicant/Anthony Marterie, Marterie
Family Trust, Owner
Property Size: 3,485 square feet
Current Zoning: RM (Residential Multi-Family)
Current Land Use: Residential Medium
Location / Parcel ID: 158 Read Street / 12-27-15-15228-000-0090
Architectural Type/District Status: Frame Vernacular / Contributing Altered

BACKGROUND SUMMARY:

The applicant is seeking a Certificate of Approval to demolish the primary structure. The Florida Master Site File (FMSF) form for this structure (8PI11851) lists this contributing altered property as built circa 1925. The wood frame home features a slab foundation, front gable roof, and wood shingle exterior.

PRELIMINARY STAFF RECOMMENDATION:

Staff recommends **approval** of the project as presented by the applicant. The applicant has provided a sufficient analysis comparing the renovation option to the replacement option for the existing residence.

If the Heritage Preservation Board (HPB) approves the application, the following conditions are recommended:

1. The parameters of DRGM Guideline 41 will be followed.
2. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.

HISTORIC DISTRICT CONSIDERATIONS:

1. When considering this application, the Heritage Preservation Board (Board) is encouraged to refer to the Historic District Design Review Guidelines Manual (DRGM), especially Chapter 4.13. The DRGM can be accessed at the following link: <https://www.ctsfl.us/wp-content/uploads/2021/03/Historic-District-Design-Review-Guidelines-Manual.pdf>
2. The DRGM guidance regarding Flood Adaptations (Chapter 4.16) and Flood Risk Reduction (Appendix H) may also provide helpful information.



3. The guidelines state that “the decision to demolish a historic structure is a measure of last resort and shall be based on the demonstration that there is no other feasible alternative.”
4. Guideline 41 provides for actions to be implemented should a demolition be approved. It is recommended that the Heritage Preservation Board (HPB) include these actions as conditions should they render a favorable decision on the demolition.
5. Guideline 42 states that demolition by neglect occurs when regular maintenance and repair of a property is not the result of a property owner’s financial inability to carry these actions out. The applicant has not provided any information regarding financial inability to maintain and repair the property.
6. The applicant has provided the following materials in support of this request:
 - Existing Conditions Report
 - Cost Estimate for Elevation and Repair
 - Photos of street flooding
 - Photos of interior water damage

REVIEW STANDARDS / STAFF ANALYSIS – CERTIFICATE OF APPROVAL

Pursuant to Section 110 - Demolition, states in Section (B), “When authorizing a Certificate of Approval for the issuance of a demolition permit, the Board shall consider the following criteria:

(1) The historic, architectural or cultural significance of the building or structure;

ANALYSIS: The building and property has no special significance beyond the fact that it is contributing to the local district. The FMSF indicates that the structure may have been built as an outbuilding for 154 Read Street as it is set back further from the street than other contributing structures in the vicinity.

(2) The importance of the building or structure to the ambiance of a district or to the patterns of land uses reflecting cultural traditions of the community or local ethnic group;

ANALYSIS: This property has no documented significance beyond contributing to the local historic district. Demolition of the structure would alter the historic streetscape. However, the placement of the home far back from the street minimizes the visual impact to the rhythm of the streetscape if it is demolished.

(3) The difficulty or impossibility of reproducing such a building or structure because of its design, texture, material, detail, or unique location;

ANALYSIS: The building would not be difficult to reproduce including the design, texture, material and detail. The location/setting is not unique to a frame vernacular structure.

(4) Whether the building or structure is one of the last remaining examples of its kind in the district or in the city;

ANALYSIS: There are approximately 147 frame vernacular structures in the district, and 87 built in this time period. Staff proposes there is sufficient representation of the residential frame vernacular style in the district.



(5) The future utilization of the site and/or group occupancy of the structure;

ANALYSIS: The site is a non-conforming lot located in the RM (Residential Multi-Family) zoning district. Demolition of the structure would remove the non-conforming use. If the structure is demolished, the lot would be combined with parcel 12-27-15-15228-000-0080 adjacent to the east of the subject property, as these lots are in common ownership.

(6) Whether reasonable measures can be taken to save the building, structure or traditional cultural property; and

ANALYSIS: The applicant has cited the following conditions associated with the existing structure. Each of these has been evaluated:

"The structure floods constantly and has suffered significant water damage including mold."

The applicant has submitted an appraisal of the property that includes an evaluation of existing conditions of the structure and the costs associated with remediation. The applicant has also provided pictures of area flooding and damage to the structure.

STRUCTURE IS IN OVERALL POOR CONDITION AND IT HAS NOT BEEN MAINTAINED THROUGH OUT ITS LIFE TIME. FLOODING HAS HAPPENED MULTIPLE TIMES AND AS RECENTLY AS LAST SUMMER. THE STRUCTURE WOULD REQUIRE A COMPLETE REMOVAL OF ALL FINISHES DOWN TO THE WOOD FRAME OF WHICH MOST FRAMING MEMBERS REQUIRE REPLACING. 70% OF THE SIDING AND 25% OF THE EXTERIOR WALL IS ALL THAT WAS FOUND TO HAVE ANY SLIGHT INTEGRITY. THE STRUCTURE IS A BASIC RETANGLE OF 22' X 28' WITH AN 8' OPEN PORCH.

"Repairs are not feasible due to the constant flooding (past and potential) and the building materials have expired as being repairable. LL appears to be less than 4. Flood zone is AE 9"

The property is located in the AE flood zone with a required finished floor elevation of 9 feet. According to the City's Floodplain Coordinator "Historic structures do not have to meet the floodplain management requirements of the program as long as they maintain their historic structure designation. They do not have to meet the new construction, substantial improvement, or substantial damage requirements of the floodplain management program. This exclusion from these requirements serves as an incentive for property owners to maintain the historic character of the designated structure (44 CFR §60.3). It may also serve as an incentive for an owner to obtain historic designation of a structure." (FEMA P-467-2, May 2008)."

The applicant has stated a concern beyond the immediate renovation problem in the form of potential future flooding impacts to a renovated property.

(7) Whether the building, structure or traditional cultural property is capable of earning a reasonable economic return on its value and whether the perpetuation of the building or structure, considering its physical condition, its location and the anticipated expense of rehabilitation would be economically feasible.

ANALYSIS: This standard requests that the Heritage Preservation Board compare the current property value to the value of the restored property and analyze whether the cost of restoration is justified. If the economic advantages or "economic return" of restoring the property exceeds the economic cost,



CITY OF TARPON SPRINGS
PLANNING & ZONING DEPARTMENT

the project would be considered economically feasible. The applicant has provided an expert opinion to determine the economic feasibility of rehabilitation.

COSTS TO REPAIR AND PARTIALLY ELEVATE ARE ESTIMATED AT \$365,862 PLUS THE PURCHASE PRICE OF \$200,000 (AS PER THE TAX RECORDS).

A TOTAL COST OF \$565,862 FOR 616 SQ FT OF LIVING SPACE IS UNABLE TO CREATE AN ECONOMIC RETURN

The Pinellas County Property Appraiser (PCPA) sets the January 2023 just market value of the property at \$147,654. This is based on the PCPA's rating of the building's condition (quality) as fair, which is not the case. The neighborhood context of the PCPA value is presented in the table below.

Address	Status in District (Year Built)	Living Floor Area	Total Just Value (2023)
154 Read Street	Contributing (1926)	780 sq. ft.	\$248,159
112 Read Street	Contributing (1925)	884 sq. ft.	\$186,691
66 Read Street	Contributing (1925)	998 sq. ft.	\$235,945
Subject Property 158 Read Street	Contributing Altered	616 sq. ft.	\$147,654

Staff cannot render an expert opinion regarding reasonable economic return and/or economic feasibility. However, the total estimated costs of repair plus the purchase price would result in a cost of approximately \$918 per square foot, which appears to significantly exceed median sale price per square foot of \$245 (<https://www.redfin.com/city/18177/FL/Tarpon-Springs/housing-market> retrieved April 2024).

PUBLIC CORRESPONDENCE:

The property owners within 500 feet were sent written notification in accordance with Section 109.00(B) of the City of Tarpon Springs Comprehensive Zoning and Land Development Code. Staff has not received any responses to these notices.

ATTACHMENTS:

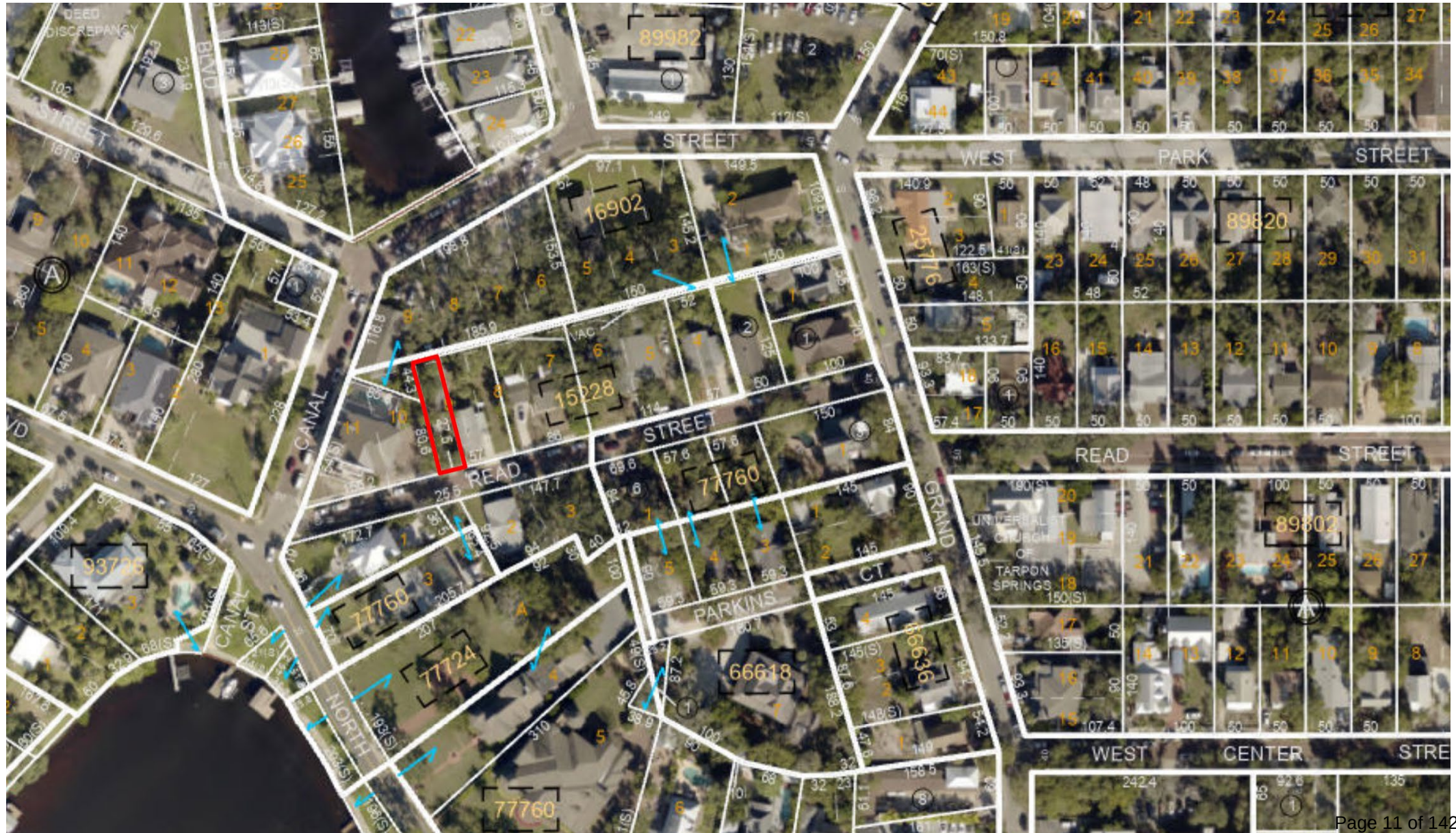
1. Slide Presentation
2. Florida Master Site File Form #8PI11881
3. Application Materials

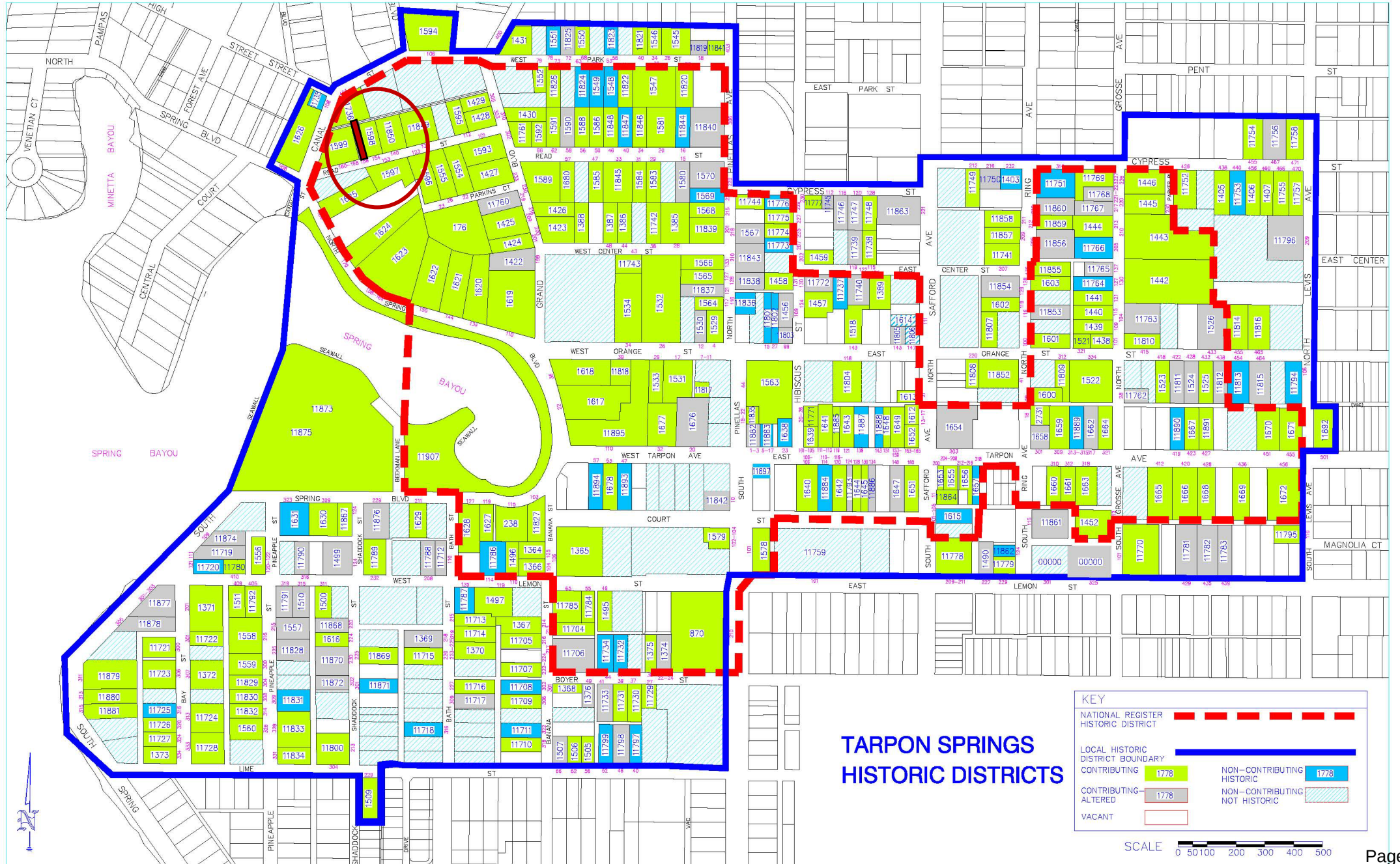
MARTERIE APPLICATION #23-153

Heritage Preservation Board, May 6, 2024



LOCATION & CONTEXT



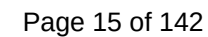






REQUEST

- Certificate of Approval to demolish the contributing-altered structure.
- Lot Size: 3,485 square feet
- Architectural Type/Style: Frame Vernacular
- District Status: Contributing-Altered
- Florida Master Site File: 8PI1851
- Property Owner / Applicant: Marterie Family Trust, Owner/ Robin Hancock, Applicant

















4.13 Universal Guidelines for Demolition

Historic buildings throughout the Tarpon Springs Historic District contribute to the overall historical and physical significance of the district; the loss of any one of these historic buildings could have a negative impact on the integrity of the district as a whole. As such, demolition is strongly discouraged for any historic building within the historic district. Demolition results in a loss of architectural and historical integrity and can dramatically change the character of a block or historic district. Demolition is generally discouraged; however, it may be approved in certain situations.

The decision to demolish a historic structure is a measure of last resort and shall be based on the demonstration that there is no other feasible alternative. Demolition can have a significant impact on the historic context of the district. Many older buildings offer character and quality that cannot be economically replicated today. Older buildings can be retrofitted to provide modern amenities.

The City of Tarpon Springs Heritage Preservation ordinance sets the following criteria to be considered in the review of demolitions:

- The historic, architectural or cultural significance of the building or structure,
- The importance of the building or structure to the ambiance of a district or to the patterns of land uses reflecting cultural traditions of the community or local ethnic group,
- The difficulty or impossibility of reproducing such a building or structure because of its design, texture, material, detail or unique location,
- Whether the building or structure is one of the last remaining examples of its kind in the district or in the city,
- The future utilization of the site and/or group occupancy of the structure,
- Whether reasonable measures can be taken to save the building, structure or traditional cultural property, and,
- Whether the building, structure, or traditional cultural property is capable of earning a reasonable economic return and whether the perpetuation of the building or structure, considering its physical condition, its location, and anticipated expense of rehabilitation would be economically feasible.

If the demolition is denied, then the property owner can apply for an economic hardship exception. The hardship exception requires information regarding the cost of the proposed construction, additional cost incurred to comply with recommendations of the Heritage Preservation Board, structural soundness, market value of the property before and after demolition, the economic feasibility of rehabilitation, and, for income-producing property, the capitalization rate based on net operating income.

Guideline 41. Guidelines for Demolition of Historic Properties

- a. Establish a permanent record of the property prior to demolition. The level of documentation and the person responsible for producing the documentation will be determined by the Tarpon Springs HPB.
- b. Identify salvageable building materials and potential buyers or recipients of salvaged material before demolition.
- c. Protect historic site features, including mature trees and potential archaeological resources.
- d. Ensure the safety of the adjacent properties and historic resources.



- e. The site must be cleared of debris, reseeded, and properly maintained until it is reused. If the site is to remain vacant for over one year, it must be improved to reflect an appearance consistent with other open space areas in the district.

Guideline 42. Demolition by Neglect

Demolition by neglect is defined as the willful neglect in the maintenance and repair of a building or structure that does not result from a property owner's financial inability to maintain and repair the property. Property owners are expected to maintain their property in good condition and in compliance with Health and Safety codes.



PRELIMINARY STAFF RECOMMENDATION

Staff recommends **approval** of the project as presented by the applicant. If the Heritage Preservation Board (HPB) approves the application, the following conditions are recommended:

1. The parameters of DRGM Guideline 41 will be followed.
2. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.

The project was publicly noticed. No responses were received.



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Consult Guide To Historical Structure Forms for detailed instructions

Site # 8PI11851

Recorder # 249

Recorder Date 2/18/09

Original ☒Update ☐

Site Name 158 Read Street Other Names

Project Name Historic Resources Survey of Tarpon Springs

Historic Contexts Boom Times National Register Category Building

LOCATION and IDENTIFICATION

Address 158 Read Street

Vicinity of

City Tarpon Springs County Pinellas

Ownership Private-individual Subdivision Block # Lot #

MAPPING

USGS Map TARPON SPRINGS Township 27S Range 15E Section 12

Quarter Qtr Qtr Irregular Section ☐ UTM Zone 17

Easting 327087 Northing 3114976 Land Grant Unknown

Latitude Longitude Plat or Other Map Aerial Photographs

HISTORY

Architect/Builder Unknown Construction Date 1925 Circa ☒Alterations ☐ Date Type/LocationAdditions ☒ Date c.1950 Type/Location flat roof carport added to frontMoved ☐ Original Location

Use Original Private residence Use Present Private residence

DESCRIPTION

Style Frame Vernacular Exterior Plan Rectangular Interior Plan Unknown Stories 1

Structural System Wood frame Exterior Fabric Wood shingles

Foundation Slab Foundation Materials Poured concrete Foundation Infill N/A

No. of Porches 1 Locations/Features integral, recessed under main roof with simple 4x4 wood posts

Main Entrance (stylistic details): off center under main porch

Outbldgs. ☐ Number Nature/Location (Describe below)

Roof Type Gable Roofing Materials Composition shingles

Secondary Structures ☐ Comments Not applicable LocationChimneys ☐ Number 0 Orientation N/A Location N/A Material Not applicableWood Windows ☒ Type DHS; Casement Light # 1/1; 4Metal Windows ☐ Type Light #

Exterior Ornament knee braces, wood surrounds

Condition Good Surroundings Residential

Narrative (general, interior, landscape, context; 3 lines only)

This structure may have been built as an outbuilding for 154 Read Street and is set back from the street.

Archaeological Remains Present ☐ FMSF Archaeological Site Form Completed (if yes, attach) ☐

Consult Guide To Historical Structure Forms for detailed instructions

RECORDER'S EVALUATION OF SITE

Individually Eligible for National Register? Yes ☐ No ☒ Likely, Need Information ☐ Insufficient Information ☐Potential Contributor to Nat. Reg. District? Yes ☐ No ☒ Likely, Need Information ☐ Insufficient Information ☐

Areas of Significance

Community planning & development

Summary of Significance

This resource is an example of residential architecture in Tarpon Springs during the Boom Times-era and is representative of the development of the City of Tarpon Springs. However, this building has inappropriate alterations that compromise its overall architectural integrity. Therefore, this resource is considered non-contributing to the NRHP Tarpon Springs Historic District and ineligible as an individual resource in the NRHP. The modifications to the building could possibly be removed or reversed, and subsequently, it may retain enough historic integrity to be considered contributing to the Local Historic District.

DHR USE ONLY		OFFICIAL EVALUATIONS		DHR USE ONLY	
NR DATE ____/____/____	KEEPER-NR ELIGIBILITY ☐ yes ☐ no			Date	____/____/____
DELIST DATE ____/____/____	SHPO-NR ELIGIBILITY: ☐ yes ☐ no ☐ potentially elig. ☐ insufficient info			Date	____/____/____
	LOCAL DESIGNATION: _____			Date	____/____/____
	Local office _____				
National Register Criteria for Evaluation ☐ a ☐ b ☐ c ☐ d (See National Register Bulletin 15, p. 2)					

DOCUMENTATION

Research Methods Florida Site File for past architectural surveys; Florida Site File search; Local library; Tax records; Pedestrian; Sanborn maps

Bibliographic References

Location of Negatives Janus Research **Negative Numbers** Roll 2885, #262, Facing N

RECORDER INFORMATION

Recorder Name Janus Research

Recorder Affiliation JANUS RESEARCH, 1107 N. Ward Street, Tampa, Florida 33607 Telephone 813-636-8200

- REQUIRED:**
1. USGS 7.5' MAP WITH STRUCTURES PINPOINTED IN RED
 2. LARGE SCALE STREET OR PLAT MAP
 3. PHOTO OF MAIN FACADE, PREFERABLY B&W, AT LEAST 3x5



SKETCH MAP





Location of 8PI11851
USGS Quadrangle: Tarpon Springs (1973 PR 1987)

0 500 ft.

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

Return to:
Planning & Zoning Department
324 E. Pine Street
Tarpon Springs, FL 34689
(727) 942-5611

(Please type or print clearly)

Property Owner(s)

Name MARTERIE, ANTHONY J TRE, MARTERIE FAMILY TRUST		Email TJM@NORCOAST.COM	
Address 405 INNESS DRIVE			
City TARPON SPRINGS		State FL	Zip 34689
Phone 415-987-5781	Fax NA	Cellular SAME	

Applicant

Name ROBIN HANCOCK / CRANE BROOK INCORPORATED		Email robin@cranebrookinc.com	
Address 623 EAST TARPON AVE			
City TARPON SPRINGS		State FL	Zip 34689
Phone 727-580-7507	Fax NA	Cellular SAME	

Agent (if applicable)

Name		Email	
Address			
City		State	Zip
Phone	Fax	Cellular	

General Information

Property Location or Address 158 READ STREET, TARPON SPRINGS FL		
Legal Description (attach additional sheets as necessary) CHEYNEY'S J.K. SUB W'LY 27 1/2FT OF LOT 9 & 1/2 VAC ALLEY TO N		
Tax Parcel Number(s) 12-27-15-15228-000-0090	Current Designations of Property	
	Land Use Category RESIDENTIAL MEDIUM	Zoning District RM
Current Use of Property VACANT SFR, UNINHABITABLE	Contributing Structure? ☒ YES ☐ NO	

Type of Proposed Activity: [please check all that apply]

- | | | | |
|--|---|--|--------------------------------------|
| ☒ Demolition | ☐ Relocation * | ☐ Structural Addition | ☐ Driveway |
| ☐ Renovation | ☐ New Construction | ☐ New Roof | ☐ Other _____ |

*** If Relocation, please indicate new location:**

New Property Location or Address		
Legal Description (attach additional sheets as necessary)		
Tax Parcel Number(s)	Current Designations of Property	
	Land Use Category	Zoning District

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

General Building Information

Year Built 1920	Architectural Style FRAME VERNACULAR	Porches? ☐ YES ☒ NO
Original Use SFR?	Present Use NONE, VACANT, UNINHABITABLE	Proposed Use DEMO
Roof Type & Material FIBERGLASS SHINGLE		Exterior Siding Material WOOD

Previous Additions or Modifications: [please describe and include dates]

FRAME CARPORT/STORAGE ON FRONT ELEVATION, ALUMINUM WINDOWS
 EXTERIOR DOORS, ROOFING, CONCRETE DRIVE

Description of Proposed Work:

DEMOLITION

For relocation or demolition, describe the property's physical condition, steps taken to save the property and whether renovation would be economically feasible:

THE STRUCTURE FLOODS CONSISTANTLY AND HAS SUFFERED SIGNIFICANT WATER DAMAGE INCLUDING MOLD.

REPAIRS ARE NOT FEASIBLE DUE TO THE CONSISTANT FLOODING (PAST AND POTENTIAL) AND THE BUILDING MATERIALS HAVE EXPIRED AS BEING REPAIRABLE.

LL APPEARS TO BE LESS THAN 4, FLOOD ZONE IS AE 9.

Requirements for Submission:

Please submit those items which have been checked by City staff:

- ☐ Completed original application with digital copies of all application documents
- ☒ \$50.00 application fee plus advertisement costs which will be invoiced upon calculation by Staff
- ☐ \$50.00 application fee for signs only
- ☒ Property survey, signed and sealed by a professional land surveyor
- ☐ Architectural floor plans and elevations (10 copies)
- ☐ Site Plan for new construction (10 copies)
- ☐ Landscaping plan (10 copies)
- ☐ Details of exterior modifications

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

AFFIDAVIT

I (we), the undersigned, certify ownership of the property within this application, that said ownership has been fully divulged, whether such ownership by contingent or absolute, and that the name of all parties to an existing contract for sale or any options are filed with this application.

I (we) certify that Robin L. Hancock
CRANE BROOK, INCORPORATED is (are) duly designated as the agent(s) for the
AGENT owner, that the agent(s) is (are) authorized to provide subject matter on the application contained herein, whether verbal or written, and appear at any public hearing(s) involving this petition.

I (we) assent to the City's Comprehensive Plan as it applies to the property. Further, it is understood that this application must be complete and accurate and the appropriate fee paid prior to processing.

Date: <u>12-1-23</u>	Title Holder/Property Owner: <u>MARTERIE, ANTHONY J TRE,</u>
Date: _____	<u>MARTERIE FAMILY TRUST</u>
Date: _____	Title Holder/Property Owner: _____
Date: _____	Title Holder/Property Owner: _____

STATE OF FLORIDA)
COUNTY OF PINELLAS)

The foregoing instrument was acknowledged before me this 5 day of December, A.D., 20 23
by ANTHONY J. MARTERIE, who is personally known to me or who has produced
PROPERTY OWNER NAME PRINTED
Anthony J. Marterie as identification and who did (did not) take an oath.

NOTARY PUBLIC

Name: _____

Signature: _____

Stamp: _____

Christine Postma
My Commission Expires 07/07/2025



Christine Postma
Notary Public, State of Florida
My Commission Expires 07/07/2025
Commission No. NH 149711

THE WESTERLY 2 1/2 FEET OF LOT 9, J.K. CHEWNEY'S SUBDIVISION OF PART OF BLOCK 60, TARPON SPRINGS, ACCORDING TO PLAT BOOK 3, PAGE 16, OF THE PUBLIC RECORDS OF PINELLAS COUNTY, FLORIDA, MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 9, RUN THENCE EASTERLY ALONG THE NORTH BOUNDARY OF SAID LOT 8 A DISTANCE OF 2 1/2 FEET; THENCE SOUTHERLY AND PARALLEL TO THE WEST BOUNDARY OF SAID LOT 9 TO THE SOUTH BOUNDARY OF SAID LOT 9; THENCE WESTERLY 2 1/2 FEET ALONG THE SOUTH LOT LINE TO THE SOUTHWEST CORNER OF LOT 9; THENCE NORTHERLY ALONG THE WEST BOUNDARY OF SAID LOT 9 TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PROPERTY APPEARS TO BE IN ZONE AE (BASE FLOOD ELEVATION OF 9 FEET), IN ACCORDANCE WITH THE FIRM MAP OF THE CITY OF TARPON SPRINGS, PINELLAS COUNTY, COMMUNITY NUMBER 120259 (MAP NUMBER 12103C-0019-H), MAP DATED AUGUST 24, 2021.

154 READ STREET PROPERTIES, LLC

[illegible]

1.) THIS SURVEY HAS BEEN EXCLUSIVELY PREPARED FOR THE NAMED ENTITIES (THE "CERTIFIED PARTIES") SHOWN HEREIN AND IS NOT TRANSFERABLE. NO OTHER PERSON OR ENTITY IS ENTITLED TO RELY UPON AND/OR RE-USE THIS SURVEY FOR ANY PURPOSE WITHOUT THE EXPRESSED, WRITTEN CONSENT OF GEORGE A. SHAPIRO & ASSOCIATES, INC. (THE "SURVEY FIRM") AND THE CERTIFYING PROFESSIONAL SURVEYOR AND MAPPER (THE "DRAWING SURVEYOR"), HEREINAFTER COLLECTIVELY REFERRED TO AS "THE SURVEYOR". NOTHING HEREIN SHALL BE CONSTRUED TO GIVE ANY RIGHTS OR BENEFITS TO ANYONE OTHER THAN THE CERTIFIED PARTIES SHOWN ON THIS SURVEY.

3.) THE WORD "CERTIFY" AS SHOWN AND USED HEREIN, MEANS AN EXPRESSION OF THE SURVEYOR'S OPINION REGARDING THE FACTS OF THE SURVEY BASED ON HIS BEST KNOWLEDGE, INFORMATION AND BELIEF, AND THAT IT THUS CONSTITUTES NEITHER A GUARANTEE NOR A WARRANTY, EITHER EXPRESSED OR IMPLIED.

5.) THIS PROPERTY WAS SURVEYED BASED ON THE PROPERTY'S LEGAL DESCRIPTION, AS SHOWN HEREON, WHICH UNLESS OTHERWISE STATED, WAS PROVIDED TO THE SURVEYOR BY THE CLIENT, OR CLIENT'S DESIGNATED AGENT.

7.) THE SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE OR ANY OTHER MATTERS OF RECORD THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE. THERE MAY BE ADDITIONAL EASEMENTS, RESERVATIONS, RESTRICTIONS AND/OR OTHER MATTERS OF RECORD AFFECTING THIS PROPERTY THAT ARE NOT SHOWN HEREON AND MAY (OR MAY NOT) BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

9.) THERE ARE NO VISIBLE ENDOACHMENTS, EXCEPT AS SHOWN HEREON.

11.) ALL BUILDING LINES, PROPERTY MARKER LOCATIONS AND OTHER SITE IMPROVEMENT LOCATIONS SHOWN HEREON ARE MEASURED PERPENDICULAR TO ADJACENT BOUNDARY LINES, UNLESS OTHERWISE STATED.

13.) UNLESS OTHERWISE SHOWN, THIS SURVEY DOES NOT REFLECT OR DETERMINE OWNERSHIP LINES, LINES AFFECTED BY ADVERSE USE, LINES OF CONFLICTING/OVERLAPPING DEEDS, OR OTHER LINES THAT MAY OTHERWISE BE DETERMINED BY A COURT OF LAW.

14.) NO INFORMATION ON ADJOINING PROPERTY OWNERS OR ADJOINING PROPERTY RECORDING INFORMATION WAS PROVIDED TO THE SURVEYOR.

15.) BECAUSE OF THE POSSIBILITY OF MOVEMENT OF THE MONUMENTATION FROM ITS ORIGINAL PLACEMENT BY PERSONS OTHER THAN THE SURVEYOR, IT IS RECOMMENDED THAT PRIOR TO ANY NEW IMPROVEMENTS ON THE PROPERTY THAT THE POSITION OF THE MONUMENTATION BE VERIFIED.

16.) FENCES AND WALLS (IF ANY) SHOWN ALONG THE BOUNDARIES OF THIS SURVEY ARE EXAGGERATED FOR CLARITY AND OWNERSHIP IS NOT DETERMINED. THE TREES AT THE PROPERTY CORNERS OR AT SPECIFICALLY DESIGNATED POINTS ARE BASED UPON FIELD LOCATIONS. FENCES AND WALLS ALONG OTHER PROPERTY BOUNDARIES MEANDER AND ARE APPROXIMATE. PRIOR TO THE RECONSTRUCTION OF ANY FENCES OR WALLS, IT WOULD BE PRUDENT TO HAVE THE BOUNDARY LINE STAKED.

17.) THE PRINTED DIMENSIONS SHOWN ON THIS SURVEY SUPERSEDE ANY SCALED DIMENSIONS. THERE MAY BE ITEMS DRAWN OUT OF SCALE TO GRAPHICALLY SHOW THEIR LOCATION.

18.) THIS SURVEY IS A REPRESENTATION OF EXISTING FIELD CONDITIONS AT THE TIME OF THE FIELD SURVEY AND UNLESS OTHERWISE SHOWN, IS BASED ON EXISTING SURVEY MONUMENTATION AS FOUND IN THE FIELD.

19) THE ACCURACY OF THIS SURVEY, AS OBTAINED BY FIELD-MEASURED CONTROL MEASUREMENTS AND CALCULATIONS, MEETS OR EXCEEDS THE MINIMUM RELATIVE DISTANCE ACCURACY REQUIREMENT AS SPECIFIED IN THE MINIMUM TECHNICAL STANDARDS (SJ-17, FLORIDA ADMINISTRATIVE CODE).

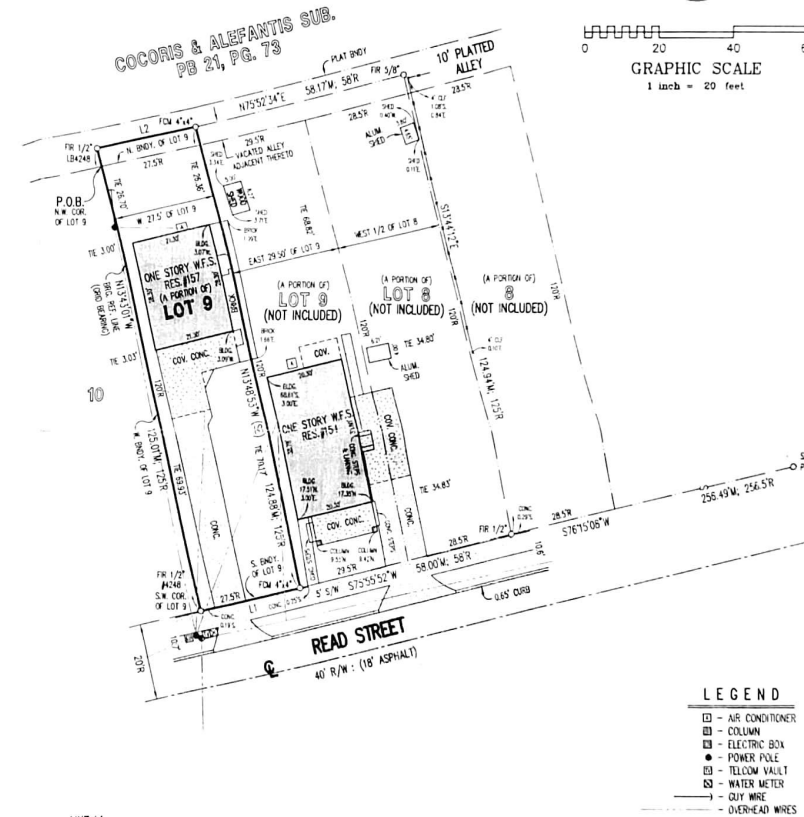
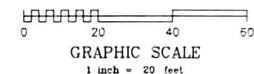
20.) THIS SURVEY IS BEING CERTIFIED ACCORDING TO THE LAST DATE OF FIELD SURVEY AND NOT THE SIGNATURE DATE (IF ANY).

21.) THIS SURVEY SHALL NOT BE FILED FOR PUBLIC RECORDS WITHOUT THE KNOWLEDGE AND THE EXPRESSED, WRITTEN CONSENT OF THE SURVEYOR.

22.) UNLESS OTHERWISE SHOWN, THE DIMENSIONS SHOWN HEREON ARE IN FEET AND DECIMAL PARTS THEREOF AND ARE BASED ON THE DEFINITION OF A FOOT AS ADOPTED BY THE UNITED STATES BUREAU OF STANDARDS AND REFER TO THE HORIZONTAL PLANE.

23.) TREES BY NATURE ARE IRREGULAR IN SHAPE AND SIZE AND EVERY EFFORT IS MADE TO ACCURATELY LOCATE THEM. THE TREE SIZE IS DETERMINED AT CHEST HEIGHT DIAMETER AND THE TREE LOCATION IS CENTER OF THE TREE TRUNK. ANY TREE LOCATIONS THAT ARE CRITICAL TO DESIGN SHOULD BE FIELD VERIFIED. EVERY EFFORT HAS BEEN MADE TO PROPERLY IDENTIFY THE TREES SHOWN HEREON. HOWEVER, TREE IDENTIFICATION IS OUTSIDE THE AREA OF EXPERTISE OF PROFESSIONAL SURVEYOR AND MAPPER. THEREFORE, THE SURVEYOR ACCEPTS NO RESPONSIBILITY FOR IDENTIFICATION OF TREE SPECIES. ALL TREE TYPES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY AND ANY TREE SPECIES THAT ARE CRITICAL SHOULD BE VERIFIED BY A CERTIFIED ARBORIST.

24.) THIS SURVEY SHALL NOT BE USED WITH A SURVEY AFFIDAVT. AN INCORRECT SURVEY AFFIDAVT CAN INCREASE THE OWNER/BUYER'S LIABILITY, DECREASE THEIR LEGAL RIGHTS AND PROTECTIONS WHICH ARE AFFORDED BY A CURRENT SURVEY AND MAY RESULT IN COSTLY LITIGATION AS WELL. AN INCORRECT SURVEY AFFIDAVT CAN BE THE RESULT OF CHANGES MADE TO THE PROPERTY SINCE THE DATE OF THE LAST SURVEY, WHICH MAY INCLUDE IMPROVEMENTS MADE BY THE OWNER, ADJACENT OWNERS OR UTILITY COMPANIES OR CHANGES IN THE SURVEY BOUNDARY MONUMENTATION. USE OF THIS SURVEY BY A LENDING INSTITUTION OR TITLE COMPANY IN CONJUNCTION WITH A SURVEY AFFIDAVT IS STRICTLY PROHIBITED AND SHALL RENDER THIS SURVEY NULL AND VOID.



JOB NUMBER: 210311 DATE SURVEYED: 8-25-2021
DRAWING FILE: 210311.DWG DATE DRAWN: 10-5-2021
LAST REVISION: N/A X REFERENCE: N/A

**GEORGE A. SHIMP II
AND ASSOCIATES, INCORPORATED**

LAND SURVEYORS LAND PLANNERS
3301 DE SOTO BOULEVARD, SUITE 2
PALM HARBOR, FLORIDA 34683
PHONE (727) 784-5496 FAX (727) 788-1758

S.O.
LH 1834

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 expressed consent of GEORGE A. SHIMP II & ASSOCIATES, INC.
 shall be prosecuted to the full extent of the law.
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CERTIFICATION: I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE SURVEY SHOWN HEREON SUBSTANTIALLY MEETS THE STANDARDS OF PRACTICE FOR LAND SURVEYING DISCLOSED IN THE STATE OF FLORIDA RULE 5A-1.0 F.A.C. FURTHERMORE, THIS CERTIFICATION SHALL EXTEND TO ANY OTHER PERSONS OR PARTIES OTHER THAN THOSE NAMED ON THIS SURVEY AND SHALL NOT BE VALID AND BINDING AGAINST THE UNDERSIGNED SURVEYOR WITHOUT THE CONJOINED RAISED SEAL AND SIGNATURE OF THE FLORIDA LICENSED SURVEYOR AND WITNESS.

George A. Stamp

GEORGE A. STAMP, JR., FLORIDA REGISTERED LAND SURVEYOR No. 25124





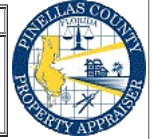






12-27-15-15228-000-0090[Compact Property Record Card](#)[Tax Estimator](#)**Updated November 14, 2023**[Email](#) [Print](#)[Radius Search](#)[FEMA/WLM](#)

Ownership/Mailing Address Change Mailing Address	Site Address
MARTERIE, ANTHONY J TRE MARTERIE FAMILY TRUST 405 INNESS DR TARPON SPRINGS FL 34689-2539	158 READ ST TARPON SPRINGS



[Property Use:](#) 0110 (Single Family Home) Current Tax District: TARPON SPRINGS ([TS](#)) Total Living: SF: 616 Total Gross SF: 913 Total Living Units: 1

[\[click here to hide\] Legal Description](#)

CHEYNEY'S, J.K. SUB W'LY 27 1/2FT OF LOT 9 & 1/2 VAC ALLEY TO N

Tax Estimator File for Homestead Exemption			2024 Parcel Use	
Exemption	2024	2025		
Homestead:	No	No		
Government:	No	No	Homestead Use Percentage: 0.00%	
Institutional:	No	No	Non-Homestead Use Percentage: 100.00%	
Historic:	No	No	Classified Agricultural: No	

Parcel Information [Latest Notice of Proposed Property Taxes \(TRIM Notice\)](#)

Most Recent Recording	Sales Comparison	Census Tract	Evacuation Zone (NOT the same as a FEMA Flood Zone)	Flood Zone (NOT the same as your evacuation zone)	Plat Book/Page
22328/0522	\$172,700 Sales Query	121030275013	A	Current FEMA Maps	3/16

2023 Final Value Information

Year	Just/Market Value	Assessed Value / Non-HX Cap	County Taxable Value	School Taxable Value	Municipal Taxable Value
2023	\$147,654	\$115,532	\$115,532	\$147,654	\$115,532

[\[click here to hide\] Value History as Certified \(yellow indicates correction on file\)](#)

Year	Homestead Exemption	Just/Market Value	Assessed Value	County Taxable Value	School Taxable Value	Municipal Taxable Value
2022	No	\$105,029	\$105,029	\$105,029	\$105,029	\$105,029
2021	No	\$111,094	\$90,560	\$90,560	\$111,094	\$90,560
2020	No	\$82,327	\$82,327	\$82,327	\$82,327	\$82,327
2019	No	\$83,186	\$77,429	\$77,429	\$83,186	\$77,429
2018	No	\$79,100	\$70,390	\$70,390	\$79,100	\$70,390
2017	No	\$63,991	\$63,991	\$63,991	\$63,991	\$63,991
2016	No	\$61,253	\$52,259	\$52,259	\$61,253	\$52,259
2015	No	\$61,441	\$47,508	\$47,508	\$61,441	\$47,508
2014	No	\$52,655	\$43,189	\$43,189	\$52,655	\$43,189
2013	No	\$41,736	\$39,263	\$39,263	\$41,736	\$39,263
2012	No	\$41,525	\$35,694	\$35,694	\$41,525	\$35,694
2011	No	\$32,449	\$32,449	\$32,449	\$32,449	\$32,449
2010	No	\$36,759	\$36,759	\$36,759	\$36,759	\$36,759
2009	No	\$42,388	\$42,388	\$42,388	\$42,388	\$42,388
2008	No	\$77,400	\$77,400	\$77,400	\$77,400	\$77,400
2007	No	\$61,200	\$61,200	\$61,200	N/A	\$61,200
2006	No	\$66,200	\$66,200	\$66,200	N/A	\$66,200
2005	No	\$48,800	\$48,800	\$48,800	N/A	\$48,800
2004	No	\$37,900	\$37,900	\$37,900	N/A	\$37,900
2003	No	\$37,600	\$37,600	\$37,600	N/A	\$37,600
2002	No	\$22,800	\$22,800	\$22,800	N/A	\$22,800
2001	No	\$20,400	\$20,400	\$20,400	N/A	\$20,400
2000	No	\$20,100	\$20,100	\$20,100	N/A	\$20,100
1999	No	\$16,600	\$16,600	\$16,600	N/A	\$16,600
1998	No	\$16,900	\$16,900	\$16,900	N/A	\$16,900
1997	No	\$16,900	\$16,900	\$16,900	N/A	\$16,900
1996	No	\$15,400	\$15,400	\$15,400	N/A	\$15,400

2023 Tax Information[2023 Tax Bill](#)Tax District: [TS](#)

2023 Final Millage Rate 18.7612

Do not rely on current taxes as an estimate following a change in ownership. A significant change in taxable value may occur after a transfer due to a loss of

Ranked Sales [\(What are Ranked Sales?\)](#) [See all transactions](#)

Sale Date	Book/Page	Price	Q/U	V/I
26 Jan 2023	22328 / 0522	\$200,100	Q	I
26 Jul 2021	21658 / 0923	\$380,000	M	I

[exemptions, reset of the Save Our Homes or 10% Cap. and/or market conditions.](#)

Please use our new [Tax Estimator](#) to estimate taxes under new ownership. **2023 Land Information**

Seawall: No

Frontage:

View: None

Land Use	Land Size	Unit Value	Units	Total Adjustments	Adjusted Value	Method
Single Family (01)	27x120	3850.00	27.5000	1.1625	\$123,080	FF

[\[click here to hide\]](#) **2024 Building 1 Structural Elements** [Back to Top](#)

Site Address: 158 READ ST

Building Type: **Single Family**

Quality: **Fair**

Foundation: **Continuous Footing Poured**

Floor System: **Wood**

Exterior Wall: **Frame Siding**

Roof Frame: **Gable Or Hip**

Roof Cover: **Shingle Composition**

Stories: **1**

Living units: **1**

Floor Finish: **Carpet/ Vinyl/Asphalt**

Interior Finish: **Drywall/Plaster**

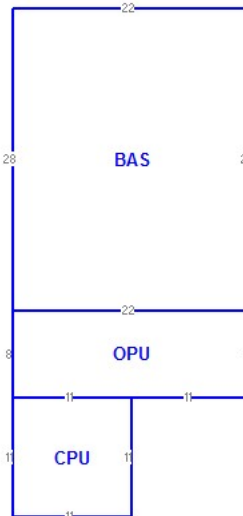
Fixtures: **3**

Year Built: **1920**

Effective Age: **39**

Heating: **Central Duct**

Cooling: **Cooling (Central)**



[Compact Property Record Card](#)

[Open plot in New Window](#)

Building 1 Sub Area Information

Description	Living Area SF	Gross Area SF
Open Porch Unfinished (OPU)	0	176
Carport Unfinished (CPU)	0	121
Base (BAS)	616	616
Total Living SF: 616		Total Gross SF: 913

[\[click here to hide\]](#) **2024 Extra Features**

Description	Value/Unit	Units	Total Value as New	Depreciated Value	Year
No Extra Features on Record					

[\[click here to hide\]](#) **Permit Data**

Permit information is received from the County and Cities. This data may be incomplete and may exclude permits that do not result in field reviews (for example for water heater replacement permits). We are required to list all improvements, which may include unpermitted construction. Any questions regarding permits, or the status of non-permitted improvements, should be directed to the permitting jurisdiction in which the structure is located.

Permit Number	Description	Issue Date	Estimated Value
No Permit Data Found			





If you are experiencing [issues with this map loading](#), you may need to clear your web browsing history, then close and restart your web browser.

[Interactive Map of this parcel](#) [Map Legend](#) [Sales Query](#) [Back to Query Results](#) [New Search](#) [Tax Collector Home Page](#) [Contact Us](#)

Crane Brook, Incorporated
 623 East Tarpon Ave.
 Tarpon Springs Florida 34689

ESTIMATED COSTS

Date	PROJECT
4/16/2024	ELEVATE / REPAIR

CUSTOMER
405 Inness Drive Tarpon Springs FL 34689

LOCATION
158 Read Street Tarpon Springs, FL 34689

ITEM	DESCRIPTION
DESIGN	DESIGN AND PLANS FOR PERMITTING
ENGINEERING	STRUCTURAL ENGINEERING
ENVIRONMENTAL	TESTING FOR LEAD AND ASBESTOS, ABATEMENT IS NOT INCLUDED
01 FOOTERS	WORK UNDER THE EXISTING HOME
CMU WALLS	WALLS TO 3 FT
02 SOIL TREAT	TERMITE TREATMENT OF SOIL ONLY
03 SLAB	NONE
DEMOLITION	SELECTIVE DEMOLITION OF FRONT PORCH AND CARPORT
DEMOLITION	EXISTING FRAME, SIDING, ELEC. PLUMB ECT
FRAME LABOR	BUILD FLOOR SYSTEM, REBUILD EXIST EXT WALLS TO ATTACH TO NEW FLOOR JOIST
FRAME MATERIALS	FLOOR SYSTEM
DRYWALL	REMOVE/REPLACE ALL INTERIOR DRY WALL
INSULATION	INSTALL WALLS AND CEILING
SIDING	REPAIRS TO EXISTING SIDING
CABINETS	SMALL KITCHEN INCLUDING COUNTER TOP
PAINT	INTERIOR AND EXTERIOR
STUCCO	INSTALL STUCCO ON THE NEW FOUNDATION
EXTERIOR DOORS	NEW EXTERIOR DOORS, MATCH HISTORICALLY
DECKING LABOR	BUILD PORCH AND STAIRS FOR EGRESS
DECKING MATERIAL	PORCH
HVAC	
INTERIOR DOORS	INTERIOR DOORS AND TRIM
ROOFING	REMOVE AND REPLACE
FLOORING	VINYL PLANK
PLUMBING	PLUMBING OF NEW BATH AND KITCHEN
PLUMBING FIXTURES	BATH AND KITCHEN FIXTURES
SEWER CONNECTION	NEW SEWER LINE
ELECTRICAL CONNE...	NEW UNDERGROUND/DUKE RESIDENTIAL
ELECTRICAL	WIRING AND OUTLETS TO CODE
LIGHTING	FIXTURES AND FANS
MISCELLANEOUS	TO RAISE THE HOUSE
WALKS/PADS	DRIVE AND WALKS
EXCAVATION	SILT FENCE, ROUGH AND FINAL GRADE, COMPACTION TESTING, DRIVE CUT
TOTAL	

Crane Brook, Incorporated
623 East Tarpon Ave.
Tarpon Springs Florida 34689

ESTIMATED COSTS

Date	PROJECT
4/16/2024	ELEVATE / REPAIR

CUSTOMER
405 Inness Drive Tarpon Springs FL 34689

LOCATION
158 Read Street Tarpon Springs, FL 34689

ITEM	DESCRIPTION
WINDOWS LANDSCAPING UNFORSEEN PROFIT & OVERHEAD SUPERVISION ORIGINAL COST	WINDOWS IRRIGATION AND LANDSCAPING MISCELLANEOUS 5% OF SUB TOTAL 289885 PROFIT AND OVERHEAD SITE SUPERVISION PURCHASE PRICE \$200,000 AS PER TAX RECORDS
TOTAL	\$565,862.00

158 READ STREET / REPORT OF EXISTING CONDITIONS

CRANE BROOK INCORPORATED CBC1252143
623 EAST TARPON AVE. TARPON SPRINGS FL 34689

THE STRUCTURE IS CURRENTLY CONFIGURED AS A 1 BED / BATH ROOM UNIT. NO PERMITS WERE ISSUED FOR IMPROVEMENTS AS PER THE PINELLAS COUNTY TAX RECORDS.

FOUNDATION: 4" +/- SLAB ON GRADE SELECTIVE REMOVAL FOR ADDITION OF NEW FOUNDATION

WALLS: 2 X 4 WOOD FRAME, 75% REPLACEMENT REQUIRED
[ORIGINAL AND NEWER, FLOOD, WOOD ROT AND TERMITE DAMAGE IS PRESENT]

FIBERGLASS INSULATION, 100% REPLACEMENT REQUIRED
[FLOOD DAMAGED AND DEGRADING CONDITION, MOLD IS VISUALLY PRESENT.
A PLASTIC VAPOR BARRIER FOUND INSTALLED IN THE WALLS UNDER THE DRYWALL
APPEARING IN THE LATE 80'S AS A STANDARD CONSTRUCTION PROCEEDURE]

SIDING WOOD SHINGLE 30% REPLACMENT REQUIRED

ROOF: CONVENTIONALLY FRAMED RAFTERS 100% STRUCTURAL REINFORCEMENT REQUIRED
[MATERIAL IS UNDERSIZED FOR SPANS, THE CONDITION IS POOR AND HAS SUSTAINED
WATER, MOLD, AND TERMITE DAMAGE]

ROOF DECKING, 100 % REPLACEMENT REQUIRED

ROOFING 100% REPLACEMENT REQUIRED
[MATERIAL COULD CONTAIN ASBESTOS, WATER STAINING THROUGHOUT THE ATTIC]

FINISHES: DRY WALL, 100% REPLACEMENT REQUIRED, FLOOD DAMAGED, PARTIALLY REMOVED
FLOORING, NONE
NO CURRENT KITCHEN, BATH HAS NON FUNCTIONING FIXTURES

MILL WORK: 1 X 3 WOOD BASE, 100% REPLACEMENT REQUIRED, FLOOD DAMAGED, PART. REMOVED
WINDOWS AND CASINGS 100% REPLACEMENT REQUIRED WOOD, NON FUNCTIONAL

ELECTRICAL: 100% REPLACEMENT NEWER PANEL AND ROMEX WIRING, NON FUNCTIONING DUE TO
SALT WATER COMPROMISE OF ALL WIRING AND DEVICES

HVAC: 100% REPLACEMENT REQUIRED

STRUCTURE IS IN OVERALL POOR CONDITION AND IT HAS NOT BEEN MAINTAINED THROUGH OUT ITS
LIFE TIME. FLOODING HAS HAPPENED MULTIPLE TIMES AND AS RECENTLY AS LAST SUMMER. THE
STRUCTURE WOULD REQUIRE A COMPLETE REMOVAL OF ALL FINISHES DOWN TO THE WOOD FRAME OF
WHICH MOST FRAMING MEMBERS REQUIRE REPLACING. 70% OF THE SIDING AND 25% OF THE EXTERIOR
WALL IS ALL THAT WAS FOUND TO HAVE ANY SLIGHT INTEGRITY. THE STRUCTURE IS A BASIC RETANGLE
OF 22' X 28' WITH AN 8' OPEN PORCH.

158 READ STREET / SCOPE OF WORK

CRANE BROOK INCORPORATED CBC1252143
623 EAST TARPON AVE. TARPON SPRINGS FL 34689

TO ELEVATE THE STRUCTURE, CONSTRUCT A BLOCK FOUNDATION APPROX 3' HIGH IN ORDER TO REMAIN VISUALLY IN KEEPING WITH THE SURROUNDING NEIGHBORHOOD.

NOTE: THIS SITE IS LOWER THAN MOST OF THE SURROUNDING PROPERTIES. THE HIGHER GRADES AND THE GRANITE CURBS OF THE SURROUNDING LOTS TO THE EAST MAY HAVE HELPED IN PREVENTION OF FLOODING.

EXISTING LOWEST LIVING = 4 FT

RAISING 3 FT MAXIMUM IN KEEPING WITH THE NEIGHBORHOOD

NEW LOWEST LIVING = 7 FT. /REMAINS 3 FT BELOW THE REQUIRED BFE
FREE-BOARD ELEVATION OF 10'.

IT IS OF MY OPINION THE FOLLOWING:

1. A PARTIAL RAISING AND REPAIR OF THIS STRUCTURE TO REMAIN IN KEEPING WITH THE NEIGHBORHOOD, THE POTENTIAL FOR FLOODING REMAINS
2. PROPERTY MAY REMAIN UNINSURABLE
3. RAISING TO MEET THE BFE WOULD NOT BE IN KEEPING WITH THE LOOK OF THE NEIGHBORHOOD
4. IN ORDER TO BE BROUGHT TO CODE COMPLIANCE FOR USE AS A SINGLE FAMILY DWELLING FULL REPLACEMENT OF ALL MATERIALS IS REQUIRED MAKING RESTORATION IRRELEVANT
5. STRUCTURE DOES NOT HAVE ANY SIGNIFICANT HISTORICAL DETAILS THAT ARE DIFFICULT TO REPRODUCE
6. EXISTING STRUCTURE FLOODS DURING NON-STORM AND STORM RELATED EVENTS.
7. MATERIALS HAVE EXCEEDED THEIR USEFULNESS AND HAVE NOT BEEN REPAIRED OR MAINTAINED
8. CURRENT STRUCTURAL ELEMENTS DO NOT MEET ANY BUILDING, ELECTRICAL, PLUMBING OR MECHANICAL CODES
9. LOT SIZE IS RESTRICTIVE USE AT 27.5' WIDE
10. COSTS TO REPAIR AND PARTIALLY ELEVATE ARE ESTIMATED AT \$365,862 PLUS THE PURCHASE PRICE OF \$200,000 (AS PER THE TAX RECORDS).
A TOTAL COST OF \$565,862 FOR 616 SQ FT OF LIVING SPACE IS UNABLE TO CREATE AN ECONOMIC RETURN



CITY OF TARPON SPRINGS
HERITAGE PRESERVATION BOARD
June 3, 2024

STAFF REPORT, April 29, 2024

Application No. / Project Title: 24-22 / Nomiki Vavlas
Staff: Caroline Lanford, AICP CTP
Principal Planner
Applicant / Owner: Nomiki Vavlas
Property Size: 7,100 square feet (building)
Current Zoning: T5b (Tarpon Ave Main Street)
Future Land Use: Community Redevelopment District
Location / Parcel ID: 20-26 Hibiscus Street / 12-27-15-64998-000-0031
Architectural Type/District Status: Masonry Vernacular/Contributing

BACKGROUND SUMMARY

The applicant is seeking an after-the-fact Certificate of Approval (CA) to replace the existing storefronts at 20-26 Hibiscus Street. All storefronts at the contributing structures at 20-26 Hibiscus Street have been replaced with new aluminum framed display windows, aluminum framed single-entry doors, and 12 new aluminum framed windows have been added.

The masonry vernacular commercial structure with three storefronts at 26, 24, and 22 Hibiscus Street were constructed circa 1913. The masonry vernacular commercial structure at 20 Hibiscus Street was constructed circa 1919 with a matching storefront. The Florida Master Site File (FMSF) for this building (8PI11771) and Sanborn maps note past use of 20 Hibiscus Street as the *Tarpon Springs Leader* newspaper. The FMSF also notes that the storefront second from the south end (22 Hibiscus Street) was "intact" as of July 2009. The building was stuccoed in the 1980s and three of the four storefronts were altered.

The applicant was issued a Certificate of Approval (CA) for application 22-139 at the regular meeting of the Heritage Preservation Board (HPB) on March 6, 2023, after the applicant had commenced work on the contributing property without HPB approval or building permits. The HPB approved the request to replace windows and doors at the storefronts as presented in the application with the following conditions:

1. Maintain the existing recessed configuration of the two remaining alcove entryways.
2. The cornice will be restored.
3. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.



It was discovered through the inspection process that what has been constructed is substantially different from the plans presented at the March 2023 HPB meeting:

1. 12 new windows (3 above each storefront) were added.
2. Single entry doors were utilized for each storefront, rather than double entry doors as noted in the March 2023 plans.
3. Additional aluminum framing was added to all storefront windows that was not included in the March 2023 application.
4. The original storefront cornice has been stuccoed over, rather than restored as shown in the March 2023 application and included in the conditions of the March 2023 CA.
5. Signage has been erected that was not included in the March 2023 plans.
6. The depth of the alcove entryway at 22 Hibiscus Street has been reduced from its original configuration.
7. Reflective glass has been used on all storefronts, in conflict with the requirements of Chapter 4.3.b of the *Transect-Based Infill Code For The Sponge Docks And Community Redevelopment Area* ("Smart Code") to use clear glass.

The construction does not comply with the conditions of the CA, has added elements that were not included in the original after-the-fact CA application, and does not comply with applicable codes.

A hold was placed on the building permit in October 2023, and the applicant was notified that they could either comply with the CA or present the modified project for HPB review. On October 26, 2023, the applicant's agent emailed Planning and Zoning staff (emails attached) and stated the following justifications for their inability to comply with the condition of the CA to restore the storefront cornice:

One of the chief reasons is that the steel beam is recessed back behind the facade by approximately 3". If it were exposed, it would allow water intrusion from the top of the beam and the bottom of the beam.

There is wood framing in front of the rosette beam that supports the brick above it. We had to apply Struatalath in order to keep the brick from falling off of the facade. So the Struatalath and the framing in front of the steel beam actually support the brick and the stucco and that makes up the entire facade. Essentially, we would have had to re-engineer the entire facade to expose the beam, and also manipulate everything above it, including the parapit wall and the roofing.

Even if it was possible to expose the steel beam to the public, we would be opening up another whole can of worms where the EPA is concerned. The beam would have to be cleaned by sandblasting under negative air pressure in a contained environment. Most likely, you would have to shut down the street because of the lead paint and the dust. After all this, the exposure of the I-beam would oxidize. Oxidisation produces rusting, flaking and scaring and can severely weaken metals left exposed to the elements. Please consider the attached letter where the exposure of the steel beam is concerned.



Staff responded that they could comply with the conditions of the CA or would need to present the modified project to the HPB for consideration.

Staff offers the following response to the emailed justification:

- The storefront cornice is behind the façade because the original brick façade has been stuccoed over. There are architecturally appropriate solutions to prevent water intrusion that could have been explored.
- Alternatives structural solutions to the wood framing over the storefront cornice should have been explored with City staff.
- The basis for the presence of lead is unsubstantiated. While the storefront cornice is likely to have been painted or coated with lead-based materials at some point in its lifespan, no factual evidence was produced to corroborate this conjecture.
- The assertion that the only option for restoration is dry sandblasting under negative air pressure in a contained environment is also unsubstantiated (see attached letter from the applicant's agent and Preservation Brief from the National Park Service). A similar storefront cornice at 151 East Tarpon was restored with sealing and painting in 2015. When the subject storefront cornice was partially exposed, it appeared in good condition and no oxidation was visible.
- Oxidation is a serious concern with cast iron architectural elements. Proper treatment and maintenance can combat this concern (see attached Preservation Brief).

Article VII § 114.00 of the City of Tarpon Springs Comprehensive Zoning and Land Development Code ("Land Development Code") notes:

(B) Violations of the terms of this Article shall be processed in accordance with the requirements established by Chapter 2, Article VIII of the Code of Ordinances for the City of Tarpon Springs, or any other applicable legal means.

(C) The violation of any conditions attached to any approval granted by the Heritage Preservation Board of any violation of any type of approval under this Article shall be considered a violation of this Code.

Therefore, the subject construction activities are subject to referral to the Code Enforcement Board.

PRELIMINARY STAFF RECOMMENDATION:

Staff recommends **denial** of the project as presented by the applicant, based on substantial inconsistency with the review criteria as detailed in this staff report. The subject construction activities have replaced historic storefronts with contemporary-styled storefronts, in direct and significant conflict with the Secretary of the Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*, Article VII of the Land Development Code, the Smart Code, and the Historic Preservation Element of the Comprehensive Plan. Additionally, the subject construction activities exhibit repeated disregard for lawful procedure and the powers and duties of the HPB.

If the HPB grants the CA, the following conditions are recommended:

1. The project is ineligible for Community Redevelopment Area Façade Improvement Grant funds.



2. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.

HISTORIC DISTRICT CONSIDERATIONS:

1. When considering this application, the Heritage Preservation Board (Board) is encouraged to refer to the Historic District Design Review Guidelines Manual (DRGM), especially Guidelines 1, 2, 3, 4, 5, 8, 9, 14, 75, 76, 77, 78, 80, 81, and 86. The DRGM can be accessed at the following link: <https://www.ctsfl.us/wp-content/uploads/2021/03/Historic-District-Design-Review-Guidelines-Manual.pdf>
2. The applicant has not submitted sufficient evidence supporting the infeasibility of constructing the project consistent with the March 2023 CA.
3. The project demolished the existing storefront and replaced it with storefronts inconsistent with the original building type and style.
4. At a minimum, the subject activities have resulted in the structure being a “contributing altered” resource in the local historic district. It is likely that the structure no longer contributes to the National Register Historic District, as architectural details have been destroyed and obscured to the extent that the structure no longer conveys its historical association.

REVIEW STANDARDS / STAFF ANALYSIS – CERTIFICATE OF APPROVAL

Pursuant to Section 109.01, Standards for Review:

- (A) It shall be the intent of this Article to promote maintenance, restoration, adaptive reuses appropriate to the property, and compatible contemporary designs that are harmonious with the exterior and landscape features of neighboring buildings, sites, and streetscapes.
- (B) In reviewing an application for a Certificate of Approval, the Board shall consider the following criteria:

(1) The height and width of any proposed alteration or new construction shall be consistent with that of adjacent contributing structures and with those structures of similar character and architectural style found throughout the immediate neighborhood or the district.

ANALYSIS: The subject construction activities demolished the storefronts at this contributing property. The masonry vernacular commercial building type and style typically feature the recessed main entrance storefront with large dominant fixed glass windows (DRGM pages 19 and 36-37) as was previously exhibited at the 22 Hibiscus Street storefront at the subject property. There are six other examples of this early storefront design along this block of East Tarpon Avenue. The subject construction activities significantly alter the height and width of the existing facade features.

(2) The width and height of windows, doors, and entries shall be consistent with the character of the building's original architectural style. Repair or replacement of missing architectural features such as windows, mullions, doors, entries, hand rails, etc., should be based on accurate duplications, substantiated by historic, physical or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

ANALYSIS: The applicant replaced entries, windows, and doors with a contemporary storefront. The building no longer conveys its historical association. Replacements were not based on duplications of original architectural components.



Section 4.18 of the DRGM, "Additional Guidelines for Commercial Properties," especially Guidelines 75 through 81, should be consulted. Especially relevant are the following stated guidelines concerning storefront features:

- Guideline 75.e states, "Maintain the historic layout of commercial storefronts."
- Guideline 75.f states, "Maintain the window and door pattern of the storefront. Historic entrances were typically flanked by glass display windows."
- Guideline 76.a states, "Maintain and restore character-defining features of your commercial building. Character defining features include historic storefronts, transoms, signboards, bulkheads, windows, cornices, and other architectural details."
- Guideline 77.a states, "Preserve or restore the historic size and configuration of glass display windows where possible."
- Guideline 77.c states, "Storefront windows should retain their historic material and be consistent with the prominent styles and eras of the building."
- Guideline 77.f states, "Retain the panel that is located below the display window. Where replacement is necessary, use wood, stone, or painted metal and coordinate the color with the historic color scheme of that of other storefront elements."
- Guideline 80.a states, "Maintain recessed entries where they exist."

Based on the above guidance and the existing documentation available for this building, the proposed storefront replacement is found to be inconsistent with the character of the building's original architectural style.

(3) The relationship of a structure within an historic or cultural preservation district to the open space between it and the street and to other buildings or scenic views, vistas or streetscapes characterizing the area, shall be protected through a site plan review process addressing setbacks, roof lines, garage placement, parking and access analysis and the use of landscaping.

ANALYSIS: The relationship of the structure with the character and active pedestrian experience along Hibiscus Street has been significantly adversely affected by the subject construction activities. Historically, recessed storefronts functioned as a transitional area that expanded the influence of the business into the public realm, allowing for greater pedestrian interaction with the business, providing temporary respite for patrons and passersby during inclement weather, and protecting the interior of the store from the elements while providing additional areas for merchandise display. While two storefronts retain a recessed configuration, the dark aluminum framing and reflective glass provide a monotonous aesthetic of an unoriginal, suburban quality that is out of character with the vibrant streetscapes that compose the National Register Historic District.

(4) The shape and texture of the roof shall replicate the shape, texture and type of roof distinguishing the building's original architecture and on structures of similar style and age within the Historic and Cultural Preservation District.

ANALYSIS: Not applicable to this application.

(5) The size and mass (or shape) of the building after alteration shall be reflective of the building's original architectural style. The size and mass (or shape) of a proposed structure (new construction) should reflect the character of contributing buildings within the District as well as those immediately



surrounding the subject property and shall include review of architectural elements such as roof lines, fenestration, and other components of facade design.

ANALYSIS: The building's massing has been adversely altered through the reduction of the alcove space at the recently original storefront at 22 Hibiscus Street. The current façade design is inconsistent with the original architectural style.

(6) Landscaping shall be utilized as a means to enhance the architectural character and appearance of the structure or traditional cultural property and to protect and define open spaces and pedestrian ways within Historic and Cultural Preservation Districts.

ANALYSIS: Not applicable to this project.

(7) Distinctive architectural features shall be repaired rather than replaced, wherever possible. Architectural details, including color, materials, texture, and site lighting shall be treated so as to make the building, structure, or traditional cultural property consistent with the property's original architectural style and character. New materials should replicate the material being replaced in composition, design, color, texture and other visual qualities.

ANALYSIS: The subject construction activities have destroyed and obscured distinctive architectural features. The intact alcove storefront at 22 Hibiscus Street has been destroyed. The remaining altered storefronts that conveyed a connection with the historic character of the subject structure have been replaced with generic contemporary storefronts. The original storefront cornice has been obscured under wood framing and stucco. The unsympathetic destruction and concealment of these architectural features is not in compliance with this standard and is inconsistent with the DRGM. The subject construction activities did not attempt to replicate the property's original architectural style and character with appropriate materials.

(8) All buildings, structures, sites and traditional cultural properties shall be recognized as products of their own time. Alterations, modifications or other changes to a structure or traditional cultural property shall not attempt to create an earlier appearance than the original date of construction. Changes that may have taken place in the course of time are evidence of the history and development of the subject property and may have acquired significance in their own right. This significance shall be recognized and respected.

ANALYSIS: The previous alterations on the two northern storefronts retained wood doors and transoms, preserving some of the architectural details of the original structure. The altered storefront at 20 Hibiscus Street replaced the bulkhead, mullions, entrance doors, and transoms but retained the alcove entrance configuration with display windows. While these alterations may or may not have achieved significance in their own right, they retained some of the original architectural features and conveyed a connection to the historic character of the structure.

(9) The renovation of contributing structures in an historic or cultural district or designated sites shall meet the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.

ANALYSIS: The project does not meet the Secretary's standards, in particular:



2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. New additions, exterior alterations, or related new construction will not destroy historic materials, 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.

(10) The proposed project shall conform to other requirements of this Code and be in compliance with the applicable goals, objectives, and policies of the Comprehensive Plan.

ANALYSIS: The subject construction activities do not conform with the requirements of the Land Development Code, the Smart Code, or the Historic Preservation Element of the Comprehensive Plan.

(11) The impact upon archaeological sites shall preserve the integrity of the site.

ANALYSIS: No archaeological sites were impacted.

PUBLIC CORRESPONDENCE:

The property owners within 500 feet were sent written notification in accordance with Section 109.00(B) of the City of Tarpon Springs Comprehensive Zoning and Land Development Code. Staff has not received any responses to these notices.

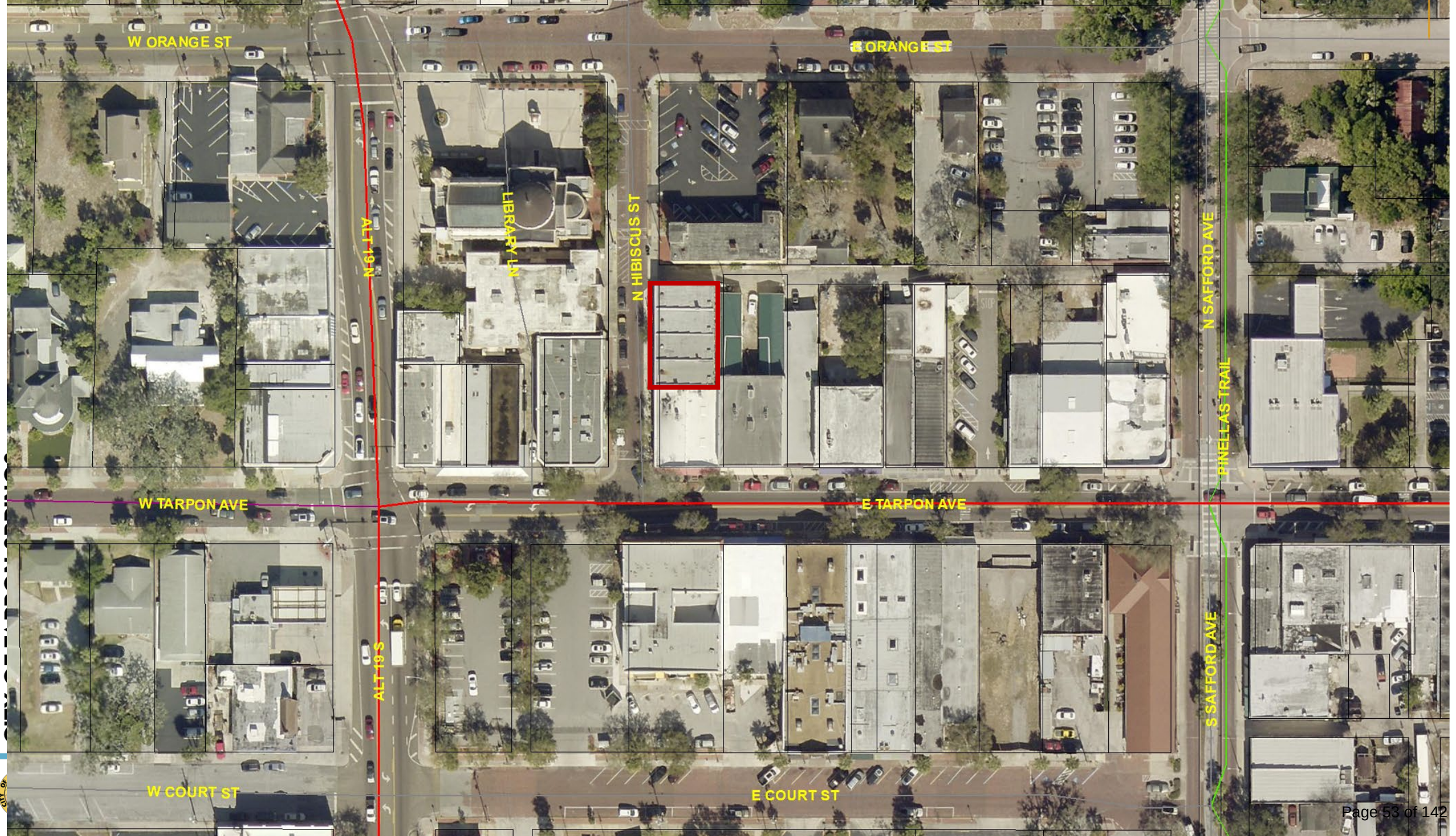
ATTACHMENTS:

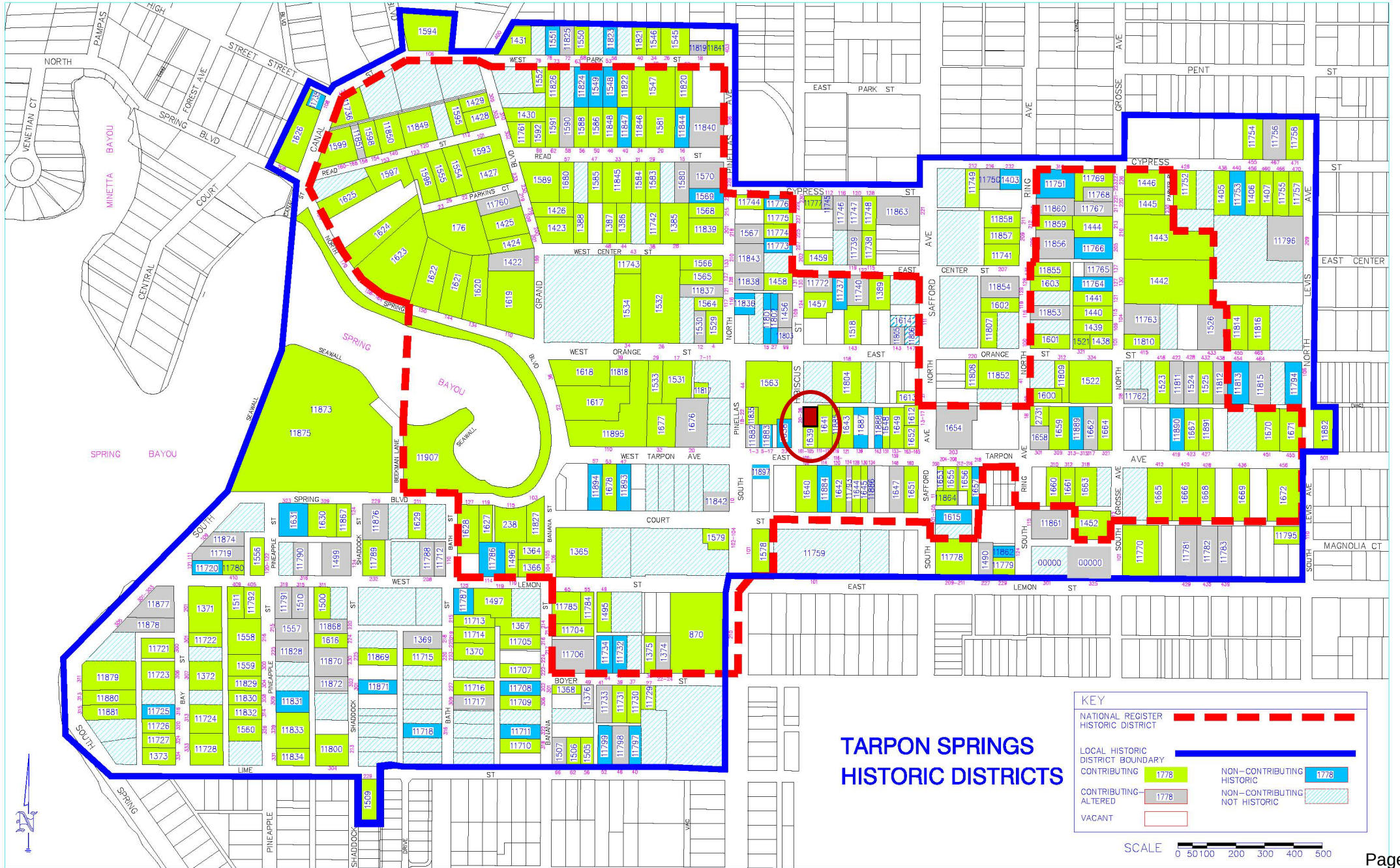
1. Slide Presentation
2. Florida Master Site File Form #8PI11771
3. Preservation Briefs 27, *The Maintenance and Repair of Architectural Cast Iron*
4. Email correspondence with the applicant and the applicant's agent
5. Application and supporting materials

VAVLAS APPLICATION #24-22

Heritage Preservation Board, May 6, 2024







REQUEST

- After-the-fact Certificate of Approval for replacement of the storefront facade at 20-26 Hibiscus Street.
- Lot Size (front building): approximately 4,000 square feet
- Architectural Type/Style: one-part masonry vernacular storefront
- District Status: Contributing
- Florida Master Site File No. 8PI1639
- Applicant / Owner: Nomiki Vavlas

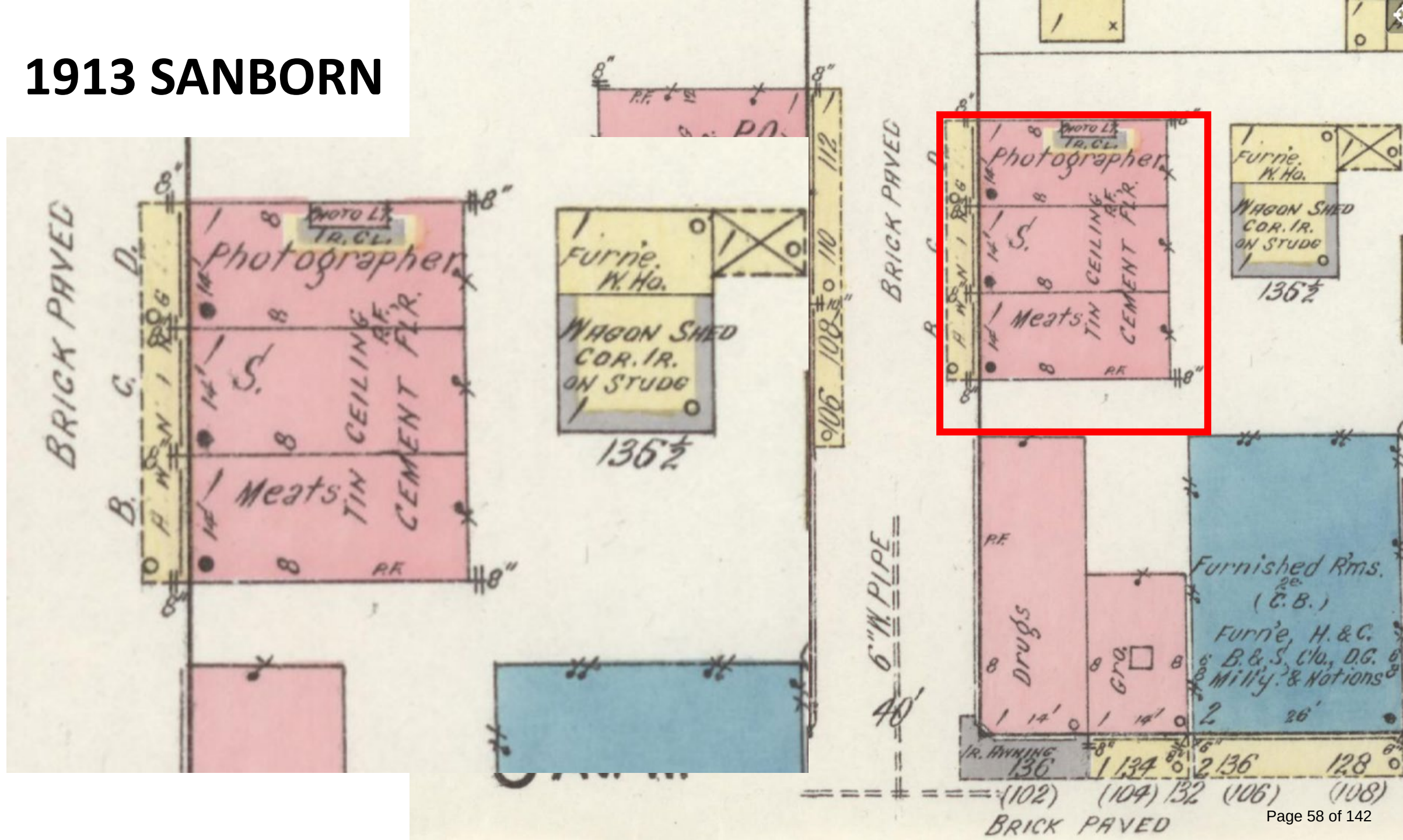




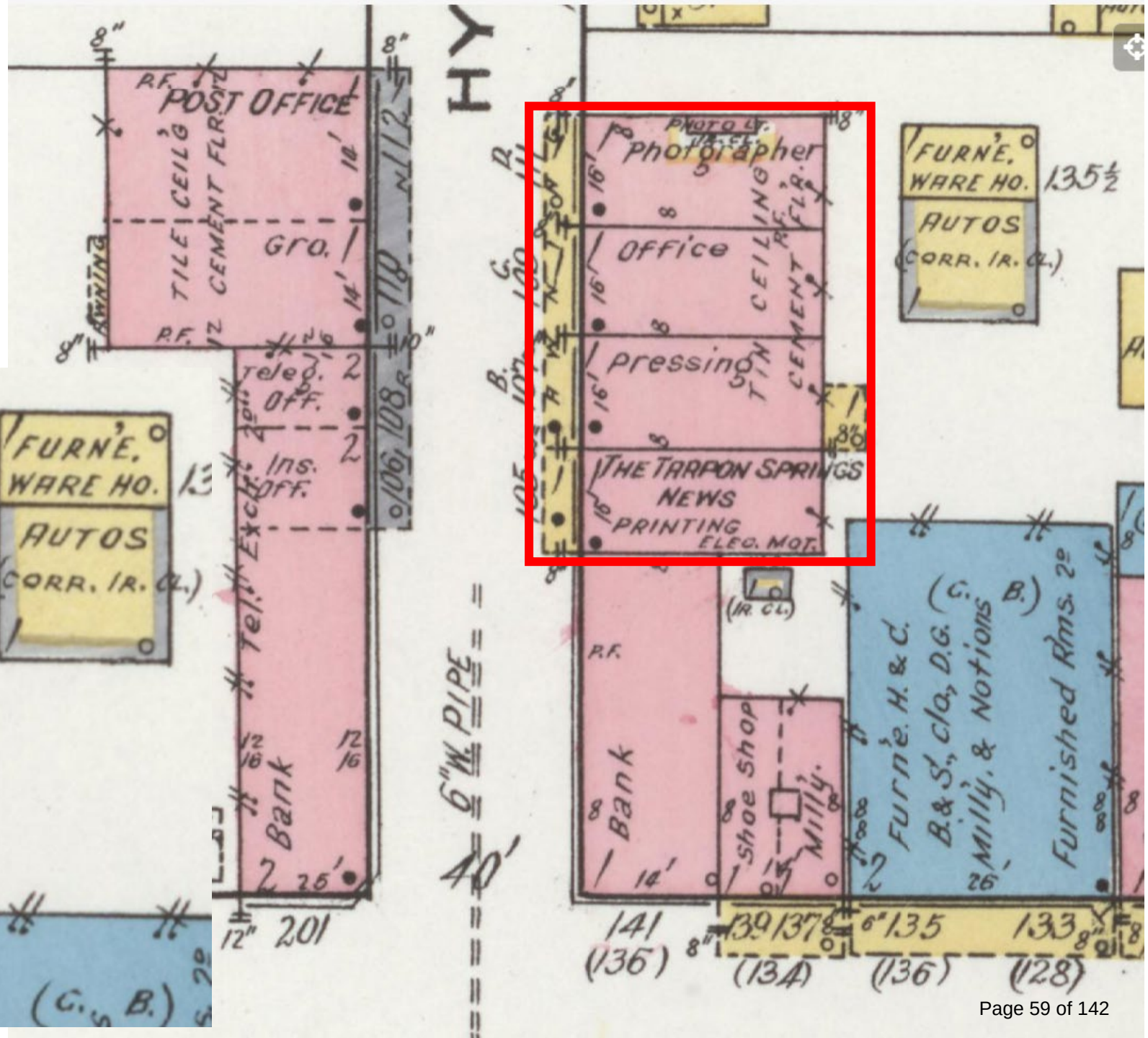
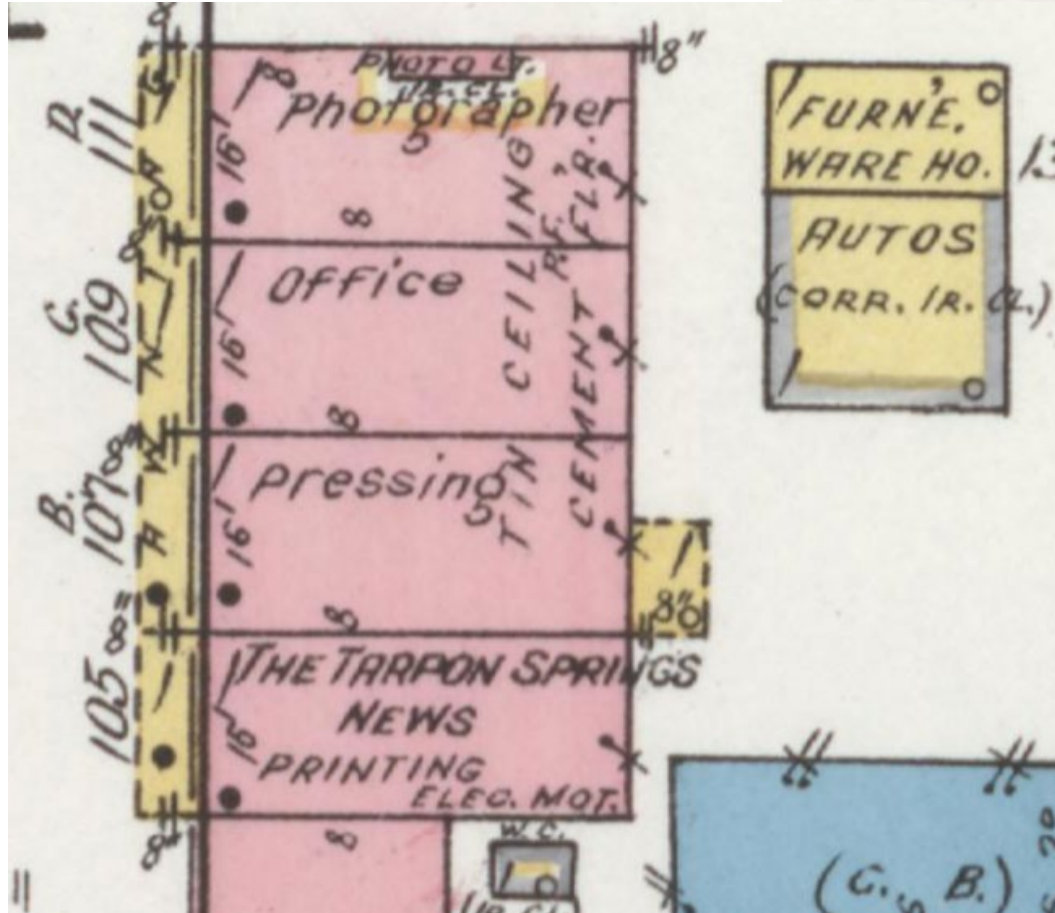
FLORIDA MASTER SITE FILE



CITY OF TARPON SPRINGS
PLANNING & ZONING DEPARTMENT

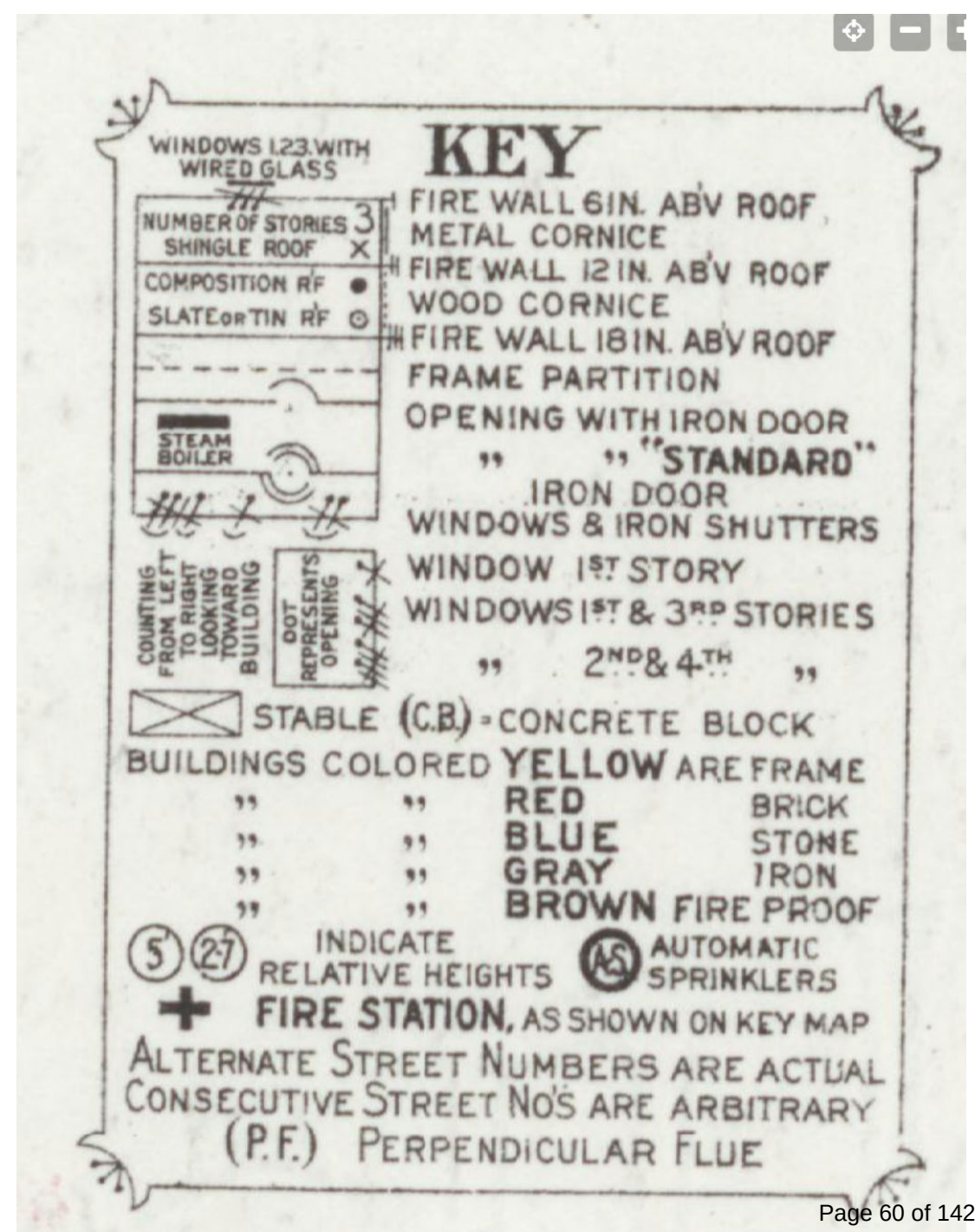
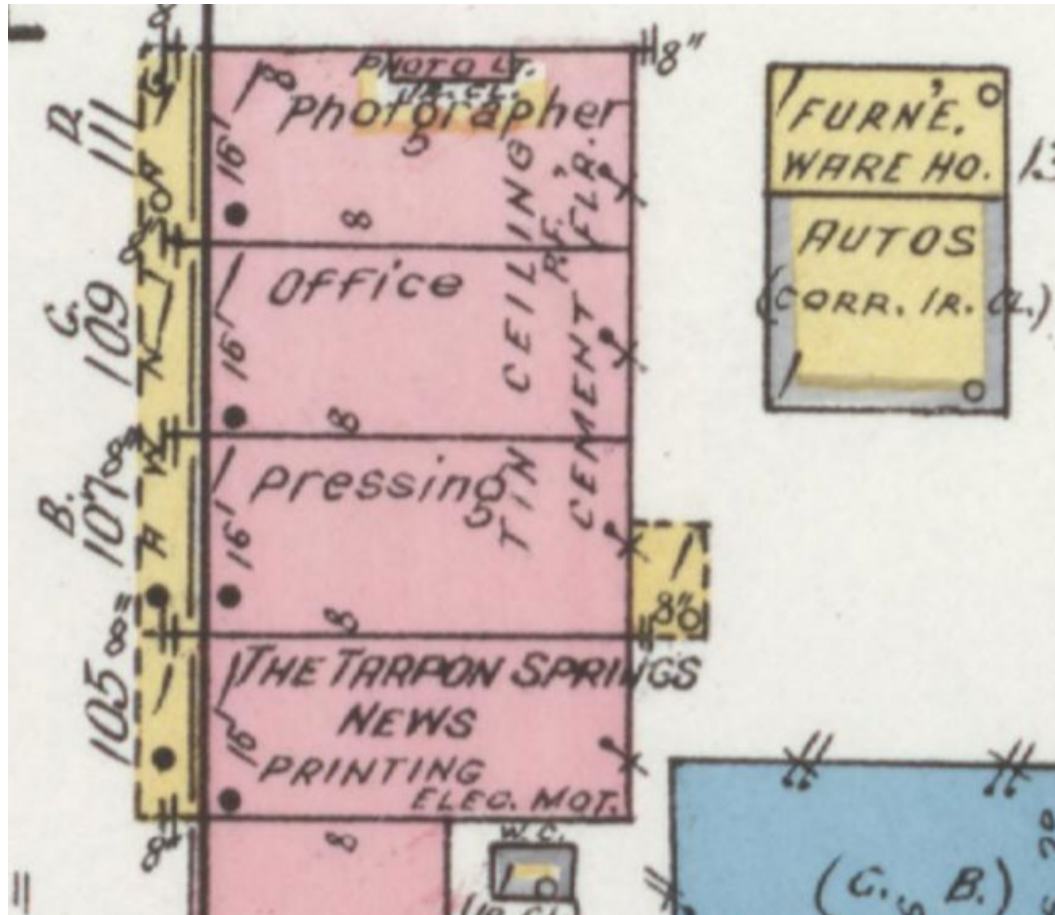


1919 SANBORN





1919 SANBORN



ELEVATION PRESENTED WITH MARCH 2023 APPLICATION FOR CA





BACKGROUND 20-26 HIBISCUS STREET

- 11/21/2022 Renovation/Remodel Permit Application Submitted
- 11/22/2022 P&Z Approves
- 12/05/2022 Building Approves Remove/Replace Stucco
- 11/29/2022 HPB Application for a Certificate of Approval received to remove storefront door and fixed glass, reframe at 90-degree angle for additional interior space (the same as the work done at 101 E Tarpon Avenue that staff previously recommended for denial, but was approved by HPB)
- 12/13/2022 P&Z Conducts site review, notices work has begun, but storefront/glass is covered and does not appear altered
- 12/14/2022 Property owner calls P&Z to inform of revealed original façade under the stucco, wants to revise project to preserve
- 1/9/2023 Property owner notifies P&Z that they would like to revise the project to replace the storefronts rather than restore
- 3/6/2023 HPB issues conditional approval for storefront replacement
- 7/6/2023 Technical Review Committee approves the project as presented
- 10/13/2023 It is discovered that work is not within the parameters of the HPB CA
- 10/25/2023 The applicant is notified that they can either alter construction to conform with the CA or present the modified project to the HPB









STOREFRONT CORNICE

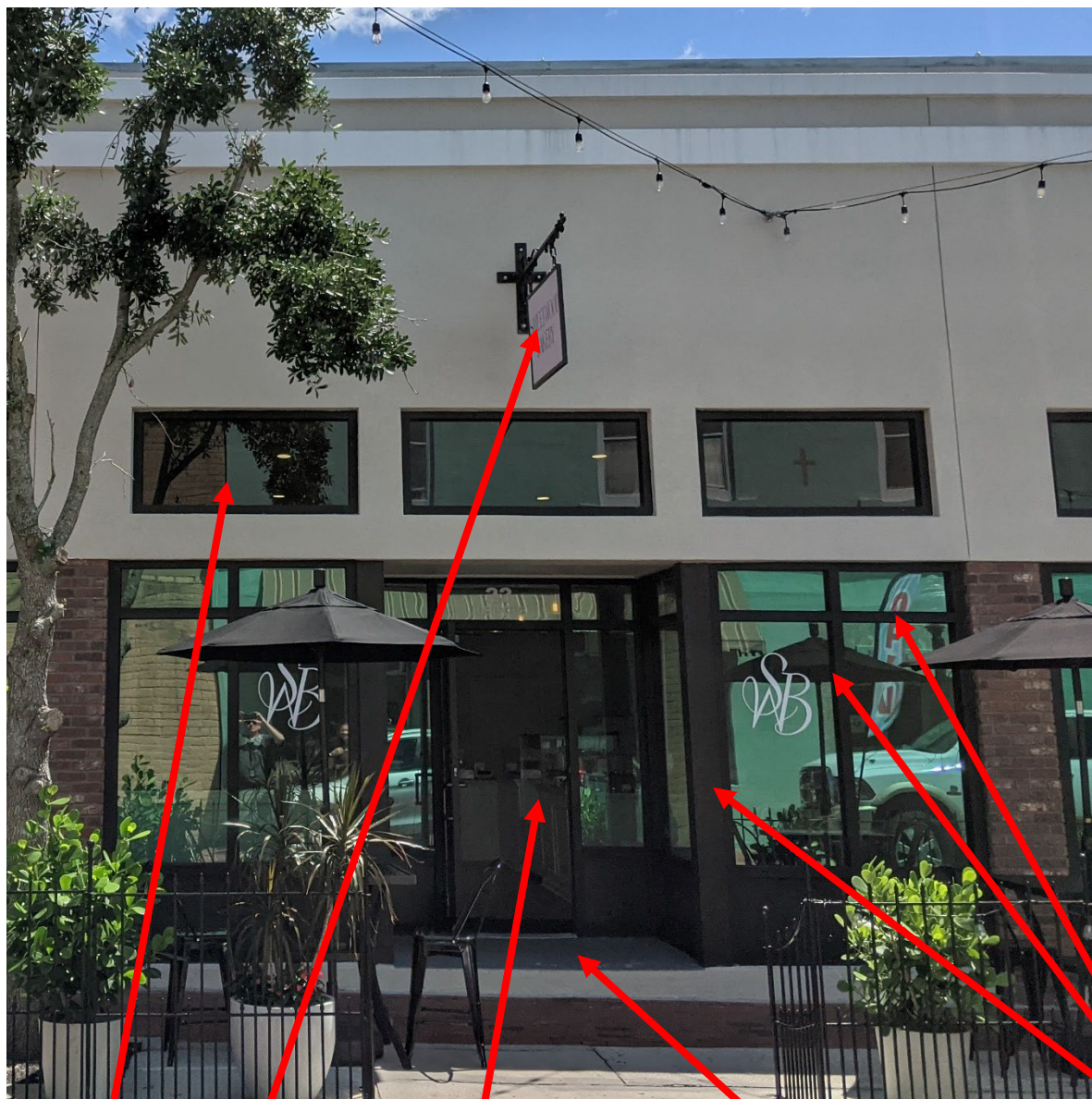
TRANSOM

DISPLAY WINDOW

ENTRANCE DOORS

**MULLION /
STRUCTURAL SUPPORT**

APRON / BULKHEAD



Window

Sign

Single Entry Door

Recessed Entry

Reduced

New/Widened
Mullions





151 E Tarpon Avenue was rehabilitated in 2015 with a similar storefront cornice. Restoration was achieved through sealing and painting.



STANDARDS FOR REVIEW – CERTIFICATE OF APPROVAL

- 1) New construction consistency.
- 2) Windows, doors and entries.
- 3) Neighborhood and district context.
- 4) Roof shape and texture.
- 5) Size and massing / shape.
- 6) Landscaping.
- 7) Architectural features.
- 8) Adherence to period of construction.
- 9) Adherence to Secretary's Guidelines.
- 10) Conformance with other City code requirements.
- 11) Impact upon archeological sites.



(1) The height and width of any proposed alteration or new construction shall be consistent with that of adjacent contributing structures and with those structures of similar character and architectural style found throughout the immediate neighborhood or the district.

The subject construction activities demolished the storefronts at this contributing property and significantly altered the height and width of the existing facade features.

(2) The width and height of windows, doors, and entries shall be consistent with the character of the building's original architectural style. Repair or replacement of missing architectural features such as windows, mullions, doors, entries, hand rails, etc., should be based on accurate duplications, substantiated by historic, physical or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

The applicant replaced entries, windows, and doors with a contemporary storefront. The building no longer conveys its historical association. Replacements were not based on duplications of original architectural components.



(3) The relationship of a structure within an historic or cultural preservation district to the open space between it and the street and to other buildings or scenic views, vistas or streetscapes characterizing the area, shall be protected through a site plan review process addressing setbacks, roof lines, garage placement, parking and access analysis and the use of landscaping.

ANALYSIS: The relationship of the structure with the character and active pedestrian experience along Hibiscus Street has been significantly adversely affected by the subject construction activities.

(5) The size and mass (or shape) of the building after alteration shall be reflective of the building's original architectural style. The size and mass (or shape) of a proposed structure (new construction) should reflect the character of contributing buildings within the District as well as those immediately surrounding the subject property and shall include review of architectural elements such as roof lines, fenestration, and other components of facade design.

ANALYSIS: The building's massing has been adversely altered through the reduction of the alcove space at the recently original storefront at 22 Hibiscus Street. The current façade design is inconsistent with the original architectural style.



(7) Distinctive architectural features shall be repaired rather than replaced, wherever possible. Architectural details, including color, materials, texture, and site lighting shall be treated so as to make the building, structure, or traditional cultural property consistent with the property's original architectural style and character. New materials should replicate the material being replaced in composition, design, color, texture and other visual qualities.

The subject construction activities have destroyed and obscured distinctive architectural features.

(8) All buildings, structures, sites and traditional cultural properties shall be recognized as products of their own time. Alterations, modifications or other changes to a structure or traditional cultural property shall not attempt to create an earlier appearance than the original date of construction. Changes that may have taken place in the course of time are evidence of the history and development of the subject property and may have acquired significance in their own right. This significance shall be recognized and respected.

The previously altered storefronts may or may not have achieved significance in their own right. However, they retained some of the original architectural features and conveyed a connection to the historic character of the structure.

ADHERENCE TO THE SECRETARY'S GUIDELINES

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

8. New additions, exterior alterations, or related new construction will not destroy historic materials, 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.



CONFORMANCE WITH CITY CODE REQUIREMENTS

- Article VII § 114.00 of the Land Development Code notes:
 - (B) Violations of the terms of this Article shall be processed in accordance with the requirements established by Chapter 2, Article VIII of the Code of Ordinances for the City of Tarpon Springs, or any other applicable legal means.
 - (C) The violation of any conditions attached to any approval granted by the Heritage Preservation Board or any violation of any type of approval under this Article shall be considered a violation of this Code.
- Reflective glass has been used on all storefronts, in conflict with the requirements of Chapter 4.3.b of the Smart Code to use clear glass.



PRELIMINARY STAFF RECOMMENDATION

Staff recommends **denial** of Application #24-22 based on substantial inconsistency with the review criteria. If the HPB grants the CA, the following conditions are recommended:

1. The project is ineligible for Community Redevelopment Area Façade Improvement Grant funds.
2. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.

The project was publicly noticed. No responses to the notices have been received.



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Consult Guide To Historical Structure Forms for detailed instructions

Site # 8PI11771

Recorder # 161

Recorder Date 2/16/09

Original ☒Update ☐

Site Name 20-26 N Hibiscus Street Other Names

Project Name Historic Resources Survey of Tarpon Springs

Historic Contexts Spanish-American War National Register Category Building

LOCATION and IDENTIFICATION

Address 20-26 N Hibiscus Street

Vicinity of E side of Hibiscus between Tarpon and Orange

City Tarpon Springs County Pinellas

Ownership Private-corporate Subdivision Block # Lot #

MAPPING

USGS Map TARPON SPRINGS Township 27S Range 15E Section 12

Quarter Qtr Qtr Irregular Section ☐ UTM Zone 17

Easting 327574 Northing 3114707 Land Grant Unknown

Latitude Longitude Plat or Other Map Aerial Photographs

HISTORY

Architect/Builder Unknown Construction Date 1913 Circa ☒Alterations ☒ Date c.1980+ Type/Location south storefront replaced, stucco applied, storefronts altered at north endAdditions ☒ Date c.1920 Type/Location south end store constructed to match existingMoved ☐ Original Location

Use Original Commercial Use Present Vacant

DESCRIPTION

Style Masonry Vernacular Exterior Plan Rectangular Interior Plan Unknown Stories 1

Structural System Concrete block Exterior Fabric Stucco

Foundation Slab Foundation Materials Poured concrete Foundation Infill N/A

No. of Porches 0 Locations/Features N/A

Main Entrance (stylistic details): four storefront entries, second from south end intact

Outbldgs. ☐ Number Nature/Location (Describe below)

Roof Type Shed Roofing Materials Built-up roof

Secondary Structures ☐ Comments Not applicable LocationChimneys ☐ Number 0 Orientation N/A Location N/A Material Not applicableWood Windows ☐ Type Light #Metal Windows ☒ Type Fixed Light # Storefront

Exterior Ornament fabric awnings

Condition Fair Surroundings Commercial

Narrative (general, interior, landscape, context; 3 lines only)

This building consists of four stores with continuous fabric awning and stucco bands at the parapet. Tarpon Springs News was located in the south store originally.

Archaeological Remains Present ☐ FMSF Archaeological Site Form Completed (if yes, attach) ☐

Consult Guide To Historical Structure Forms for detailed instructions

RECORDER'S EVALUATION OF SITE

Individually Eligible for National Register? Yes ☐ No ☒ Likely, Need Information ☐ Insufficient Information ☐Potential Contributor to Nat. Reg. District? Yes ☒ No ☐ Likely, Need Information ☐ Insufficient Information ☐

Areas of Significance

Community planning & development

Summary of Significance

This resource is an example of commercial architecture in Tarpon Springs during the Spanish-American War-era and is representative of the development of the City of Tarpon Springs. Although this building has undergone some minor alterations, the majority of architectural details remain and the overall historic massing is retained. Therefore, this building would be considered a contributing resource to the NRHP and Local Tarpon Springs Historic District.

DHR USE ONLY		OFFICIAL EVALUATIONS	DHR USE ONLY	
NR DATE ____/____/____	KEEPER-NR ELIGIBILITY ☐ yes ☐ no		Date	____/____/____
DELIST DATE ____/____/____	SHPO-NR ELIGIBILITY: ☐ yes ☐ no ☐ potentially elig. ☐ insufficient info		Date	____/____/____
	LOCAL DESIGNATION: _____		Date	____/____/____
	Local office _____			
National Register Criteria for Evaluation ☐ a ☐ b ☐ c ☐ d (See National Register Bulletin 15, p. 2)				

DOCUMENTATION

Research Methods Florida Site File for past architectural surveys; Florida Site File search; Local library; Tax records; Pedestrian; Sanborn maps

Bibliographic References

Location of Negatives Janus Research **Negative Numbers** Roll 2885, #55, Facing SE

RECORDER INFORMATION

Recorder Name Janus Research

Recorder Affiliation JANUS RESEARCH, 1107 N. Ward Street, Tampa, Florida 33607 Telephone 813-636-8200

- REQUIRED:**
1. USGS 7.5' MAP WITH STRUCTURES PINPOINTED IN RED
 2. LARGE SCALE STREET OR PLAT MAP
 3. PHOTO OF MAIN FACADE, PREFERABLY B&W, AT LEAST 3x5



SKETCH MAP





Location of 8PI1771

USGS Quadrangle: Tarpon Springs (1973 PR 1987)

27 PRESERVATION BRIEFS

The Maintenance and Repair of Architectural Cast Iron

John G. Waite, AIA

Historical Overview by Margot Gayle



U.S. Department of the Interior
National Park Service
Cultural Resources
Preservation Assistance

The preservation of cast-iron architectural elements, including entire facades, has gained increasing attention in recent years as commercial districts are recognized for their historic significance and revitalized. This Brief provides general guidance on approaches to the preservation and restoration of historic cast iron.

Cast iron played a preeminent role in the industrial development of our country during the 19th century. Cast-iron machinery filled America's factories and made possible the growth of railroad transportation. Cast iron was used extensively in our cities for water systems and street lighting. As an architectural metal, it made possible bold new advances in architectural designs and building technology, while providing a richness in ornamentation (Fig. 1).

This age-old metal, an iron alloy with a high carbon content, had been too costly to make in large quantities until the mid-18th century, when new furnace technology in England made it more economical for use in construction. Known for its great strength in compression, cast iron in the form of slender, non-flammable pillars, was introduced in the 1790s in English cotton mills, where fires were endemic. In the United States, similar thin columns were first employed in the 1820s in theaters and churches to support balconies.

By the mid-1820s, one-story iron storefronts were being advertised in New York City. Daniel Badger, the Boston foundryman who later moved to New York, asserted that in 1842 he fabricated and installed the first rolling iron shutters for iron storefronts, which provided protection against theft and external fire. In the years ahead, and into the 1920s, the practical cast-iron storefront would become a favorite in towns and cities from coast to coast. Not only did it help support the load of the upper floors, but it provided large show windows for the display of wares and allowed natural light to flood the interiors of the shops. Most importantly, cast-iron storefronts were inexpensive to assemble, requiring little on-site labor.

A tireless advocate for the use of cast iron in buildings was an inventive New Yorker, the self-taught architect/engineer



In Cooperation with the
New York Landmarks Conservancy

James Bogardus. From 1840 on, Bogardus extolled its virtues of strength, structural stability, durability, relative lightness, ability to be cast in almost any shape and, above all, the fire-resistant qualities so sought after in an age of serious urban conflagrations. He also stressed that the foundry casting processes, by which cast iron was made into building elements, were thoroughly compatible with the new concepts of prefabrication, mass production, and use of identical interchangeable parts.



Fig. 1. The Haughwout Building in New York City is an excellent example of the quality and character of mass-produced cast-iron architecture. Once wood patterns were made, any number of elements could be cast, as was done with each of these repetitive bays. Photo: New York City Landmarks Preservation Commission.

In 1849 Bogardus created something uniquely American when he erected the first structure with self-supporting, multi-storied exterior walls of iron. Known as the Edgar Laing Stores, this corner row of small four-story warehouses that looked like one building was constructed in lower Manhattan in only two months. Its rear, side, and interior bearing walls were of brick; the floor framing consisted of timber joists and girders. One of the cast-iron walls was load-bearing, supporting the wood floor joists. The innovation was its two street facades of self-supporting cast iron, consisting of multiples of only a few pieces—Doric-style engaged columns, panels, sills, and plates, along with some applied ornaments (cover photo and Fig. 2). Each component of the facades had been cast individually in a sand mold in a foundry, machined smooth, tested for fit, and finally trundled on horse-drawn drays to the building site. There they were hoisted into position, then bolted together and fastened to the conventional structure of timber and brick with iron spikes and straps (Fig. 3).

The second iron-front building erected was a quantum leap beyond the Laing Stores in size and complexity. Begun in April 1850 by Bogardus, with architect Robert Hatfield, the five-story Sun newspaper building in Baltimore was both cast-iron-fronted and cast-iron-framed. In Philadelphia,



Fig. 2. The Edgar Laing Stores Block in New York City was designed by James Bogardus. It was the first building constructed with facades of self-supporting cast iron. This corner view shows the Doric-style engaged columns, panels, and spandrel beams; the loss of most of the original ornamental castings give it an austere look. As part of an urban renewal project, the facades were carefully disassembled in 1971 for later re-erection in another location—only to have its iron parts stolen for scrap. Photo: Jack E. Boucher, HABS Collection.

several ironfronts were begun in 1850: The Inquirer Building, the Brock Stores, and the Penn Mutual Building (all three have been demolished). The St. Charles Hotel of 1851 at 60 N. Third Street is the oldest ironfront in America. Framing with cast-iron columns and wrought-iron beams and trusses was visible on a vast scale in the New York Crystal Palace of 1853.

In the second half of the 19th century, the United States was in an era of tremendous economic and territorial growth. The use of iron in commercial and public buildings spread rapidly, and hundreds of iron-fronted buildings were erected in cities across the country from 1849 to beyond the turn of the century. Outstanding examples of ironfronts exist in Baltimore, Galveston, Louisville, Milwaukee, New Orleans, Philadelphia, Richmond, Rochester (N.Y.), and especially New York City where the SoHo Cast Iron Historic District alone has 139 iron-fronted buildings (Fig. 1). Regrettably, a large proportion of ironfronts nationwide have been demolished in downtown redevelopment projects, especially since World War II.

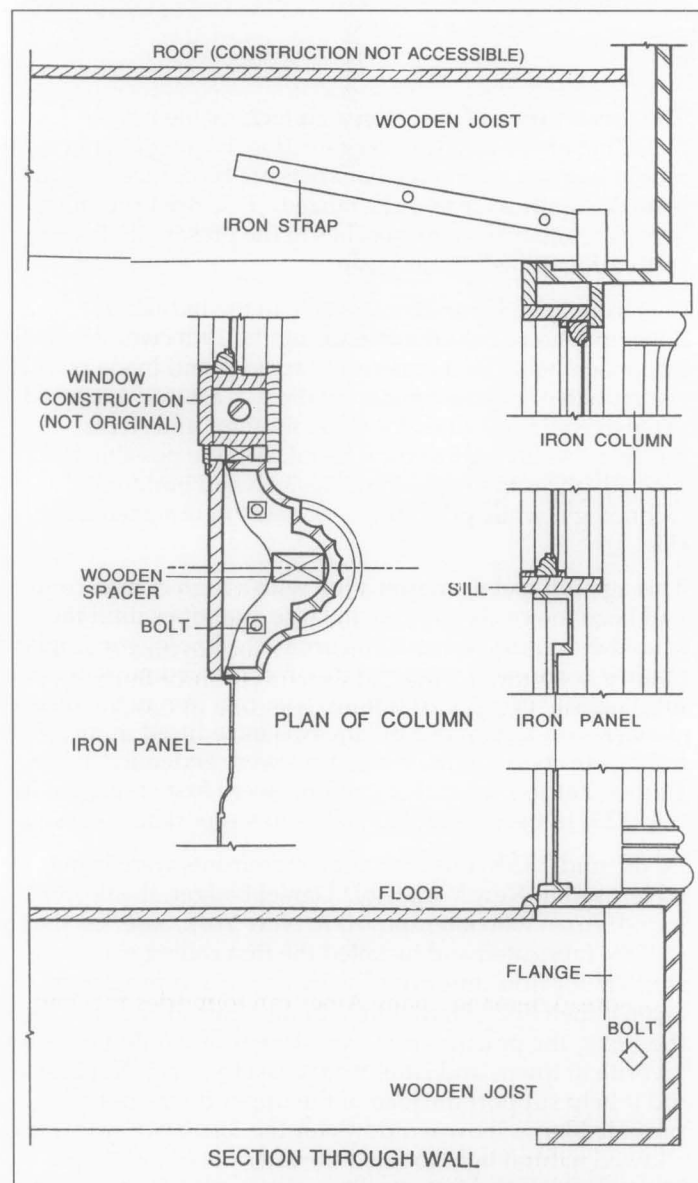


Fig. 3. Section drawing through the wall of Edgar Laing Stores showing how the cast-iron facade components were anchored to the wood floor and roof framing members. Drawing: John G. Waite, HABS Collection.

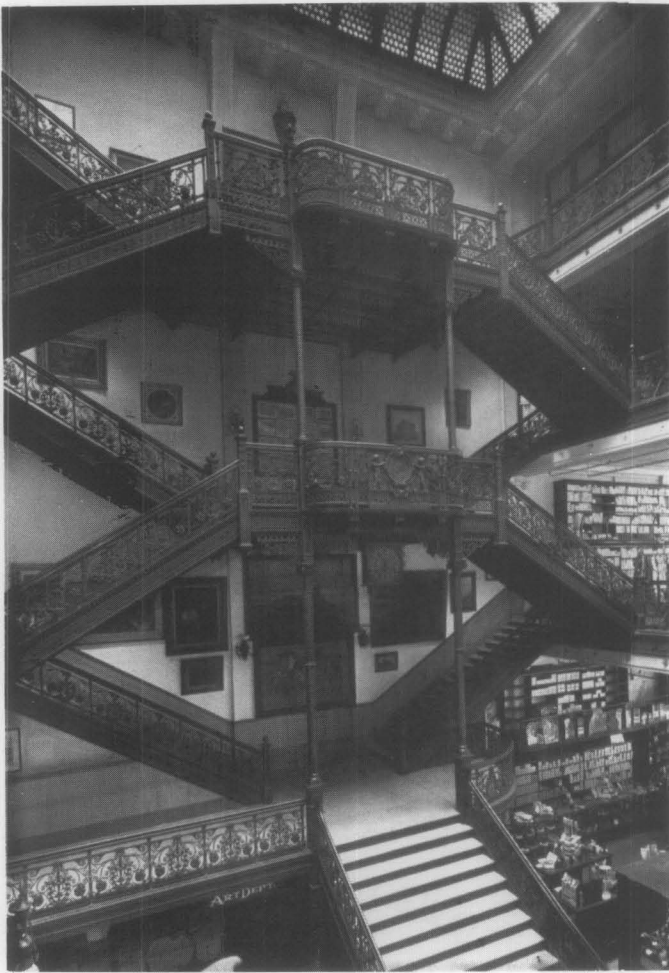


Fig. 4. The 1904 grand stairway of the former Frear's department store in Troy, N.Y. was constructed of cast iron, as was the frame of the skylight above. Some ornamental wrought iron was also employed. This use of iron was typical in major commercial buildings constructed throughout the United States. Courtesy: Rensselaer County Historical Society.

In addition to these exterior uses, many public buildings display magnificent exposed interior ironwork, at once ornamental and structural (Fig. 4). Remarkable examples have survived across the country, including the Peabody Library in Baltimore; the Old Executive Office Building in Washington, D.C.; the Bradbury Building in Los Angeles; the former Louisiana State Capitol; the former City Hall in Richmond; Tweed Courthouse in New York; and the state capitols of California, Georgia, Michigan, Tennessee, and Texas. And it is iron, of course, that forms the great dome of the United States Capitol, completed during the Civil War. Ornamental cast iron was a popular material in the landscape as well, appearing as fences, fountains with statuary, lampposts, furniture, urns, gazebos, gates, and enclosures for cemetery plots (Fig. 5). With such widespread demand, many American foundries that had been casting machine parts, bank safes, iron pipe, or cookstoves added architectural iron departments (Fig. 6). These called for patternmakers with sophisticated design capabilities, as well as knowledge of metal shrinkage and other technical aspects of casting. Major companies included the Hayward Bartlett Co. in Baltimore; James L. Jackson, Cornell Brothers, J. L. Mott, and Daniel D. Badger's Architectural Iron Works in Manhattan; Hecla Ironworks in Brooklyn; Wood & Perot of Philadelphia; Leeds & Co., the

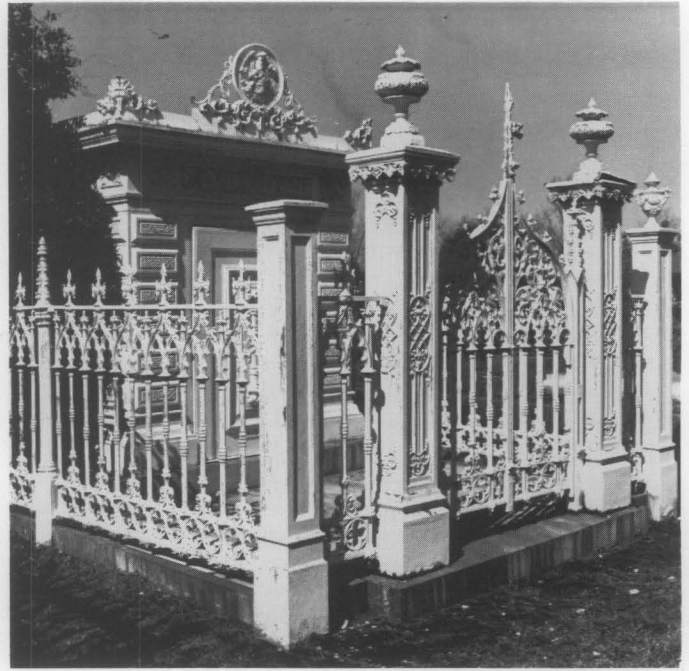


Fig. 5. The Slatter Family Tomb in Mobile, Alabama, consisting of a cast-iron mausoleum and fence, exhibits the wide range of uses of the material in the 19th century. Photo: Jack E. Boucher, HABS Collection.

Shakspeare (sic) Foundry, and Miltenberger in New Orleans; Winslow Brothers in Chicago; and James McKinney in Albany, N.Y.

Cast iron was the metal of choice throughout the second half of the 19th century. Not only was it a fire-resistant material in a period of major urban fires, but also large facades could be produced with cast iron at less cost than comparable stone fronts, and iron buildings could be erected with speed and efficiency. The largest standing example of framing with cast-iron columns and wrought-iron beams is Chicago's sixteen-story Manhattan Building, the world's tallest skyscraper when built in 1890 by William LeBaron Jenney. By this time, however, steel was becoming available nationally, and was structurally more versatile and cost-competitive. Its increased use is one reason why building with cast iron diminished around the turn of the century after having been so eagerly adopted only fifty years before. Nonetheless, cast iron continued to be used in substantial quantities for many other structural and ornamental purposes well into the 20th century: storefronts; marquees; bays and large window frames for steel-framed, masonry-clad buildings; and street and landscape furnishings, including subway kiosks.

The 19th century left us with a rich heritage of new building methods, especially construction on an altogether new scale that was made possible by the use of metals. Of these, cast iron was the pioneer, although its period of intensive use lasted but a half century. Now the surviving legacy of cast-iron architecture, much of which continues to be threatened, merits renewed appreciation and appropriate preservation and restoration treatments.

What is Cast Iron?

Cast iron is an alloy with a high carbon content (at least 1.7% and usually 3.0 to 3.7%) that makes it more resistant to corrosion than either wrought iron or steel. In addition to carbon, cast iron contains varying amounts of silicon, sulfur, manganese, and phosphorus.

While molten, cast iron is easily poured into molds, making it possible to create nearly unlimited decorative and structural forms. Unlike wrought iron and steel, cast iron is too hard and brittle to be shaped by hammering, rolling, or pressing. However, because it is more rigid and more resistant to buckling than other forms of iron, it can withstand great compression loads. Cast iron is relatively weak in tension, however, and fails under tensile loading with little prior warning.

The characteristics of various types of cast iron are determined by their composition and the techniques used in melting, casting, and heat treatment. Metallurgical constituents of cast iron that affect its brittleness, toughness, and strength include ferrite, cementite, pearlite, and graphite carbon. Cast iron with flakes of carbon is called gray cast iron. The "gray fracture" associated with cast iron was probably named for the gray, grainy appearance of its broken edge caused by the presence of flakes of free graphite, which account for the brittleness of cast iron. This brittleness is the important distinguishing characteristic between cast iron and mild steel.

Compared with cast iron, wrought iron is relatively soft, malleable, tough, fatigue-resistant, and readily worked by forging, bending, and drawing. It is almost pure iron, with less than 1% (usually 0.02 to 0.03%) carbon. Slag varies between 1% and 4% of its content and exists in a purely physical association, that is, it is not alloyed. This gives wrought iron its characteristic laminated (layered) or fibrous structure.

Wrought iron can be distinguished from cast iron in several ways. Wrought-iron elements generally are simpler in form and less uniform in appearance than cast-iron elements, and contain evidence of rolling or hand working. Cast iron often contains mold lines, flashing, casting flaws, and air holes. Cast-iron elements are very uniform in appearance and are frequently used repetitively. Cast-iron elements are often bolted or screwed together, whereas wrought-iron pieces are either riveted or forge-molded (heat welded) together.

Mild steel is now used to fabricate new hand-worked metal work and to repair old wrought-iron elements. Mild steel is an alloy of iron and is not more than 2% carbon, which is strong but easily worked in block or ingot form. Mild steel is not as resistant to corrosion as either wrought iron or cast iron.

Maintenance and Repair

Many of the maintenance and repair techniques described in the Brief, particularly those relating to cleaning and painting, are potentially dangerous and should be carried out only by experienced and qualified workmen using protective equipment suitable to the task. In all but the most simple repairs, it is best to involve a preservation architect or building conservator to assess the condition of the iron and prepare contract documents for its treatment.

As with any preservation project, the work must be preceded by a review of local building codes and environmental protection regulations to determine whether any conflicts exist with the proposed treatments. If there are conflicts, particularly with cleaning techniques or painting materials, then waivers or variances need to be negotiated, or alternative treatments or materials adopted.

Deterioration

Common problems encountered today with cast-iron construction include badly rusted or missing elements, impact damage, structural failures, broken joints, damage to connections, and loss of anchorage in masonry (Figs. 7, 8).

Oxidation, or rusting, occurs rapidly when cast iron is exposed to moisture and air. The minimum relative humidity necessary to promote rusting is 65%, but this

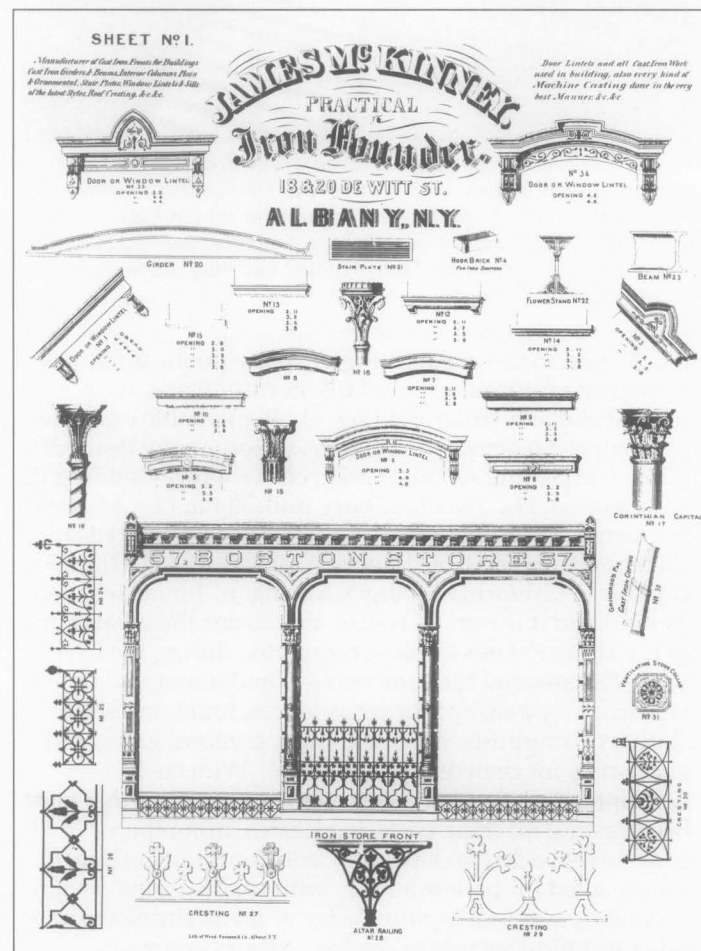


Fig. 6. Sheet from a late 19th century manufacturer's trade catalog illustrates some of the products available from foundries, such as storefronts, girders and beams, columns, stairs, window lintels and sills, and roof crestings. Courtesy: Albany Institute of History and Art.



Fig. 7. Despite an impact that shattered the main castings, this fence post remains upright, demonstrating the great strength of cast iron. Originally, the post was held together by a long bolt that extended from the finial to the base. Photo: John G. Waite.

figure can be lower in the presence of corrosive agents, such as sea water, salt air, acids, acid precipitation, soils, and some sulfur compounds present in the atmosphere, which act as catalysts in the oxidation process. Rusting is accelerated in situations where architectural details provide pockets or crevices to trap and hold liquid corrosive agents. Furthermore, once a rust film forms, its porous surface acts as a reservoir for liquids, which in turn causes further corrosion. If this process is not arrested, it will continue until the iron is entirely consumed by corrosion, leaving nothing but rust.

Galvanic corrosion is an electrochemical action that results when two dissimilar metals react together in the presence of an electrolyte, such as water containing salts or hydrogen ions (Fig. 9). The severity of the galvanic corrosion is based

on the difference in potential between the two metals, their relative surface areas, and time. If the more noble metal (higher position in electrochemical series) is much larger in area than the baser, or less noble, metal, the deterioration of the baser metal will be more rapid and severe. If the more noble metal is much smaller in area than the baser metal, the deterioration of the baser metal will be much less significant. Cast iron will be attacked and corroded when it is adjacent to more noble metals such as lead or copper.



Fig. 9. Galvanic corrosion occurred where a patch of copper was installed alongside the cast-iron cap at the base of a fountain. The use of terne-coated stainless flashings with appropriate caulking would have been a more suitable repair. Photo: John G. Waite.

Graphitization of cast iron, a less common problem, occurs in the presence of acid precipitation or seawater. As the iron corrodes, the porous graphite (soft carbon) corrosion residue is impregnated with insoluble corrosion products. As a result, the cast-iron element retains its appearance and shape but is weaker structurally. Graphitization occurs where cast iron is left unpainted for long periods or where caulked joints have failed and acidic rainwater has corroded pieces from the backside. Testing and identification of graphitization is accomplished by scraping through the surface with a knife to reveal the crumbling of the iron beneath. Where extensive graphitization occurs, usually the only solution is replacement of the damaged element.

Castings may also be fractured or flawed as a result of imperfections in the original manufacturing process, such as air holes, cracks, and cinders, or cold shuts (caused by the "freezing" of the surface of the molten iron during casting because of improper or interrupted pouring). Brittleness is another problem occasionally found in old cast-iron elements. It may be a result of excessive phosphorus in the iron, or of chilling during the casting process.

Condition Assessment

Before establishing the appropriate treatment for cast-iron elements in a building or structure, an evaluation should be made of the property's historical and architectural significance and alterations, along with its present condition. If the work involves more than routine maintenance, a qualified professional should be engaged to develop a historic structure report which sets forth the historical development of the property, documents its existing condition, identifies problems of repair, and provides a detailed listing of recommended work items



Fig. 8. Structural cracks, gaps at joints between components, and a large opening where part of the console bracket is missing are the problems evident in this cast-iron assembly. Photo: Ford, Powell & Carson.

with priorities. Through this process the significance and condition of the cast iron can be evaluated and appropriate treatments proposed. For fences, or for single components of a building such as a facade, a similar but less extensive analytical procedure should be followed.

The nature and extent of the problems with the cast-iron elements must be well understood before proceeding with work. If the problems are minor, such as surface corrosion, flaking paint, and failed caulking, the property owner may be able to undertake the repairs by working directly with a knowledgeable contractor. If there are major problems or extensive damage to the cast iron, it is best to secure the services of an architect or conservator who specializes in the conservation of historic buildings. Depending on the scope of work, contract documents can range from outline specifications to complete working drawings with annotated photographs and specifications

To thoroughly assess the condition of the ironwork, a close physical inspection must be undertaken of every section of the iron construction including bolts, fasteners, and brackets (Fig. 10). Typically, scaffolding or a mechanical lift is employed for close inspection of a cast-iron facade or other large structures. Removal of select areas of paint may be the only means to determine the exact condition of connections, metal fasteners, and intersections or crevices that might trap water.



Fig. 11. Major cracks in the piers of this cast-iron storefront in Galveston, Texas resulted from the transfer of load onto the iron from internal brick piers eroded by rising damp. This crack was inappropriately filled with concrete, which trapped moisture and accelerated internal corrosion, pushing the iron further apart. Photo: Ford, Powell & Carson.

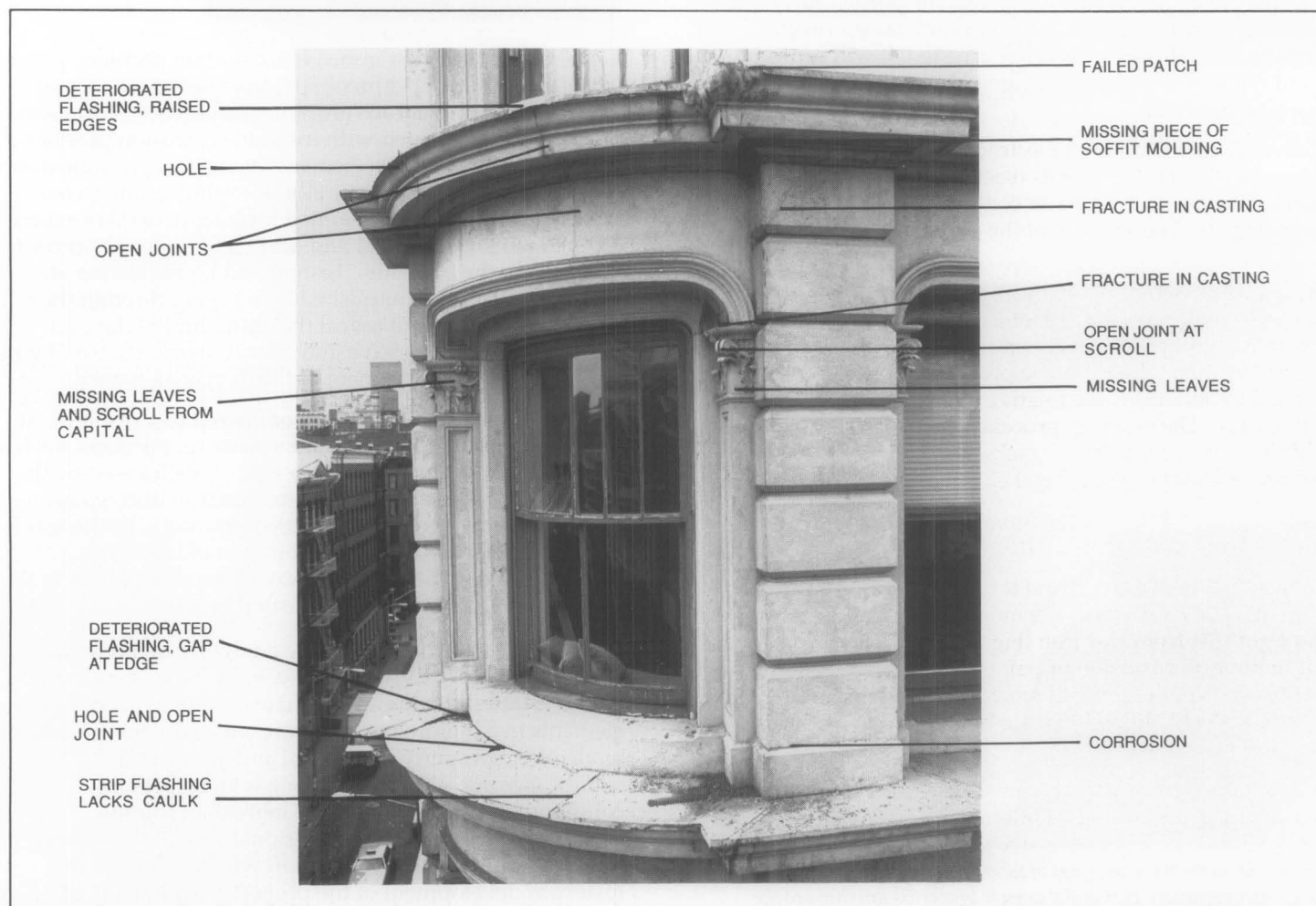


Fig. 10. During close-up inspection of the Gunther Building in New York City, photographs of each bay were taken to use in a survey of existing conditions. Photo: Willcox Dunn.

An investigation of load-bearing elements, such as columns and beams, will establish whether these components are performing as they were originally designed, or the stress patterns have been redistributed. Areas that are abnormally stressed must be examined to ascertain whether they have suffered damage or have been displaced (Fig. 11). Damage to a primary structural member is obviously critical to identify and evaluate; attention should not be given only to decorative features.

The condition of the building, structure, or object; diagnosis of its problems; and recommendations for its repair should be recorded by drawings, photographs, and written descriptions, to aid those who will be responsible for its conservation in the future.

Whether minor or major work is required, the retention and repair of historic ironwork is the recommended preservation approach over replacement. All repairs and restoration work should be reversible, when possible, so that modifications or treatments that may turn out to be harmful to the long-term preservation of the iron can be corrected with the least amount of damage to the historic ironwork.

Cleaning and Paint Removal

When there is extensive failure of the protective coating and/or when heavy corrosion exists, the rust and most or all of the paint must be removed to prepare the surfaces for new protective coatings. The techniques available range from physical processes, such as wire brushing and grit blasting, to flame cleaning and chemical methods. The selection of an appropriate technique depends upon how much paint failure and corrosion has occurred, the fineness of the surface detailing, and the type of new protective coating to be applied. Local environmental regulations may restrict the options for cleaning and paint removal methods, as well as the disposal of materials.

Many of these techniques are *potentially dangerous* and should be carried out only by experienced and qualified workers using proper eye protection, protective clothing, and other workplace safety conditions. Before selecting a process, test panels should be prepared on the iron to be cleaned to determine the relative effectiveness of various techniques. The cleaning process will most likely expose additional coating defects, cracks, and corrosion that have not been obvious before (Fig. 12).

There are a number of techniques that can be used to remove paint and corrosion from cast iron:

Hand scraping, chipping, and wire brushing are the most common and least expensive methods of removing paint and light rust from cast iron (Fig. 13a, b). However, they do not remove all corrosion or paint as effectively as other methods. Experienced craftsmen should carry out the work to reduce the likelihood that surfaces may be scored or fragile detail damaged.

Low-pressure grit blasting (commonly called abrasive cleaning or sandblasting) is often the most effective approach to removing excessive paint build-up or substantial corrosion. Grit blasting is fast, thorough, and economical, and it allows the iron to be cleaned in place. The aggregate can be iron slag or sand; copper slag should not be used on iron because of the potential for electrolytic



Fig. 12. Paint stripping exposed a large defect under a faulty patch at a joint of this wide cast-iron watertable. The damage can be repaired mechanically by splicing in a cast-iron replacement piece. Photo: Peter Jensen, Kapell and Kostow Architects.

reactions. Some sharpness in the aggregate is beneficial in that it gives the metal surface a “tooth” that will result in better paint adhesion. The use of a very sharp or hard aggregate and/or excessively high pressure (over 100 pounds per square inch) is unnecessary and should be avoided. Adjacent materials, such as brick, stone, wood, and glass, must be protected to prevent damage. Some local building codes and environmental authorities prohibit or limit dry sandblasting because of the problem of airborne dust.

Wet sandblasting is more problematic than dry sandblasting for cleaning cast iron because the water will cause instantaneous surface rusting and will penetrate deep into open joints. Therefore, it is generally not considered an effective technique. Wet sandblasting reduces the amount of airborne dust when removing a heavy paint build-up, but disposal of effluent containing lead or other toxic substances is restricted by environmental regulations in most areas.

Flame cleaning of rust from metal with a special multi-flame head oxyacetylene torch requires specially skilled operators, and is expensive and potentially dangerous. However, it can be very effective on lightly to moderately corroded iron. Wire brushing is usually necessary to finish the surface after flame cleaning.

Chemical rust removal, by acid pickling, is an effective method of removing rust from iron elements that can be easily removed and taken to a shop for submerging in vats of dilute phosphoric or sulfuric acid. This method does not damage the surface of iron, providing that the iron is neutralized to pH level 7 after cleaning. Other chemical rust removal agents include ammonium citrate, oxalic acid, or hydrochloric acid-based products.



Fig. 13. Surface preparation may involve several different techniques. Where chemical paint stripping is involved, careful planning of the sequence of work and inspection by an architect or conservator to ensure strict compliance with the contract documents is important to minimize the risk of problems. After the chemical paste and paint was scraped off, the remaining paint and chemical residue were removed with a wire brush (a) and scrapers selected or cut to fit the shape of the iron surfaces (b). The surface was then wiped with solvent to create a completely clean surface prior to repainting (c). Photos: Raymond M. Pepi, Building Conservation Associates.

Chemical paint removal using alkaline compounds, such as methylene chloride or potassium hydroxide, can be an effective alternative to abrasive blasting for removal of heavy paint build-up (Fig. 13). These agents are often available as slow-acting gels or pastes. Because they can cause burns, protective clothing and eye protection must be worn. Chemicals applied to a non-watertight facade can seep through crevices and holes, resulting in damage to the building's interior finishes and corrosion to the backside of the iron components. If not thoroughly neutralized, residual traces of cleaning compounds on the surface of the iron can cause paint failures in the future (Fig. 14). For these reasons, field application of alkaline paint removers and acidic cleaners is not generally recommended.

Following any of these methods of cleaning and paint removal, the newly cleaned iron should be painted immediately with a corrosion-inhibiting primer before new rust begins to form. This time period may vary from minutes to hours depending on environmental conditions. If priming is delayed, any surface rust that has developed should be removed with a clean wire brush just before priming, because the rust prevents good bonding between the primer and the cast iron surface and prevents the primer from completely filling the pores of the metal.

Painting and Coating Systems

The most common and effective way to preserve architectural cast iron is to maintain a protective coating of paint on the metal. Paint can also be decorative, where historically appropriate.

Before removing paint from historic architectural cast iron, a microscopic analysis of samples of the historic paint sequencing is recommended. Called paint seriation analysis, this process must be carried out by an experienced architectural conservator. The analysis will identify the historic paint colors, and other conditions, such as whether the paint was matte or gloss, whether sand was added to the paint for texture, and whether the building was polychromed or marbled. Traditionally many cast-iron elements were painted to resemble other materials, such as limestone or sandstone. Occasionally, features were faux-painted so that the iron appeared to be veined marble.

Thorough surface preparation is necessary for the adhesion of new protective coatings. All loose, flaking, and deteriorated paint must be removed from the iron, as well as dirt and mud, water-soluble salts, oil, and grease. Old paint that is tightly adhered may be left on the surface of the iron if it is compatible with the proposed coatings. The retention of old paint also preserves the historic paint sequence of the building and avoids the hazards of removal and disposal of old lead paint.

It is advisable to consult manufacturer's specifications or technical representatives to ensure compatibility between the surface conditions, primer and finish coats, and application methods.

For the paint to adhere properly, the metal surfaces must be absolutely dry before painting. Unless the paint selected is

specifically designed for exceptional conditions, painting should not take place when the temperature is expected to fall below 50 degrees Fahrenheit within 24 hours or when the relative humidity is above 80 per cent; paint should not be applied when there is fog, mist, or rain in the air. Poorly prepared surfaces will cause the failure of even the best paints, while even moderately priced paints can be effective if applied over well-prepared surfaces.

Selection of Paints and Coatings

The types of paints available for protecting iron have changed dramatically in recent years due to federal, state, and local regulations that prohibit or restrict the manufacture and use of products containing toxic substances such as lead and zinc chromate, as well as volatile organic compounds and substances (VOC or VOS). Availability of paint types varies from state to state, and manufacturers continue to change product formulations to comply with new regulations.



Fig. 14. Major problems can result if work is undertaken without proper sequencing and precautions. On this building, a strong alkaline paint remover was used, and apparently was not adequately rinsed or neutralized. Over a period of months, the newly applied paint began to peel and streaks of rust appeared on the iron. Photo: Kim Lovejoy.

Traditionally, red lead has been used as an anti-corrosive pigment for priming iron. Red lead has a strong affinity for linseed oil and forms lead soaps, which become a tough and elastic film impervious to water that is highly effective as a protective coating for iron. At least two slow-drying linseed oil-based finish coats have traditionally been used over a red lead primer, and this combination is effective on old or partially-deteriorated surfaces. Today, in most areas, the use of paints containing lead is prohibited, except for some commercial and industrial purposes.

Today, alkyd paints are very widely used and have largely replaced lead-containing linseed-oil paints. They dry faster than oil paint, with a thinner film, but they do not protect the metal as long. Alkyd rust-inhibitive primers contain

pigments such as iron oxide, zinc oxide, and zinc phosphate. These primers are suitable for previously painted surfaces cleaned by hand tools. At least two coats of primer should be applied, followed by alkyd enamel finish coats.

Latex and other water-based paints are not recommended for use as primers on cast iron because they cause immediate oxidation if applied on bare metal. Vinyl acrylic latex or acrylic latex paints may be used as finish coats over alkyd rust-inhibitive primers, but if the primer coats are imperfectly applied or are damaged, the latex paint will cause oxidation of the iron. Therefore, alkyd finish coats are recommended.

High-performance coatings, such as zinc-rich primers containing zinc dust, and modern epoxy coatings, can be used on cast iron to provide longer-lasting protection. These coatings typically require highly clean surfaces and special application conditions which can be difficult to achieve in the field on large buildings (Fig. 13c). These coatings are used most effectively on elements which have been removed to a shop, or newly cast iron.

One particularly effective system has been first to coat commercially blast-cleaned iron with a zinc-rich primer, followed by an epoxy base coat, and two urethane finish coats. Some epoxy coatings can be used as primers on clean metal or applied to previously-painted surfaces in sound condition. Epoxies are particularly susceptible to degradation under ultraviolet radiation and must be protected by finish coats which are more resistant. There have been problems with epoxy paints which have been shop-applied to iron where the coatings have been nicked prior to installation. Field touching-up of epoxy paints is very difficult, if not impossible. This is a concern since iron exposed by imperfections in the base coat will be more likely to rust and more frequent maintenance will be required.

A key factor to take into account in selection of coatings is the variety of conditions on existing and new materials on a particular building or structure. One primer may be needed for surfaces with existing paint; another for newly cast, chemically stripped, or blast-cleaned cast iron; and a third for flashings or substitute materials; all three followed by compatible finish coats.

Application Methods

Brushing is the traditional and most effective technique for applying paint to cast iron. It provides good contact between the paint and the iron, as well as the effective filling of pits, cracks, and other blemishes in the metal. The use of spray guns to apply paint is economical, but does not always produce adequate and uniform coverage. For best results, airless sprayers should be used by skilled operators. To fully cover fine detailing and reach recesses, spraying of the primer coat, used in conjunction with brushing, may be effective.

Rollers should never be used for primer coat applications on metal, and are effective for subsequent coats only on large, flat areas. The appearance of spray-applied and roller-applied finish coats is not historically appropriate and should be avoided on areas such as storefronts which are viewed close at hand.

Caulking, Patching, and Mechanical Repairs

Most architectural cast iron is made of many small castings assembled by bolts or screws (Fig. 16a). Joints between pieces were caulked to prevent water from seeping in and causing rusting from the inside out. Historically, the seams were often caulked with white lead paste and sometimes backed with cotton or hemp rope; even the bolt and screw heads were caulked to protect them from the elements and to hide them from view. Although old caulking is sometimes found in good condition, it is typically crumbled from weathering, cracked from the structural settlement, or destroyed by mechanical cleaning. It is essential to replace deteriorated caulking to prevent water penetration. For good adhesion and performance, an architectural-grade polyurethane sealant or traditional white lead paste is preferred.

Water that penetrates the hollow parts of a cast-iron architectural element causes rust that may streak down over other architectural elements. The water may freeze, causing the ice to crack the cast iron. Cracks reduce the strength of the total cast-iron assembly and provide another point of entry for water. Thus, it is important that cracks be made weathertight by using caulks or fillers, depending on the width of the crack.

Filler compounds containing iron particles in an epoxy resin binder can be used to patch superficial, non-structural cracks and small defects in cast iron. The thermal expansion rate of epoxy resin alone is different from that of iron, requiring the addition of iron particles to ensure compatibility and to control shrinkage. Although the repaired piece of metal does not have the same strength as a homogeneous piece of iron, epoxy-repaired members do have some strength. Polyester-based putties, such as those used on auto bodies, are also acceptable fillers for small holes.

In rare instances, major cracks can be repaired by brazing or welding with special nickel-alloy welding rods. Brazing or welding of cast iron is very difficult to carry out in the field and should be undertaken only by very experienced welders.

In some cases, mechanical repairs can be made to cast iron using iron bars and screws or bolts. In extreme cases,

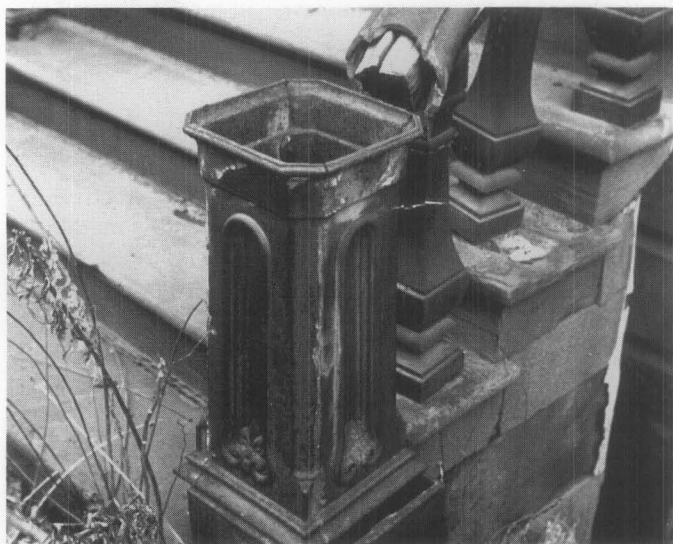


Fig. 15. In an effort to repair this stair railing, concrete was poured around the wood spacer inside the railing casting. Water penetrated the railing and reacted with the concrete to accelerate the corrosion of the iron. Photo: John G. Waite.

deteriorated cast iron can be cut out and new cast iron spliced in place by welding or brazing. However, it is frequently less expensive to replace a deteriorated cast-iron section with a new casting rather than to splice or reinforce it. Cast-iron structural elements that have failed must either be reinforced with iron and steel or replaced entirely.

A wobbly cast-iron balustrade or railing can often be fixed by tightening all bolts and screws. Screws with stripped threads and seriously rusted bolts must be replaced. To compensate for corroded metal around the bolt or screw holes, new stainless steel bolts or screws with a larger diameter need to be used. In extreme cases, new holes may need to be tapped.

The internal voids of balusters, newel posts, statuary, and other elements should not be filled with concrete; it is an inappropriate treatment that causes further problems (Fig. 15). As the concrete cures, it shrinks, leaving a space between the concrete and cast iron. Water penetrating this space does not evaporate quickly, thus promoting further rusting. The corrosion of the iron is further accelerated by the alkaline nature of concrete. Where cast-iron elements have been previously filled with concrete, they need to be taken apart, the concrete and rust removed, and the interior surfaces primed and painted before the elements are reassembled.

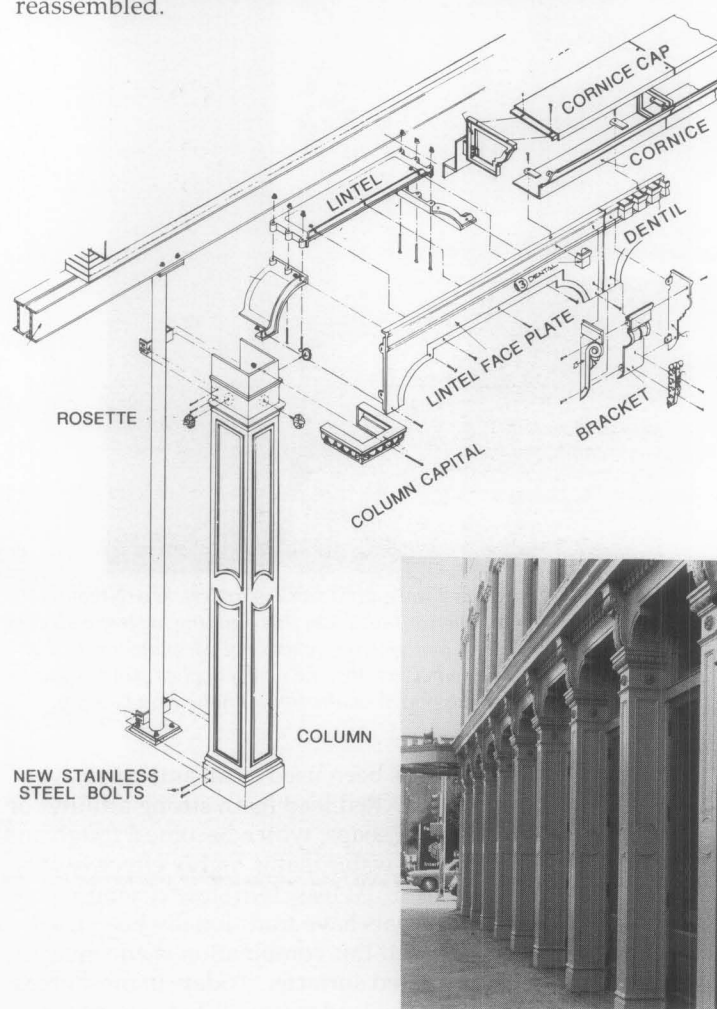


Fig. 16. Architectural cast iron is made of many small components bolted and screwed together. (a) This exploded view of a storefront illustrates the variety of elements, including brackets, fasteners, and holes for bolts. (b) The storefront was replicated in cast iron because of the extensive damage and structural failure, a detail of which is shown in Fig. 11. Drawing and photo: Historical Arts & Casting, Inc.

Duplication and Replacement

The replacement of cast-iron components is often the only practical solution when such features are missing, severely corroded, or damaged beyond repair, or where repairs would be only marginally useful in extending the functional life of an iron element (Fig. 16).

Sometimes it is possible to replace small, decorative, non-structural elements using intact sections of the original as a casting pattern. For large sections, new patterns of wood or plastic made slightly larger in size than the original will

need to be made in order to compensate for the shrinkage of the iron during casting (cast iron shrinks approximately 1/8 inch per foot as it cools from a liquid into a solid).

Occasionally, a matching replacement can be obtained from the existing catalogs of iron foundries. Small elements can be custom cast in iron at small local foundries, often at a cost comparable to substitute materials. Large elements and complex patterns will usually require the skills and facilities of a larger firm that specializes in replication.

The Casting Process

Architectural elements were traditionally cast in sand molds. The quality of the special sands used by foundries is extremely important; unlike most sands they must be moist. Foundries have their own formulas for sand and its admixtures, such as clay, which makes the sand cohesive even when the mold is turned upside down.

A two-part mold (with a top and a bottom, or cope and drag) is used for making a casting with relief on both sides, whereas an open-top mold produces a flat surface on one side (Fig. 17a). For hollow elements, a third pattern and mold are required for the void. Many hollow castings are made of two or more parts that are later bolted, screwed, or welded together, because of the difficulty of supporting an interior core between the top and bottom sand molds during the casting process.

The molding sand is compacted into flasks, or forms, around the pattern. The cope is then lifted off and the pattern is removed, leaving the imprint of the pattern in the small mold. Molten iron, heated to a temperature of approximately 2700 degrees Fahrenheit, is poured into the mold and then allowed to cool (Fig. 17b). The molds are then stripped from the casting; the tunnels to the mold (sprues) and risers that allowed release of air are cut off; and ragged edges (called "burrs") on the casting are ground smooth.

The castings are shop-primed to prevent rust, and laid out and preassembled at the foundry to ensure proper alignment and fit. When parts do not fit, the pieces are machined to remove irregularities caused by burrs, or are rejected and recast until all of the cast elements fit together properly. Most larger pieces then are taken apart before shipping to the job site, while some small ornamental parts may be left assembled.

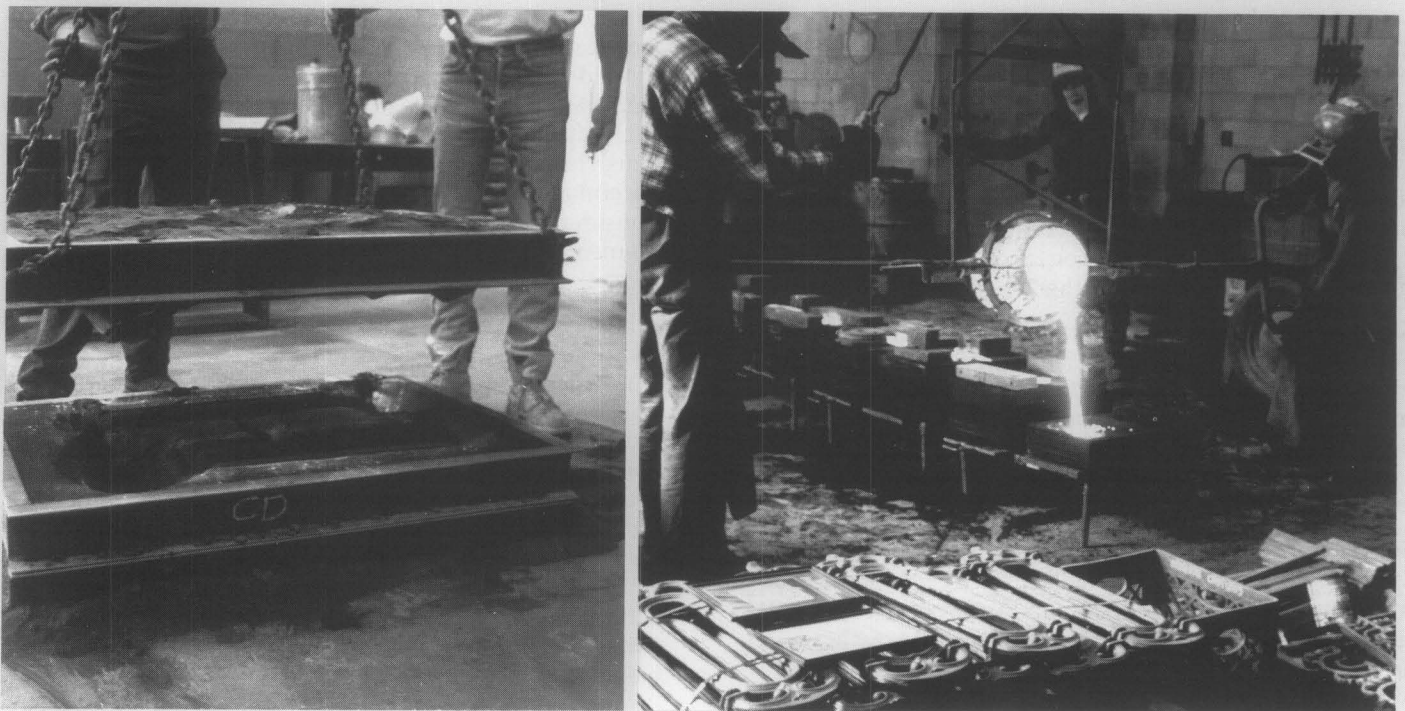


Fig. 17. (a) A two-part mold, consisting of a cope (top) and drag (bottom) for a newel post. Photo: Architectural Iron Company, Inc.
(b) Molten iron being poured into a mold containing sand at a foundry. The iron casting process has changed little in the past two centuries.
Photo: Karen Huebner.



Fig. 18. This cast-iron storefront cornice was corroded beyond the point of repair, and could not be removed easily for replacement. Terne-coated stainless steel, the most durable metal for flashing cast iron, was applied to the cornice and fitted as closely as possible to the historic profile. Although painting is not necessary to protect terne-coated stainless steel, the cornice should be painted to be consistent with the historic character of the building. A primer which is compatible with the terne coating should be used. Photo: Dean Koga, Robert E. Meadows, P.C., Architects.

Dismantling and Assembly of Architectural Components

It is sometimes necessary to dismantle all or part of a cast-iron structure during restoration, if repairs cannot be successfully carried out in place. Dismantling should be done only under the direction of a preservation architect or architectural conservator who is experienced with historic cast iron. Extreme care must be taken since cast iron is very brittle, especially in cold weather.

Dismantling should follow the reverse order of construction and re-erection should occur, as much as possible, in the exact order of original assembly. Each piece should be numbered and keyed to record drawings. When work must be carried out in cold weather, care needs to be taken to avoid fracturing the iron elements by uneven heating of the members.

Both new castings and reused pieces should be painted with a shop-applied prime coat on all surfaces. All of the components should be laid out and preassembled to make sure that the alignment and fit are proper. Many of the original bolts, nuts, and screws may have to be replaced with similar fasteners of stainless steel.

After assembly at the site, joints that were historically caulked should be filled with an architectural-grade polyurethane sealant or the traditional white lead paste. White lead has the advantage of longevity, although its use is restricted in many areas.

Flashings

In some instances, it may be necessary to design and install flashings to protect areas vulnerable to water penetration. Flashings need to be designed and fabricated carefully so that they are effective, as well as unobtrusive in appearance. The most durable material for flashing iron is terne-coated stainless steel (Fig. 18). Other compatible materials are terne-coated steel and galvanized steel; however, these require more frequent maintenance and are less durable. Copper and lead-coated copper are not recommended for use as flashings in contact with cast iron because of galvanic corrosion problems. Galvanic problems can also occur with the use of aluminum if certain types of electrolytes are present.

Substitute Materials

In recent years, a number of metallic and non-metallic materials have been used as substitutes for cast iron, although they were not used historically with cast iron. The most common have been cast aluminum, epoxies, reinforced polyester (fiberglass), and glass fiber-reinforced concrete (GFRC). Factors to consider in using substitute materials are addressed in **Preservation Briefs 16**, which emphasizes that "every means of repairing deteriorating historic materials or replacing them with identical materials should be examined before turning to substitute materials."

Cast aluminum has been used recently as a substitute for cast iron, particularly for ornately-detailed decorative elements. Aluminum is lighter in weight, more resistant to corrosion, and less brittle than cast iron. However, because it is dissimilar from iron, its placement in contact with or near cast iron may result in galvanic corrosion, and thus should be avoided. Special care must be taken in the application of paint coatings, particularly in the field. It is often difficult to achieve a durable coating after the original finish has failed. Because aluminum is weaker than iron, careful analysis is required whenever aluminum is being considered as a replacement material for structural cast-iron elements.

Epoxies are two-part, thermo-setting, resinous materials which can be molded into virtually any form. When molded, the epoxy is usually mixed with fillers such as sand, glass balloons, or stone chips. Since it is not a metal, galvanic corrosion does not occur. When mixed with sand or stone, it is often termed epoxy concrete or polymer concrete, a misnomer because no cementitious materials are included. Epoxies are particularly effective for replicating small, ornamental sections of cast iron. Since it is not a metal, galvanic corrosion does not occur. Epoxy elements must have a protective coating to shield them from ultraviolet degradation. They are also flammable and cannot be used as substitutes for structural cast-iron elements.

Reinforced polyester, commonly known as **fiberglass**, is often used as a lightweight substitute for historic materials, including cast iron, wood, and stone. In its most common form, fiberglass is a thin, rigid, laminate shell formed by pouring a polyester resin into a mold and then adding fiberglass for reinforcement. Like epoxies, fiberglass is non-

A



B

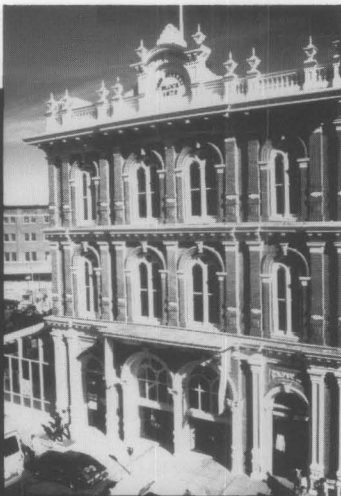


Fig. 19. (a) Fiberglass columns and aluminum capitals were installed to replicate the ornamental features on the east facade of the New Market Theater in Portland, Oregon, that had been destroyed by previous occupants. Like cast iron, crisp ornamental details can be achieved with cast aluminum. Although aluminum may be in contact with fiberglass, galvanic corrosion may result when aluminum is in direct contact with cast iron. Photo: William J. Hawkins, III. (b) The west facade of the theatre retains its original cast iron features. Photo: George McMath.

corrosive, but is susceptible to ultraviolet degradation. Because of its rather flimsy nature, it cannot be used as a substitute for structural elements, cannot be assembled like cast iron and usually requires a separate anchorage system. It is unsuitable for locations where it is susceptible to damage by impact (Fig. 20), and is also flammable.

Glass fiber-reinforced concrete, known as *GFRC*, is similar to fiberglass except that a lightweight concrete is substituted for the resin. GFRC elements are generally fabricated as thin shell panels by spraying concrete into forms. Usually a separate framing and anchorage system is required. GFRC elements are lightweight, inexpensive, and weather resistant. Because GFRC has a low shrinkage coefficient, molds can be made directly from historic elements.



Fig. 20. The location of the feature must be taken into account if a substitute replacement material is being considered. This lightweight fiberglass column at street level sustained damage from impact within a few years of installation. The great strength of cast iron makes it ideal for storefronts and elements that must withstand heavy use. Photo: Building Conservation Associates.

However, GFRC is very different physically and chemically from iron. If used adjacent to iron, it causes corrosion of the iron and will have a different moisture absorption rate. Also, it is not possible to achieve the crisp detail that is characteristic of cast iron.

Maintenance

A successful maintenance program is the key to the long-term preservation of architectural cast iron. Regular inspections and accurate record-keeping are essential. Biannual inspections, occurring ideally in the spring and fall, include the identification of major problems, such as missing elements and fractures, as well as minor items such as failed caulking, damaged paint, and surface dirt.

Records should be kept in the form of a permanent maintenance log which describes routine maintenance tasks and records the date a problem is first noted, when it was corrected, and the treatment method. Painting records are important for selecting compatible paints for touch-up and subsequent repainting. The location of the work and the type, manufacturer, and color of the paint should be noted in the log. The same information also should be assembled and recorded for caulking.

Superficial dirt can be washed off well-painted and caulked cast iron with low-pressure water. Non-ionic detergents may be used for the removal of heavy or tenacious dirt or stains, after testing to determine that they have no adverse effects on the painted surfaces. Thick grease deposits and residue can be removed by hand scraping. Water and detergents or non-caustic degreasing agents can be used to clean off the residue. Before repainting, oil and grease must be removed so that new coatings will adhere properly.

The primary purpose of the maintenance program is to control corrosion. As soon as rusting is noted, it should be carefully removed and the protective coating of the iron renewed in the affected area. Replacement of deteriorated caulking, and repair or replacement of failed flashings are also important preventive maintenance measures.

Summary

The successful conservation of cast-iron architectural elements and objects is dependent upon an accurate diagnosis of their condition and the problems affecting them, as well as the selection of appropriate repair, cleaning, and painting procedures. Frequently, it is necessary to undertake major repairs to individual elements and assemblies; in some cases badly damaged or missing components must be replicated. The long-term preservation of architectural cast iron is dependent upon both the undertaking of timely, appropriate repairs and the commitment to a regular schedule of maintenance.



Detail of polychromed cast-iron facade at 23 Petaluma Boulevard, Petaluma, Calif. (1886; O'Connell and Lewis, *Architectural Iron Work*, San Francisco). Photo: Don Meacham.

Acknowledgements

This Preservation Brief was developed by the New York Landmarks Conservancy's Technical Preservation Services Center under a cooperative agreement with the National Park Service's Preservation Assistance Division, and with partial funding from the New York State Council on the Arts. The following individuals are to be thanked for their technical assistance: Robert Baird, Historical Arts & Casting; Willcox Dunn, Architect and Cast Iron Consultant; William Foulks, Mesick Cohen Waite Architects; Elizabeth Frosch, New York City Landmarks Preservation Commission; William Hawkins, III, FAIA, McMath Hawkins Dortignacq; J. Scott Howell, Robinson Iron Company; David Look, AIA, National Park Service; Donald Quick, Architectural Iron Company; Maurice Schickler, Facade Consultants International; Joel Schwartz, Schwartz and Schwartz Metalworks; and Diana Waite, Mount Ida Press. Kim Lovejoy was project coordinator and editor for the Conservancy; Charles Fisher was project coordinator and editor for the National Park Service.

Reading List

- Ashurst, John, and Nicola Ashurst with Geoff Wallis and Dennis Toner. *Practical Building Conservation: English Heritage Technical Handbook: Volume 4 Metals*. Aldershot, Hants: Gower Technical Press, 1988.
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- Hawkins, William John III. *The Grand Era of Cast Iron Architecture in Portland*. Portland, Oregon: Binford & Mort, 1976.
- Howell, J. Scott. "Architectural Cast Iron: Design and Restoration," *The Journal of the Association for Preservation Technology*. Vol XIX, Number 3 (1987), pp. 51-55.
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- Southworth, Susan and Michael. *Ornamental Ironwork: An Illustrated Guide to Its Design, History, and Use in American Architecture*. Boston: David R. Godine, 1978.
- Waite, Diana S. *Ornamental Ironwork: Two Centuries of Craftsmanship in Albany and Troy, New York*. Albany, NY: Mount Ida Press, 1990.

This publication has been prepared pursuant to the National Historic Preservation Act amendments of 1980, which direct the Secretary of the Interior to develop and make available information concerning historic properties. Comments on the usefulness of this information and information on how to obtain copies may be directed either to the Chief, Preservation Assistance Division, National Park Service, U.S. Department of the Interior, P.O. Box 37127, Washington, D.C. 20013-7127, or to the Director, Technical Preservation Services Center, New York Landmarks Conservancy, 141 Fifth Avenue, New York, NY 10010.

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ISSN: 0885-7016

October 1991

International Rigging Group, LLC.

20 Hibiscus Street

Tarpon Springs, FL 34689

Phone: (727) 938-6557

Fax: (727) 942-1450

E-Mail: Info@intrigging.com



10/25/2023

TO: Tarpon Springs Building Department
324 Pine St.
Tarpon Springs, FL 34689

RE: Renovation of storefronts on Hibiscus St.

Regarding the above-mentioned project some concerns were raised by the city regarding the decorative and structural steel element which is now enclosed by stucco. The steel I-Beam in question is believed to have been installed during the initial construction of a very old building. The I-beam was and has been covered with stucco for decades; and is installed at an ingress and not flush to the façade of the building. Considering the age of the structure is pre 1978 (lead Paint ban by EPA) the I-Beam in question is most likely to have Lead Based Paints (%87 likely for pre 1940 buildings according to EPA data) that are naturally deteriorating by chalking and flaking causing contamination in the vicinity where restaurants and a bakery is present. Posing a potential health issue for the public frequenting the various restaurants and bakeries in the area if the I-beam in question was left exposed.

The Environmental Protection Agency has stringent rules and regulations that must be adhered to when working with lead exposure. The EPA also offers several methods for lead abatement divided into two parts: interim controls to reduce lead hazards which are not permanent solutions and will need ongoing attention; and permanent hazard elimination. The permanent hazard elimination is further divided into several methods such as removal, sealing, enclosing, and encapsulation. Each of the previously listed permanent hazard elimination methods have associated risks, costs, etc. that must be weighted when considering a method to utilize. The most costly and hazardous waste producing method would be the removal, which would involve abrasive blasting the beam to remove the entirety of lead-based coatings, producing lead dust which must be done in full containment as per the EPA. Utilizing this method there are various other government agencies with regulations that must be adhered to pertaining to the abatement such as OSHA, EPA, etc. along with various testing and training performed as per the regulations such as soil sampling, air monitoring, employee blood monitoring, etc. Thus, this method is the costliest of all methods listed and requires that current tenant businesses cease work during the construction; along with a minimum 10 foot offset of the containment onto the street for an extended period.

The second EPA recommended method simply requires encapsulation of the lead hazard. The encapsulation is typically done via an additional coating applied over the existing lead paint. However, considering the potential hazards that may be posed soon to the public (additional encapsulation coatings will naturally deteriorate due to exposure and the lead hazard remains, where food products are produced, served, and consumed) thus this method was not chosen. Enclosing the hazard requires that the potential hazard is covered with a non-permeable covering eliminating the exposure of the hazard to the public completely. Enclosing method was chosen for this project I believe is the best method considering the totality of the circumstances (impact on local business, possible contamination, etc.). If you have any further questions about this matter, please feel free to contact me.

Tufan Markal
SSPC C-1, C-2, C-3, C-5, BCI, QCS
NACE CIP 1 & 2
Industrial De-leading and Coatings

Patricia McNeese

From: Niki Vavlas <nvavlas@vhpenterprises.com>
Sent: Thursday, January 26, 2023 11:18 AM
To: Patricia McNeese
Subject: RE: Heritage Preservation Board hearing

External Email- Use caution with links and attachments

Pat
No problem I will make a note of that, thank you 😊
Please see attached photo this is how I want the store front to look like and proceed with approval of the board.
Disregard all other drawings.

Thank again

Niki Vavlas
20 Hibiscus Street
Tarpon Springs, FL 34689
(727) 938-6557

From: Patricia McNeese <pmcneese@ctsfl.us>
Sent: Thursday, January 26, 2023 10:25 AM
To: Niki Vavlas <nvavlas@vhpenterprises.com>
Cc: Caroline Lanford <clanford@ctsfl.us>; Karen Lemmons <klemmons@ctsfl.us>; Kim Yothers <kyothers@ctsfl.us>; Renea Vincent <rvincent@ctsfl.us>; Allie Keen <AKeen@ctsfl.us>
Subject: Heritage Preservation Board hearing

Niki,

Your project must be delayed to the March 6, 2023 meeting of the Heritage Preservation Board. We will send you the staff report and packet materials about a week ahead of that meeting.

Let me know if you have any questions on this.

Thanks! -Pat

Patricia L. McNeese, AICP
Principal Planner
City of Tarpon Springs
324 East Pine Street
P.O. Box 5004
Tarpon Springs, FL 34688-5004
727-938-3711, ext. 2255
pmcneese@ctsfl.us

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

Return to:
 Planning & Zoning Department
 324 E. Pine Street
 Tarpon Springs, FL 34689
 (727) 942-5611

(Please type or print clearly)

Property Owner(s)

Name Nomiki Vavlas		Email nvavlas@vhpenterprises.com	
Address 1403 Circle Drive			
City Tarpon Springs		State Florida	Zip 34689
Phone 727-421-7716	Fax 727-942-1450	Cellular 727-421-7716	

Applicant

Name Bokova Industrial Center, Inc		Email nvavlas@vhpenterprises.com	
Address 20 Hibiscus Street			
City Tarpon Springs		State Florida	Zip 34689
Phone 727-421-7716	Fax 727-942-1450	Cellular 727-421-7716	

Agent (if applicable)

Name		Email	
Address			
City		State	Zip
Phone	Fax	Cellular	

General Information

Property Location or Address 20, 22, 24, 26 Hibiscus Street					
Legal Description (attach additional sheets as necessary)					
Tax Parcel Number(s) 12/27/15/64998/000/0031	<table border="1"> <tr> <th align="center" colspan="2">Current Designations of Property</th> </tr> <tr> <td>Land Use Category</td> <td>Zoning District</td> </tr> </table>	Current Designations of Property		Land Use Category	Zoning District
Current Designations of Property					
Land Use Category	Zoning District				
Current Use of Property office, bakery, cafe	Contributing Structure? ☐ YES ☐ NO				

Type of Proposed Activity: [please check all that apply]

- | | | | |
|--|---|--|--------------------------------------|
| ☐ Demolition | ☐ Relocation * | ☐ Structural Addition | ☐ Driveway |
| ☒ Renovation | ☐ New Construction | ☐ New Roof | ☐ Other _____ |

*** If Relocation, please indicate new location:**

New Property Location or Address					
Legal Description (attach additional sheets as necessary)					
Tax Parcel Number(s)	<table border="1"> <tr> <th align="center" colspan="2">Current Designations of Property</th> </tr> <tr> <td>Land Use Category</td> <td>Zoning District</td> </tr> </table>	Current Designations of Property		Land Use Category	Zoning District
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CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

General Building Information

Year Built 1895	Architectural Style Masonry Vernacular	Porches? ☐ YES ☒ NO
Original Use George McArpy Building	Present Use Office, Bakery, Restaurant	Proposed Use Commercial
Roof Type & Material Flat	Exterior Siding Material Stucco / Venier Brick	

Previous Additions or Modifications: [please describe and include dates]

Application #22-139, approved by HPB to replace windows and doors on the storefronts at the contributing structure at 20-26 Hibiscus Street

After removal of existing stucco, the original brick, upper windows and steel beam were revealed however, due to the age of the building original material was not suitable to support the structure see attached

Description of Proposed Work:

For relocation or demolition, describe the property's physical condition, steps taken to save the property and whether renovation would be economically feasible:

the building has received new store front doors and window with the existing recessed remaining alcove entryways, over door windows and brick veneir columns

Requirements for Submission:

Please submit those items which have been checked by City staff:

- ☒ Completed original application with digital copies of all application documents
- ☒ \$50.00 application fee plus advertisement costs which will be invoiced upon calculation by Staff
- ☐ \$50.00 application fee for signs only
- ☐ Property survey, signed and sealed by a professional land surveyor
- ☐ Architectural floor plans and elevations (10 copies)
- ☐ Site Plan for new construction (10 copies)
- ☐ Landscaping plan (10 copies)
- ☐ Details of exterior modifications

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

AFFIDAVIT

I (we), the undersigned, certify ownership of the property within this application, that said ownership has been fully divulged, whether such ownership by contingent or absolute, and that the name of all parties to an existing contract for sale or any options are filed with this application.

I (we) certify that Nomiki Vavlas is (are) duly designated as the agent(s) for the owner, that the agent(s) is (are) authorized to provide subject matter on the application contained herein, whether verbal or written, and appear at any public hearing(s) involving this petition.

I (we) assent to the City's Comprehensive Plan as it applies to the property. Further, it is understood that this application must be complete and accurate and the appropriate fee paid prior to processing.

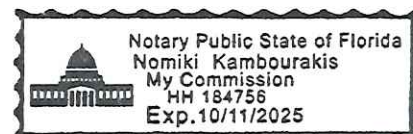
Date: <u>02/12/2024</u>	Title Holder/Property Owner: <u>owner</u>
Date: _____	Title Holder/Property Owner: _____
Date: _____	Title Holder/Property Owner: _____
Date: _____	Title Holder/Property Owner: _____

STATE OF FLORIDA)
COUNTY OF PINELLAS)

The foregoing instrument was acknowledged before me this 12 day of February, A.D., 20____
by Nomiki Vavlas, who is personally known to me or who has produced
_____ as identification and who did (did not) take an oath.

NOTARY PUBLIC

Name: Nomiki Kambourakis
Signature: *Nomiki Kambourakis*
Stamp: _____





Renea Vincent, AICP, CPM
Director

City of Tarpon Springs, Florida

Planning and Zoning Department
324 E Pine Street
Tarpon Springs FL 34689
(727) 942-5611

March 7, 2023

Ms. Nomiki Vavlas
20-26 Hibiscus Street
Tarpon Springs, FL 34689
(c/o nvavlas@vhpenterprises.com)

**RE: Certificate of Approval – Vavlas
Application #22-139**

Dear Ms. Vavlas:

This letter serves to inform you that the City of Tarpon Springs Heritage Preservation Board, at their regular meeting of March 6, 2023, approved your request, as conditioned, to replace the windows and doors on the storefronts at the contributing structure at 20-26 Hibiscus Street with aluminum framed windows and doors. The following conditions of approval were specified:

1. Maintain the existing recessed configuration of the two remaining alcove entryways.
2. The cornice will be restored.
3. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.

Please note that it is your responsibility to supply a copy of this letter with the application for a building permit when it is submitted. In the meantime, if you have any questions, please do not hesitate to contact me at 727-938-3711, ext. 2379.

Sincerely,

Caroline Lanford, AICP CTP
Principal Planner

cc: File #22-139
enc. Plan revisions

International Rigging Group, LLC.

20 Hibiscus Street

Tarpon Springs, FL 34689

Phone: (727) 938-6557

Fax: (727) 942-1450

E-Mail: Info@intrigging.com



10/25/2023

TO: Tarpon Springs Building Department
324 Pine St.
Tarpon Springs, FL 34689

RE: Renovation of storefronts on Hibiscus St.

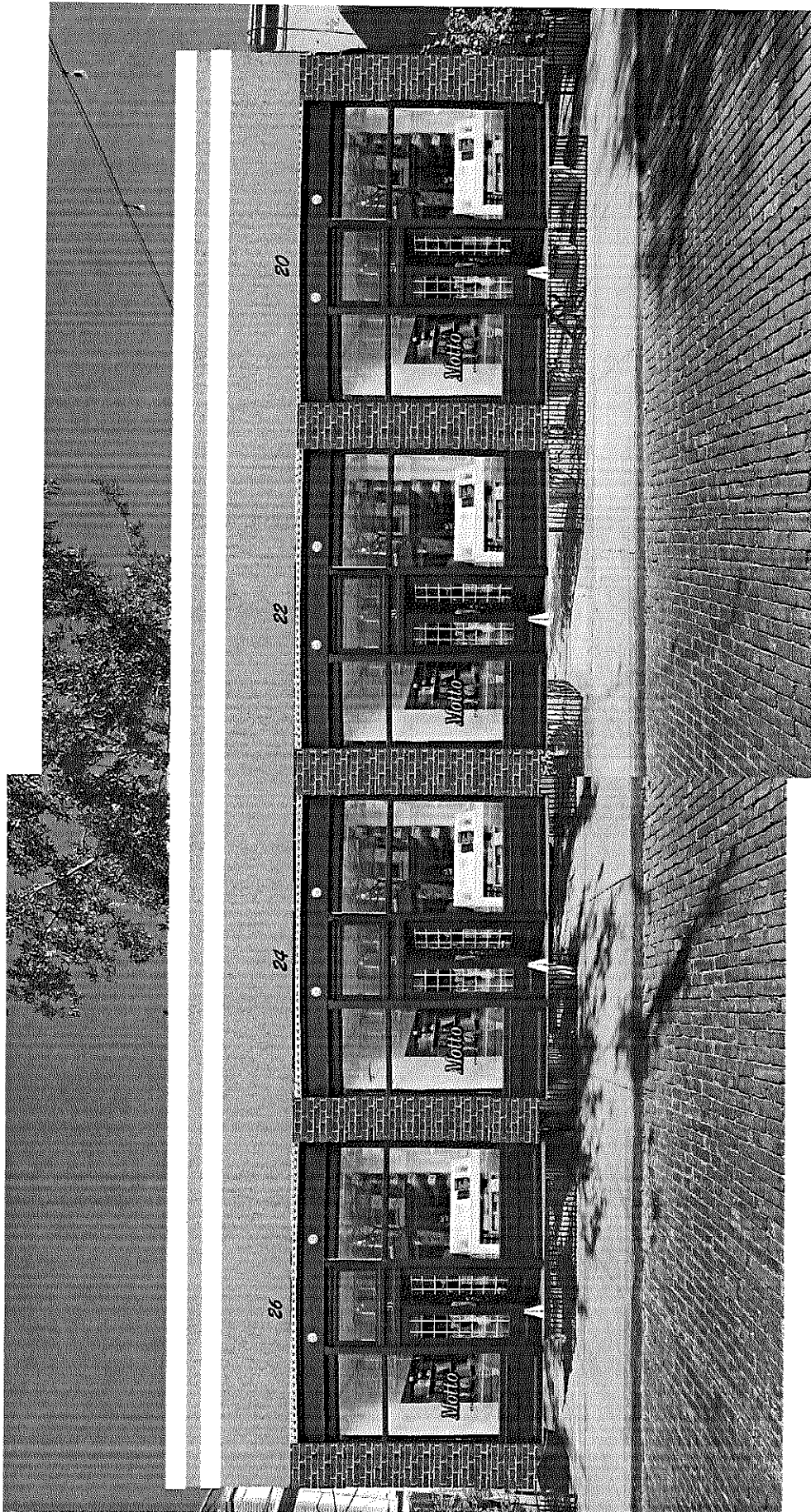
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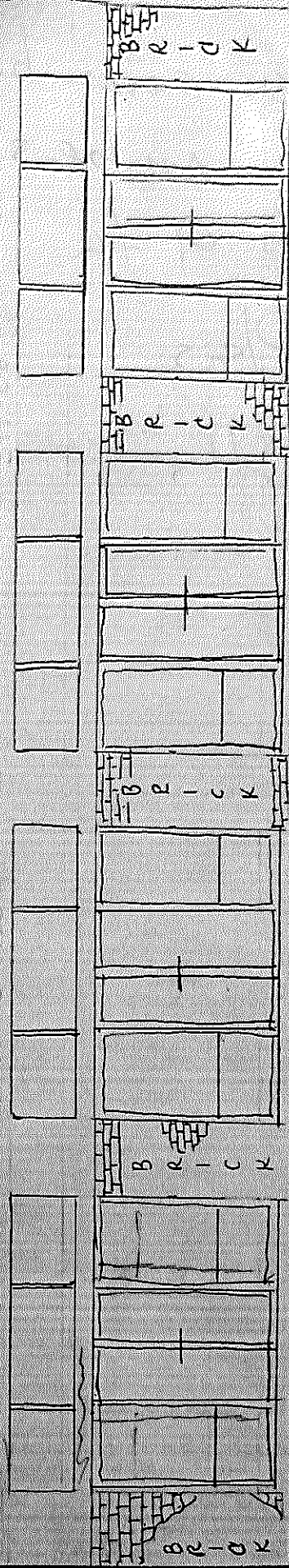
SSPC C-1, C-2, C-3, C-5, BCI, QCS
NACE CIP 1 & 2
Industrial De-leading and Coatings



2

Stucco

Stucco



CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

Return to:
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 324 E. Pine Street
 Tarpon Springs, FL 34689
 (727) 942-5611

(Please type or print clearly)

Property Owner(s)

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|--|---|--|--------------------------------------|
| ☐ Demolition | ☐ Relocation * | ☐ Structural Addition | ☐ Driveway |
| ☒ Renovation | ☐ New Construction | ☐ New Roof | ☐ Other _____ |

*** If Relocation, please indicate new location:**

New Property Location or Address					
Legal Description (attach additional sheets as necessary)					
Tax Parcel Number(s)	<table border="1"> <tr> <th align="center" colspan="2">Current Designations of Property</th> </tr> <tr> <td>Land Use Category</td> <td>Zoning District</td> </tr> </table>	Current Designations of Property		Land Use Category	Zoning District
Current Designations of Property					
Land Use Category	Zoning District				

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

General Building Information

Year Built 1895	Architectural Style masonry vernacular	Porches? ☐ YES ☒ NO
Original Use George McAroy	Present Use Office Commercial	Proposed Use Office
Roof Type & Material Flat	Exterior Siding Material Stucco	

Previous Additions or Modifications: [please describe and include dates]

Description of Proposed Work:

20, 22, 24, 26 Hibiscus St.

Remove storefront door and fixed glass

Reframe at a 90 degree angle to accommodate additional interior space

Product approval code and specifications will be the same as Bakdraughts and Twisted Orange

For relocation or demolition, describe the property's physical condition, steps taken to save the property and whether renovation would be economically feasible:

Requirements for Submission:

Please submit those items which have been checked by City staff:

- ☒ Completed original application with digital copies of all application documents
- ☒ \$50.00 application fee plus advertisement costs which will be invoiced upon calculation by Staff
- ☐ \$50.00 application fee for signs only
- ☐ Property survey, signed and sealed by a professional land surveyor
- ☐ Architectural floor plans and elevations (10 copies)
- ☐ Site Plan for new construction (10 copies)
- ☐ Landscaping plan (10 copies)
- ☒ Details of exterior modifications

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

AFFIDAVIT

I (we), the undersigned, certify ownership of the property within this application, that said ownership has been fully divulged, whether such ownership by contingent or absolute, and that the name of all parties to an existing contract for sale or any options are filed with this application.

I (we) certify that Nomiki Vavlas is (are) duly designated as the agent(s) for the owner, that the agent(s) is (are) authorized to provide subject matter on the application contained herein, whether verbal or written, and appear at any public hearing(s) involving this petition.

I (we) assent to the City's Comprehensive Plan as it applies to the property. Further, it is understood that this application must be complete and accurate and the appropriate fee paid prior to processing.

Date: <u>01/09/2023</u>	Title Holder/Property Owner: <u>Nomiki Vavlas</u>
Date: _____	Title Holder/Property Owner: _____
Date: _____	Title Holder/Property Owner: _____
Date: _____	Title Holder/Property Owner: _____

STATE OF FLORIDA)
COUNTY OF PINELLAS)

The foregoing instrument was acknowledged before me this 09 day of January, A.D., 20 ____
by Nomiki Vavlas, who is personally known to me or who has produced
_____ as identification and who did (did not) take an oath.

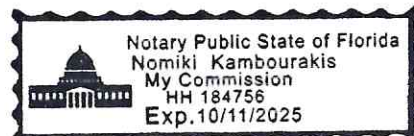
NOTARY PUBLIC

Name: _____

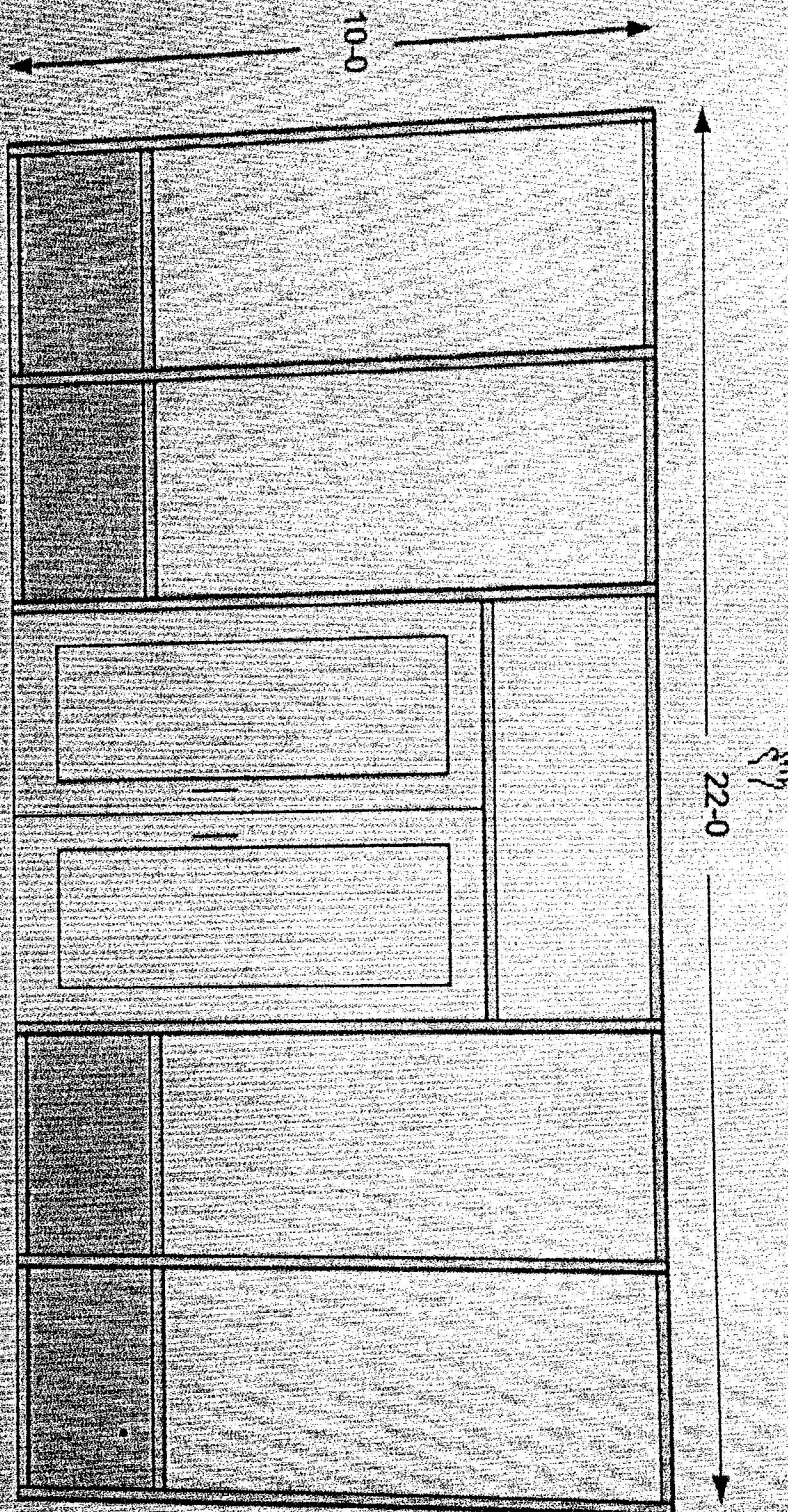
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Stamp: _____

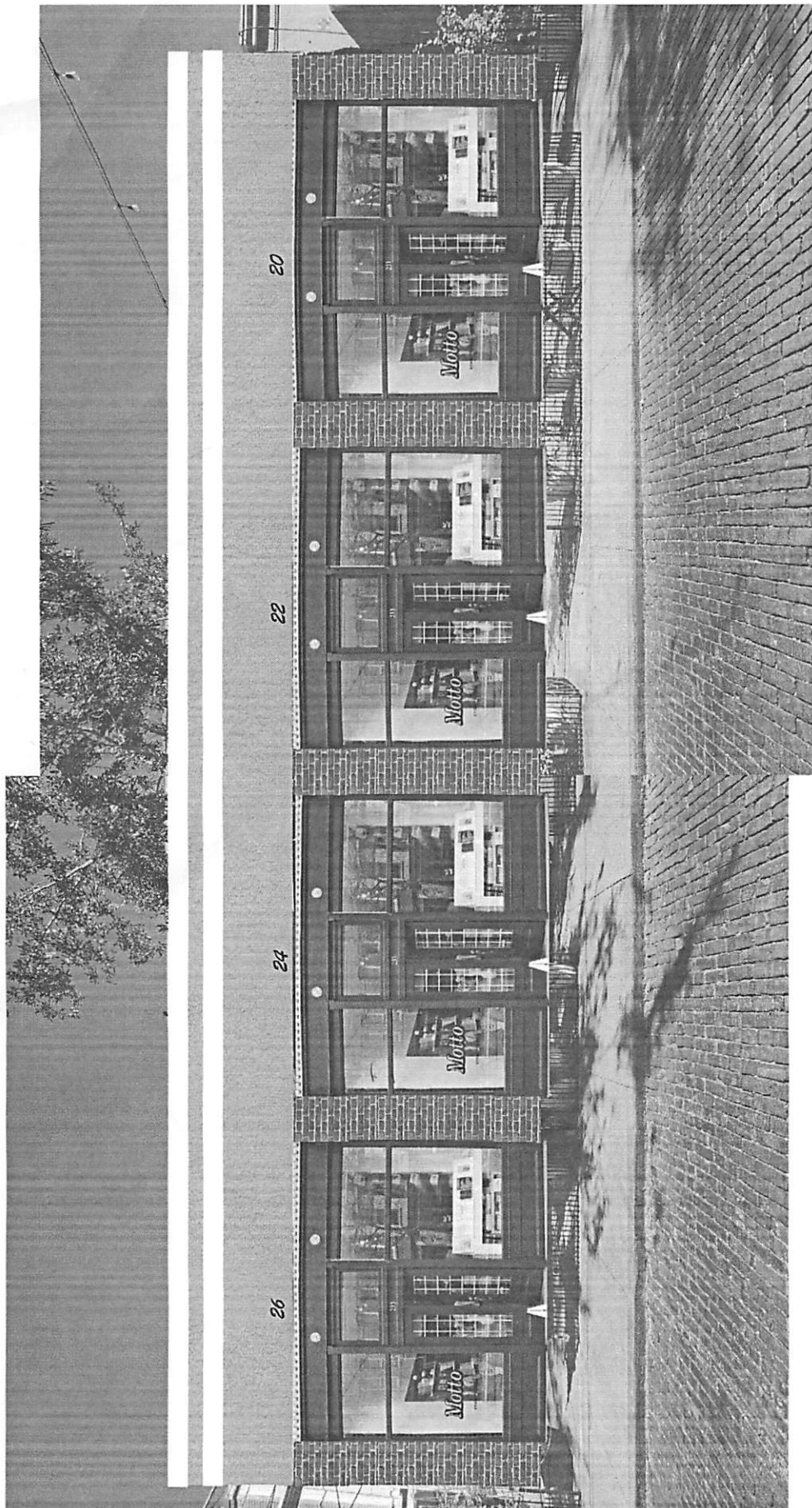
Nomiki Kambourakis
Kambourakis



105 Tarpon Avenue
Tarpon Springs, Florida 34689



New dark bronze aluminum hurricane impact store front
Window and door system glazed with clear 9/16 impact laminated glass.
There is one pair of 3-0 x 7-0 doors with a transom and comes with Mtg. standard
Door hardware package. Approx. size from 20-0 x 10-0.



FLORIDA DEPARTMENT OF Business & Professional Regulation

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Product Approval
USER: Public User

[Product Approval Menu](#) > [Product or Application Search](#) > **Application List**

► OFFICE OF THE
SECRETARY

Search Criteria

Code Version	2017	FL#
Application Type	ALL	Product Manufacturer
Category	ALL	Subcategory
Application Status	ALL	Compliance Method
Quality Assurance Entity	ALL	Quality Assurance Entity Contract Expired
Product Model, Number or Name	ALL	Product Description
Approved for use in HVHZ	ALL	Approved for use outside HVHZ
Impact Resistant	ALL	Design Pressure
Other	ALL	

Search Results - Applications

FL#	Type	Manufacturer
FL17693-R1 History	Revision	OLDCASTLE BUILDING ENVELOPE DOORS FL#: FL17693.1 Model: SERIES MSD-375 AND WSD-500 ALUMINUM ENTRANCE DOOR Description: MSD-375 MEDIUM STILE AND WSD-WIDE STILE IMPACT ALUMINUM ENTRANCE DOORS (WET GLAZED) Category: Exterior Doors Subcategory: Swinging Exterior Door Assemblies

*Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.

[Contact Us](#) :: 2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1831

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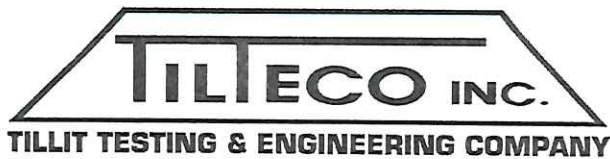
Under Florida law, email addresses are public records. If you do not want your e-mail address released in response to a public request, please contact the office by phone or by traditional mail. If you have any questions, please contact 455.275(1), Florida Statutes, effective October 1, 2012, licensees licensed under Chapter 455, F.S. must provide the Department with an email address which can be made available to the public. To determine if your email address is a public record, please click [here](#).

Product Approval Accepts:



Credit Card
Safe

securityMETRICS



WALTER A. TILLIT, JR., P.E.

PRODUCT EVALUATION REPORT

tilteco@aol.com
FL P.E. License No. 44167
FL E.B. License No. 0006719

REPORT No.: 18-0410.01

DATE: April 10, 2018

PRODUCT CATEGORY: Exterior Doors

PRODUCT SUB-CATEGORY: Swinging Exterior Door Assemblies

PRODUCT NAME: Series MSD-375 (medium) and WSD-500 (wide) Stiles Aluminum Entrance Door (wet glazed) Large and Small Missile Impact

MANUFACTURER: Oldcastle BuildingEnvelope™
803 Airport RD. Terrell, TX 75160

1. PURPOSE OF EVALUATION:

This is a Product Evaluation Report issued by **Walter A. Tillit, Jr., P.E.** (System ID # 1906) to **OLDCASTLE BUILDING ENVELOPE** based on **Rule Chapter No. 61G20-3, Method 1D of the Florida Department of Business and Professional Regulation.**

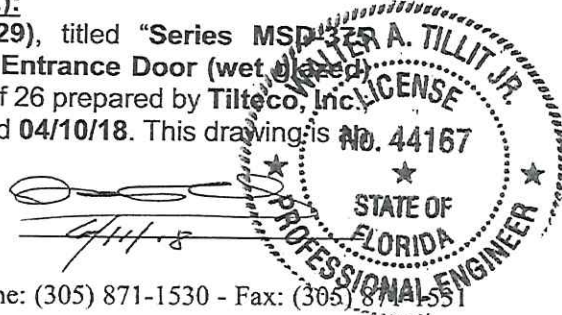
This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2017 Sixth Edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

This Product Evaluation Report shall be subject to review and revision in case of a Building Code Change that may affect its limitations and conditions.

2. EVIDENCE SUBMITTED:

2.1. PRODUCT EVALUATION DOCUMENT (P.E.D.):

Drawing No. **18-019 (Revises Drawing # 15-029)**, titled "**Series MSD-375 (medium) and WSD-500 (wide) Stiles Aluminum Entrance Door (wet glazed) Large and Small Missile Impact**" sheets 1 thru 26 of 26 prepared by **Tilteco, Inc.**, signed and sealed by **Walter A. Tillit, Jr., P.E.**; dated **04/10/18**. This drawing is an integral part of this Evaluation Report.



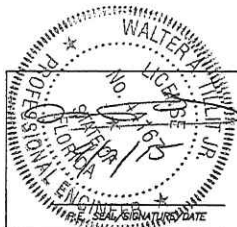
6355 N.W. 36th Street, Suite 305, Miami, Florida 33166 - Phone: (305) 871-1530 - Fax: (305) 871-1551

SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STILE OUT SWING ALUMINUM ENTRANCE DOORS W/ LARGE & SMALL MISSILE IMPACT RESISTANT GLASS

GENERAL NOTES:

- ALUMINUM ENTRANCE DOOR SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2014 (5th EDITION) OF THE FLORIDA BUILDING CODE. PRODUCT MAY BE INSTALLED WITHIN HIGH VELOCITY HURRICANE ZONES (HVHZ) AND OUT OF THEM (NHVHZ).
- DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 (HVHZ) & 1609 (NHVHZ) OF THE ABOVE MENTIONED CODE, FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THIS PRODUCT TO BE INSTALLED FOR A DIRECTIONALITY FACTOR $K_d=0.85$, USING ASCE 7-10 & SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATING INDICATED ON NOTE 2.
- IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-10 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTE 2.
- IN ORDER TO VERIFY THAT ANCHORS ON THIS P.E.D., AS TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS. FASTENERS SPACING TO WOOD HAS BEEN DETERMINED IN ACCORDANCE WITH N.D.S. 2012.
- THIS PRODUCT'S ADEQUACY FOR IMPACT AND WIND RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 & 1609.1.2 OF THE ABOVE MENTIONED CODE AS PER PROTOCOLS TAS-201, TAS-202, TAS-203, PER HURRICANE TESTING LABORATORY REPORTS # HTL-0105-1030-02, HTL-0105-0712-03, HTL-0105-0205-03, HTL-0105-0810-03, HTL-0105-0210-04 AND HTL-0105-0407-04; PER CERTIFIED TESTING LABORATORIES REPORT # CTLA-1177W (FOR DOOR CERTIFICATION INSTALLATION WITH FG-5000 AND FG-5100 WINDOW WALL SYSTEM); PER ARCHITECTURAL TESTING LAB REPORTS # C0344.01-450-18, 95631.01-401-18 (NEW PANIC HARDWARE) PER CONSTRUCTION CONSULTING LABORATORY REPORTS #CC1-14-128, AND AS PER SUBMITTED STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTIONS 1616 & 1604 OF THE FLORIDA BUILDING CODE.
- MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR 3'-6"x8'-0" SINGLE OR 7'-0"x8'-0" PAIR OF DOORS SHALL BE ± 70 psf. WHEN USED WITH LAMINATED GLASS, AND MAX. ± 70 psf. WHEN USED WITH INSULATED GLASS. MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR 3'-6"x8'-0" SINGLE OR 7'-0"x8'-0" PAIR OF DOORS SHALL BE ± 80 psf. WHEN SARGENT OR COBBIN RUSSWIN EXIT DEVICES ARE USED (SEE SHEETS 6 & 7).
- USE SEALANT #37 FOR UP TO ± 70 psf. -80 psf. A.S.D. DESIGN PRESSURE RATING. USE SEALANT # 37A FOR UP TO ± 70 psf. -70 psf. A.S.D. DESIGN PRESSURE RATING.
- MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR 4'-0"x8'-0" SINGLE OR 8'-0"x8'-0" PAIR OF DOORS SHALL BE ± 70 psf. -70 psf. AND SHALL ONLY BE USED WITH EITHER LAMINATED OR INSULATED GLASS. USE SEALANTS #37 AND #37A FOR THESE DOORS.
- THIS PRODUCT WILL NOT REQUIRE A HURRICANE PROTECTION DEVICE.
- THIS PRODUCT IS NOT APPROVED FOR WATER INFILTRATION.
- PROVIDE 1/4" MAX. LOAD BEARING SHIM (TYP.) WHEN ALLOWED BY THIS DRAWING.
- ALL SCREWS USED FOR ASSEMBLY CONNECTIONS (METAL TO METAL) TO BE STAINLESS STEEL 304 OR 316 ANSI SERIES OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018 AND SECTION 2411.3.3.4 OF THE FLORIDA BUILDING CODE WITH 50 ksi YIELD STRENGTH AND 90 ksi TENSILE STRENGTH.
- WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE BUILDING STRUCTURE. WOOD BUCKS MUST BE SOUTHERN PINE, G = 0.55, AND SHALL COMPLY WITH SECTIONS 2411.3.3.3 & 2328 OF THE FLORIDA BUILDING CODE.
- REMAINING COMPONENTS FOR THIS PRODUCT SHALL BE AS INDICATED ON BILL OF MATERIALS, SHEETS 4 & 5 OF THIS DRAWING AND AT HARDWARE SCHEDULES ON SHEETS 6 & 7 OF THE DRAWING.
- ALL ALUMINUM EXTRUSIONS IN CONTACT WITH STEEL, CONCRETE, GROUT FILLED CONCRETE BLOCK AND WOOD SHALL COMPLY WITH SECTIONS 2003.8.4.2, 2003.8.4.4, 2003.8.4.5 AND 2003.8.4.6 OF THE FLORIDA BUILDING CODE, RESPECTIVELY.
- SHOP DRAWINGS PREPARED BASED ON THIS APPROVAL, AND TAKING INTO ACCOUNT THE SPECIFIC JOB CONDITIONS, SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AS PART OF THE PERMIT DOCUMENTS.
- SUBSTRATE MATERIAL, NOTED ON THIS DRAWING AS EXISTING BY OTHERS, POURED CONCRETE, GROUT FILLED CONCRETE BLOCK AND WOOD MUST WITHSTAND THE LOADS IMPOSED BY THIS PRODUCT.
- THIS PRODUCT'S INSTALLATION SHALL COMPLY WITH ALL SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
- (a) THIS P.E.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, I.E. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.
- (b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.E.D., PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
- (c) THIS P.E.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
- (d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD ACTING AS DELEGATED ENGINEER TO THE P.E.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- (e) ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
- PRODUCT MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH SECTION 1710.5 OF THE FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING.

THIS DRAWING SHALL ONLY BE USED TO
OBTAIN PERMITS IN THE STATE OF FLORIDA



FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)			
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE)		DRAWN BY:	
STILE ALUMINUM ENTRANCE DOOR (WET GLAZED)		F.R.L.	
LARGE & SMALL MISSILE IMPACT		03/18/15	
		DATE:	
		15-029	
		DRAWING No	
		SHEET 1 OF 26	

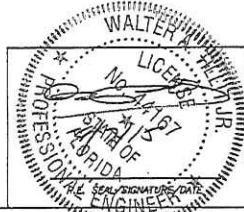
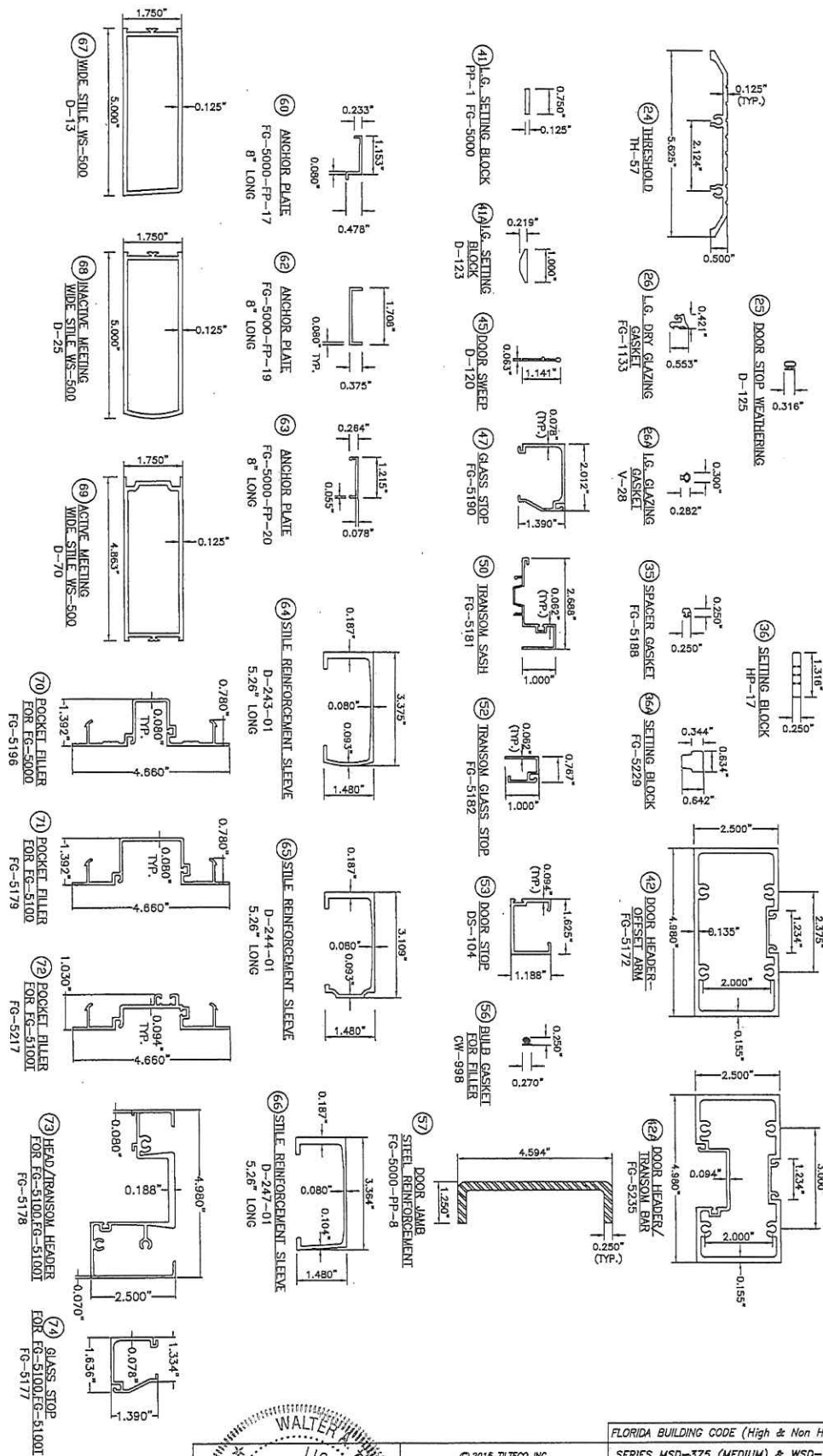
SCALE: 4" = 1"



REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
	OLD 14-D83	6/3/18/15			

(WET GLAZED) COMPONENTS

(WET GLAZED) COMPONENTS



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TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 32nd St., Ste. 300, WILMINGTON, FL 33180
Phone 1: (305) 871-1630, Fax 2: (305) 871-1531
e-mail: tliteco@aol.com

EB-0008719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE)
STILE ALUMINUM ENTRANCE DOOR (WET GLAZED)
LARGE & SMALL MISSILE IMPACT



Oldcastle BuildingEnvelope™
800 AIRBORNE RD. TERRELL, TX 75140

DRAWN BY:
F.R.L
03/18/15

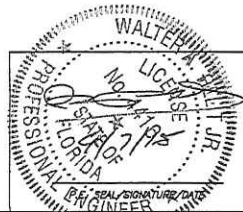
15-029
DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
	OLD 14-063	03/18/15			

SHEET 3 OF 20

BILL OF MATERIALS MSD-375 & WSD-500 DOORS

ITEM NO.	PART NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	NOTES
1.	AS-6	ADJUSTABLE ASTRAGAL ASSEMBLY	.331' X 1.562' X .076'	6063-T6 ALUMINUM	DBE	
2.	CB-21	CORNER BLOCK	2.130' X 1.44' X .25'	6063-T5 ALUMINUM	DBE	4.437' LONG
3.	CB-38	DOOR CORNER BLOCK	2.130' X 1.44' X .25'	6063-T5 ALUMINUM	DBE	123' LONG
4.	CB-61	DOOR CORNER BLOCK	2.130' X 1.44' X .25'	6063-T5 ALUMINUM	DBE	8' LONG
4A.	CB-71	DOOR CORNER BLOCK	2.130' X 1.44' X .25'	6063-T5 ALUMINUM	DBE	6' LONG
5.	D-6	MEDIUM STILE MS-375	3.75' X 1.75' X .125'	6063-T5 ALUMINUM	DBE	
6.	D-21	HORIZONTAL MID-RAIL/TOP RAIL	6.50' X 1.71' X .125'	6063-T5 ALUMINUM	DBE	
7.	D-24	INACTIVE MEETING MEDIUM STILE MS-375	3.75' X 1.75' X .125'	6063-T5 ALUMINUM	DBE	
8.	D-38	DOOR TOP RAIL	3.00' X 1.71' X .125'	6063-T5 ALUMINUM	DBE	
9.	D-62	MID-RAIL ADAPTER	1.429' X 1.532' X .062'	6063-T5 ALUMINUM	DBE	
10.	D-69	ACTIVE MEETING MEDIUM STILE MS-375	3.614' X 1.75' X .125'	6063-T5 ALUMINUM	DBE	
11.	D-61	10' ADA BOTTOM RAIL	10.00' X 1.71' X .125'	6063-T6 ALUMINUM	DBE	
11A.	D-71	8' BOTTOM RAIL	8.00' X 1.71' X .125'	6063-T6 ALUMINUM	DBE	
12.	D-118	DOOR BOTTOM RAIL SWEEP ASSEMBLY	.812' X .302' X .125'	6063-T5 ALUMINUM	DBE	CUT TO DOOR WIDTH MINUS 5/8"
13.	D-134-3	PANIC DOOR STOP	.344' X 1.484' X .300'	6063-T5 ALUMINUM	DBE	
14.	D-152	SCREW ATTACHED DOOR GLASS STOP	1.00' X .762' X .125'	6063-T6 ALUMINUM	DBE	ATTACH W/ 3/16" IN CENTER
15.	FG-5206	HEAD HORIZONTAL/TRANSMOM HEADER	2.50' X 4.98' X .080'	6063-T6 ALUMINUM	DBE	FOR FG-5000 SYSTEMS
15A.	FG-5204	HEAD HORIZONTAL/TRANSMOM HEADER	2.50' X 4.98' X .080'	6063-T6 ALUMINUM	DBE	FOR FG-5000 SYSTEMS
16.	FG-5113	HEAD FILLER	.50' X 1.63' X .050'	6063-T5 ALUMINUM	DBE	
18.	FG-5163	SNAP-IN DOOR STOP	.746' X 1.357' X .062'	6063-T6 ALUMINUM	DBE	
19.	FG-5167	FLAT FILLER	.778' X 4.66' X .080'	6063-T6 ALUMINUM	DBE	RUNS FULL LENGTH
20.	FG-5168	DOOR JAMB & FG-5000, FG-5100 & FG-5100T	2.50' X 5.00' X .125'	6063-T6 ALUMINUM	DBE	
21.	FG-5198	TRANSMOM SASH	1.00' X 1.940' X .062'	6063-T6 ALUMINUM	DBE	
22.	FG-5197	DOOR HEADER/TRANSMOM BAR	2.50' X 4.90' X .080'	6063-T6 ALUMINUM	DBE	
23.	S-83	SNAP-IN DOOR LAMINATED GLASS STOP	.812' X .762' X .078'	6063-T6 ALUMINUM	DBE	
23A.	S-81	SNAP-IN DOOR INSULATED GLASS STOP	.748' X .75' X .050'	6063-T5 ALUMINUM	DBE	
24.	TH-57	THRESHOLD	.50' X 5.625' X .125'	6063-T5 ALUMINUM	DBE	
25.	D-125	DOOR STOP WEATHERING	.125' SPACE	SANTOPRENE	UNIVERSAL RUBBER	
26.	FG-1133	GLAZING GASKET	.197' SPACE	EPDM	VARIES	70 DIAMETER, USE AT LAMINATED GLASS
26A.	V-28	GLAZING GASKET	.30' X .282'	VINYL	DBE	USE AT INSULATED GLASS
27.	FS-2	ATTACH D-118 SWEEP TO DOOR BOTTOM	#8 X 3/4" PPHSMS	STEEL	VARIES	
28.	FS-7	ATTACH RAILS TO CORNER BLOCKS	#10 X 3/4" PFH	STEEL	VARIES	
29.	FS-8	SPLINE ASSEMBLY SCREW	#14 X 1" HHSTS	STEEL	VARIES	
30.	FS-114	ATTACH D-152 TO DOOR	#8 X 3/4" PPHSMS	STEEL	VARIES	SPACED @ 12" O.C.
31.	SM-5601	JOINT SEALANT TAPE	.125' X .50' VARIES	BUTYL	SCHNEE-MOREHEAD	
32.	WP-085	ADJUSTABLE ASTRAGAL WEATHERING	VARIABLE SPACE	WOOD PILE	SCHLAGE	
33.	FS-56	ATTACH D-134-2 PANIC STOP	#12 X 3/4" PPHSMS	STEEL	VARIES	
34.	FS-49	ADJUSTABLE ASTRAGAL SCREW	#8 X 1 1/2" PPHSMS	STEEL	VARIES	
35.	FG-5188	SPACER GASKET	.25' X .25'	EPDM	VARIES	85 DIAMETER
36.	HP-17	SETTING BLOCK	1.316' X .25' X 4' LONG	EPDM	VARIES	90 DIAMETER
36A.	FG-5629	SETTING BLOCK	.634' X .642' X 4' LONG	EPDM	VARIES	85 DIAMETER



TILECO INC.
TILLIT TESTING & ENGINEERING COMPANY
 4355 N.W. 38th St., Suite 200, Virginia Gardens, FL 33158
 Phone: 1-800-871-1530 Fax: 1-202-871-1537
 e-mail: tillitco@tileco.com
 ED-0008719
 WALTER A. TILLIT, JR., P.E.
 FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)					
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STILE ALUMINUM ENTRANCE DOOR (WET GLAZED) LARGE & SMALL MISSILE IMPACT				DRAWN BY: FRL 03/16/15 DATE	
Okcast BuildingEnvelope® 503 AIRPORT RD. TERRELL, TX 75160 www.OkcastBB.com Phone 800-859-4567				15-029 DRAWING No	
REV. NO.	DESCRIPTION	DATE	REV. NO.	DESCRIPTION	DATE
	D.D. 14-063	03/16/15			
				SHEET 4 OF 28	

BILL OF MATERIALS MSD-375 & WSD-500 DOORS (CONTINUED)

ITEM No.	PART NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	NOTES
37.	995 SEALANT	STRUCTURAL SILICONE	FILL SPACE	SILICONE	DDV CORNING 995	USE FOR UP TO +70, -80 psf. ASD PRESSURE RATING
37A.	SEALANT	STRUCTURAL SILICONE PROGLAZE II	FILL SPACE	SILICONE	TREMCO	USE FOR UP TO +70, -70 psf. ASD PRESSURE RATING
38.	921	USED AS PERIMETER SEALANT	FILL SPACE	POLYURETHANE	VULKEN	
40.	FS-39	ATTACH CORNER BLOCK TO STILES	3/4" X 20" X 3/4" HHMS	STEEL	VARIES	USE FOR LAMINATED GLASS
41.	FG-5000-PP1	SETTING BLOCK	3/4" X 3/4" X 4"	EPDM	VARIES	USE FOR INSULATED GLASS
41A.	D-123	SETTING BLOCK	1.00" X 0.219"	RIGID PVC	VARIES	
42.	FG-5172	DDOR HEADER-OFFSET ARM	2.50" X 4.98" X .135"	6063-T6 ALUMINUM	DBE	
42A.	FG-5235	DDOR HEADER/TRANSOM BAR	2.50" X 4.98" X .135"	6063-T6 ALUMINUM	DBE	
43.	DS-104	OFFSET ARM COVER	1.188" X 1.625" X .094"	6063-T6 ALUMINUM	DBE	
44.	FASTENER	ATTACH DS-104 TO FG-5172	#10 X 2" FHPSMS	STEEL	VARIES	SINGLE DDOR: 1 EA. 6" FROM LOCK STILE PAIR OF DRS: 1 EA. 6" EACH SIDE OF DR C/L
45.	D-120	DDOR WEATHERING STRIP	VARIABLE SPACE	VINYL	DBE	DDOR WIDTH MINUS 5/8"
46.	FG-5185	SPACER GASKET	.25" X .25"	SILICONE	VARIES	
47.	FG-5190	GLASS STOP	2.01" X 1.39" X .080"	6063-T6 ALUMINUM	DBE	FOR FG-5000 SYSTEMS
50.	FG-5181	TRANSOM SASH	1.00" X 2.69" X .062"	6063-T5 ALUMINUM	DBE	
51.	FS-55	ATTACH SC-1 CLIP	#10 X 1/2" PH ROUND	STEEL	VARIES	9" D.C.
52.	FG-5182	TRANSOM GLASS STOP	1.00" X .767" X .062"	6063-T5 ALUMINUM	DBE	
53.	DS-104	DDOR STOP	1.625" X 1.188" X .094"	6063-T5 ALUMINUM	DBE	USES SC-1 CLIP
56.	CV-998	BULB GASKET FOR FILLER	VARIES	FOAM-TITE	AMESBURY	
57.	FG-5000-PP-8	DDOR JAMB MULLION STL REINFORCING	1 1/4" X 4 9/16" X 1/4"	A-36 STEEL/ZINC PLATED	VARIES	FULL LENGTH OF MULLION COAT RICH PRIMER
58.	FS-38	ATTACH STL REINFORCEMENT	1/4"-20 X 1/2" HH TYPE "F"	STEEL	VARIES	
59.	SC-1	STAINLESS STEEL CLIP	.281" X .968" X .032"	STAINLESS STEEL	DBE	9" D.C.
60.	FG-5000-PP-17	ANCHOR PLATE	1.153" X .478" X .080" X 8" LONG	6063-T5 ALUMINUM	DBE	USED @ 22
62.	FG-5000-PP-19	ANCHOR PLATE	1.708" X .375" X .080" X 8" LONG	6063-T5 ALUMINUM	DBE	USED @ 24
63.	FG-5000-PP-20	ANCHOR PLATE	1.215" X .264" X .078" X 8" LONG	6063-T5 ALUMINUM	DBE	USED @ 42
64.	D-243-01	STILE REINFORCEMENT SLEEVE	3.375" X 1.480" X .093" X 5.26LG	6063-T6 ALUMINUM	DBE	USED AT DDOR STILE SILL WITH REGENT HARDWARE
65.	D-244-01	STILE REINFORCEMENT SLEEVE	3.109" X 1.480" X .093" X 5.26LG	6063-T6 ALUMINUM	DBE	USED AT DDOR STILE SILL WITH REGENT HARDWARE
66.	D-247-01	STILE REINFORCEMENT SLEEVE	3.364" X 1.480" X .104" X 5.26LG	6063-T6 ALUMINUM	DBE	USED AT DDOR STILE SILL WITH REGENT HARDWARE
67.	D-13	WIDE STILE WS-500	5.000" X 1.75" X .125"	6063-T5	DBE	
68.	D-25	INACTIVE MEETING WIDE STILE WS-500	5.000" X 1.75" X .125"	6063-T5	DBE	
69.	D-70	ACTIVE MEETING WIDE STILE WS-500	4.863" X 1.75" X .125"	6063-T5	DBE	
70.	FG-5196	POCKET FILLER FOR FG-5000	4.660" X 1.392" X .080"	6063-T5	DBE	
71.	FG-5179	POCKET FILLER FOR FG-5100	4.660" X 1.392" X .080"	6063-T5	DBE	
72.	FG-5217	POCKET FILLER FOR FG-5100T	4.660" X 1.030" X .094"	6063-T5	DBE	
73.	FG-5178	HEAD/TRANSOM HEADER	2.500" X 4.980" X VARIES	6063-T6 ALUMINUM	DBE	FOR FG-5100/FG-5100T SYSTEMS
74.	FG-5177	GLASS STOP	1.390" X 1.636" X .078"	6063-T6 ALUMINUM	DBE	FOR FG-5100/FG-5100T SYSTEMS



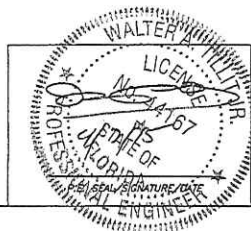
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 WALTER A. TILLIT JR., P.E.
 FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)					
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STILE ALUMINUM ENTRANCE DOOR (WET GLAZED) LARGE & SMALL MISSILE IMPACT				DRAWN BY: P.R.L. 03/18/15 DATE	
Okcast BuildingEnvelope 803 AIRPORT RD. TERRELL, TX 75160 www.OkcastBE.com Phone 800-869-4567				15-029 DRAWING No	
REV. NO.	DESCRIPTION	DATE	REV. NO.	DESCRIPTION	DATE
01	OLD 14-043	05/18/15			

SHEET 5 OF 28

HARDWARE SCHEDULE 3'-6" X 8'-0" OR 4'-0" X 8'-0" (Max.) SINGLE MSD-375 & WSD-500 DOORS

HARDWARE TYPE	HARDWARE MODEL AND DESCRIPTION	MANUFACTURER	MAX. DESIGN PRESSURE	MAX. DOOR SIZE	NOTES
3-POINT LOCK	MS 1850 DEADLOCK	ADAMS RITE	+70 / -80 PSF	3'-6" X 8'-0"	
3-POINT LOCK	MS 1850S + 401S + 4016 DEADLOCK	ADAMS RITE	+70 / -70 PSF	4'-0" X 8'-0"	
RIM PANIC	ED4200S RIM PANIC	CORBIS RUSSEWIN	+60 / -60 PSF	3'-6" X 8'-0"	
CONCEALED PANIC	1265 CONCEALED VERTICAL ROD PANIC	JACKSON	+70 / -80 PSF	3'-6" X 8'-0"	
CONCEALED PANIC	2086 CONCEALED VERTICAL ROD PANIC	JACKSON	+70 / -80 PSF	3'-6" X 8'-0"	
CONCEALED PANIC	5770 CONCEALED VERTICAL ROD PANIC	REGENT	+70 / -80 PSF	3'-6" X 8'-0"	
CONCEALED PANIC	8410 CONCEALED VERTICAL ROD PANIC	SARGENT	+70 / -80 PSF	3'-6" X 8'-0"	
RIM PANIC	AD5500 RIM PANIC	SARGENT	+60 / -60 PSF	3'-6" X 8'-0"	
SURFACE PANIC	9927 SURFACE PANIC VERTICAL ROD	VON DUPRIN	+70 / -80 PSF	3'-6" X 8'-0"	
CONCEALED PANIC	9947 CONCEALED PANIC VERTICAL ROD	VON DUPRIN	+70 / -80 PSF	3'-6" X 8'-0"	
SURFACE CLUSTER	MODEL VARIES BY MANUFACTURER	VARIES	N/A	N/A	
CONCEALED CLUSTER	21-211 HVT DUTY W/OFFSET SWING ARM	JACKSON	N/A	N/A	
BUTT HINGES 4' X 4 1/2"	4001 BALL BEARING STAINLESS STEEL	REGENT	+70 / -80 PSF	3'-6" X 8'-0"	(3) PER DOOR LEAF
BUTT HINGES 4' X 4 1/2"	DB1199 BALL BEARING STAINLESS STEEL	HAGER	+70 / -70 PSF	4'-0" X 8'-0"	(4) PER DOOR LEAF
BUTT HINGES 4' X 4 1/2"	RCTA2314 BALL BEARING STAINLESS	MC KINNEY	+60 / -60 PSF	3'-6" X 8'-0"	(3) PER DOOR LEAF
PULL HANDLES	PH-20 FORMED ALUMINUM	DBE	N/A	N/A	
PULL HANDLES	PH-21 FORMED ALUMINUM	DBE	N/A	N/A	
CYLINDER	CY-1 LOCK CYLINDER	DBE	N/A	N/A	
KEY CONTROL	106 KEY CONTROL FOR SARGENT	SARGENT	N/A	N/A	
THUMB TURN	TY-3	DBE	N/A	N/A	
CYLINDER	CY-5 FOR VON DUPRIN DEVICES	DBE	N/A	N/A	
LOCK INDICATOR	AR-4089 OPTIONAL DEVICE	ADAMS RITE	N/A	N/A	
PANIC STOP	D-134-2 LOCATED AT THRESHOLD	DBE	N/A	N/A	
THRESHOLD	TH-57 COMPONENT (2)	DBE	N/A	N/A	
DOOR BOTTOM SWEEP	D-118 / D120	DBE	+70 / -80 PSF	3'-6" X 8'-0"	OPTION FOR 4' X 8' ALLOWED UP TO +70 / -70 psf
TOP PIVOTS	DP-6 / DP-7	DBE	N/A	N/A	
INTERMEDIATE PIVOTS	H-19	RIXON	+70 / -80 PSF	3'-6" X 8'-0"	
BOTTOM PIVOTS	DP-9 / DP-10	DBE	+70 / -80 PSF	3'-6" X 8'-0"	
CONT. GEAR HINGE	780-224 HD CONTINUOUS GEAR HINGES	ROTON	+70 / -80 PSF	3'-6" X 8'-0"	
THRESHOLD	TH-43	DBE	+70 / -80 PSF	3'-6" X 8'-0"	
CONT. GEAR HINGE	KCFM-95HDL CONTINUOUS GEAR HINGES	PERKO	+70 / -70 PSF	4'-0" X 8'-0"	

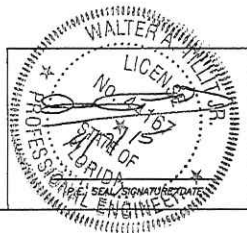


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 ED-0008719
 WALTER A. TILT Jr., P.E.
 FLORIDA Lic. # 14167

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)			
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE)		DRAWN BY: F.R.L.	
STILE ALUMINUM ENTRANCE DOOR (WET GLAZED)		DATE: 03/18/15	
LARGE & SMALL MISSILE IMPACT		DATE:	
Oldcastle BuildingEnvelope®		15-029	
803 AIRPORT RD. TERRELL, TX 75160		DRAWING No	
www.Oldcastle360.com Phone 803-869-4357			
REV. #	DESCRIPTION	DATE	REV. #
1	OLD 14-029	03/18/15	

HARDWARE SCHEDULE 7'-0" X 8'-0" OR 8'-0" X 8'-0" (Max.) PAIRS MSD-375 & WSD-500 DOORS

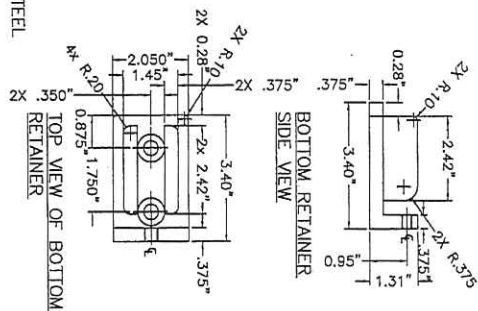
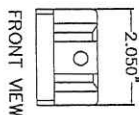
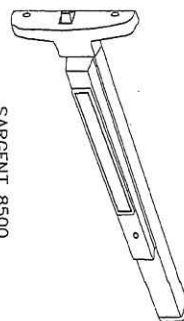
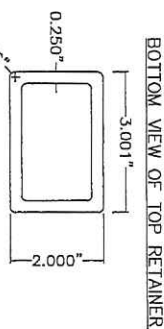
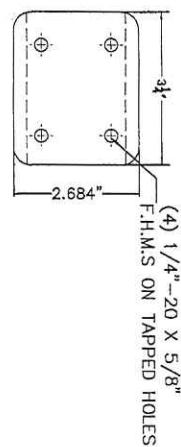
HARDWARE TYPE	HARDWARE MODEL AND DESCRIPTION	MANUFACTURER	MAX. DESIGN PRESSURE	MAX. DOOR SIZE	NOTES
3-POINT LOCK	MS 1850 DEADLOCK	ADAMS RITE	+70 / -80 PSF	7'-0" X 8'-0"	ACTIVE DOOR
FLUSH BOLTS	FB-1201-VHM TOP & BOTTOM-STEEL TIPS	DBE	+70 / -80 PSF	7'-0" X 8'-0"	INACTIVE DOOR
3-POINT LOCK	MS 1850S + 4015 + 4016 DEADLOCK	ADAMS RITE	+70 / -70 PSF	8'-0" X 8'-0"	ACTIVE DOOR
2-POINT LOCK	MS 2180 AUTO RELEASE FLUSH BOLT	ADAMS RITE	+70 / -70 PSF	8'-0" X 8'-0"	INACTIVE DOOR
RIM PANIC	ED4200S RIM PANIC	CORBIN RUSSWIN	+60 / -60 PSF	7'-0" X 8'-0"	TO BE USED WITH ED4200S RIM DEVICE EXCLUSIVELY
REMOVABLE MULLION	W570BAMH REMOVABLE MULLION	CORBIN RUSSWIN	+60 / -60 PSF	7'-0" X 8'-0"	TO BE USED WITH ED4200S RIM DEVICE EXCLUSIVELY
CONCEALED PANIC	1285 CONCEALED VERTICAL ROD PANIC	JACKSON	+70 / -80 PSF	7'-0" X 8'-0"	
CONCEALED PANIC	2086 CONCEALED VERTICAL ROD PANIC	JACKSON	+70 / -80 PSF	7'-0" X 8'-0"	
CONCEALED PANIC	5770 CONCEALED VERTICAL ROD PANIC	RECENT	+70 / -80 PSF	7'-0" X 8'-0"	ONLY ALLOWED TO USED FOR MEDIUM STILES (9) & (10)
CONCEALED PANIC	8410 CONCEALED VERTICAL ROD PANIC	SARGENT	+70 / -80 PSF	7'-0" X 8'-0"	OPTION FOR 8' X 8' ALLOWED UP TO +70 / -70 psf
RIM PANIC	AD8500 RIM PANIC	SARGENT	+60 / -60 PSF	7'-0" X 8'-0"	TO BE USED WITH AD8500 RIM DEVICE EXCLUSIVELY
REMOVABLE MULLION	HC L980 REMOVABLE MULLION	CORBIN RUSSWIN	+60 / -60 PSF	7'-0" X 8'-0"	
SURFACE PANIC	9927 SURFACE PANIC VERTICAL ROD	VON DUPRIN	+70 / -80 PSF	7'-0" X 8'-0"	
CONCEALED PANIC	9947 CONCEALED PANIC VERTICAL ROD	VON DUPRIN	+70 / -80 PSF	7'-0" X 8'-0"	
SURFACE CLOSER	MODEL VARIES BY MANUFACTURER	VARIES	N/A	N/A	
CONCEALED CLOSER	21-211 HVR DUTY W/OFFSET SWING ARM	JACKSON	N/A	N/A	
BUTT HINGES 4' X 4 1/2"	4001 BALL BEARING STAINLESS STEEL	REGENT	+70 / -80 PSF	7'-0" X 8'-0"	(3) PER DOOR LEAF
BUTT HINGES 4' X 4 1/2"	BH1199 BALL BEARING STAINLESS STEEL	HAGER	+70 / -70 PSF	8' X 8'	(4) PER DOOR LEAF
BUTT HINGES 4' X 4 1/2"	RCTA2314 BALL BEARING STAINLESS	MC KINNEY	+60 / -60 PSF	3'-6" X 8'-0"	(3) PER DOOR LEAF
PULL HANDLES	PH-20 FORGED ALUMINUM	DBE	N/A	N/A	
PUSH BARS	PB-21 FORGED ALUMINUM	DBE	N/A	N/A	
CYLINDER	CY-1 LOCK CYLINDER	DBE	N/A	N/A	
KEY CONTROL	106 KEY CONTROL FOR SARGENT	SARGENT	N/A	N/A	
THUMB TURN	CY-3	DBE	N/A	N/A	
CYLINDER	CY-5 FOR VON DUPRIN DEVICES	DBE	N/A	N/A	
LOCK INDICATOR	AR-4089 OPTIONAL DEVICE	ADAMS RITE	N/A	N/A	
PANIC STOP	D-134-2 LOCATED AT THRESHOLD	DBE	N/A	N/A	
THRESHOLD	TH-57 COMPONENT (2)	DBE	+70 / -80 PSF	7'-0" X 8'-0"	OPTION FOR 4' X 8' ALLOWED UP TO +70 / -70 psf
DOOR BOTTOM SWEEP	D-118 / D120	DBE	N/A	N/A	
TIP PIVOTS	DP-6 / DP-7	DBE	+70 / -80 PSF	7'-0" X 8'-0"	
INTERMEDIATE PIVOTS	M-19	RIXON	+70 / -80 PSF	7'-0" X 8'-0"	
BOTTOM PIVOTS	DP-9 / DP-10	DBE	+70 / -80 PSF	7'-0" X 8'-0"	
CENT. GEAR HINGE	780-224 HD CONTINUOUS GEAR HINGES	ROTON	+70 / -80 PSF	7'-0" X 8'-0"	
THRESHOLD	TH-43	DBE	+70 / -80 PSF	7'-0" X 8'-0"	
CENT. GEAR HINGE	KCFM-95HDI CONTINUOUS GEAR HINGES	PEMKO	+70 / -70 PSF	8'-0" X 8'-0"	



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 88-0000719
 WALTER A. TILT, Jr., P.E.
 FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)					
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STILE ALUMINUM ENTRANCE DOOR (WET GLAZED) LARGE & SMALL MISSILE IMPACT				DRAWN BY: F.R.L. 03/18/15	
Oldcastle BuildingEnvelope 803 AIRPORT RD. TERRELL, TX 75160 www.OldcastleBE.com Phone 800-869-4567				DATE	
				15-029 DRAWING No	
REV. NO.	DESCRIPTION	DATE	REV. NO.	DESCRIPTION	DATE
OLD 14-003		03/18/15			
				SHEET 7 OF 25	

SARGENT HC L980
REMOVABLE MULLION
OR CORBIN RUSSWIN
KRM 200 FWS
REMOVABLE MULLION

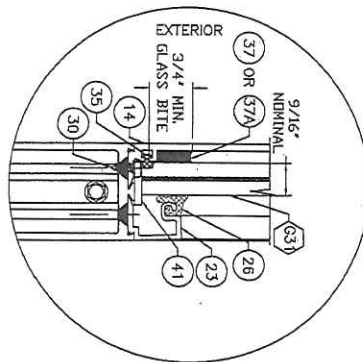


3. RETAINER
MATERIALS: CARBON STEEL
MULLION BODY -
HOT ROLLED, WELDED SEAM
PER ASTM A500 GRADE B
FINISH: PRIME COAT RED PAINT
TOP & BOTTOM RETAINER - CAST IRON, PRIMED.

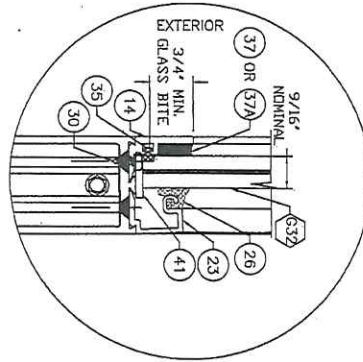


FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)				
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STYLE ALUMINUM ENTRANCE DOOR (WET GLAZED) LARGE & SMALL MISSILE IMPACT			DRAWN BY: FAL 03/18/15	
 Oldcastle BuildingEnvelope® 800 AIRPORT RD. TERRELL TX 75160 www.OldcastleBE.com Phone 800-860-4567			DATE 15-029 DRAWING No	
CITY, ST. 00000 00000	OLDCASTLE 00000	DATE 03/18/15	DESCRIPTION 00000	DATE 00000
SHEET 8 OF 26				

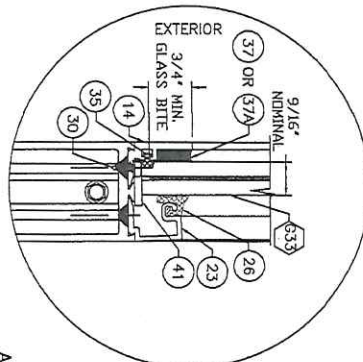
TYPICAL GLAZING DETAILS AT DOORS



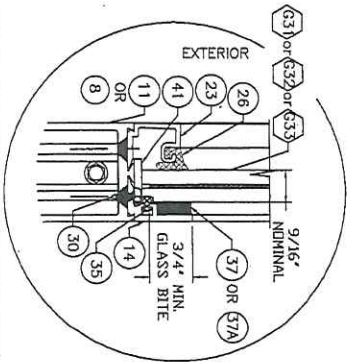
GLASS TYPE G33
SCALE: 6" = 1"



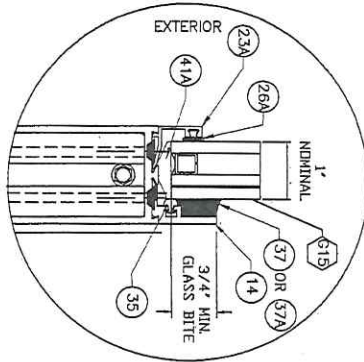
GLASS TYPE G32



GLASS TYPE G33



APPLICABLE ALTERNATE DETAIL WITH DOOR GLASS STOPS REVERSED FOR ALL GLASS TYPES
VALID ONLY FOR 3'-6"x7'-0" OR 7'-0"x7'-0" SINGLE/PAIR OF DOORS RESPECTIVELY



GLASS TYPE G13

GLASS LABEL	GLASS COMPOSITION	INTERLAYER MANUFACTURER NAME	MAXIMUM D.L.O.	MAX. ASD DESIGN FOR GLASS (P.S.F.) W/ (B) SILICONE	MAX. ASD DESIGN FOR GLASS (P.S.F.) W/ (B) SILICONE
G31	9/16" NOMINAL THICKNESS LAMINATED GLASS CONSISTING OF TWO 1/4" H.S. GLASS, AND A 0.005" SAFLEX C.P. STORM INTERLAYER	EASTMAN CHEMICAL COMPANY	32 5/16"	+70, -80	+70, -70
G32	9/16" NOMINAL THICKNESS LAMINATED GLASS CONSISTING OF TWO 1/4" H.S. GLASS, AND A 0.005" SAFLEX C.P. STORM INTERLAYER	EASTMAN CHEMICAL COMPANY	32 5/16"	+70, -80	+70, -70
G33	9/16" NOMINAL THICKNESS LAMINATED GLASS CONSISTING OF TWO 1/4" H.S. GLASS, AND A 0.005" SAFLEX C.P. STORM INTERLAYER	EASTMAN CHEMICAL COMPANY	32 5/16"	+70, -80	+70, -70
G13	1" NOMINAL THICKNESS TEMPERED GLASS OR 5/16" SPACER & 3/16" H.S. GLASS OVER 0.005" SAFLEX C.P. STORM GLASS INTERLAYER OVER 3/16" H.S. GLASS	EASTMAN CHEMICAL COMPANY		+70, -70	+70, -70

TYPICAL DOOR GLASS SIZE= DLO +1 1/2"

* SEE SHEET 1, GENERAL NOTE #3, FOR MAX. ASD PRESSURE RATING WHEN SPECIFIC HARDWARE IS USED.

GLASS LABEL	GLASS COMPOSITION	INTERLAYER MANUFACTURER NAME	MAXIMUM D.L.O.	MAX. ASD DESIGN FOR GLASS (P.S.F.) W/ (B) SILICONE
G33	9/16" NOMINAL THICKNESS LAMINATED GLASS CONSISTING OF TWO 1/4" H.S. GLASS, AND A 0.005" SAFLEX C.P. STORM GLASS INTERLAYER	EASTMAN CHEMICAL COMPANY	38 3/4" x 82 9/16"	+70, -70
G13	1" NOMINAL THICKNESS TEMPERED GLASS OR 5/16" SPACER & 3/16" H.S. GLASS OVER 0.005" SAFLEX C.P. STORM GLASS INTERLAYER OVER 3/16" H.S. GLASS	EASTMAN CHEMICAL COMPANY		+70, -70

GLASS SCHEDULE FOR 4'-0"x8'-0" OR 8'-0"x8'-0" DOORS



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TILLIT TESTING & ENGINEERING COMPANY
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TILLIT, P.E.
WALTER A. TILLIT, P.E.
FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

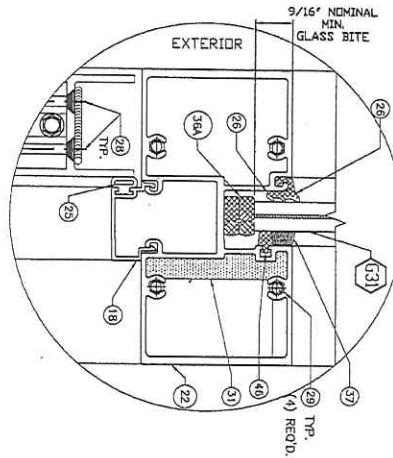
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STILE ALUMINUM ENTRANCE DOOR (WET GLAZED) LARGE & SMALL MISSILE IMPACT		DRAWN BY: F.R.L.
		DATE: 03/18/15
		15-029
		DRAWING No
		SHEET 9 OF 26

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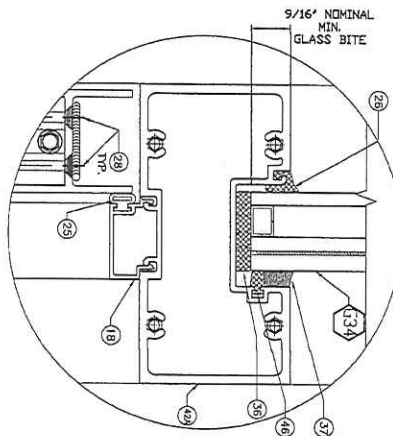
REV. NO.	DESCRIPTION	DATE	REV. NO.	DESCRIPTION	DATE
01	OLD 14-063	03/18/15			

VALID ONLY FOR 3'-6"x8'-0" & 7'-0"x8'-0" SINGLE/PAIR OF DOORS RESPECTIVELY

TYPICAL GLAZING DETAILS FOR TRANSOMS



GLASS TYPE 631
SCALE: 6" = 1"



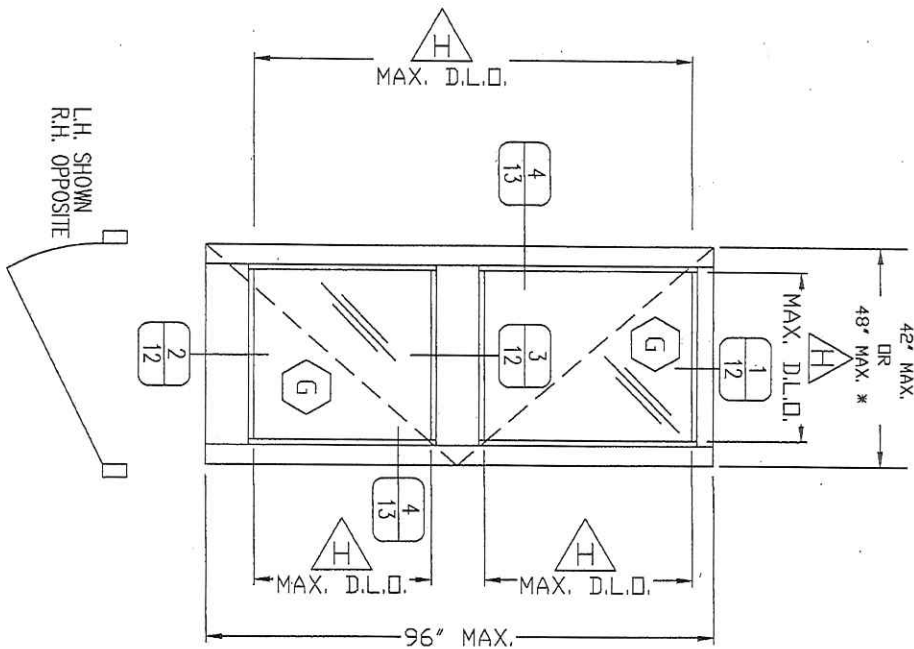
GLASS TYPE 634
SCALE: 6" = 1"

GLASS SCHEDULE FOR 3'-6"x8'-0" (MAX.) OR 7'-0"x8'-0" (MAX.) DOORS TRANSOMS			
GLASS LABEL	GLASS COMPOSITION	INTERLAYER MANUFACTURER NAME	MAX. ASD DESIGN PRESSURE RATING FOR GLASS (P.S.F.) W/ (57)
631	9/16" NOMINAL THICKNESS LAMINATED GLASS, CONSISTING OF TWO 1/4" H.S. INTERLAYER	EASTMAN CHEMICAL COMPANY	+70, -80
634	1 5/16" NOMINAL THICKNESS INSULATED LAMINATED GLASS, CONSISTING OF TWO 1/4" H.S. + 1/2" AIR SPACE + 1/4" H.S. + 0.090" SAFLEX PVB INTERLAYER + 1/4" H.S.	EASTMAN CHEMICAL COMPANY	+70, -80



FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)			
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STILE ALUMINUM ENTRANCE DOOR (WET GLAZED) LARGE & SMALL MISSILE IMPACT		DRAWN BY: F.R.L. 03/18/15	
DATE		15-029	
DRAWING No		SHEET 10 OF 26	
REV. No	DESCRIPTION	DATE	REV. No
01	01	02/18/15	01

TYPICAL PANEL ELEVATIONS FOR MSD-375 & WSD-500 IMPACT SINGLE/PAIR OF DOORS
(WET GLAZED)



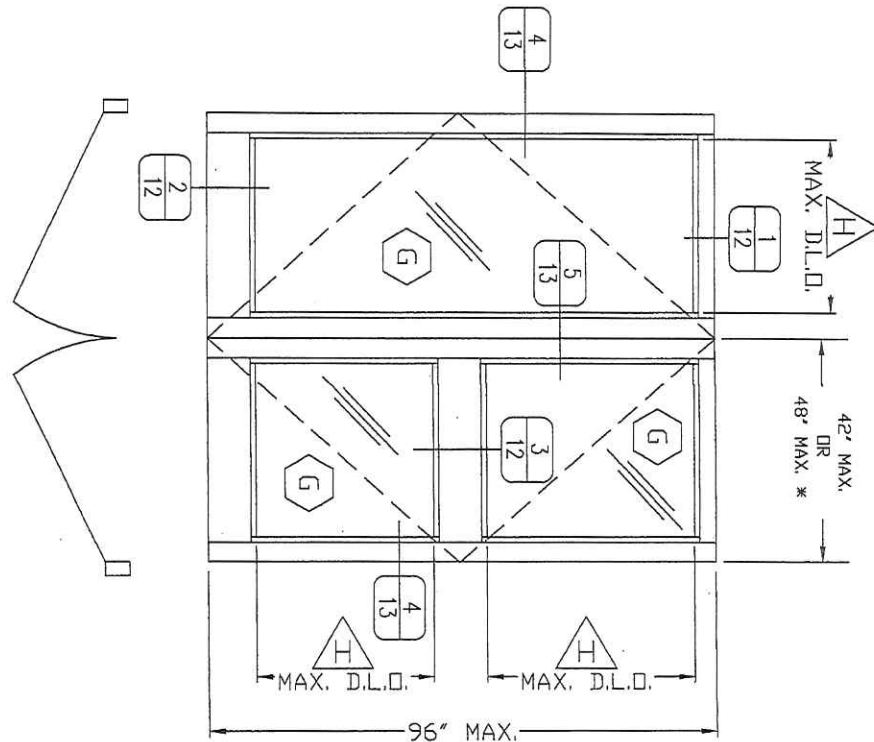
FOOT NOTES:

SINGLE PANEL

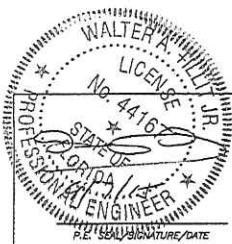
Ⓔ FOR GLAZING DETAILS AND GLASS SCHEDULE SEE SHEET 9.

Ⓐ FOR MAXIMUM DAYLIGHT OPENING (D.L.O.) SEE SCHEDULE ON SHEET 9.

* SEE GENERAL NOTES #2 & 3 ON SHEET 1 FOR LIMITATIONS ON MAX. A.S.D PRESSURE RATINGS, USABLE GLASS & HARDWARE.



DOUBLE PANEL



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EEO-0000718
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STILE ALUMINUM ENTRANCE DOOR (WET GLAZED)
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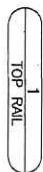
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001	DES 14-063	03/18/15			

SHEET 11 OF 28

SCALE: 6" = 1"



2
BOTTOM RAIL

3
HORIZONTAL MID-RAIL

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 LICENSE NO. 44115
 EXPIRATION DATE 12/15
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA

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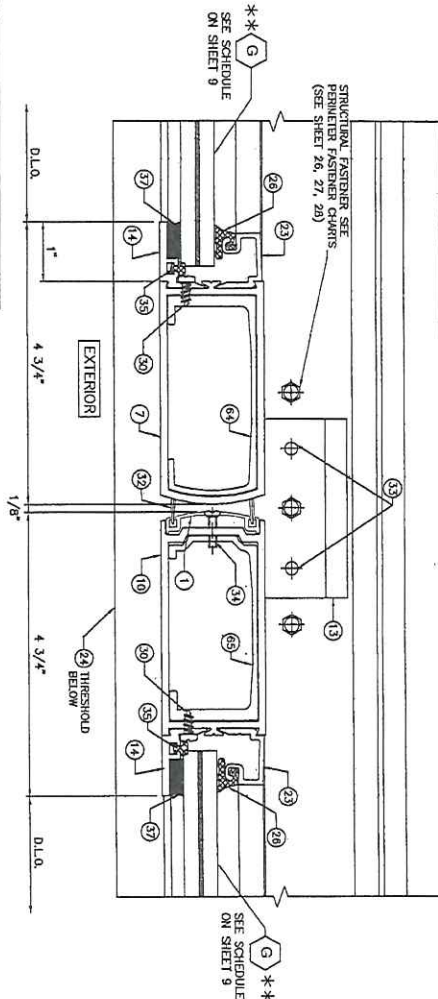
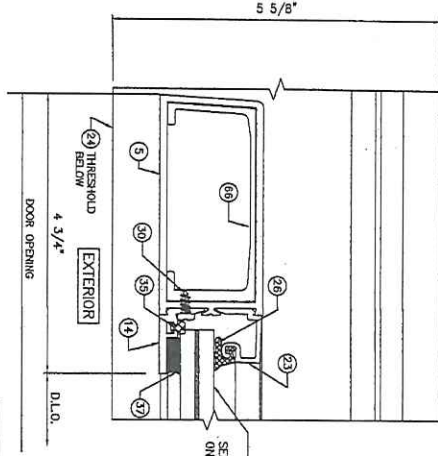
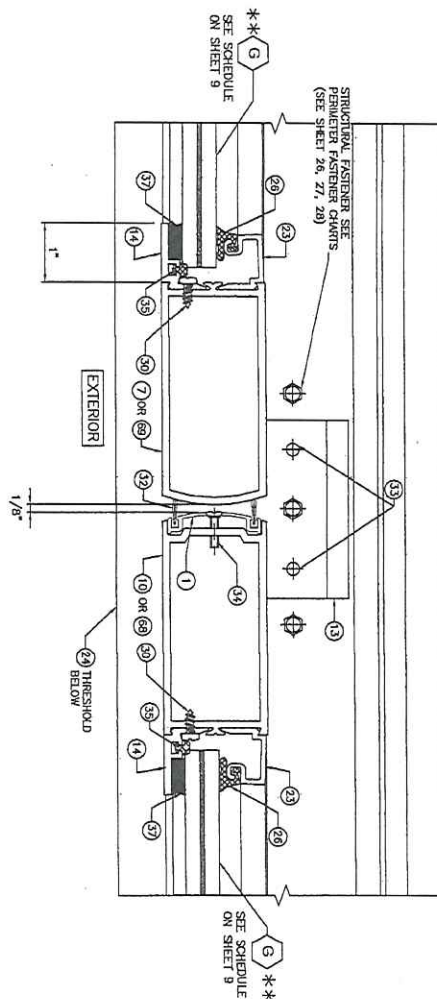
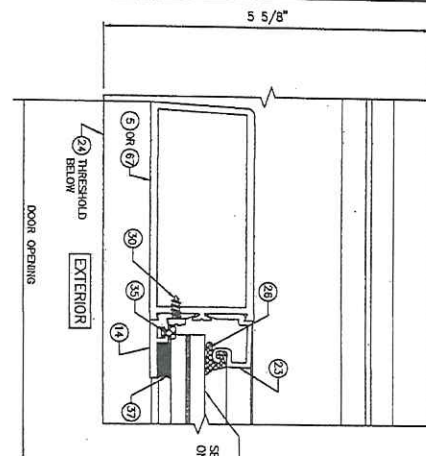
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DOORS HINGE/LOCK/MEETING STILES AND THRESHOLD CONNECTION DETAILS (PLAN VIEWS)

SCALE: 6" = 1"



4A*
LOCK STILE AT
SINGLE DOOR ONLY

* DETAILS 4A AND 5A ARE ONLY REQUIRED AND APPLICABLE WHEN A
RECENT 5770 CONCEALED PANIC DEVICE IS USED
** LAMINATED GLASS SHOWN, SEE GLAZING DETAIL FOR (G15) INSULATING
GLASS ON SHEET 9.

5A*
MEETING STILES &
THRESHOLD CONNECTION



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STILE ALUMINUM ENTRANCE DOOR (WET GLAZED)
LARGE & SMALL MISSILE IMPACT



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SHEET 13 OF 26

TYPICAL DOOR CORNER ASSEMBLY
DETAIL (ISOMETRIC)

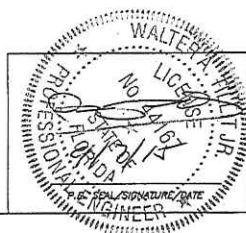
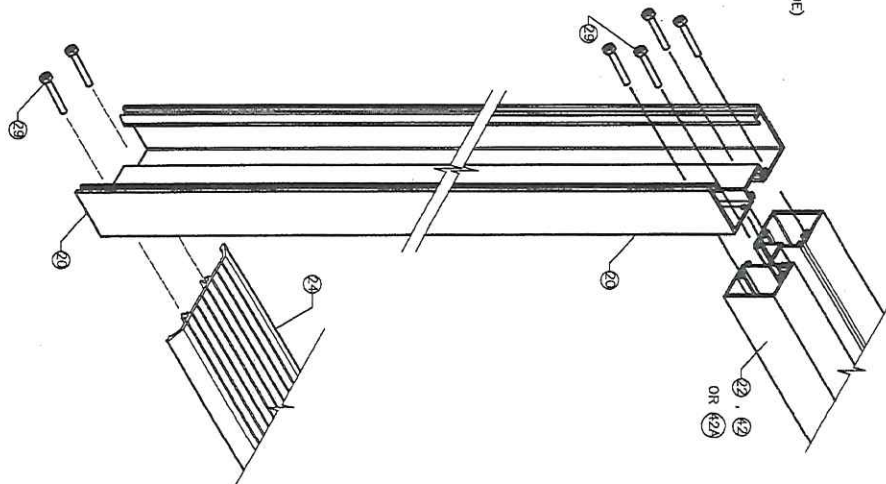
- AFTER DOOR IS ASSEMBLED,
DOORS WILL BE
WELDED ON THE OUTSIDE
INTERSECTION BETWEEN
THE RAIL AND STILE AT
TOP AND BOT/TOM RAILS
W/ 1/8" x 1/2"
ER 5356 FILLET WELD

Diagram illustrating the assembly of a door stile and reinforcement sleeve. The diagram shows the following components and steps:

- DOOR RAIL**: The top horizontal component of the door assembly.
- CORNER BLOCK**: A block used to secure the door rail to the door frame.
- DOOR STILE (ONLY ⑤, ⑦ & ⑩ MEDIUM STILES & ALLOWED)**: The vertical component being installed.
- STILE REINFORCEMENT SLEEVE (D-243-01, D-244-01 OR D-247-01)**: A sleeve used to reinforce the door stile.
- ATTACH THRU DOOR STILE INTO 3/16" STEEL BACK-UP PLATE**: Step 1: Attaching the door stile into the steel back-up plate.
- (2) (29) THRU RAIL**: Step 2: Attaching the door stile into the rail.

DOOR CORNER ASSEMBLY DETAIL (ISOMETRIC), ONLY FOR
REGENT 5770 CYR PANIC DEVICE HARDWARE

HEAD AND THRESHOLD ASSEMBLY



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STILE ALUMINUM ENTRANCE DOOR (WET GLAZED)
LARGE & SMALL MISSILE IMPACT

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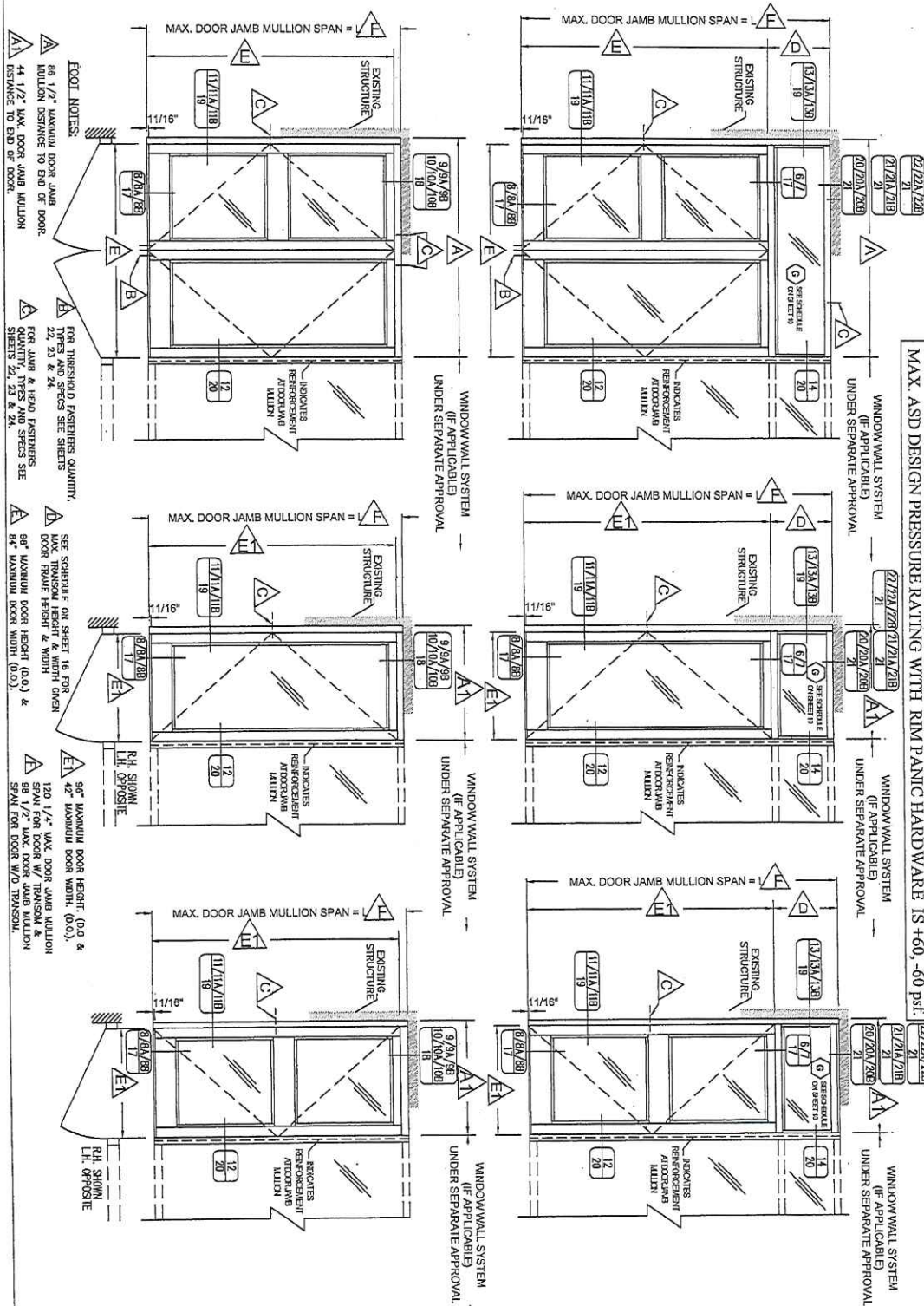
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SHEET 14 OF 20

SHEET 14 OF 20

TYPICAL EXTERIOR ELEVATIONS FOR MSD-375 & WSD-500 IMPACT DOOR (WET GLAZED) 3'-6"x8'-0" (SINGLE) & 7'-0"x8'-0" (PAIR)
 CONNECTED TO EXISTING STRUCTURE OR FG-5000, FG-5100 OR FG-5100T ALUMINUM WINDOW WALL SYSTEM FRAMING

MAX. ASD DESIGN PRESSURE RATING WITH LAMINATED GLASS IS +70, -80 psf.
 MAX. ASD DESIGN PRESSURE RATING WITH INSULATED GLASS IS +70, -70 psf.
 MAX. ASD DESIGN PRESSURE RATING WITH RIM PANIC HARDWARE IS +60, -60 psf.



FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

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 STILE ALUMINUM ENTRANCE DOOR (WET GLAZED)
 LARGE & SMALL MISSILE IMPACT



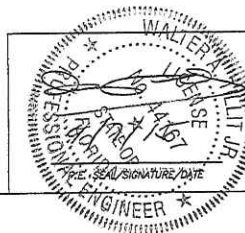
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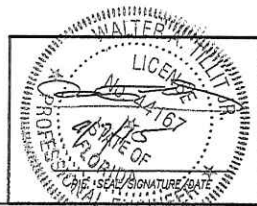
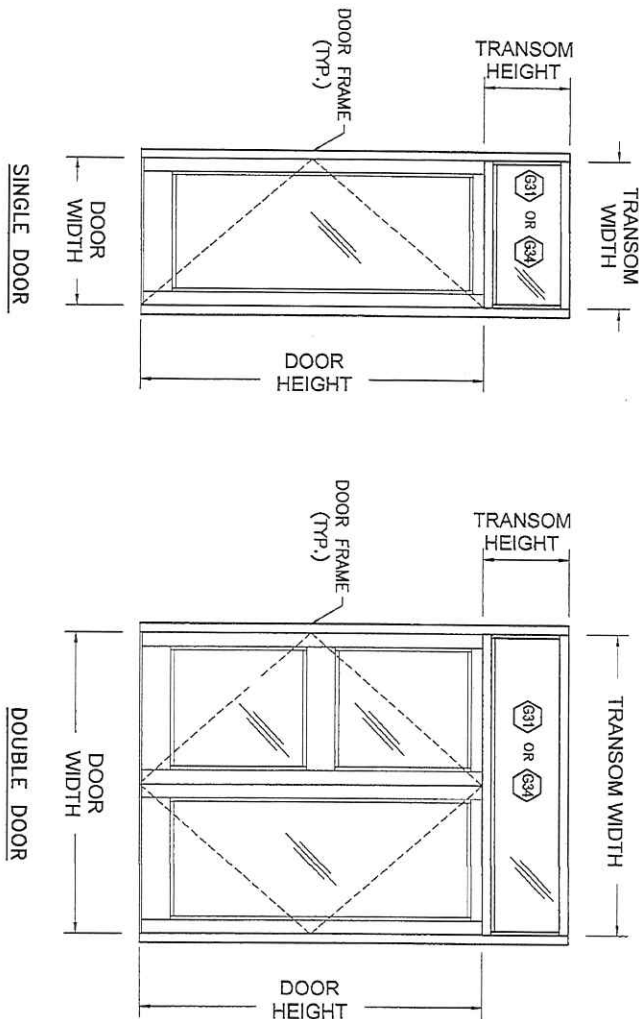
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MAXIMUM TRANSOM WIDTH & HEIGHT SCHEDULE GIVEN MAX. WIDTH & HEIGHT FOR DOOR
(VALID ONLY FOR 3'-6"x8'-0" (MAX) OR 7'-0"x8'-0" (MAX) SINGLE & PAIR OF DOORS RESPECTIVELY)

DOOR WIDTH (IN)	DOOR HEIGHT (IN)	TRANSOM WIDTH (IN)		TRANSOM HEIGHT (IN)
		SINGLE	DOUBLE	
30"	60"	30"	60"	36"
30"	60"	30"	60"	24"
36"	72"	36"	72"	36"
36"	72"	36"	72"	24"
42"	84"	42"	84"	30"
42"	84"	42"	84"	24"

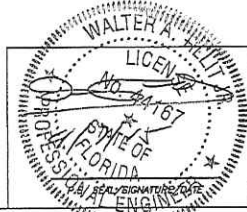
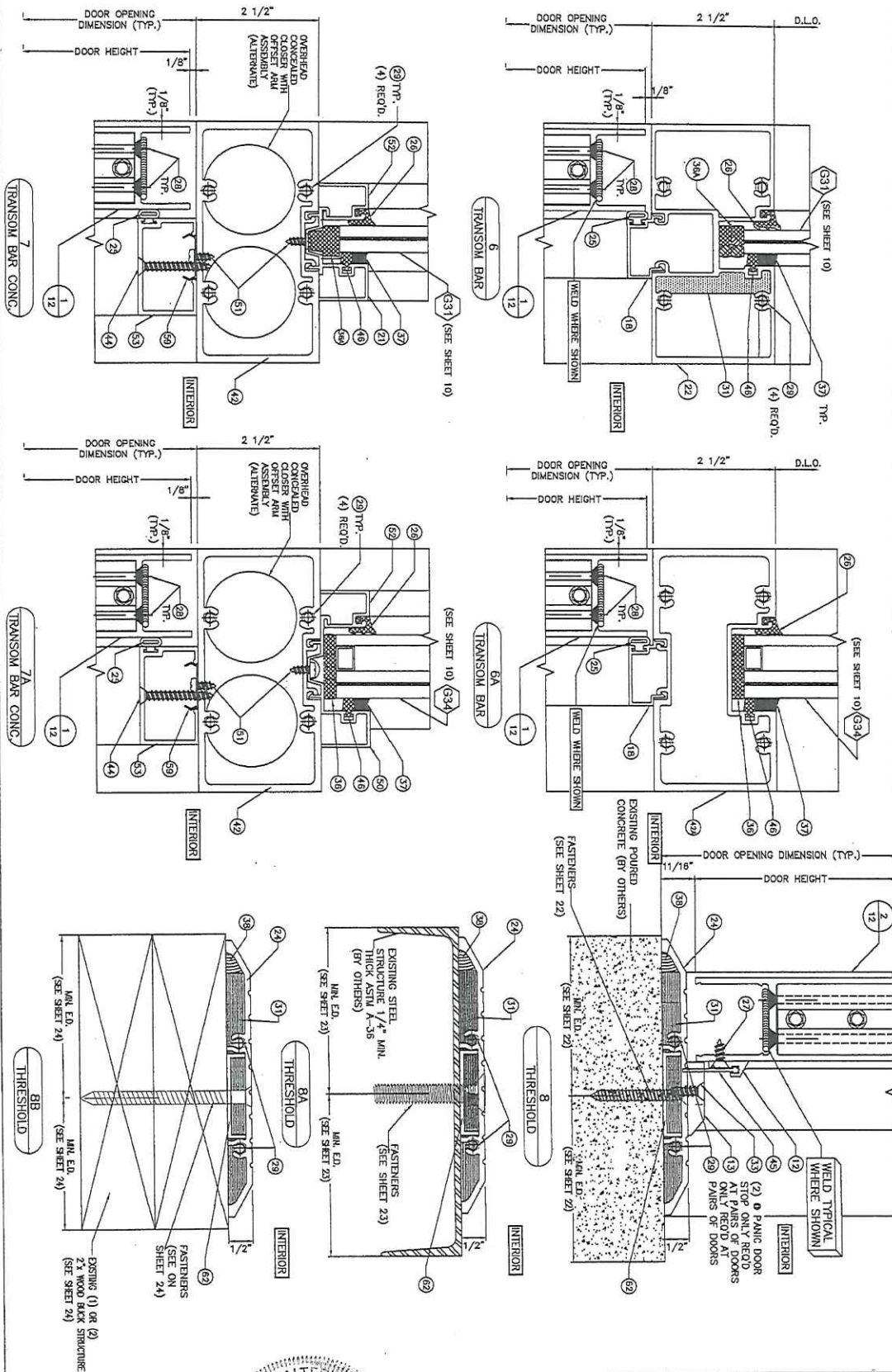


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TRANSOM BAR CONNECTION DETAILS TO FG-5000, FG-5100 AND FG-5100T *
 * VALID ONLY FOR 3'-6"x7'-0" OR 7'-0"x8'-0" DOORS AT FG-500, FG-5100 & FG-5100T

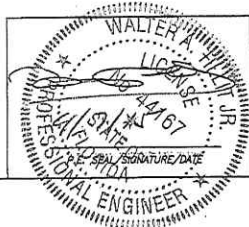
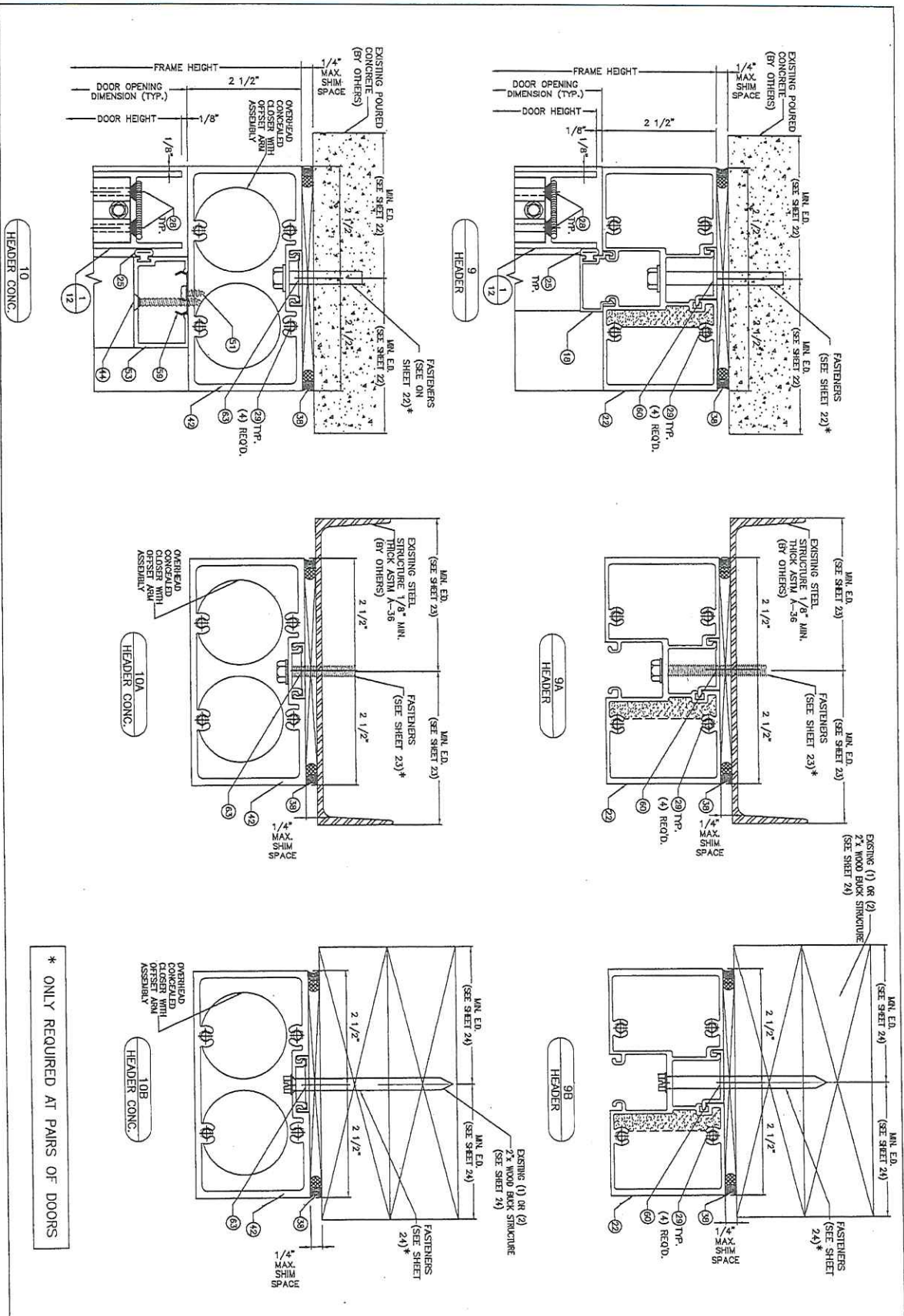
THRESHOLD CONNECTION DETAILS
 TO FG-5000, FG-5100 & FG-5100T



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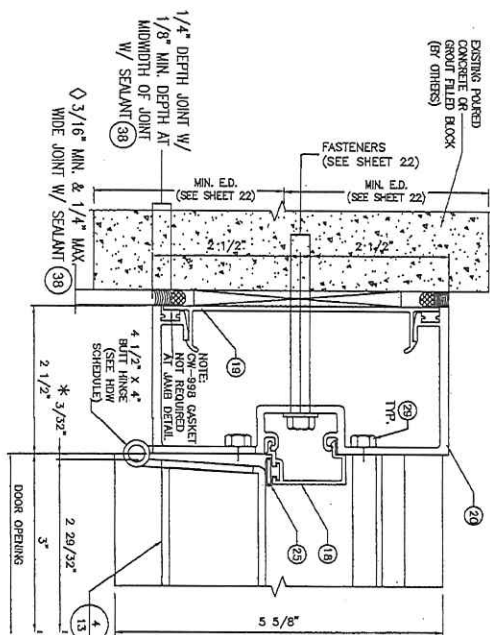
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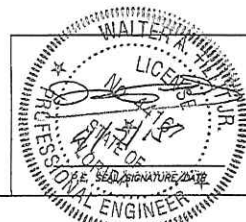
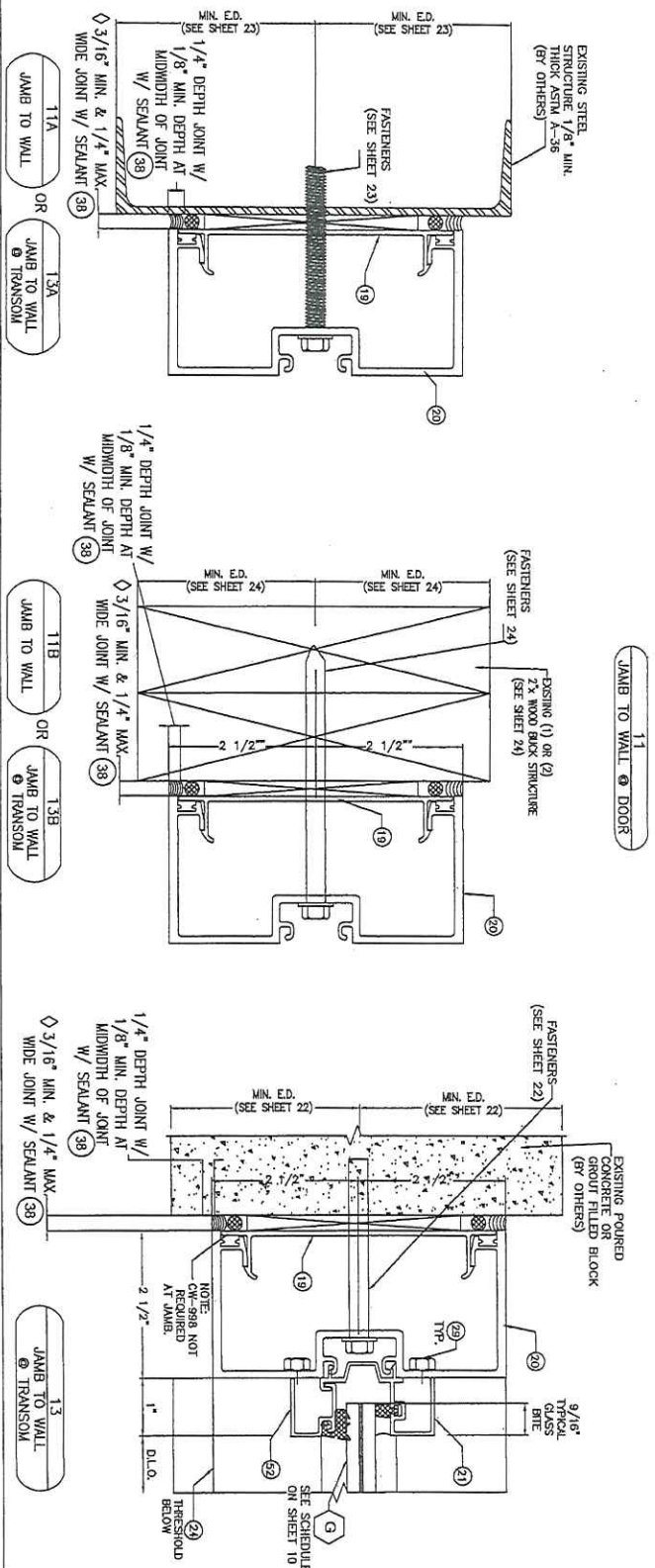
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NOTE:
 LISTED MAXIMUM AND MINIMUM
 VALUES FOR SPECIFIED SEALANT
 VERTICAL JOINT WIDTH AT JAMBS
 CONNECTED TO WALL HAVE BEEN
 DETERMINED ONLY TAKING INTO
 CONSIDERATION THE ACTUAL
 JOINT WIDTH. IT IS THE USER'S
 RESPONSIBILITY TO VERIFY THAT JAMBS
 ARE TO REMAIN AND ITS OWN
 CONSTRUCTION TOLERANCE, AND
 NOT PERFORMANCE FACTORS FROM
 THE SURROUNDING STRUCTURE.



* NOTE:
 SEE CLEARANCE DIMENSIONS
 AT JAMB DETAIL FOR
 BUTT HINGES OR OFFSET PIVOTS.
 CLEARANCE AT JAMBS.
 5/16\"/>

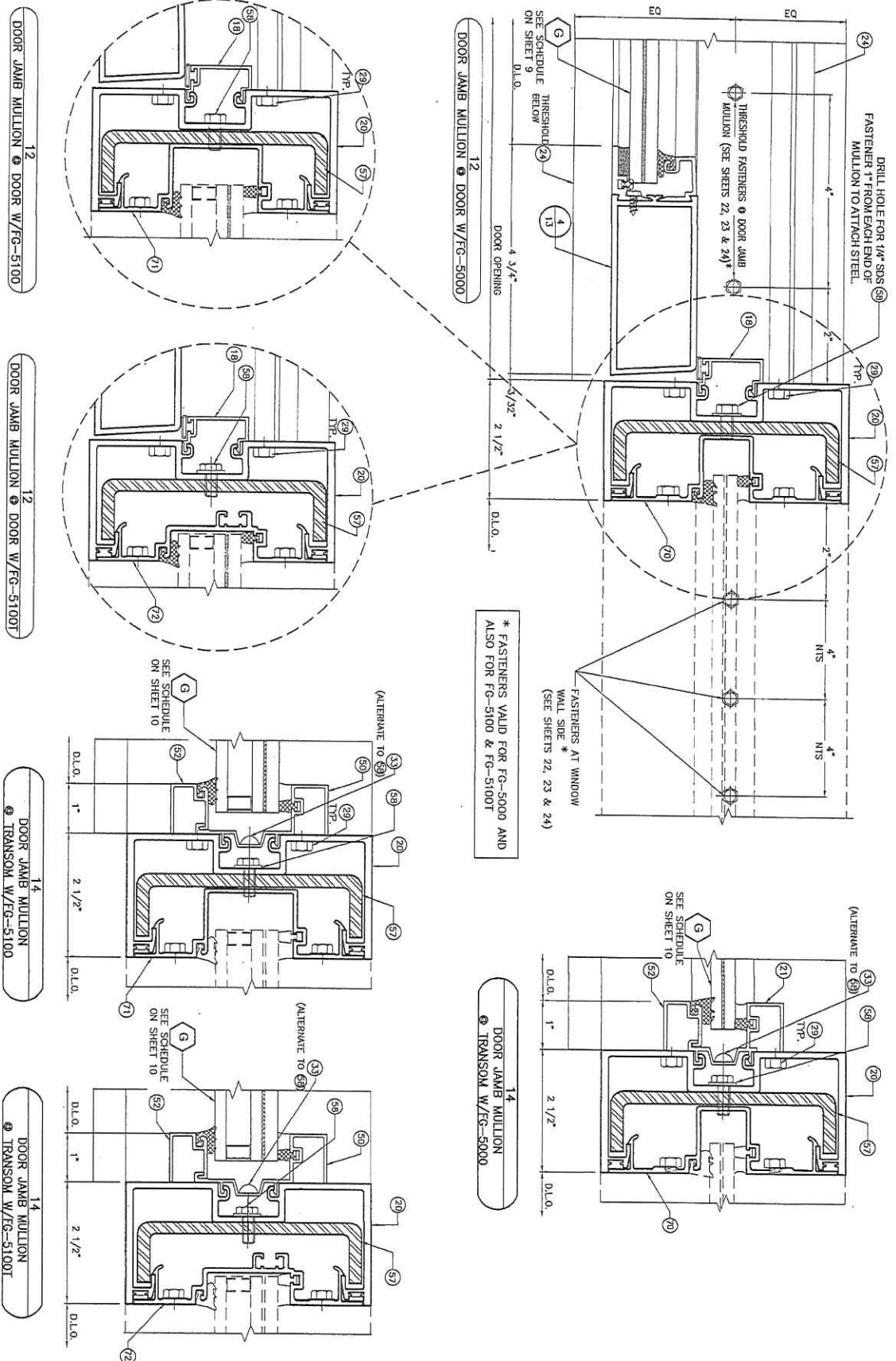


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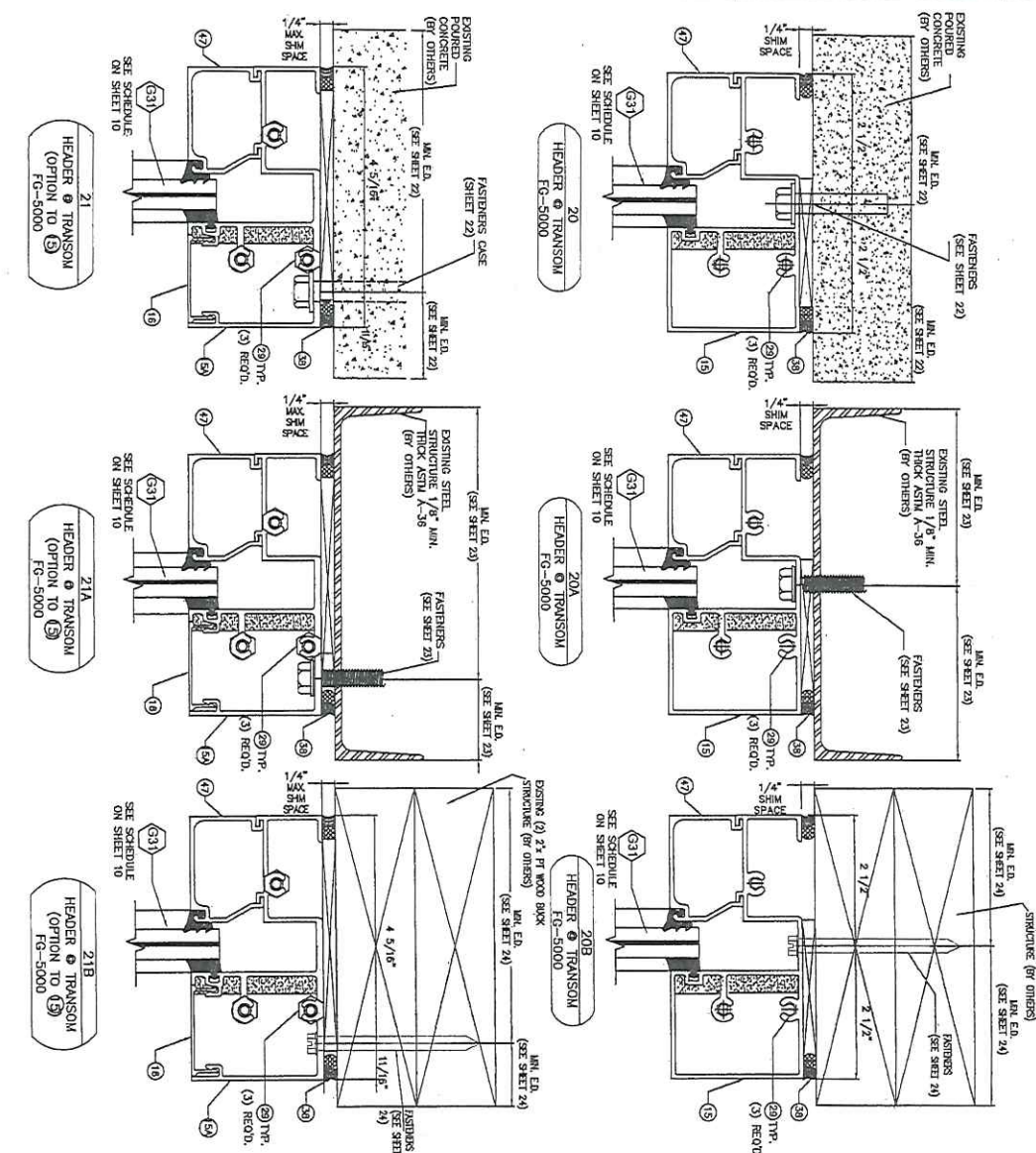


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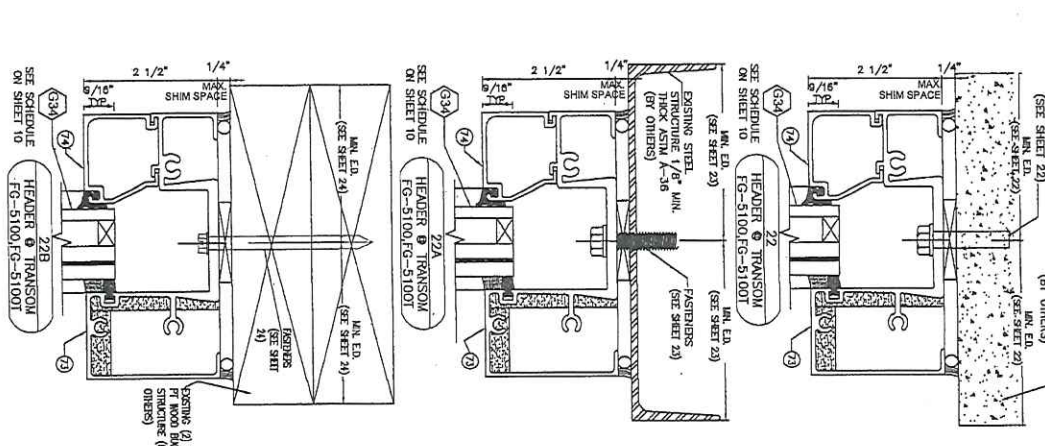
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HEADER @ TRANSOM CONNECTION DETAILS AT FG 5000 SYSTEM TO EXISTING STRUCTURE
(VALID ONLY FOR 3'-6"x8'-0" OR 7'-0"x8'-0" DOORS)



HEADER @ TRANSOM CONN. DETAILS AT FG 5100, FG 5100T SYSTEM TO EXISTING STRUCTURE
(VALID ONLY FOR 3'-6"x8'-0" OR 7'-0"x8'-0" DOORS)



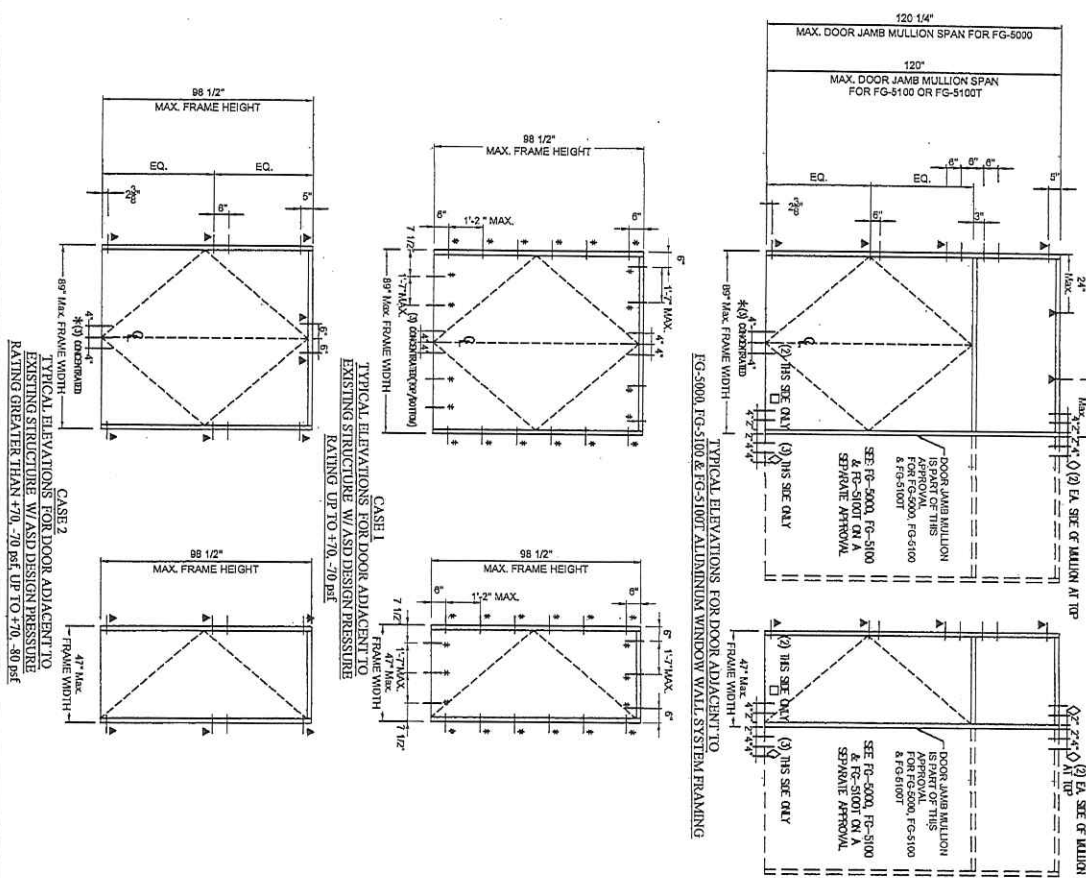
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DOOR & DOOR JAMB MULLION ANCHORAGE TO CONCRETE (MIN $f'_c=3\text{ksi}$) & GROUT FILLED CONCRETE BLOCK
(VALID FOR 3'-6" x 8'-0" & 7'-0" x 8'-0" DOORS)



- FASTENERS LEGEND**
- ▲ : AT JAMB AT HEADER
 - * : AT THRESHOLD JAMB & HEAD (CASE 1)
 - ◇ : AT MULLION AT TOP OR AT MULLION AT BOTTOM WINDOW WALL SEE AT MULLION THRESHOLD SIDE

FASTENERS TYPES AT ▲
(VALID FOR CONCRETE & GROUTED BLOCK)

- B - 3/8" F.H. POWER FASTENERS TAPER ANCHOR W/ 1 3/4" MIN. EMBEDMENT, W/ 6" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.**
- C - 3/8" LID RW/RED HEAD SCREW ANCHOR W/ 1 1/2" MIN. EMBEDMENT, W/ 3" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.**

FASTENERS TYPE AT *
(VALID FOR CONCRETE & GROUTED BLOCK)

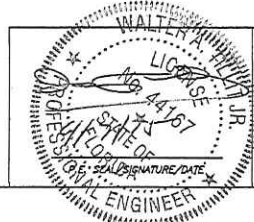
- F - 1/4" F.H. ELCO ULTRACON ANCHOR W/ 1 3/4" MIN. EMBEDMENT, W/ 2 1/2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.**

FASTENERS TYPE AT ◇
(VALID FOR CONCRETE)

- A - 3/8" F.H. POWERS FASTENERS TAPER SCREW ANCHOR W/ 2" MIN. EMBEDMENT INTO POURED CONCRETE (MIN. $f'_c = 3 \text{ ksi}$) W/ 4 1/2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.**
- C - 3/8" LID RW/RED HEAD SCREW ANCHOR W/ 2" MIN. EMBEDMENT, W/ 4" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.**

FASTENERS TYPE AT □
(VALID FOR CONCRETE)

- I - 3/8" F.H. POWERS FASTENERS TAPER SCREW ANCHOR W/ 1 3/4" MIN. EMBEDMENT INTO POURED CONCRETE (MIN. $f'_c = 3 \text{ ksi}$) W/ 6" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.**



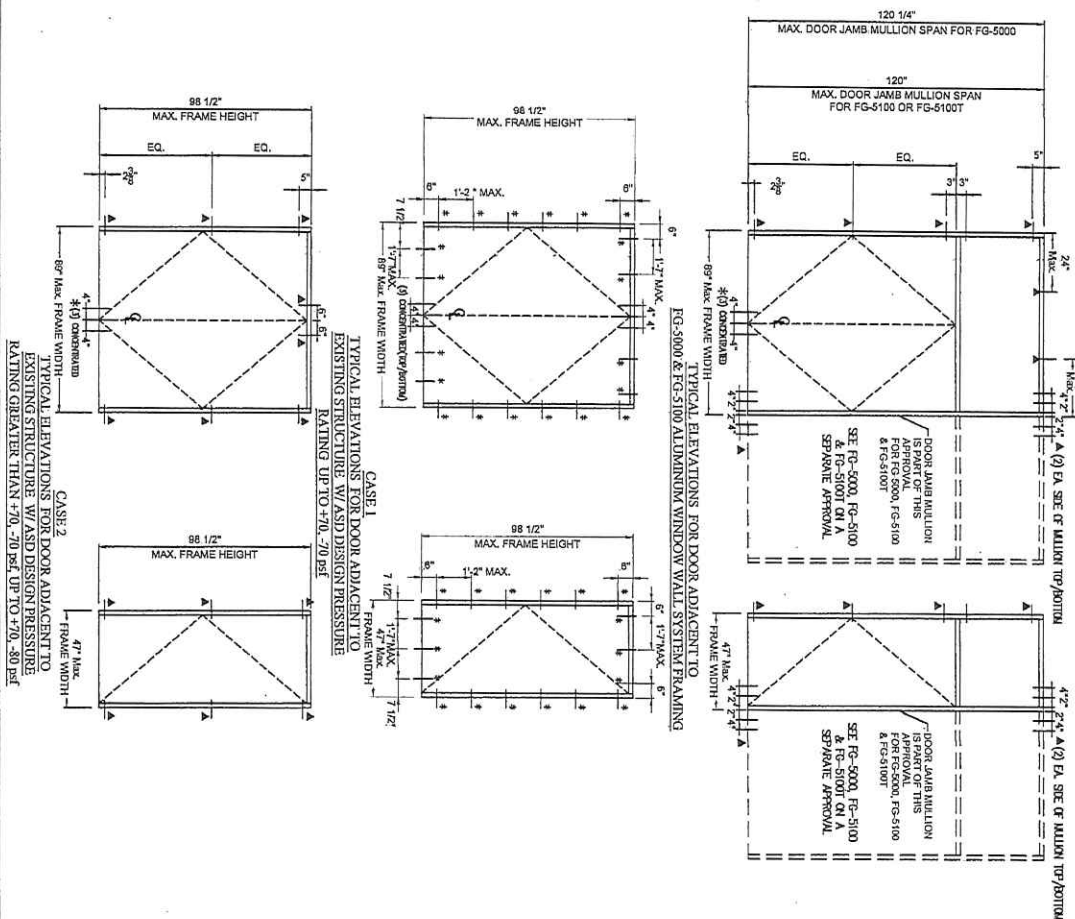
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TILTECO INC.

TILTELL TESTING & ENGINEERING COMPANY
 11005 A.W. 300, 5th Fl., 3001 WINDY GARDENS, D. 33160
 Phone: (305) 971-1530 • Fax: (305) 971-1531
 e-mail: info@tilteco.com
 ED-0006719
 WALTER A. TILLET JR. P.E.
 FLORIDA LIC. # 44167

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)					
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STILE ALUMINUM ENTRANCE DOOR (WET GLAZED) LARGE & SMALL MISSILE IMPACT				DRAWN BY: F.R.L. 03/10/15	
				DATE	
				15-029	
				DRAWING No	
REV. NO.	DESCRIPTION	DATE	REV. NO.	DESCRIPTION	DATE
OLD 14-063		03/16/15			

DOOR & DOOR JAMB MULLION ANCHORAGE TO MIN 1/8" THICK ASTM A-36 STEEL OR 12 GAGE ASTM-653, GRADE 33 STEEL
(VALID FOR 3'-6"x8'-0" & 7'-0"x8'-0" DOORS)



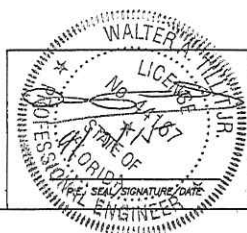
- FASTENERS LEGEND**
- ▲ AT JAMB & HEADER
 - * AT THRESHOLD (JAMB & HEAD CASE 1)
 - * AT THRESHOLD (CASE 2)

FASTENERS TYPES AT ▲

D - 3/8" H.H. TYPE "F" BOLT W/
3/4" MIN. EDGE DISTANCE, BEYOND
MIN. FINISH MATERIAL BOLT TO BE
FULLY ENGAGED INTO PROFILE
THICKNESS

FASTENERS TYPE AT *

G - 1/4"-20 ELCO DRILL FLEX SELF
DRILLING SCREWS W/ 1/2" MIN.
EDGE DISTANCE, BEYOND ANY FINISH
MATERIAL, FULLY ENGAGED INTO
PROFILE THICKNESS



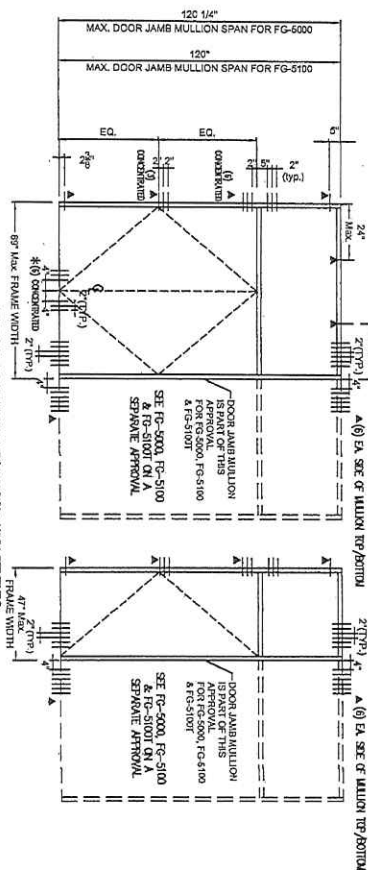
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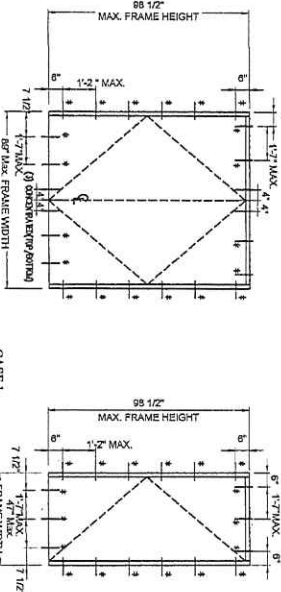
TILT TESTING & ENGINEERING COMPANY
6303 N.W. 20th, 3d, 5th, 200, Miramar, FL 33189
Phone: (305) 871-1237 Fax: (305) 871-1231
E-mail: tiltco@aol.com
88-0000719
WALTER A. TILT, JR., P.E.
FLORIDA Lic. # 44107

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)					
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STILE ALUMINUM ENTRANCE DOOR (WET GLAZED) LARGE & SMALL MISSILE IMPACT				DRAWN BY: F.R.L.	
				DATE	
				15-029	
				DRAWING No	
				SHEET 23 OF 26	

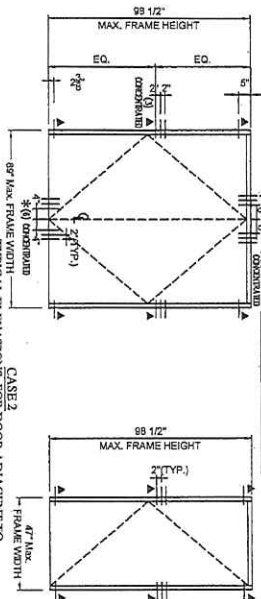
DOOR & DOOR JAMB MULLION ANCHORAGE TO WOOD (VALID FOR 3'-6"x8'-0" & 7'-0"x8'-0" DOORS)



TYPICAL ELEVATIONS FOR DOOR JAMB MULLION ANCHORAGE TO FG-5000 & FG-5100 ALUMINUM WINDOW WALL SYSTEMS



TYPICAL ELEVATIONS FOR DOOR JAMB MULLION ANCHORAGE TO FG-5000 & FG-5100 ALUMINUM WINDOW WALL SYSTEMS



TYPICAL ELEVATIONS FOR DOOR JAMB MULLION ANCHORAGE TO FG-5000 & FG-5100 ALUMINUM WINDOW WALL SYSTEMS

FASTENERS LEGEND	
▲	AT JAMB, HEADER AND AT DOOR JAMB MULLION (TOP/BOTTOM)
*	AT THRESHOLD, JAMB & HEAD (CASE 1), INTO SINGLE 2x BUCK (CASE 2), AT THRESHOLD 2x BUCK INTO DOUBLE 2x BUCK

FASTENERS TYPE

▲

E-5/16" LAG SCREWS TO DOUBLE 2x BUCK (G=0.59) W/ 3" MIN. PENETRATION INTO WOOD W/ 1 1/2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL, OR 5/16" ELCO ULTRACONS W/ 3" MIN. PENETRATION INTO DOUBLE 2x BUCK (G=0.59) W/ 1 1/2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL

FASTENERS TYPE

*

H-1/4" ELCO ULTRACONS W/ 1 1/2" MIN. PENETRATION INTO SINGLE 2x BUCK W/ 3" MIN. PENETRATION INTO DOUBLE 2x BUCK W/ 1 1/2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE) STILE ALUMINUM ENTRANCE DOOR (WET GLAZED) LARGE & SMALL MISSILE IMPACT		DRAWN BY: F.R.L.
		03/15/15
		DATE
		15-029
		DRAWING No
		SHEET 24 OF 25

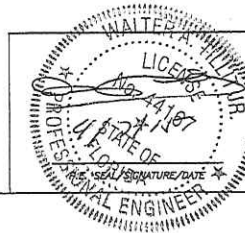


Oldcastle BuildingEnvelope
803 AIRPORT RD. TERRELL, TX 75160
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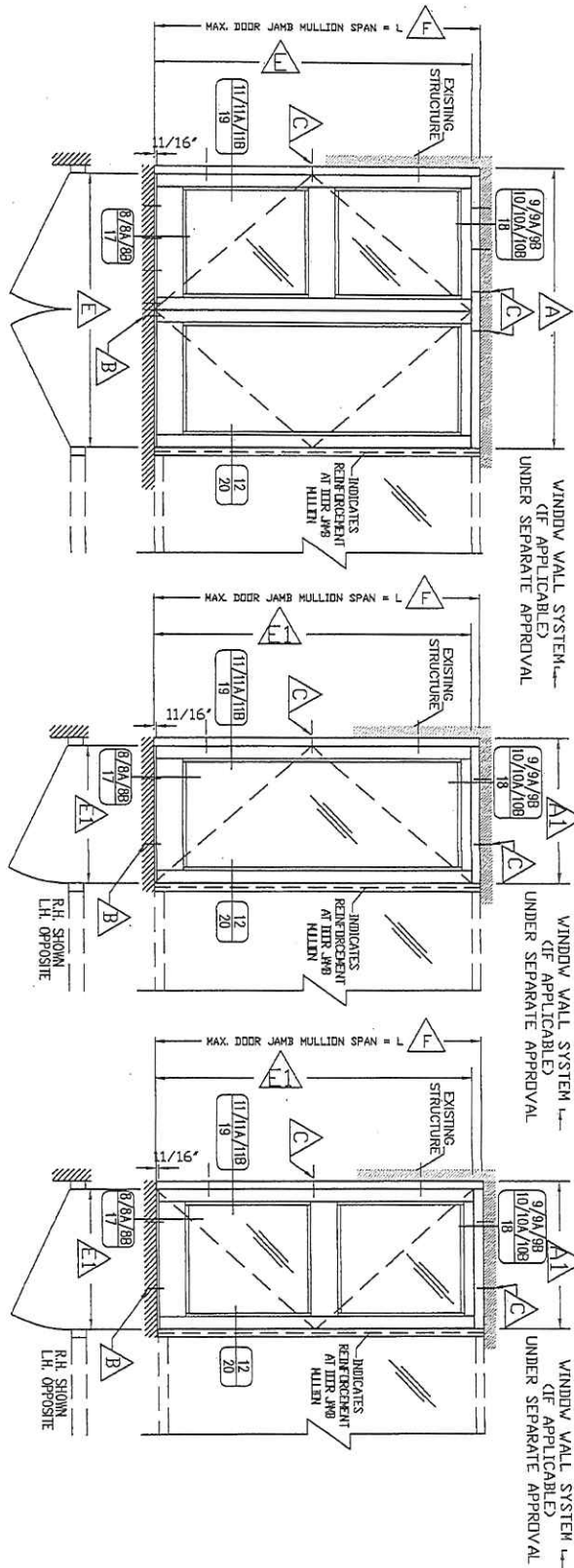


TILTECO TESTING & ENGINEERING COMPANY
3300 N.E. 28th St., Ste. 200, Virginia Beach, VA 23160
Phone: 757-497-1510 Fax: 757-497-1511
e-mail: tiltco@tilteco.com
Tiltco 0006719
WALTER A. TILIT, Jr. P.E.
FLORIDA Lic. # 44187



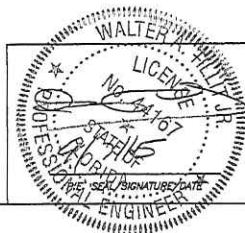
TYPICAL EXTERIOR ELEVATIONS FOR MSD-375 & WSD-500 IMPACT DOOR (WET GLAZED) 4'-0"x8'-0" (SINGLE) & 8'-0"x8'-0" (PAIR OF DOORS) CONNECTED TO EXISTING STRUCTURE OR FG-5000, FG-5100 OR FG-5100T ALUMINUM WINDOW WALL SYSTEM FRAMING

MAX. ASD PRESSURE RATING W/ LAMINATED & INSULATED GLASS IS +70, -70 psf



FOOT NOTES:

- A** 101" MAX. DOOR FRAME WIDTH.
- A1** 53" MAX. DOOR FRAME WIDTH.
- E** 96" MAXIMUM DOOR HEIGHT (O.O.) & 96" MAXIMUM DOOR WIDTH (O.O.).
- B** FOR THRESHOLD FASTENERS QUANTITY, TYPES AND SPECS SEE SHEET 26.
- E1** 96" MAXIMUM DOOR HEIGHT (O.O.) & 48" MAXIMUM DOOR WIDTH (O.O.).
- C** FOR JAMB & HEAD FASTENERS QUANTITY, TYPES AND SPECS SEE SHEET 26.
- F** 96" MAXIMUM DOOR JAMB MULLION SPAN.

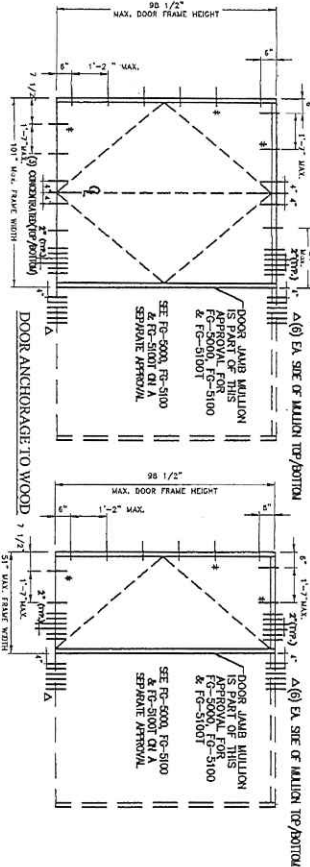
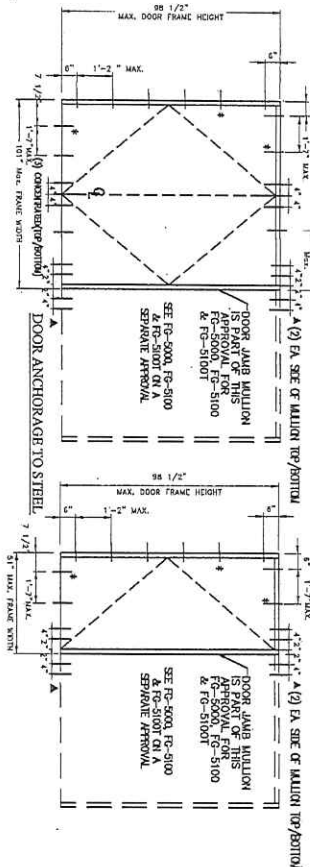
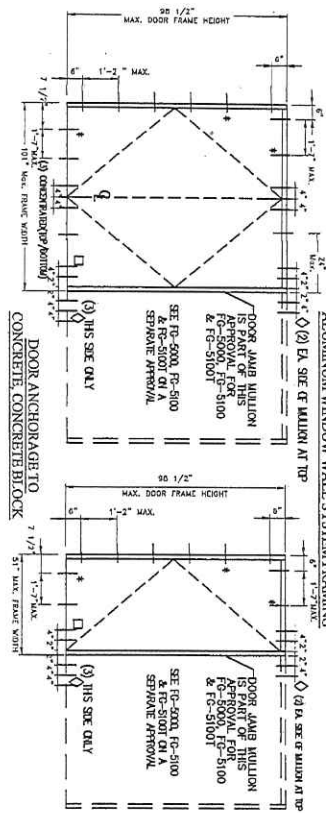


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TILTECO INC.
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 Phone: (305) 971-1330, Fax: (305) 971-1531
 e-mail: Tilteco@aol.com
 EB-0008719
 WALTER A. TILLIT, P.E.
 FLORIDA Lic. # 44167

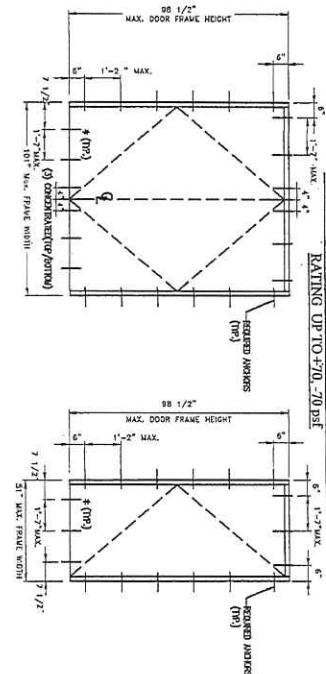
FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)					
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				03/18/15	
				DATE:	
				15-029	
				DRAWING No	
REV. NO.	DESCRIPTION	DATE	REV. NO.	DESCRIPTION	DATE
001	14-063	03/16/15			

DOOR ANCHORAGE TO CONCRETE, CONCRETE BLOCK, STEEL AND WOOD SUBSTRATES
(VALID FOR 8'-0"X8'-0" & 4'-0"X8'-0" DOORS)

TYPICAL ELEVATIONS FOR DOOR ADJACENT TO FG-5000, FG-5100 & FG-5100T
ALUMINUM WINDOW WALL SYSTEM BRACING



TYPICAL ELEVATIONS FOR DOOR ADJACENT TO
EXISTING STRUCTURE W/ AID DESIGN PRESSURE
RATING UP TO +70, -70 psf



**ANCHORAGE TO (MIN. f'c=3ksi) CONCRETE OR
ASTM C-90 GROUTED FILLED CONCRETE BLOCK**

REQUIRED ANCHOR:	LOCATION:
* 1/4" Ø F.H. E.LCO ULTRACON ANCHOR W/ 1 3/4" MIN. EMBEDMENT W/ 1/2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.	AT HEAD, SILL & JAMBS OF DOOR
* 3/8" Ø F.H. POWERS FASTENERS TAPPER SCREW ANCHOR W/ 2" MIN. EMBEDMENT INTO POURED CONCRETE (MIN. F'C = 3 KSI), W/ 4 1/2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.	AT HEAD & SILL OF DOOR JAMB MULLION AT WINDOW WALL SIDE
* 3/8" Ø LID TW/RED HEAD SCREW ANCHOR W/ 2" MIN. EMBEDMENT, W/ 4" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.	AT HEAD & SILL OF DOOR JAMB MULLION AT WINDOW WALL SIDE
* 3/8" Ø F.H. POWERS FASTENERS TAPPER SCREW ANCHOR W/ 1 3/4" MIN. EMBEDMENT INTO POURED CONCRETE (MIN. F'C = 3 KSI), W/ 6" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.	AT HEAD & SILL OF DOOR JAMB MULLION AT DOOR SIDE

**ANCHORAGE TO 1/8" THICK ASTM A-36 STEEL OR
12 GAGE, ASTM A-653, GRADE 33 STEEL**

REQUIRED ANCHOR:	LOCATION:
* 1/4" Ø-20 F.H. E.LCO DRILL FLEX SELF DRILLING SCREWS W/ 1/2" MIN. EDGE DISTANCE BEYOND ANY FINISH MATERIAL. SCREWS TO BE MIN. FULLY ENGAGED INTO PROFILE THICKNESS.	AT HEAD, SILL & JAMBS OF DOOR
* 3/8" Ø H.H. TYPE T" BOLT W/ 3/4" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL. BOLT TO BE MIN. FULLY ENGAGED INTO PROFILE THICKNESS.	AT HEAD & SILL OF DOOR JAMB MULLION AT EITHER SIDE OF MULLION
ANCHORAGE INTO G=0.55 MIN. WOOD	LOCATION:
* #14 F.H. WOOD SCREWS OR 1/4" Ø E.LCO ULTRACON TO SINGLE 2x BUCK W/ 1 1/2" MIN. PENETRATION W/ 1" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.	AT HEAD, SILL & JAMBS OF DOOR
* 5/16" Ø LAG SCREWS TO DOUBLE 2x BUCK (G=0.55) W/ 3" MIN. PENETRATION INTO WOOD W/ 1 1/2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL. OR 5/16" Ø E.LCO SCREWS W/ 1 1/2" MIN. EDGE DISTANCE, BEYOND ANY FINISH MATERIAL.	AT HEAD & SILL OF DOOR JAMB MULLION AT EITHER SIDE OF MULLION

FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)			
SERIES MSD-375 (MEDIUM) & WSD-500 (WIDE)		DRAWN BY: F.R.L.	
STILE ALUMINUM ENTRANCE DOOR (WET GLAZED)		03/18/15	
LARGE & SMALL MISSILE IMPACT		DATE	
Oldcastle BuildingEnvelope®		15-029	
805 AIRPORT RD. TERRELL, TX 75760		DRAWING No	
www.OldcastleBE.com Phone 800-469-4367		SHEET 28 OF 28	
REV. NO.	DESCRIPTION	DATE	DESCRIPTION
001	OLD 14-063	02/16/15	

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5000 N.W. 25th St., Suite 200, Fort Lauderdale, FL 33309
Phone: (954) 971-1230 Fax: (954) 971-1231
E-mail: tillit@tillit-testing.com

EP-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

Return to:
 Planning & Zoning Department
 324 E. Pine Street
 Tarpon Springs, FL 34689
 (727) 942-5611

(Please type or print clearly)

Property Owner(s)

Name Nomiki Vavlas		Email nvavlas@vhpenterprises.com	
Address 1403 Circle Drive			
City Tarpon Springs		State Florida	Zip 34689
Phone 727-421-7716	Fax 727-942-1450	Cellular 727-421-7716	

Applicant

Name Bokova Industrial Center, Inc		Email nvavlas@vhpenterprises.com	
Address 20 Hibiscus Street			
City Tarpon Springs		State Florida	Zip 34689
Phone 727-421-7716	Fax 727-942-1450	Cellular 727-421-7716	

Agent (if applicable)

Name		Email	
Address			
City		State	Zip
Phone	Fax	Cellular	

General Information

Property Location or Address 20, 22, 24, 26 Hibiscus Street					
Legal Description (attach additional sheets as necessary)					
Tax Parcel Number(s) 12/27/15/64998/000/0031	<table border="1"> <tr> <th align="center" colspan="2">Current Designations of Property</th> </tr> <tr> <td>Land Use Category</td> <td>Zoning District</td> </tr> </table>	Current Designations of Property		Land Use Category	Zoning District
Current Designations of Property					
Land Use Category	Zoning District				
Current Use of Property office, bakery, cafe	Contributing Structure? ☐ YES ☐ NO				

Type of Proposed Activity: [please check all that apply]

- | | | | |
|--|---|--|--------------------------------------|
| ☐ Demolition | ☐ Relocation * | ☐ Structural Addition | ☐ Driveway |
| ☒ Renovation | ☐ New Construction | ☐ New Roof | ☐ Other _____ |

*** If Relocation, please indicate new location:**

New Property Location or Address					
Legal Description (attach additional sheets as necessary)					
Tax Parcel Number(s)	<table border="1"> <tr> <th align="center" colspan="2">Current Designations of Property</th> </tr> <tr> <td>Land Use Category</td> <td>Zoning District</td> </tr> </table>	Current Designations of Property		Land Use Category	Zoning District
Current Designations of Property					
Land Use Category	Zoning District				

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

General Building Information

Year Built 1895	Architectural Style Masonry Vernacular	Porches? ☐ YES ☒ NO
Original Use George McArpy Building	Present Use Office, Bakery, Restaurant	Proposed Use Commercial
Roof Type & Material Flat	Exterior Siding Material Stucco / Venier Brick	

Previous Additions or Modifications: [please describe and include dates]

Application #22-139, approved by HPB to replace windows and doors on the storefronts at the contributing structure at 20-26 Hibiscus Street

After removal of existing stucco, the original brick, upper windows and steel beam were revealed however, due to the age of the building original material was not suitable to support the structure see attached

Description of Proposed Work:

For relocation or demolition, describe the property's physical condition, steps taken to save the property and whether renovation would be economically feasible:

the building has received new store front doors and window with the existing recessed remaining alcove entryways, over door windows and brick veneir columns

Requirements for Submission:

Please submit those items which have been checked by City staff:

- ☒ Completed original application with digital copies of all application documents
- ☒ \$50.00 application fee plus advertisement costs which will be invoiced upon calculation by Staff
- ☐ \$50.00 application fee for signs only
- ☐ Property survey, signed and sealed by a professional land surveyor
- ☐ Architectural floor plans and elevations (10 copies)
- ☐ Site Plan for new construction (10 copies)
- ☐ Landscaping plan (10 copies)
- ☐ Details of exterior modifications

CITY OF TARPON SPRINGS, FLORIDA
Heritage Preservation Board
Application for Certificate of Approval

AFFIDAVIT

I (we), the undersigned, certify ownership of the property within this application, that said ownership has been fully divulged, whether such ownership by contingent or absolute, and that the name of all parties to an existing contract for sale or any options are filed with this application.

I (we) certify that Nomiki Vavlas is (are) duly designated as the agent(s) for the owner, that the agent(s) is (are) authorized to provide subject matter on the application contained herein, whether verbal or written, and appear at any public hearing(s) involving this petition.

I (we) assent to the City's Comprehensive Plan as it applies to the property. Further, it is understood that this application must be complete and accurate and the appropriate fee paid prior to processing.

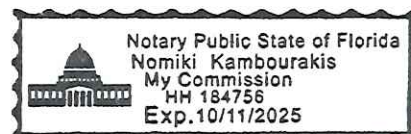
Date: <u>02/12/2024</u>	Title Holder/Property Owner: <u>owner</u>
Date: _____	Title Holder/Property Owner: _____
Date: _____	Title Holder/Property Owner: _____
Date: _____	Title Holder/Property Owner: _____

STATE OF FLORIDA)
COUNTY OF PINELLAS)

The foregoing instrument was acknowledged before me this 12 day of February, A.D., 20____
by Nomiki Vavlas, who is personally known to me or who has produced
_____ as identification and who did (did not) take an oath.

NOTARY PUBLIC

Name: Nomiki Kambourakis
Signature: *Nomiki Kambourakis*
Stamp: _____





Renea Vincent, AICP, CPM
Director

City of Tarpon Springs, Florida

Planning and Zoning Department
324 E Pine Street
Tarpon Springs FL 34689
(727) 942-5611

March 7, 2023

Ms. Nomiki Vavlas
20-26 Hibiscus Street
Tarpon Springs, FL 34689
(c/o nvavlas@vhpenterprises.com)

**RE: Certificate of Approval – Vavlas
Application #22-139**

Dear Ms. Vavlas:

This letter serves to inform you that the City of Tarpon Springs Heritage Preservation Board, at their regular meeting of March 6, 2023, approved your request, as conditioned, to replace the windows and doors on the storefronts at the contributing structure at 20-26 Hibiscus Street with aluminum framed windows and doors. The following conditions of approval were specified:

1. Maintain the existing recessed configuration of the two remaining alcove entryways.
2. The cornice will be restored.
3. The Certificate of Approval will expire in three (3) years if a building permit has not been issued for the project.

Please note that it is your responsibility to supply a copy of this letter with the application for a building permit when it is submitted. In the meantime, if you have any questions, please do not hesitate to contact me at 727-938-3711, ext. 2379.

Sincerely,

Caroline Lanford, AICP CTP
Principal Planner

cc: File #22-139
enc. Plan revisions

International Rigging Group, LLC.

20 Hibiscus Street

Tarpon Springs, FL 34689

Phone: (727) 938-6557

Fax: (727) 942-1450

E-Mail: Info@intrigging.com



10/25/2023

TO: Tarpon Springs Building Department
324 Pine St.
Tarpon Springs, FL 34689

RE: Renovation of storefronts on Hibiscus St.

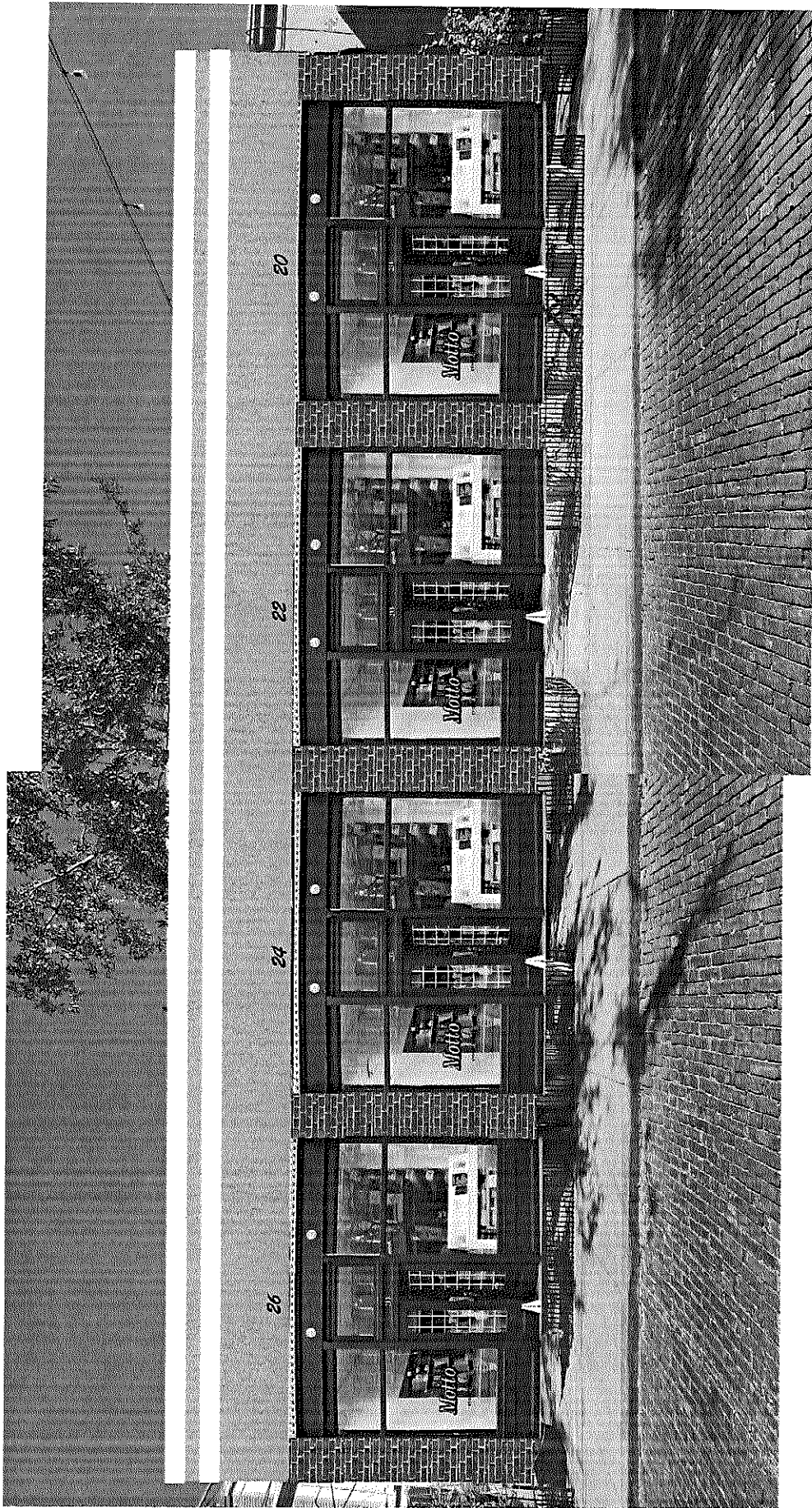
Regarding the above-mentioned project some concerns were raised by the city regarding the decorative and structural steel element which is now enclosed by stucco. The steel I-Beam in question is believed to have been installed during the initial construction of a very old building. The I-beam was and has been covered with stucco for decades; and is installed at an ingress and not flush to the façade of the building. Considering the age of the structure is pre 1978 (lead Paint ban by EPA) the I-Beam in question is most likely to have Lead Based Paints (%87 likely for pre 1940 buildings according to EPA data) that are naturally deteriorating by chalking and flaking causing contamination in the vicinity where restaurants and a bakery is present. Posing a potential health issue for the public frequenting the various restaurants and bakeries in the area if the I-beam in question was left exposed.

The Environmental Protection Agency has stringent rules and regulations that must be adhered to when working with lead exposure. The EPA also offers several methods for lead abatement divided into two parts: interim controls to reduce lead hazards which are not permanent solutions and will need ongoing attention; and permanent hazard elimination. The permanent hazard elimination is further divided into several methods such as removal, sealing, enclosing, and encapsulation. Each of the previously listed permanent hazard elimination methods have associated risks, costs, etc. that must be weighted when considering a method to utilize. The most costly and hazardous waste producing method would be the removal, which would involve abrasive blasting the beam to remove the entirety of lead-based coatings, producing lead dust which must be done in full containment as per the EPA. Utilizing this method there are various other government agencies with regulations that must be adhered to pertaining to the abatement such as OSHA, EPA, etc. along with various testing and training performed as per the regulations such as soil sampling, air monitoring, employee blood monitoring, etc. Thus, this method is the costliest of all methods listed and requires that current tenant businesses cease work during the construction; along with a minimum 10 foot offset of the containment onto the street for an extended period.

The second EPA recommended method simply requires encapsulation of the lead hazard. The encapsulation is typically done via an additional coating applied over the existing lead paint. However, considering the potential hazards that may be posed soon to the public (additional encapsulation coatings will naturally deteriorate due to exposure and the lead hazard remains, where food products are produced, served, and consumed) thus this method was not chosen. Enclosing the hazard requires that the potential hazard is covered with a non-permeable covering eliminating the exposure of the hazard to the public completely. Enclosing method was chosen for this project I believe is the best method considering the totality of the circumstances (impact on local business, possible contamination, etc.). If you have any further questions about this matter, please feel free to contact me.

Tufan Markal

SSPC C-1, C-2, C-3, C-5, BCI, QCS
NACE CIP 1 & 2
Industrial De-leading and Coatings



2

Stucco

Stucco

