



**City of Biddeford
Historic Preservation Commission**

January 8, 2025 at 4:00 PM
City Hall Council Chambers & Zoom

[Join Zoom Meeting Online](#)

Or call in by phone: +1 312 626 6799

Meeting ID: 950 4356 2174

Passcode: 011116

1. Declaration of Quorum/Voting Members
2. Adjustment(s) to Agenda
3. Approval of Meeting Minutes
 - 3.a Approval of Meeting Minutes from November 20, 2024
4. New Business
 - 4.a 20246.46 HPC Review for Josh Cushman to rehabilitate 6 & 14 Main Street (Buildings 19 & 20, respectively) for residential use, Tax Map 71, Lots 10-1 & 10-4.
 - 4.b Design Guidelines-Review of Formatting Template-Discussion with Samantha Smith of JMT, Inc.
5. Past Projects
 - 5.a Review of 146 Alfred Street-Approved June 2024
6. Other Business
 - 6.a Election of New Officers: Chair, Vice Chair & Secretary
7. Adjourn

Historic Preservation Commission
Meeting/Workshop – November 20, 2024
Meeting Notes

Tyler Norod, Westbrook Development
Jesse Thompson, Kaplan/Thompson Architects
Sam Bell-Hart – Kaplan Thompson Architects
Alli Tobey
Julie Larry
Erin Ware
Leah Thompson
Scott Joslin
Brad Favreau

Workshop discussion of new residential development at 15 Pearl Street by Westbrook Development and Kaplan/Thompson Architects.

This is an affordable housing development comprising 2 buildings with 45 units each. Project will proceed in two phases.

Discussion of materials, form and scale, especially regarding the adjacent garage.

Discussion of windows – rhythm and symmetry at the exterior of the building, and of type and placement in the exterior wall. Window type will be casement or tilt – unsure at this time.

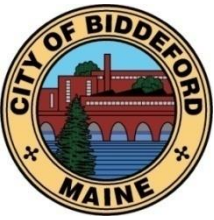
Discussion of the corner of Elm Street and Lincoln Street. This is an important gateway to downtown and the Mill District. Buildings should have strongly expressed symmetry, and landscaping should be appropriate for the corner.

Phasing – Building nearest the garage will be constructed first. Due to uncertainty of the timing of development of the second lot on site.

Discussion of material treatment of the exterior. Buildings will be different color and different treatment of canopies and cornices. This treatment helps identify each building from one another. Compliance with Build America Buy America makes certainty of materials and fixtures unsure at this time.

Courtyard will be landscaped with benches to encourage community among residents.

Rooftop mechanicals will be set back from the edge of the roof and will be screened from view. But design of mechanicals has not been completed.



CITY OF BIDDEFORD

PLANNING DEPARTMENT

2024.46

205 Main Street PO Box 586 Biddeford, ME 04005 (207) 284-9115

HISTORIC PRESERVATION COMMISSION REPORT

TO: The Biddeford Historic Preservation Commission

FROM: Brad Favreau, Economic Development Coordinator

MEETING DATE: Wednesday December 11, 2024 PM

RE: **Item 3.1: 2024.46 HPC Review for Josh Cushman** to rehabilitate 6 and 14 Main Street (Buildings 20 and 19 respectively) into residential use, Tax Maps 71, Lot 10/1 and Map 71, Lot 10/4, in the MSRD-3 Zone.

1. INTRODUCTION

The owner of these circa-1890 mill buildings proposes to rehabilitate them to residential use. The applicant is seeking Historic Preservation certification through the National Park Service. This application has not yet been approved by the NPS.

The buildings as they appeared circa 2000:

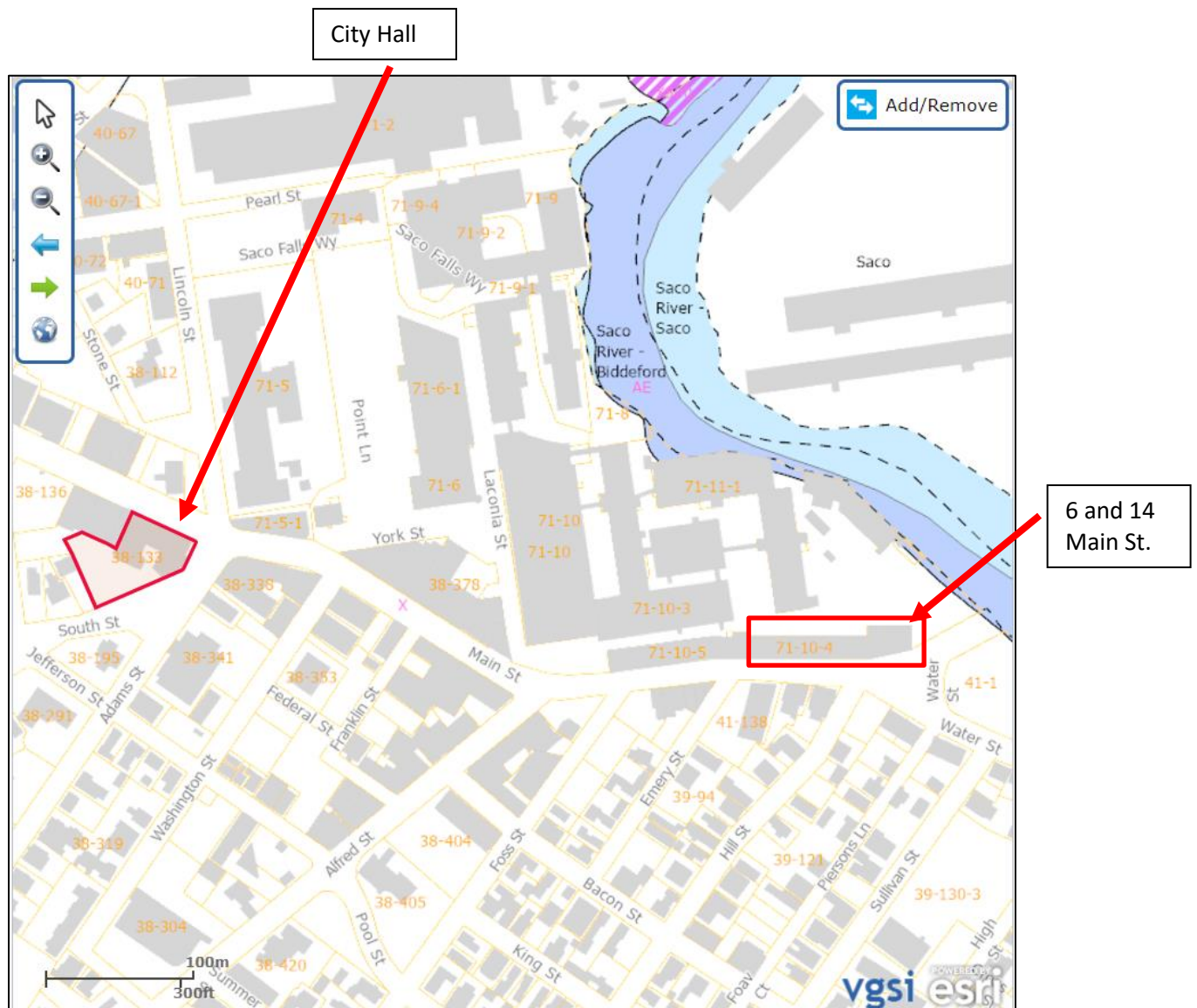


2. PROJECT DATA/INFORMATION

	<i>SUBJECT</i>	<i>DATA/INFORMATION</i>
1.	Applicant:	Josh Cushman 16 Casco Street Portland ME 04101 jcushman@corefirms.com
2.	Owner of Property:	
3.	Agent:	Marieke Thormann, Fathom Companies
4.	Engineer/Architect:	Archetype, Portland, ME
5.	Project Location:	6 Main Street, 14 Main Street Buildings 20 and 19
6.	Project Tax Map #/Lot #:	Tax Map 71, Lot 10-4; Map 71, Lot 10-1
7.	Existing Zoning:	MSRD-3
8.	Overlay Zoning:	Biddeford / Saco Mills Historic District
9.	Contributing?	Yes
10.	National Register of Historic Places?	Yes
11.	Approximate Date of Construction	Circa 1890
12.	Existing Use:	Vacant
13.	Proposed Use:	Residential
14.	Uses in the Vicinity:	Mixed Use
15.	Parcel Size:	0.46 acres (combined)
16.	Front Setback Required:	None
17.	Side Setbacks Required:	None
18.	Rear Setback Requires:	None
19.	Height Requirements:	Min. 2 stories or 26 feet
20.	LDR Attachment A: Fess Paid:	Yes
21.	Historic Preservation Commission Review History:	Meeting date Jan. 8, 2025. Posted Dec. 31, 2024; Mail Notices to all abutters within 100'. 3 notices sent Dec. 31, 2024.

3. EXISTING CONDITIONS

The subject property is located at the lower end of Main Street, adjacent to the entrance to North Dam Mill complex. These buildings are highly visible at the lower end of Main Street and both are **Contributing** to the Biddeford / Saco Mills Historic District under the areas of Industry and Architecture.



Source: "14 Main Street." [Vision Government Solutions](#).
Accessed Nov. 29, 2024.

Formerly known as the Laconia Cloth Room, Building 19 is described in the National Register of Historic Places Registration Form as follows:

"... The Laconia Cloth Room is a red brick structure (34 bays long and four bays deep) with a low-pitched roof. Due to the slope of the site, there are both two and three-story sections of the building. A third floor was added to the 16 northernmost bays c. 1925. The roofline was originally defined by deep overhanging eaves supported on broad brackets, but the brackets and projecting eaves were removed (date unknown), leaving the brick fascia seen today. Typical of buildings constructed in the district in the late nineteenth century, Laconia's Cloth Room has segmental arched windows with brick heads and rusticated granite sills. Window openings hold the historic 12/12 wood sash."

Similarly, Building 20 (Laconia Mapping Room) is described:

"...The Laconia Cloth Room is a red brick structure with a wedge-shaped plan, 12 bays long and five bays wide at its north end (due to the irregular footprint, there are two exposed bays at the south elevation). The building is enclosed by a low pitched roof and has a shallow brick fascia defining the roofline. The top floor was added around 1925. Typical of buildings constructed in the district in the late nineteenth century, Laconia's Mapping Room has segmental arched windows with brick heads and rusticated granite sills. Window openings hold the historic 12/12 wood sash."

According to the Kleinfelder Survey, 6 and 14 Main Street:

*Contributes to listed-Biddeford Saco Mills HD under Architecture and Engineering.
Previously inventoried.*

The buildings as they appeared on November 29, 2024:



North side of Buildings 20 (left) and 19 (right).



Building 20 anchors the entrance to North Dam Mill at Main Street.



Building 19 was last used as the Shipping Department for WestPoint Pepperell.



Building 20 as viewed from Hill Street

4. PROJECT PROPOSAL

According to Archetype, the project architect for this project:

This project is located at Buildings 19 & 20 at the Pepperell Mill Campus in Biddeford, Maine. Both currently vacant historic mill buildings will be converted to multi-family residential. Scope of work includes the replacement of windows to match historic, blocking off access to the existing tunnel and bridge, masonry repair and repointing, restoring and replacing existing doors, as well as the addition of an ADA access ramp to the North elevation of the building. This project is being reviewed by the National Park Service.

The work on the south and east sides of the buildings mainly includes cleaning and repointing of brick, and replacement of existing windows.

- All existing wood windows will be replaced.

New windows will be by Stergis Series 700 aluminum double hung units except where smaller fixed glass units are required. (see elevation drawings and manufacturer cut sheet in agenda packet for details). Windows will be arched-topped and will be simulated divided lite with spacer bar behind muntins and between glass.

- Existing masonry will be repointed as needed.

Mortar for repointing brick will be Type N with the following proportions;

Portland Cement – 1 part

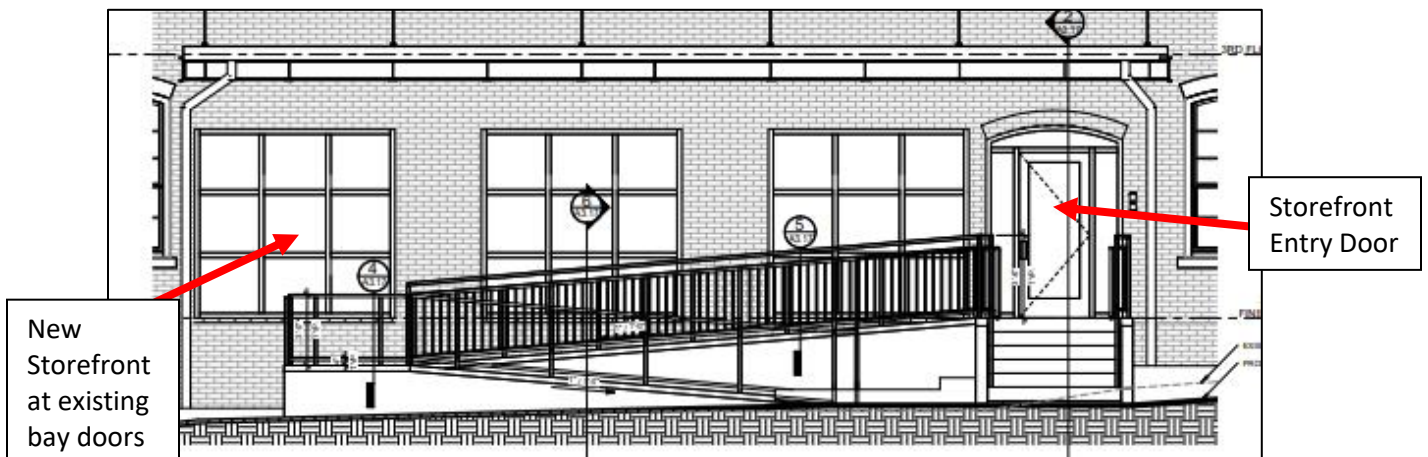
Lime – 1 part

Sand – 6 parts

Mortar will be pigmented to match existing

Work on the north side of the building will involve the above work and:

- Five existing bay doors will be replaced by storefront glass. Storefront is by Kawneer. See cut sheet in agenda packet for details. See sheet A3.17 for details.



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STANDARD (ACTUAL SIZE)	33.00" W x 77.974" L 8538480 W x 1978840 L	33.00" W x 77.974" L 8538480 W x 1978840 L
THICKNESS (ACTUAL SIZE)	0.07" (1.80mm)	0.07" (1.80mm)
WEIGHT (S&S, PER PANEL)	45.25	45.25
WEIGHT (S&S, PER SQ. FT.)	0.58	0.57
STANDARD (S&S, PER PANEL)	9.48 SQ. FT.	75.81 SQ. FT.
STANDARD (S&S, PER SQ. FT.)	2.17 SQ. FT. (20.1)	1.30 SQ. FT. (12.1)
100% color replication 100% texture replication	100% color replication 100% texture replication	

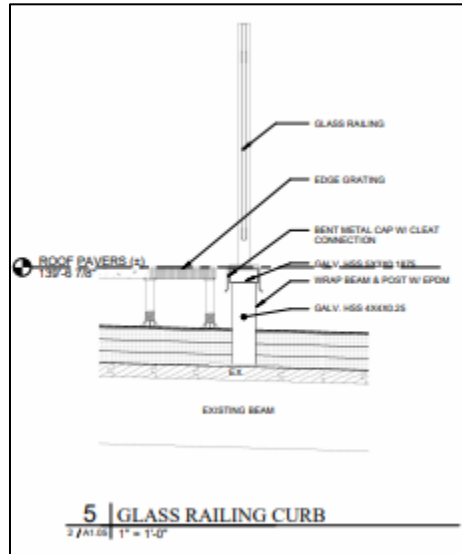
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- Architectural drawing of the 14th floor. The drawing shows a cross-section of the building with a glass roof deck railing and new stairs and elevator shaft. The railing is labeled "GLASS ROOF DECK RAILING" and the stairs and elevator shaft are labeled "NEW STAIRS AND ELEVATOR SHAFT". The drawing also shows a section of the building facade with five windows, each labeled "W8".



Click Image To Enlarge

Share Print

CRL Brushed Stainless 42" Steel Square Glass Clamp 180 Degree Center Square Post Railing Kit

Finish/Color : Brushed Stainless Steel

Brushed Stainless Steel Polished Stainless Steel

Item #: SPS42CBS

- The canopy at the main entrance to Building 19 will be constructed with steel beams and steel deck with membrane (EPDM) roof. It is hung by tension rods secured into the brick face of the building. See sheet A 5.12 and renderings below for details.

Renderings of Proposed Rehabilitation:



5. PUBLIC COMMENT

The notice was posted on the city website on December 31, 2024. Six abutter notices were sent on December 31, 2024.

As of January 2, 2025, no Public Comments had been received regarding the proposed project.

6. STAFF REVIEW:

This work will activate a part of two mill buildings on Lower Main Street that have been unused for more than a decade.

This project is now under review by the National Park Service as part of the Historic Preservation Certification Application. Chris Beard of Essex Preservation is working as consultant for this project.

The work proposed here is similar in scope to the rehabilitation of several other mill buildings completed over the past 15 years, including Building 18, Building 13, and Building 15. Similar treatment of windows and doors, and the inclusion of storefront glass in place of overhang bay doors has been previously approved by this commission.

The designers of this project have been careful to maintain historic materials and elements where possible, especially the wood panel doors found on the north side of the building, and the arched top of windows.

This project maintains the character of the building while allowing new uses.

As is stated above, no information is available at this time for the entrance canopy or the exterior stairs. These areas might require scrutiny by the commission at the December 11 meeting.

A. REVIEW STANDARDS: Article XV (Historic Preservation Ordinance),

Section 13. Evaluation standards for certificate of appropriateness.

A. Reconstruction and alterations.

1. A building or structure classified as an historic landmark or located within an historic district, or any part thereof, or any appurtenance related to such structures, including but not limited to walls, fences, light fixtures, steps, paving and signs, shall not be reconstructed or altered unless a certificate of appropriateness has been issued for such activity. No certificate of appropriateness for a structure or building identified as contributing to the district shall be issued unless the proposed activity is found to preserve or enhance a building's or structures historical or architectural character. No certificate of appropriateness shall be issued for a noncontributing structure or building

unless the proposed activity is complementary to the historic character of surrounding structures and buildings and meets the intent of this ordinance.

2. The standards and requirements in the United States Secretary of the Interior's Standards of Rehabilitation as well as the following factors shall be considered when reviewing applications for reconstruction or alteration of buildings or structures subject to review under this ordinance:

- a. Every reasonable effort shall be made to use a property for its historic purpose and in a way which will require minimum alteration to the structure and its environment;

Like other buildings in the Mill District, these buildings will be converted to residential use. The units will be market rate apartments.

- b. Rehabilitation work shall not destroy the distinguishing qualities nor character of the structure and its environment. The removal or alteration of any historic material or architectural features should be avoided;

No distinguishing characteristics of the buildings will be destroyed. The designer has been careful to maintain historic materials and elements where possible e.g. arch top windows and existing wood panel doors.

- c. Deteriorated architectural features should be repaired rather than replaced, wherever possible. In the event that replacement is necessary, the new material should match the material being replaced in composition, design, texture and other visual qualities. Repair or replacement of missing architectural features should be based on physical or pictorial evidence rather than on conjectural designs or the availability of different architectural features from other buildings;

Existing wood windows will be replaced with aluminum double hung units. These new windows are visually compatible with the existing units. Aluminum windows have been approved for use in other Mill District building conversions.

- d. Distinctive stylistic features or examples of skilled craftsmanship which characterize historic structures and often predate the mass production of building materials shall be treated with sensitivity;

Existing wood panel doors will be refinished and restored.

- e. Changes which may have taken place in the course of time are evidence of the history and development of the structure and its environment, and these changes shall be recognized and respected;

The existing overhead bay openings are not original to the building and their removal does not compromise the historic integrity of the building.

- f. All structures shall be recognized as products of their own time. Alterations to create an earlier appearance shall be discouraged;

N/A

- g. Contemporary design for additions to existing structures shall be encouraged if such design is compatible with the size, scale, material and character of the neighborhood, the structure or its environment; and,

N/A

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

N/A

7. STAFF RECOMMENDATION

Staff recommends further scrutiny of the proposed exterior stairs and the entry canopy.

Given the work on this project by Essex Preservation, the commission should have not reservations about approving the rehabilitation o these buildings for residential use.

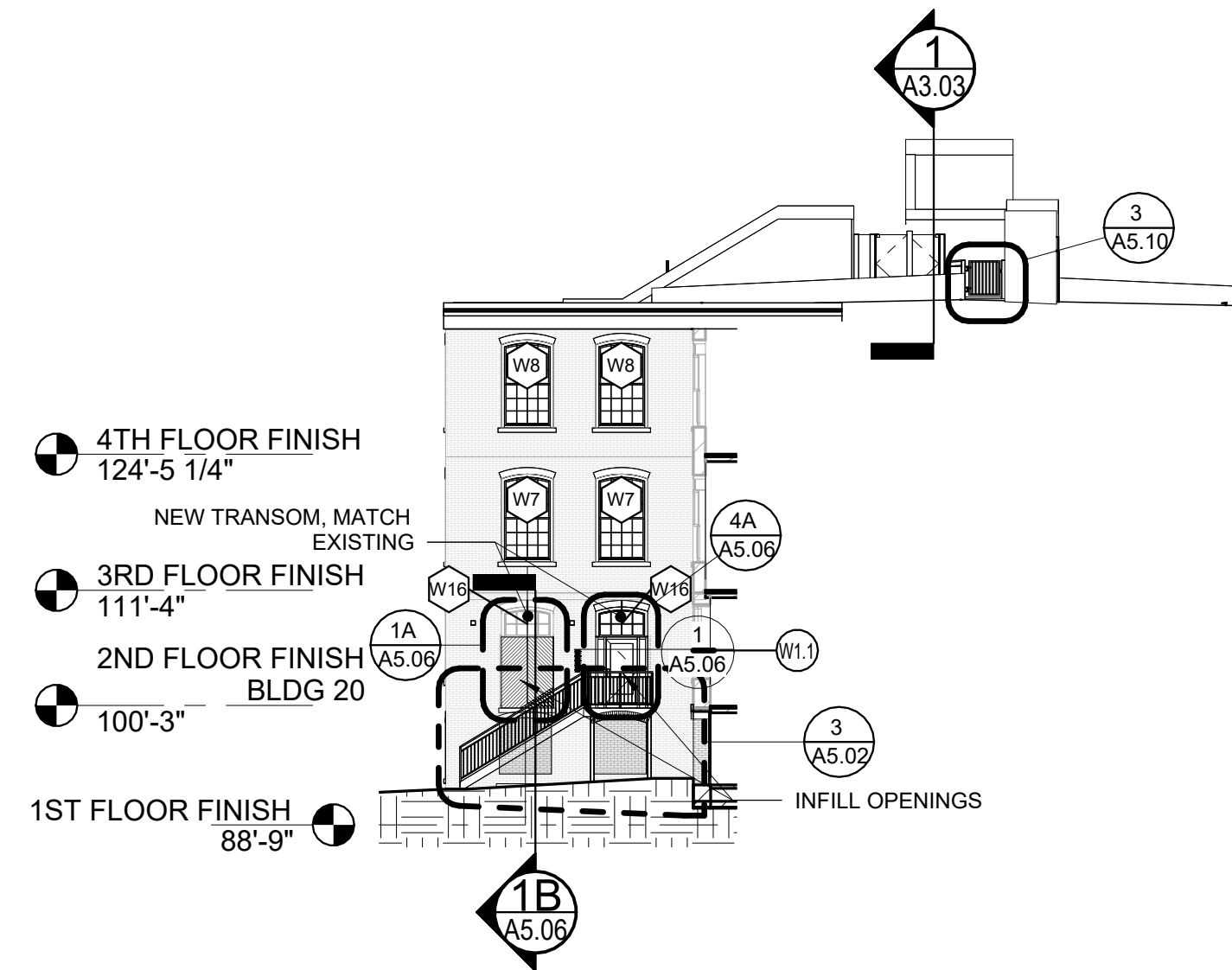
8. SAMPLE MOTIONS

- A. Motion to approve Certificate of Appropriateness for Josh Cushman to rehabilitate Buildings 19 and 20, at 14 and 6 Main Street respectively, for residential use, based on materials and assertions submitted, and conditioned on the following:
 - 1. *All permits must be obtained from Code Enforcement prior to beginning any work.*
 - 2. _____
- B. Motion to deny the Certificate of Appropriateness for Josh Cushman to rehabilitate Buildings 19 and 20, at 14 and 6 Main Street respectively, for residential use, based on the following:
 - 1. _____
 - 2. _____
- C. Motion to postpone decision for the Certificate of Appropriateness for Josh Cushman to rehabilitate Buildings 19 and 20, at 14 and 6 Main Street respectively, for residential use, until further information or materials can be provided:
 - 1. _____
 - 2. _____

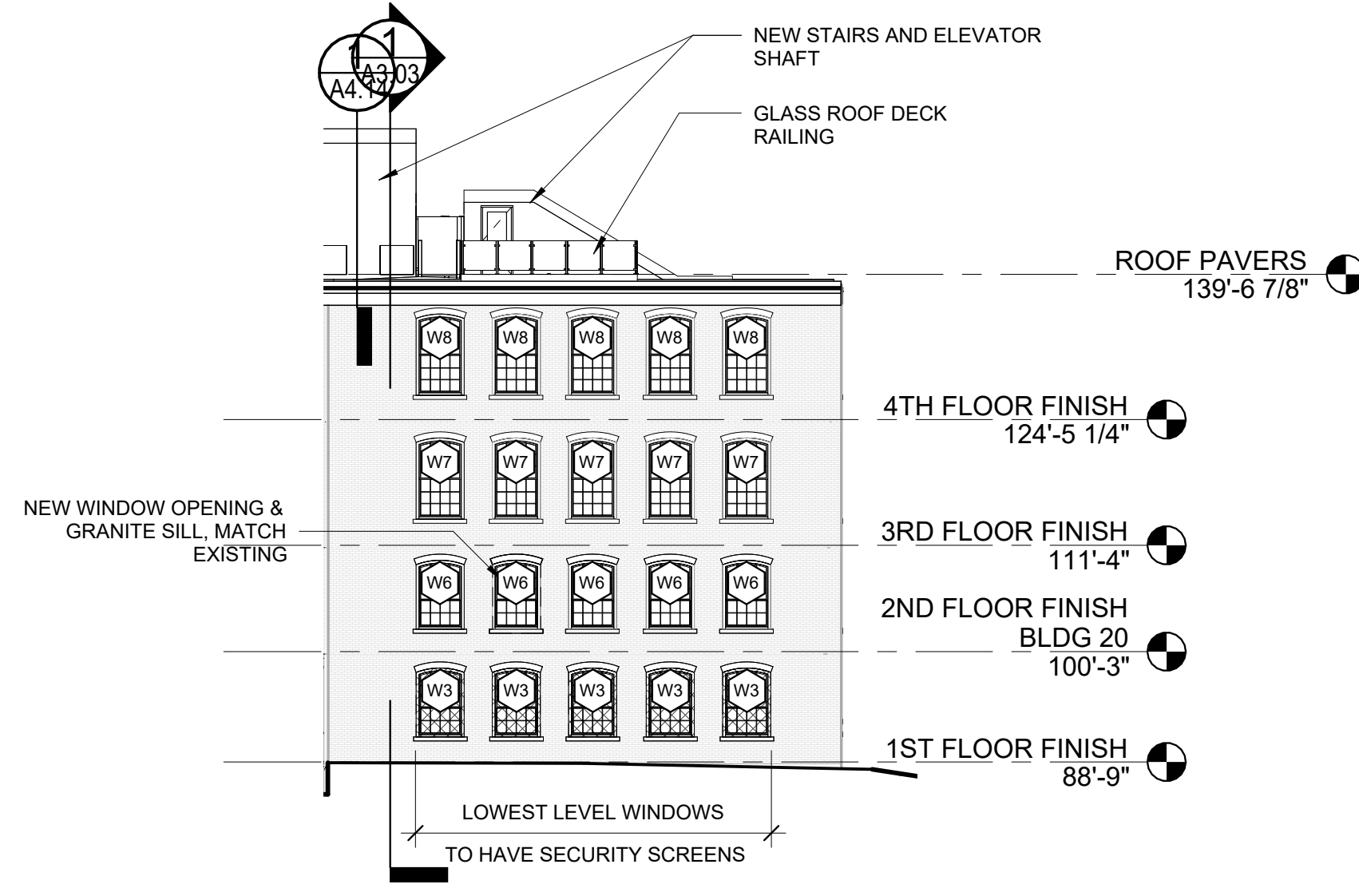
October 07, 2024

PROJECT SUMMARY

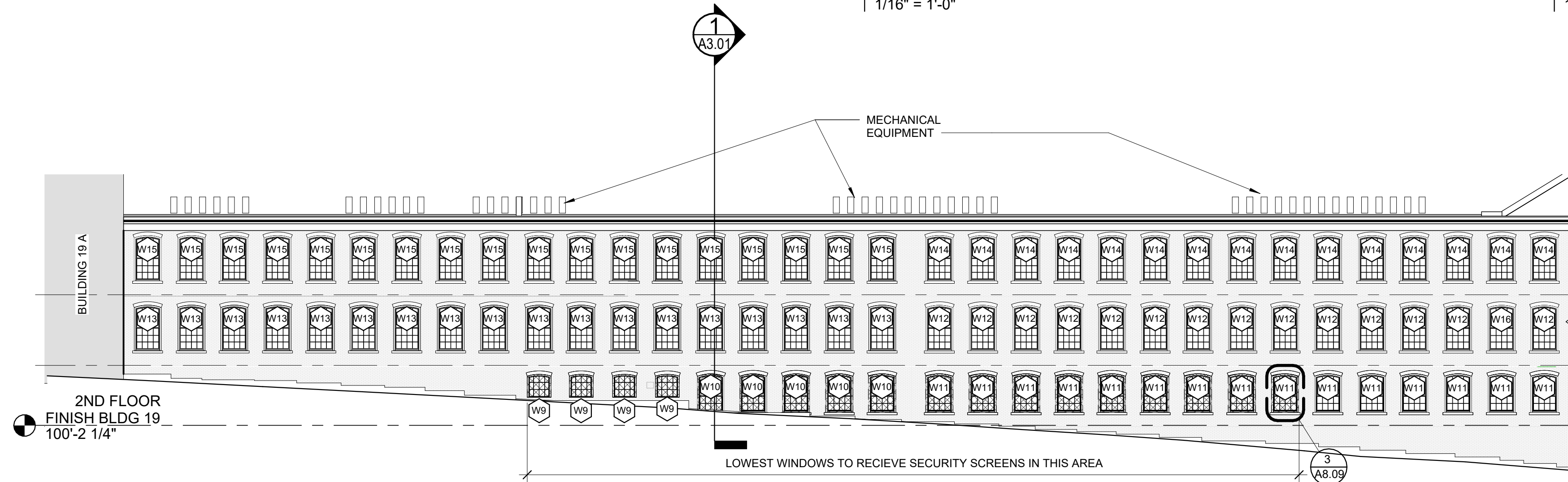
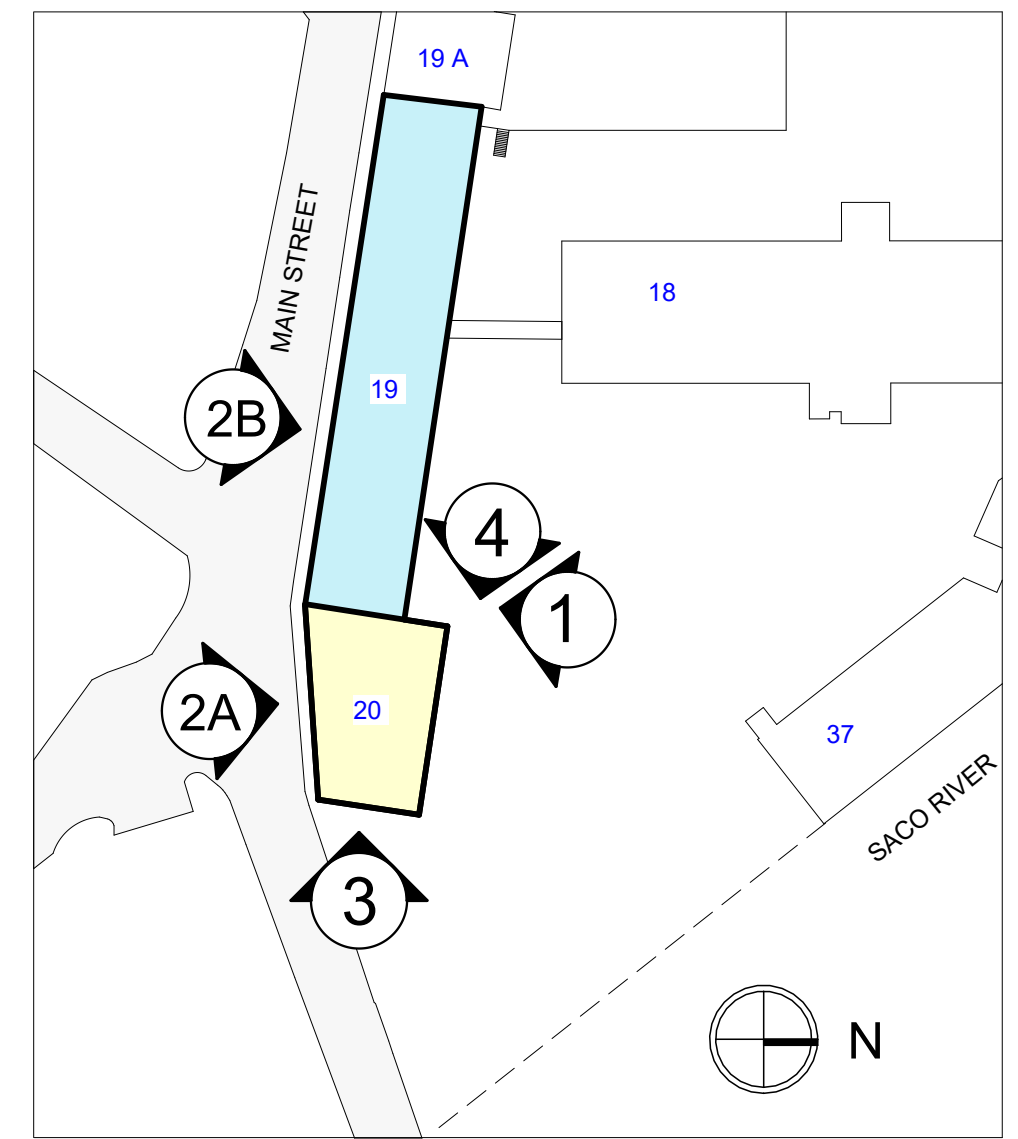
This project is located at Buildings 19 & 20 at the Pepperell Mill Campus in Biddeford, Maine. Both currently vacant historic mill buildings will be converted to multi-family residential. Scope of work includes the replacement of windows to match historic, blocking off access to the existing tunnel and bridge, masonry repair and repointing, restoring and replacing existing doors, as well as the addition of an ADA access ramp to the North elevation of the building. This project is being reviewed by the National Park Service.



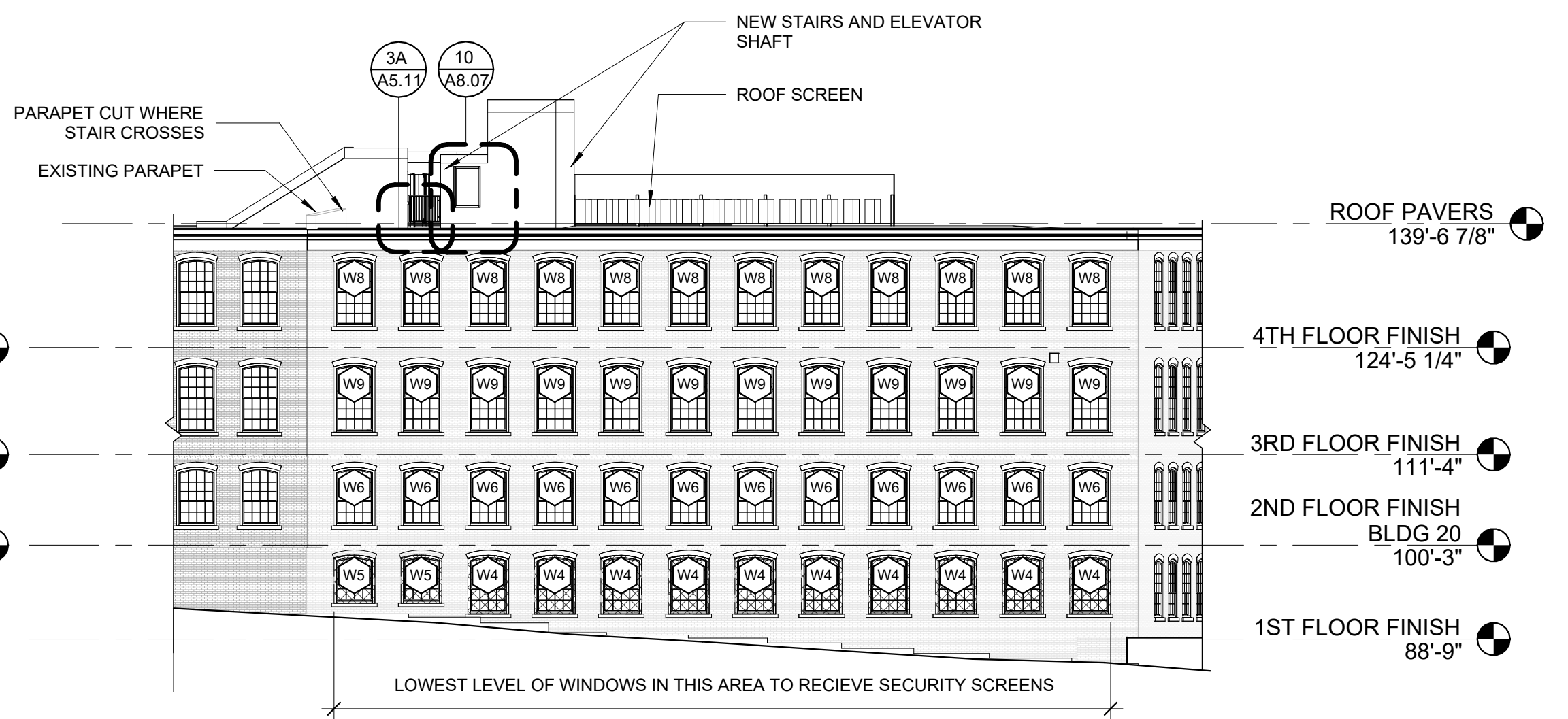
4 | BUILDING 20 WEST ELEVATION
1/16" = 1'-0"



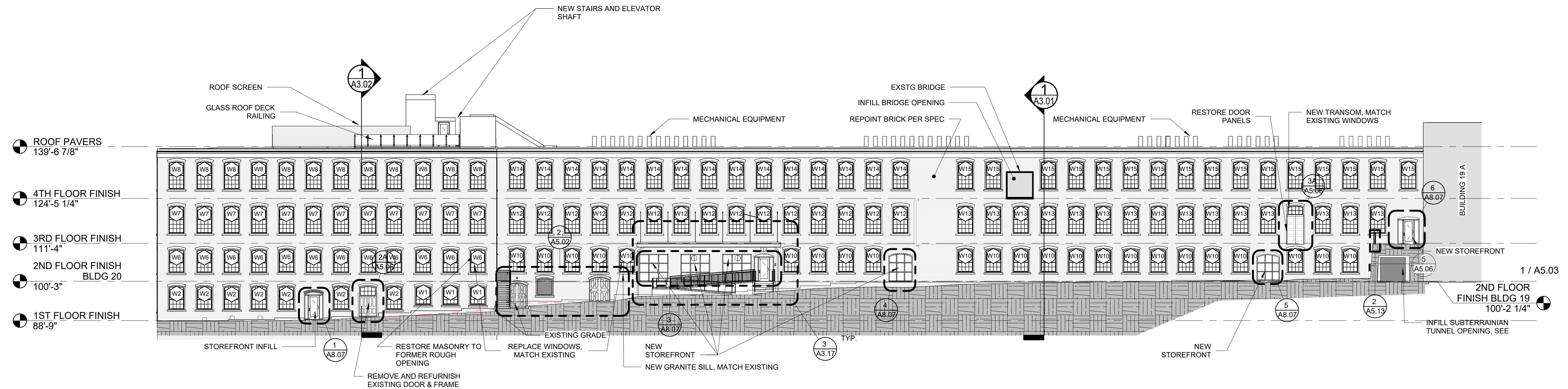
3 | BUILDING 20 EAST ELEVATION
1/16" = 1'-0"



2-B | BUILDING 19 SOUTH ELEVATION
1/16" = 1'-0"



2-A | BUILDING 20 SOUTH ELEVATION
1/16" = 1'-0"



1 | BUILDINGS 19&20 NORTH ELEVATION
1/16" = 1'-0"

Prepared For:
1921 Pepperell,
LLC

Consultant:

Architect:
**ARCHETYPE
ARCHITECTS**
48 Union Wharf Portland, Maine 04101
(207) 772-4022 ARCHETYPE@ARCHETYPEDA.COM

Project:
LACONIA

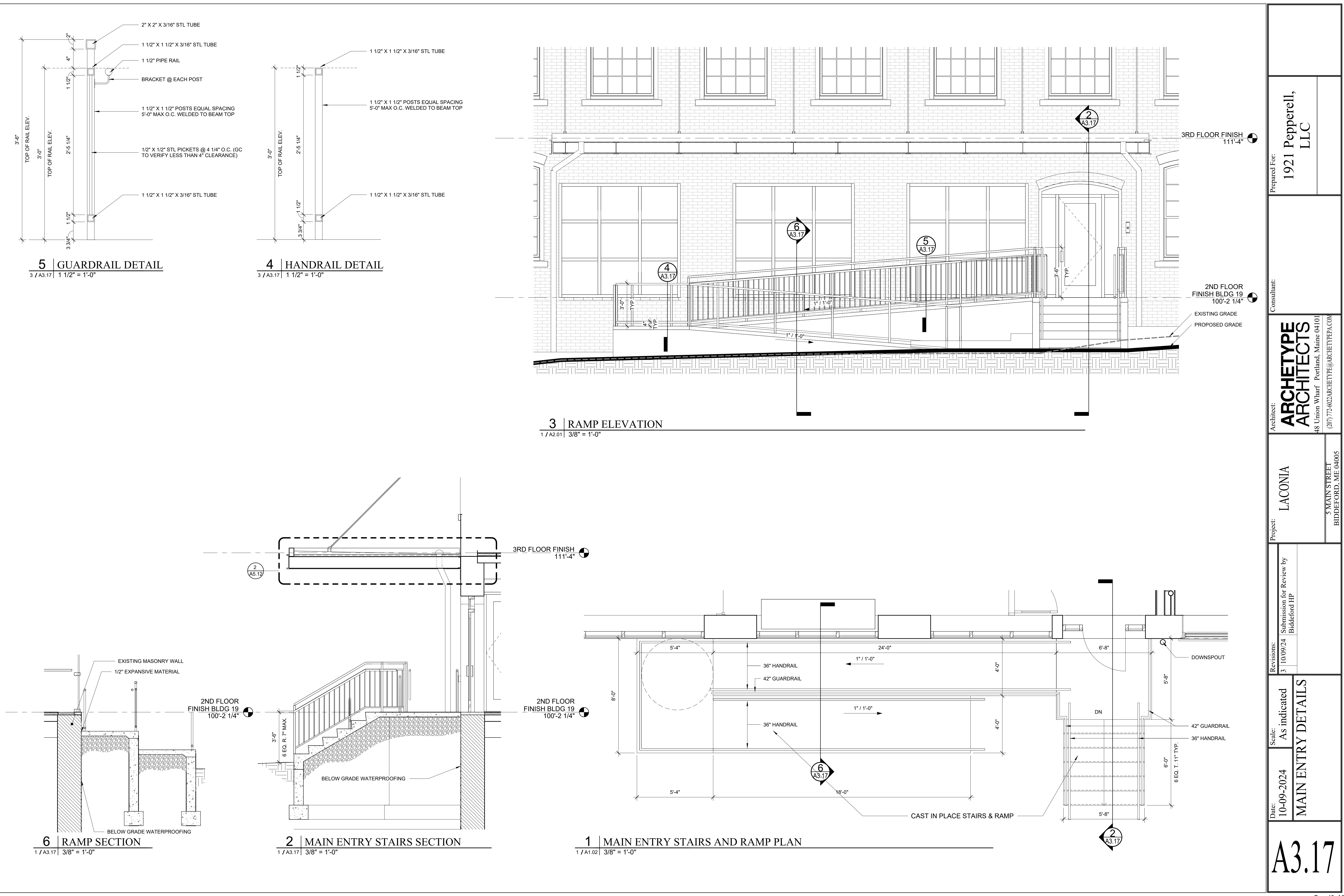
Revisions:
3 10/09/24 Submission for Review by
Bideford HP

Scale:
As indicated

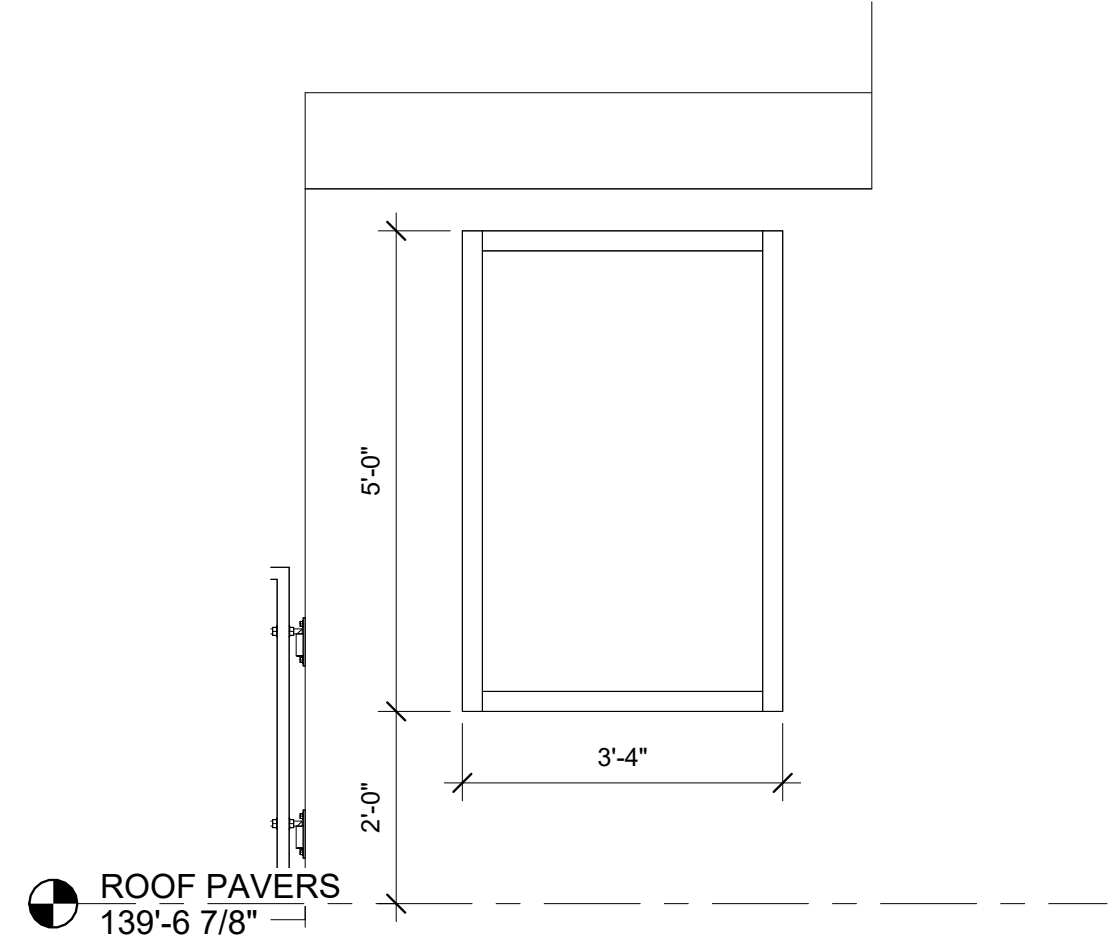
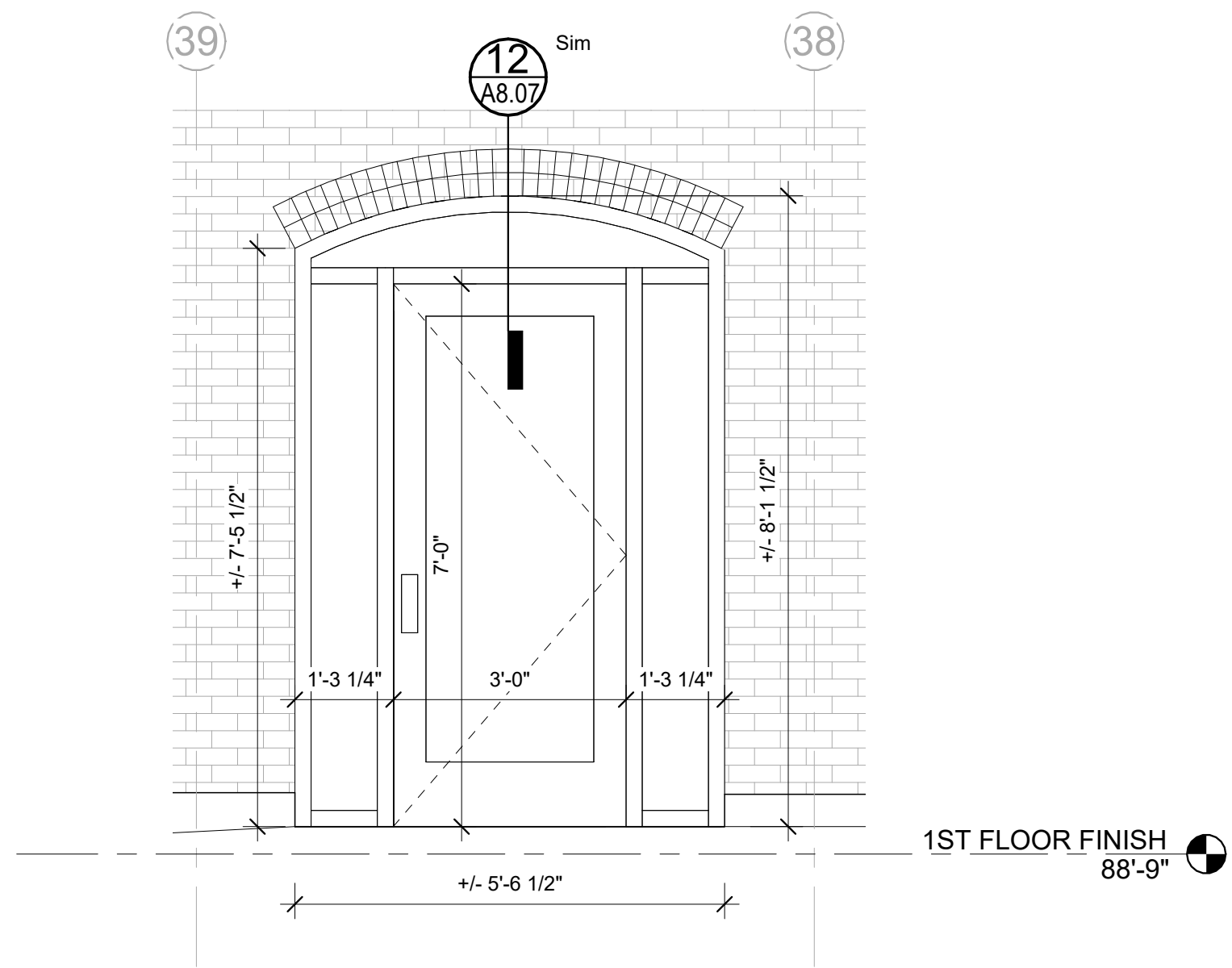
Date:
10-09-2024

BUILDING
ELEVATIONS

A2.01



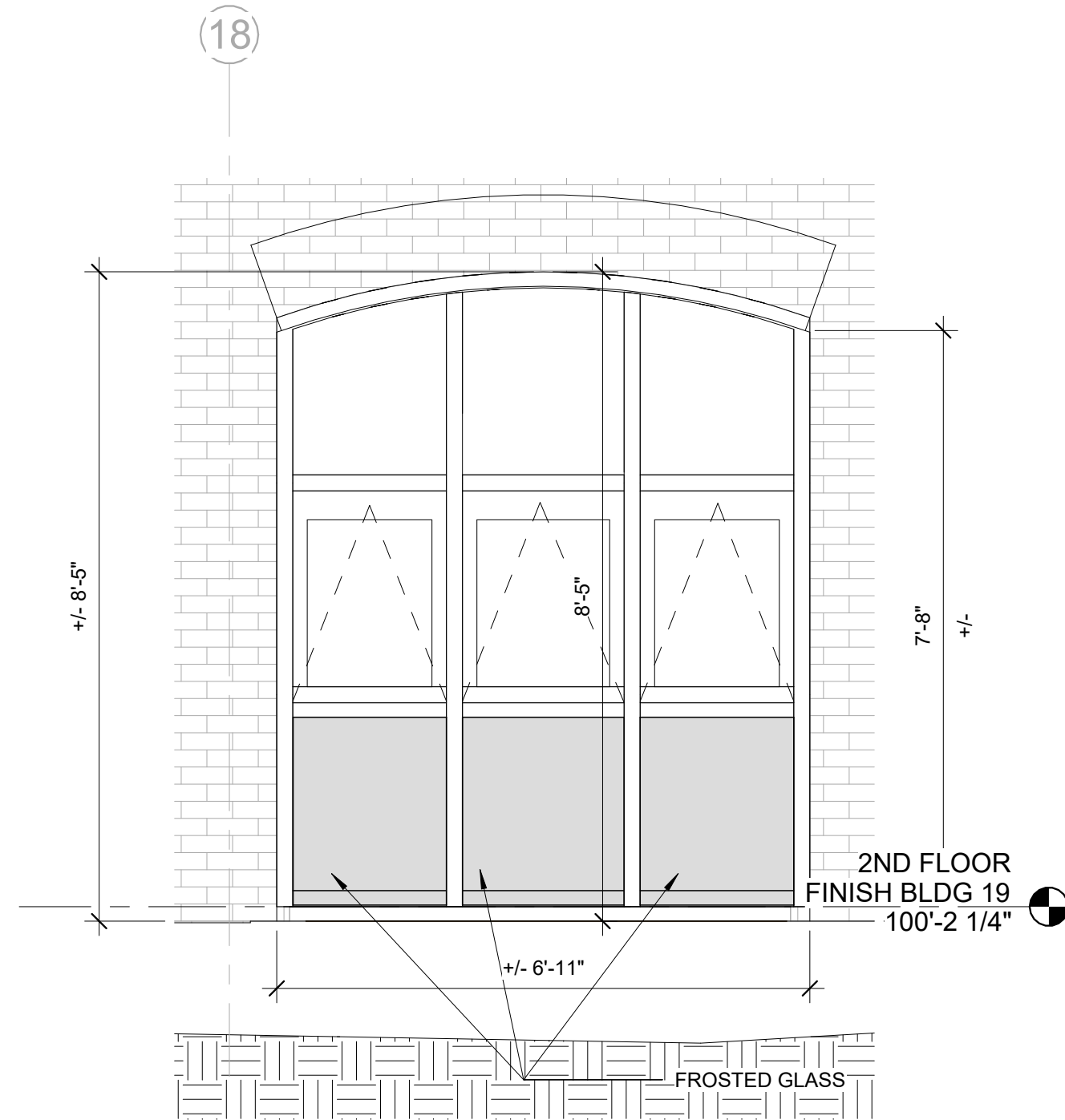
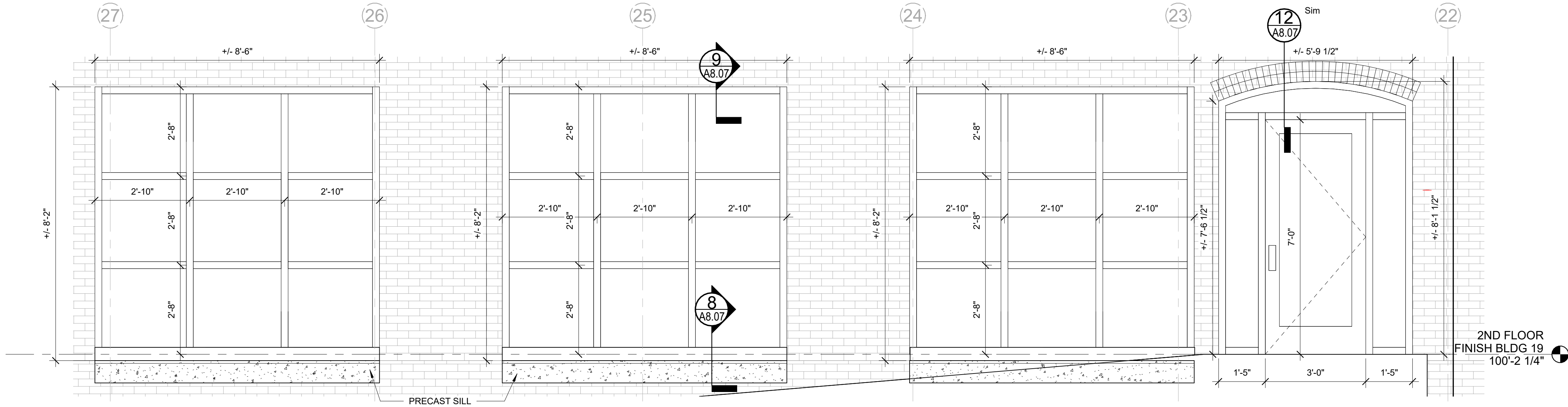
Prepared For: 1921 Pepperell, LLC	
Consultant: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-0022 ARCHETYPE@ARCHETYPEDA.COM	
Project: LACONIA	Revisions: 3 10/09/24 Submission for Review by Biddeford HP
Date: 10-09-2024	Scale: As indicated
MAIN ENTRY DETAILS	
A3.17	



- STOREFRONT NOTES:
1. IECC 2018 - TC402.4 - U-FACTOR FOR FIXED FENESTRATIONS - 0.36; OPERABLE FENESTRATIONS - 0.43; ENTRANCE DOORS - 0.77. SHGC N 0.53.
 2. FRONT SET, 4-1/2" MIN SYSTEM DEPTH.
 3. GC TO VERIFY ALL R.O. SIZES.
 4. ALL GLASS TO BE TEMPERED IN THE LOCATIONS:
 - BELOW HEIGHT OF 18;
 - IN DOORS;
 - ADJACENT TO STAIRWAYS AND RAMP WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS
 - ADJACENT TO DOORS WHERE THE NEAREST VERTICAL EDGE OF THE GLAZING IS WITHIN A 24-INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES .
 5. PROVIDE COLOR SAMPLES PRIOR TO ORDERING FOR APPROVAL, MATCH WINDOW FRAME COLORS.

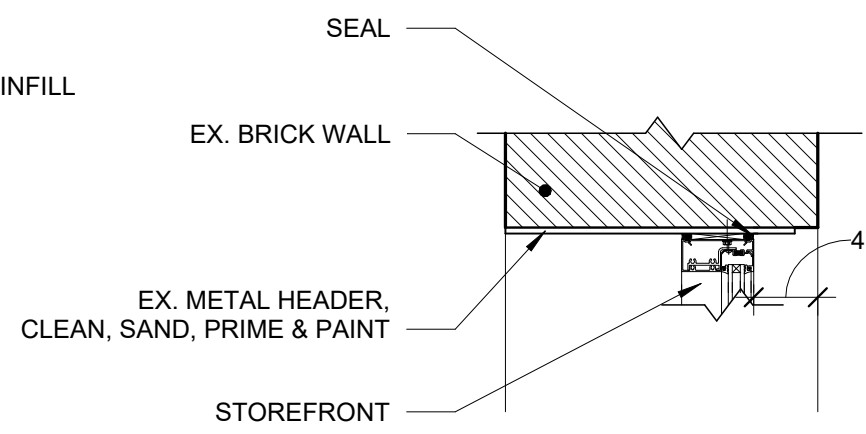
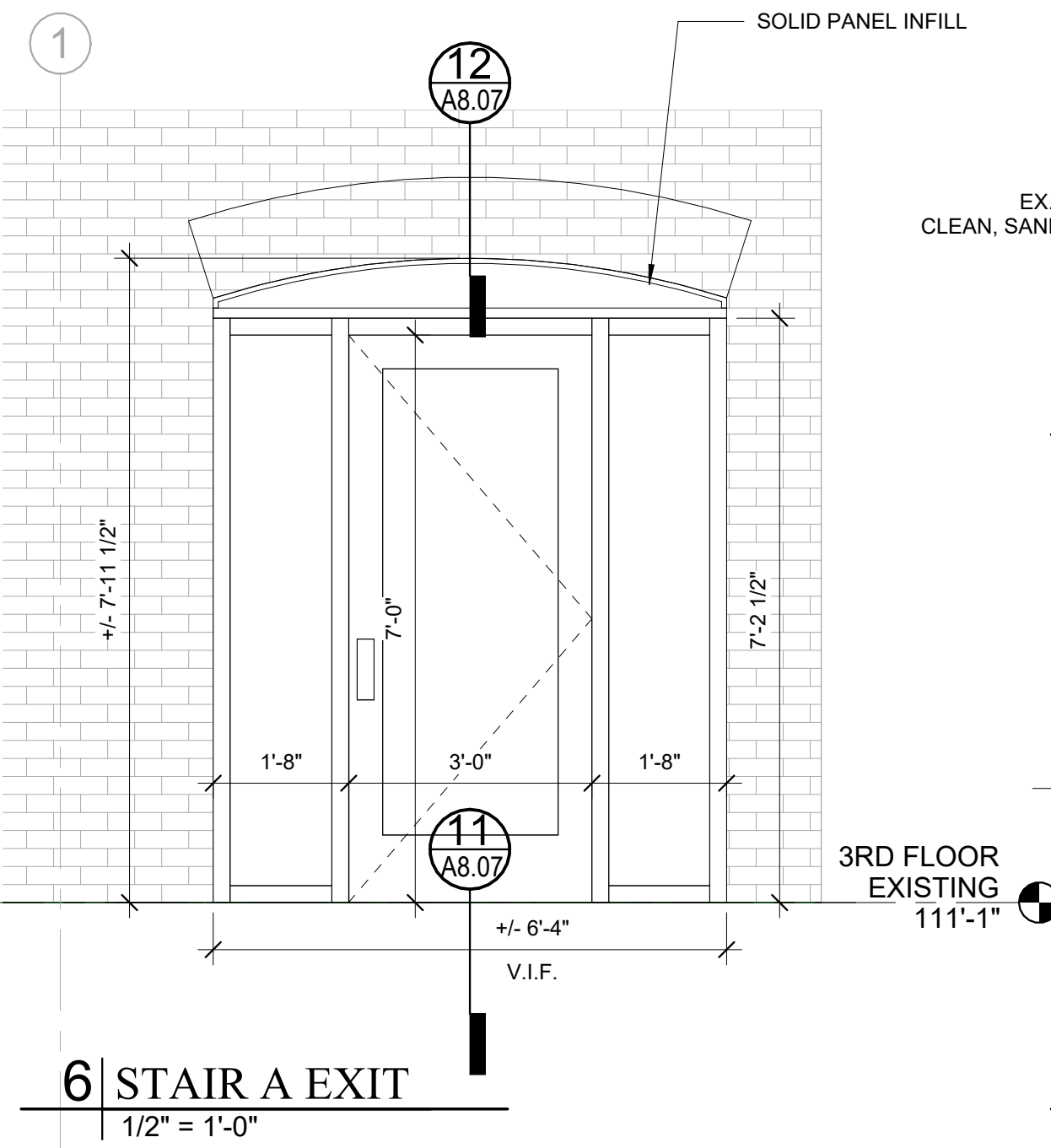
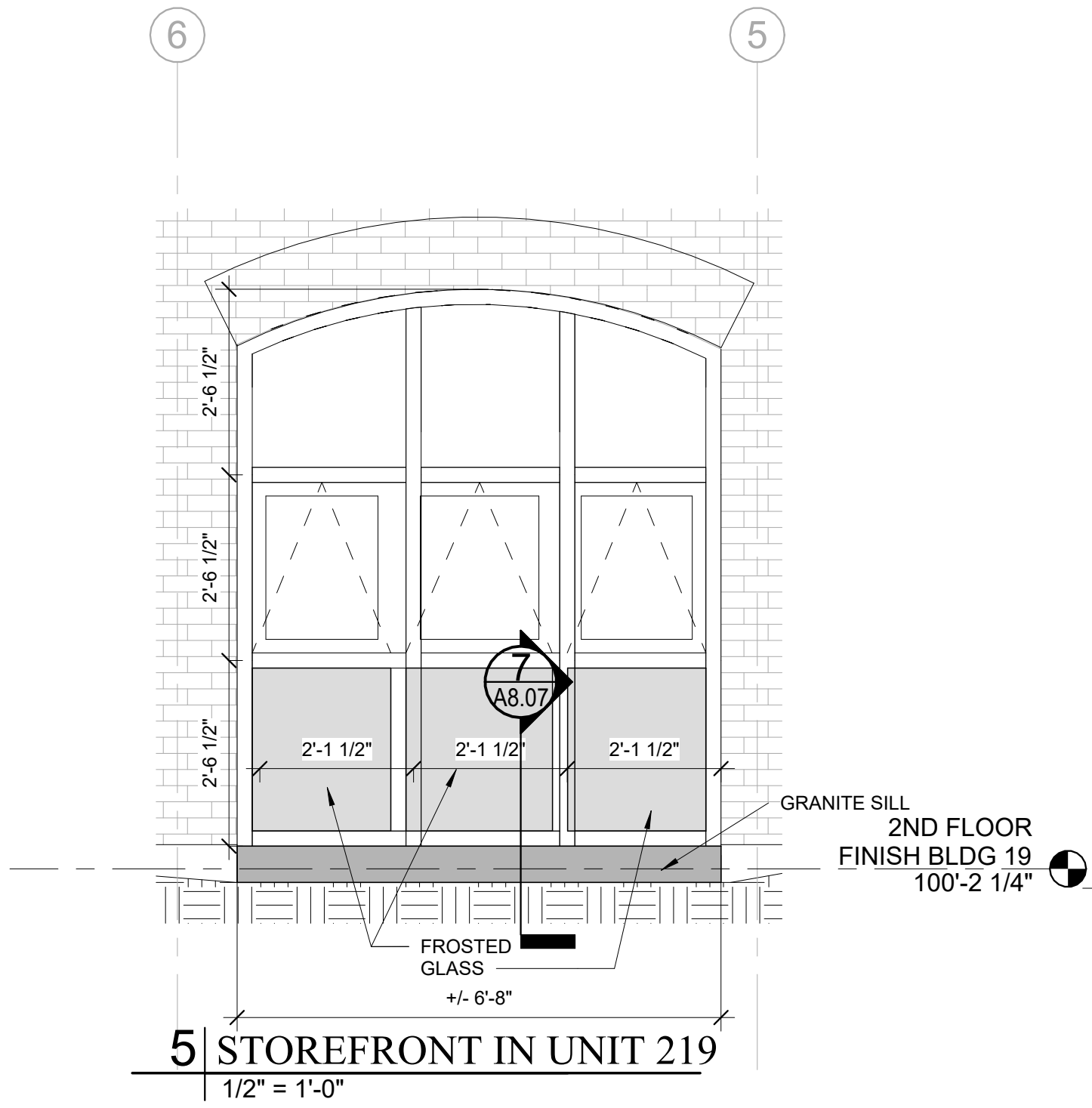
1 BUILDING 20 1ST FLOOR EXIT
1/2" = 1'-0"

10 ELEVATOR LOBBY STOREFRONT WINDOW
1/2" = 1'-0"

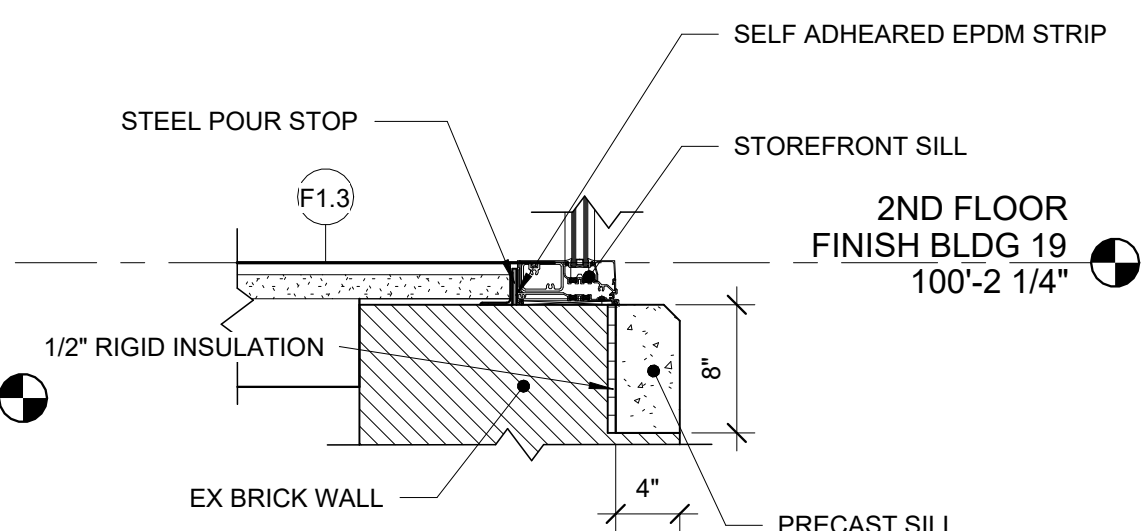


3 MAIN ENTRY STOREFRONT ELEVATION
1/2" = 1'-0"

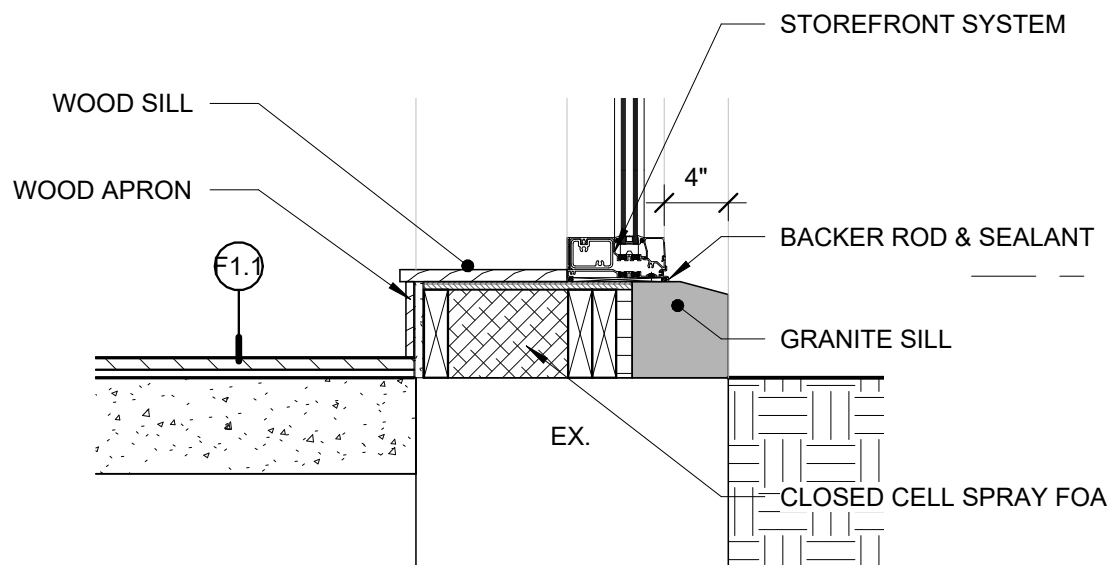
4 STOREFRONT IN UNIT 213
1/2" = 1'-0"



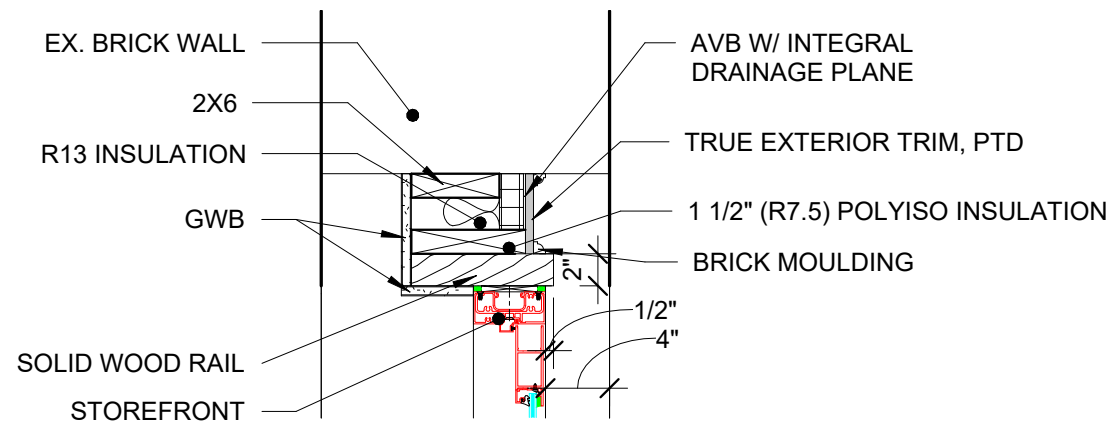
9 STOREFRONT HEADER DETAIL
1" = 1'-0"



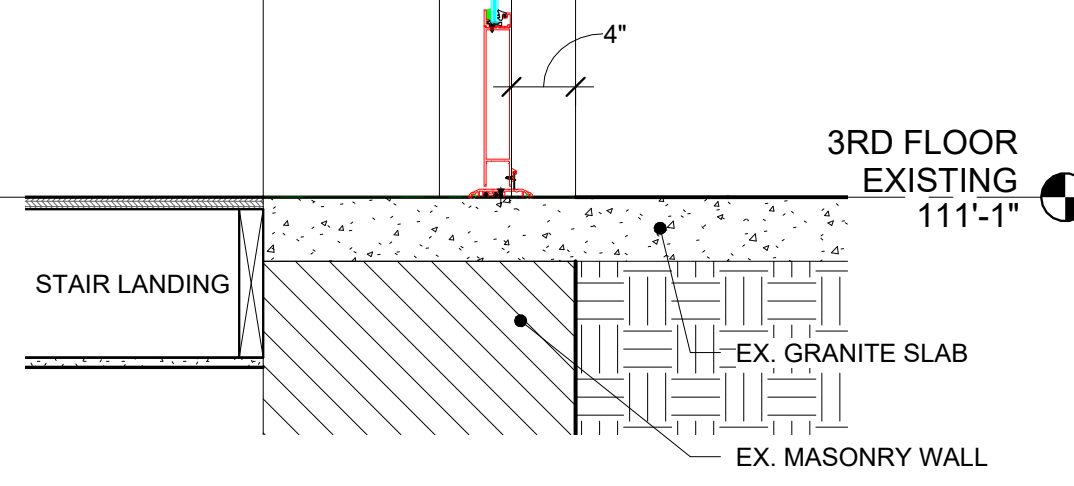
8 STOREFRONT SILL DETAIL
1" = 1'-0"



7 STOREFRONT SILL DETAIL
1" = 1'-0"

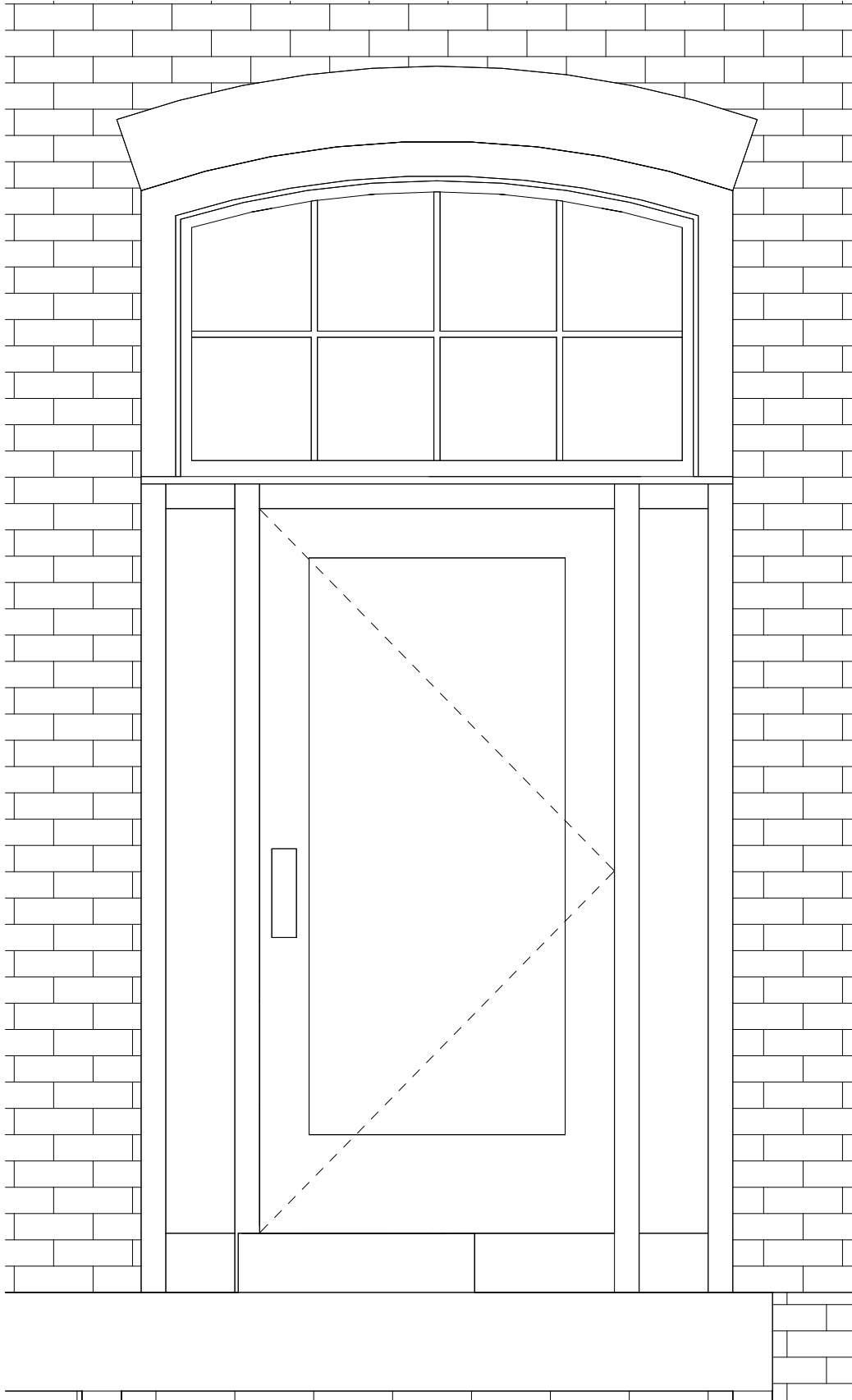


12 TYPICAL DOOR HEAD
1" = 1'-0"

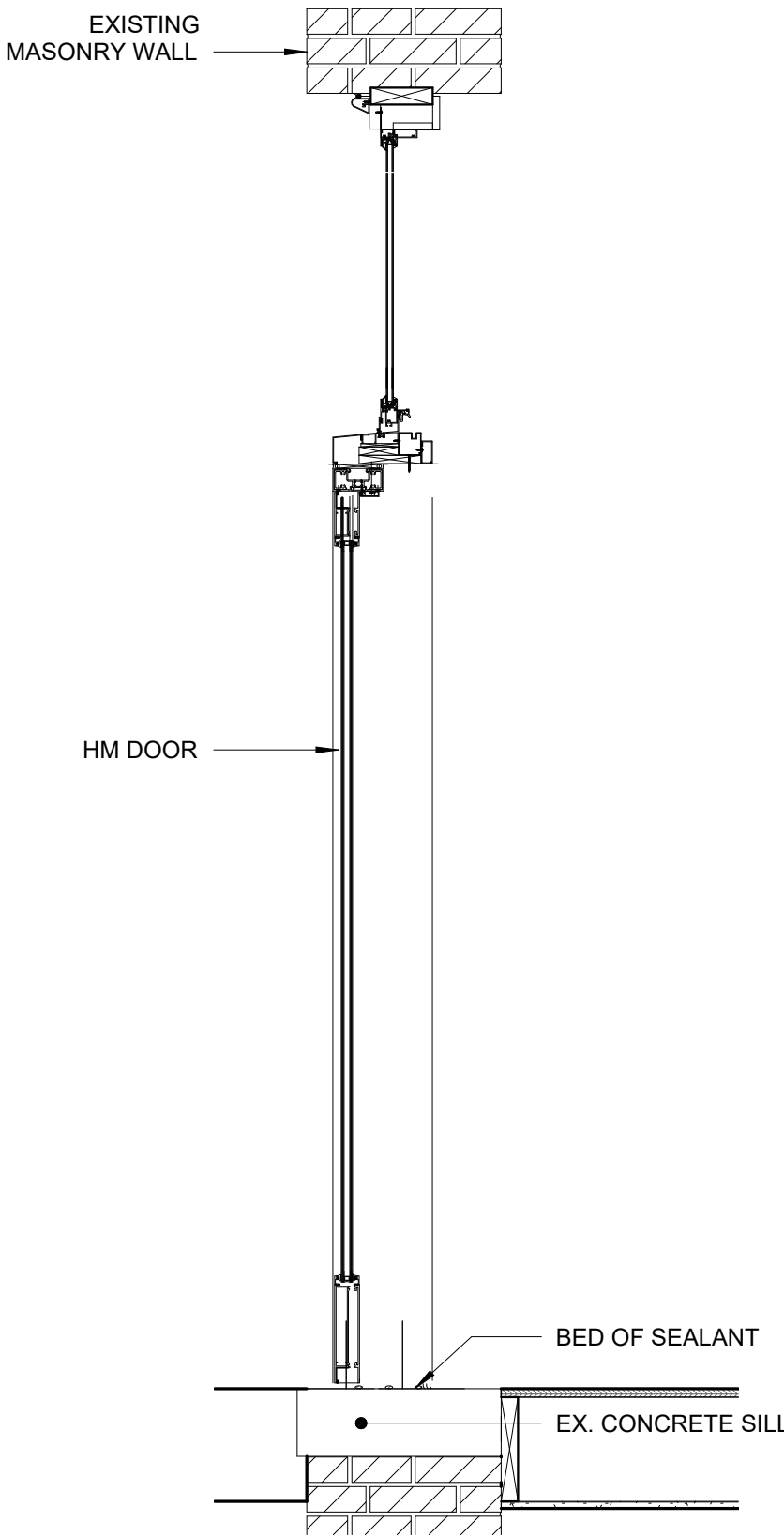


11 STAIR A DOOR SILL
1" = 1'-0"

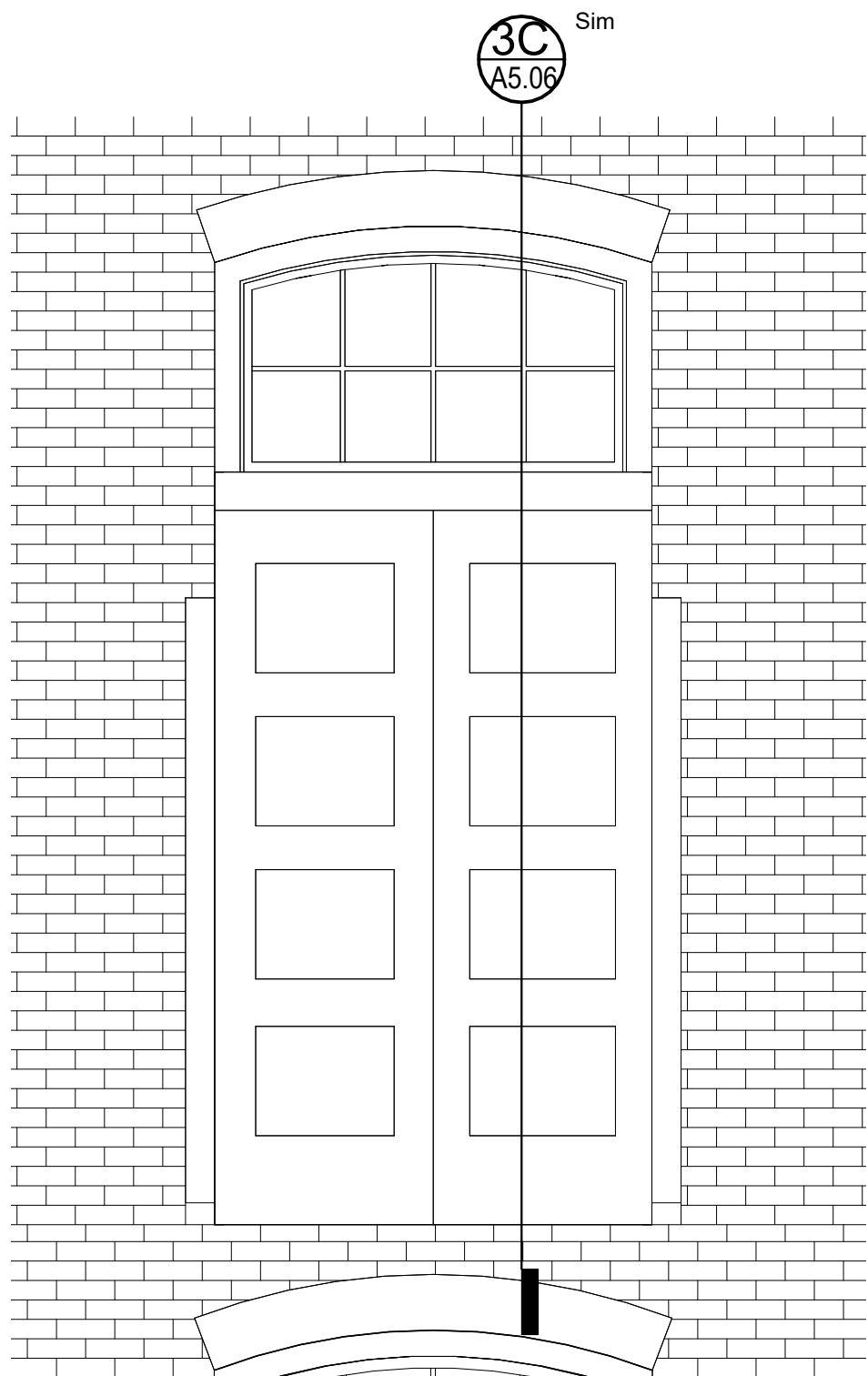
Prepared For:		1921 Pepperell, LLC	
Consultant:		ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-0022 ARCHETYPE@ARCHETYPPEA.COM	
Project:		LACONIA 5 MAIN STREET BIDDEFORD, ME 04005	
Revisions:		Submission for Review by Biddeford HP	
Date:	Scale:	STOREFRONT SCHEDULE	
10-09-2024	As indicated		
		A8.07	



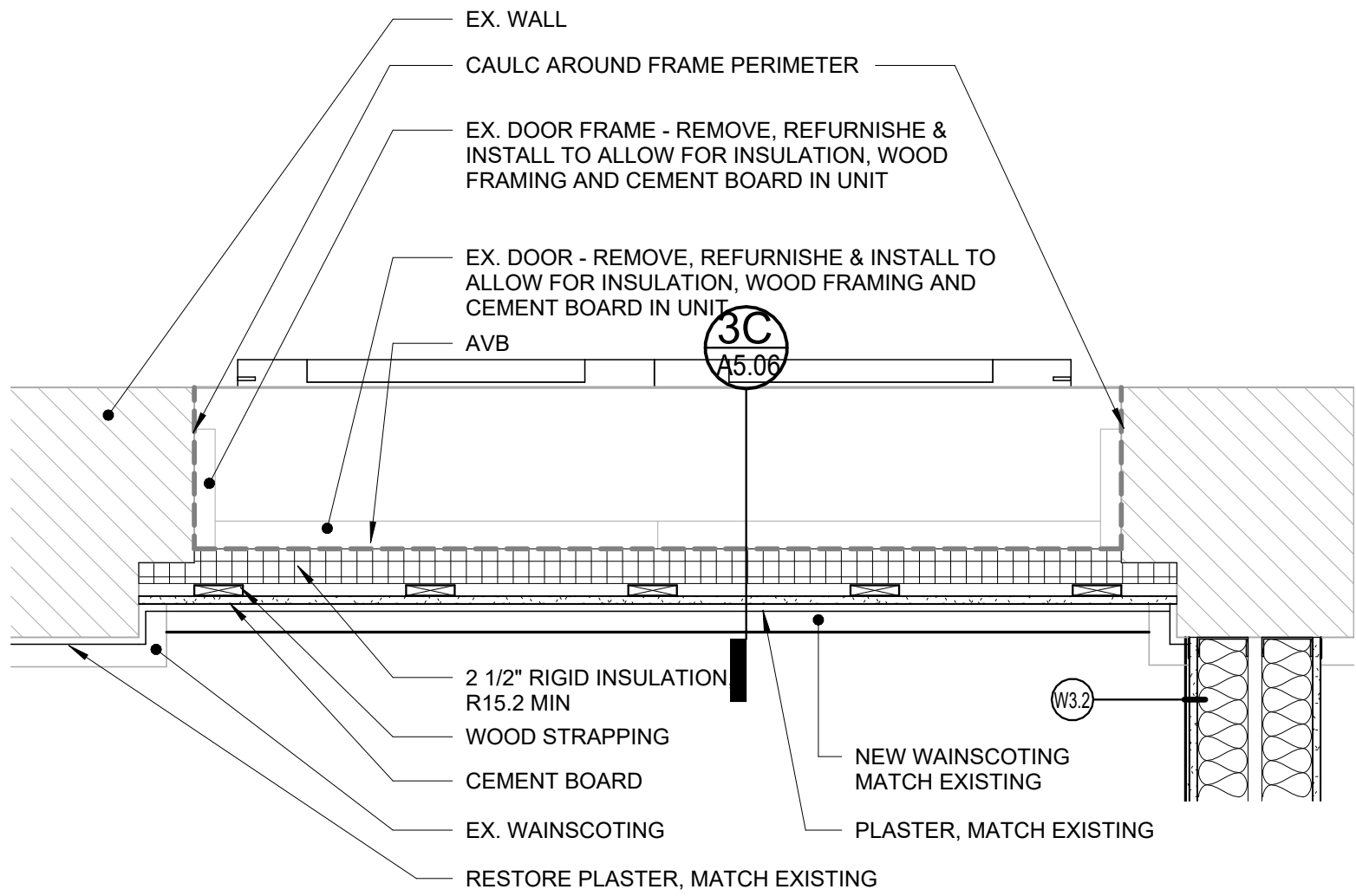
4A | STAIR B EXIT DOOR INFILL
3/4" = 1'-0"



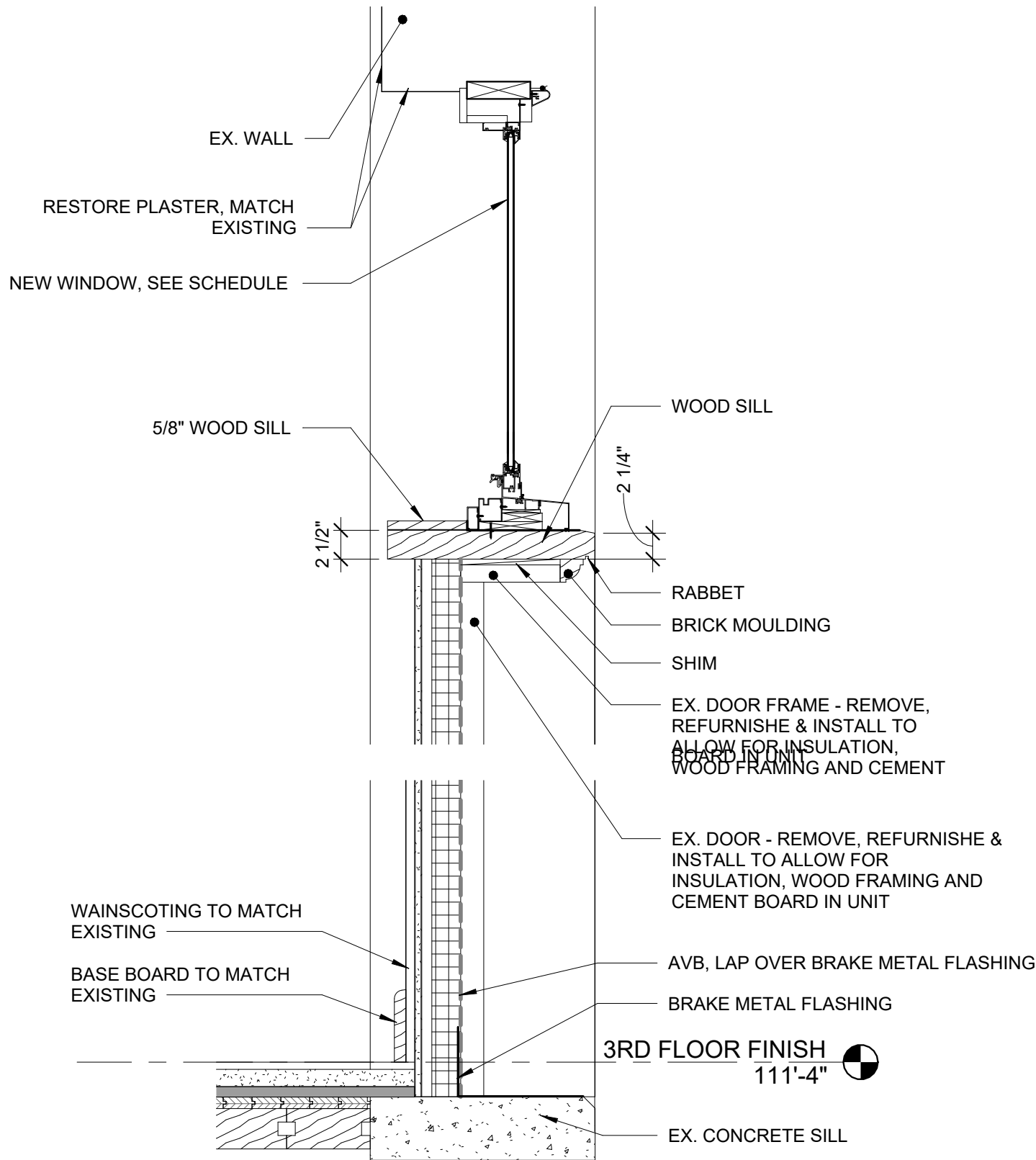
4B | WALL INFILL AT STAIR B
3/4" = 1'-0"



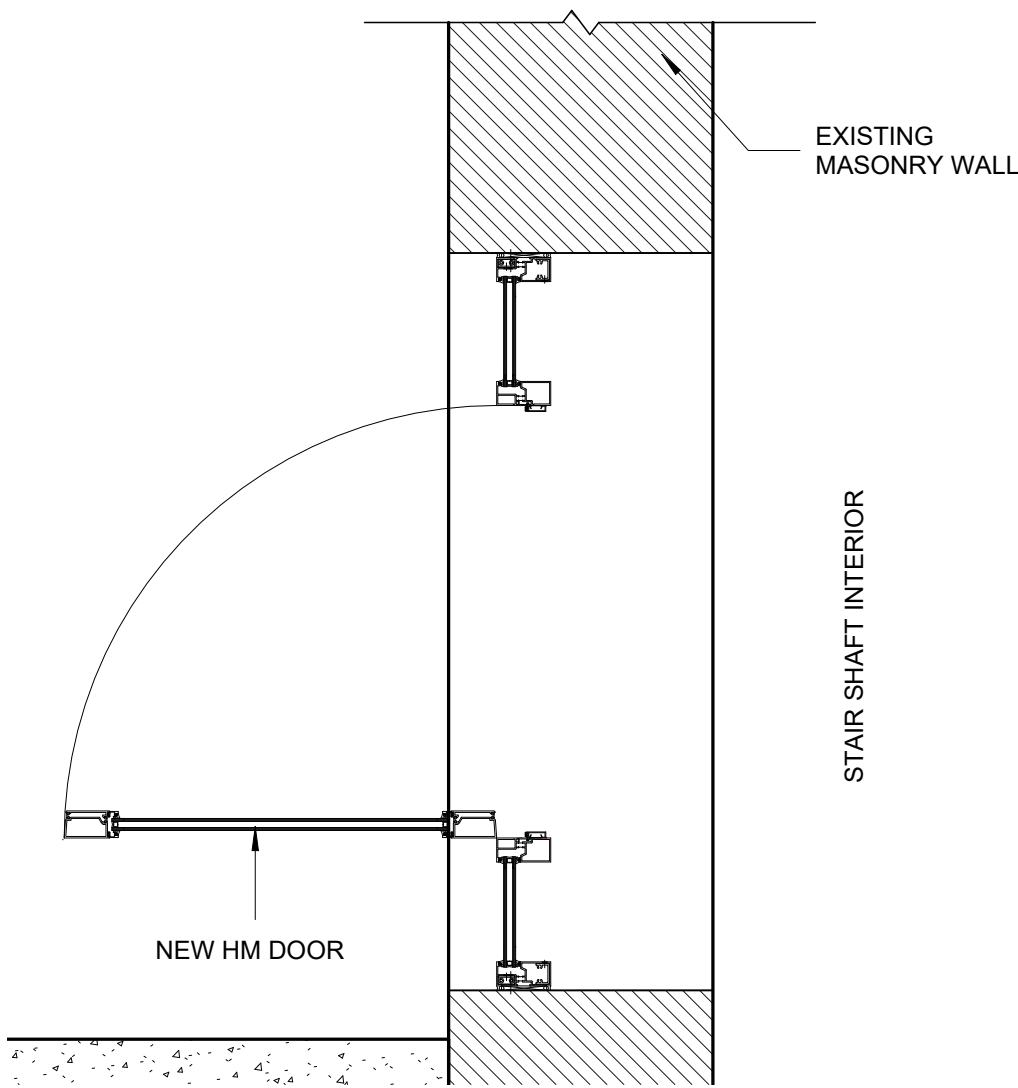
3A | DOOR INFILL
1/2" = 1'-0"



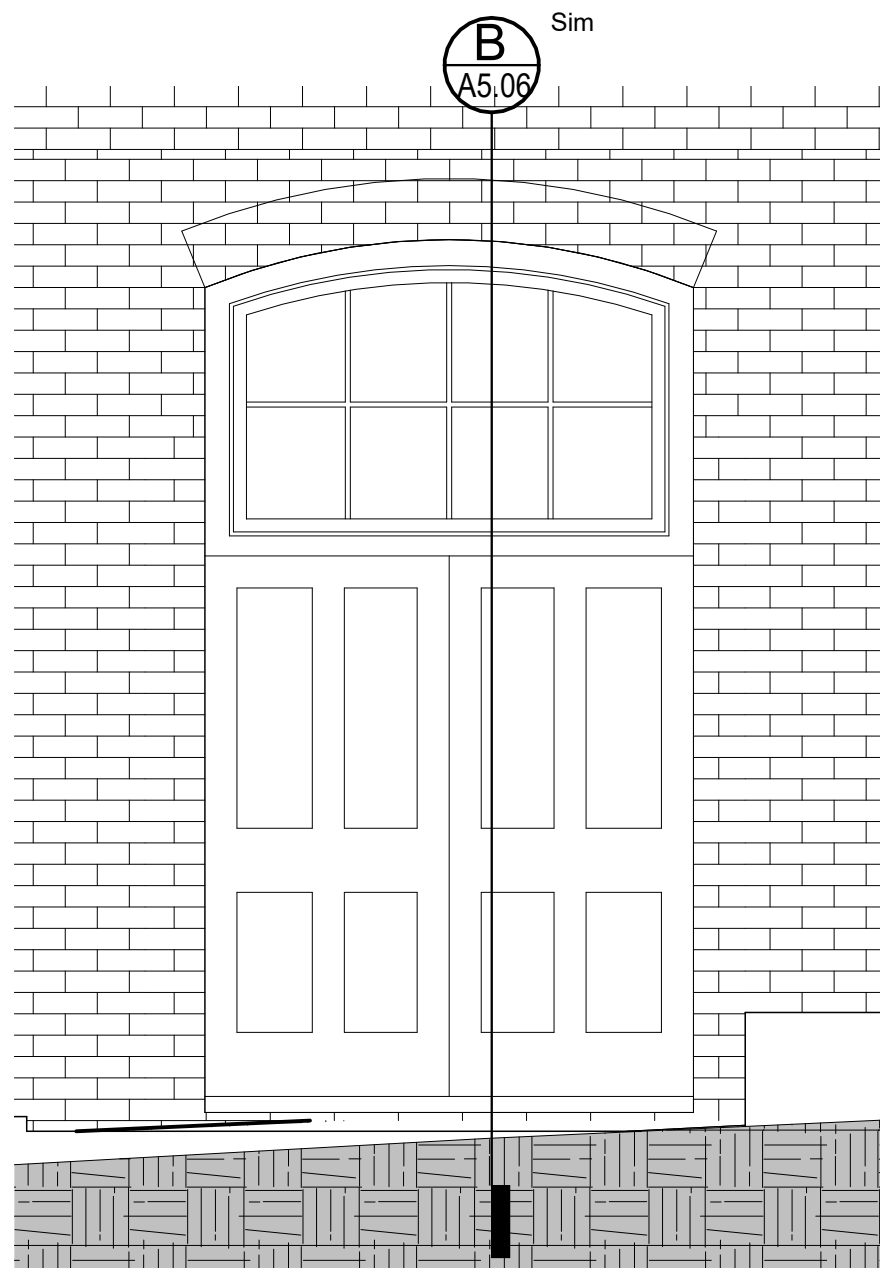
3B | DOOR INFILL DETAIL
1" = 1'-0"



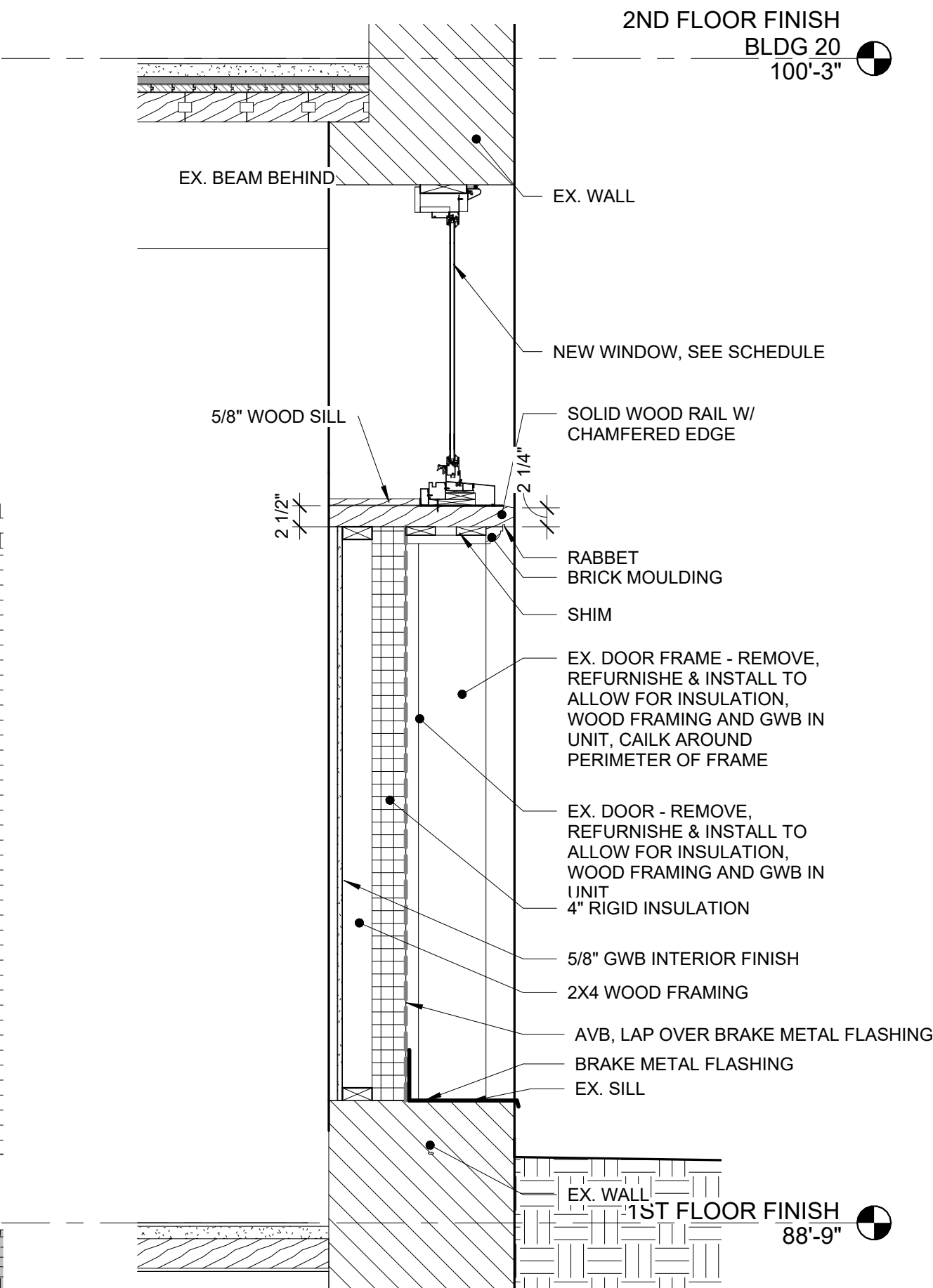
3C | DOOR SECTION
1" = 1'-0"



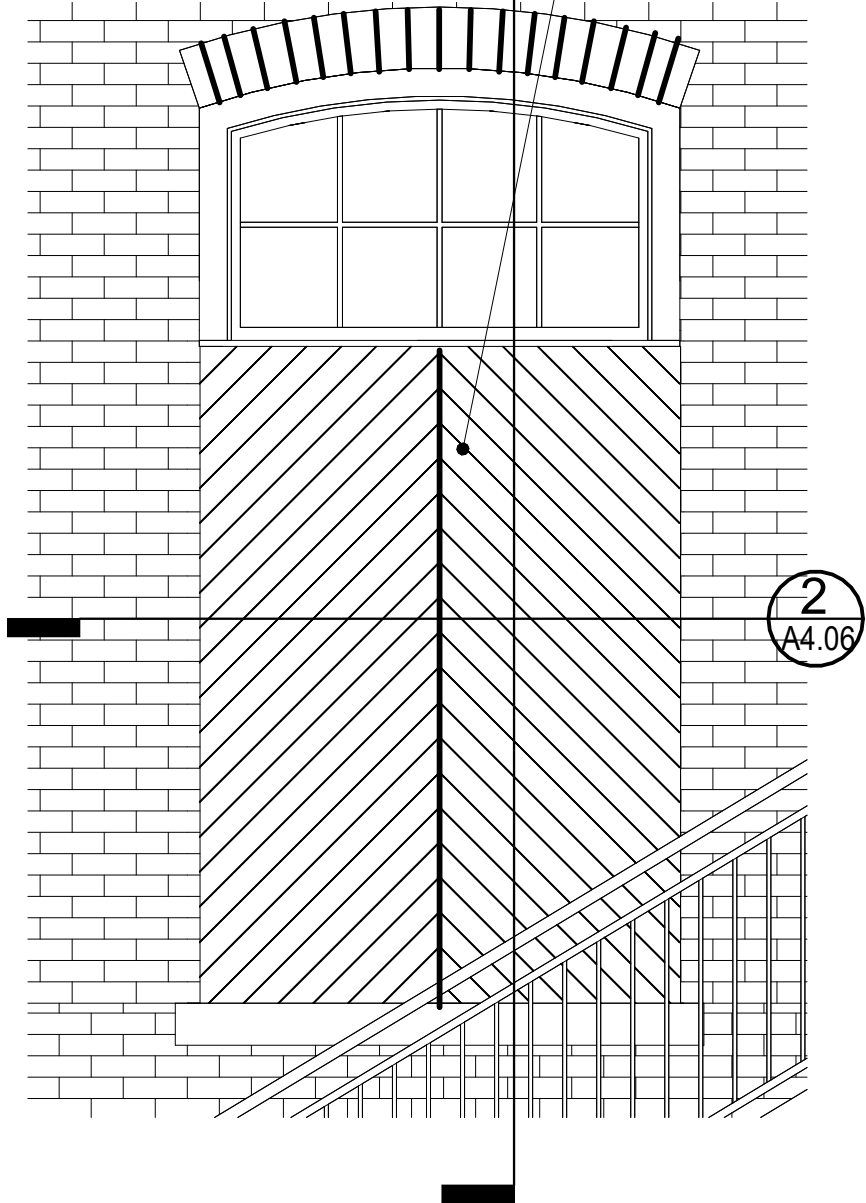
4C | STAIR B - EGRESS DOOR
3/4" = 1'-0"



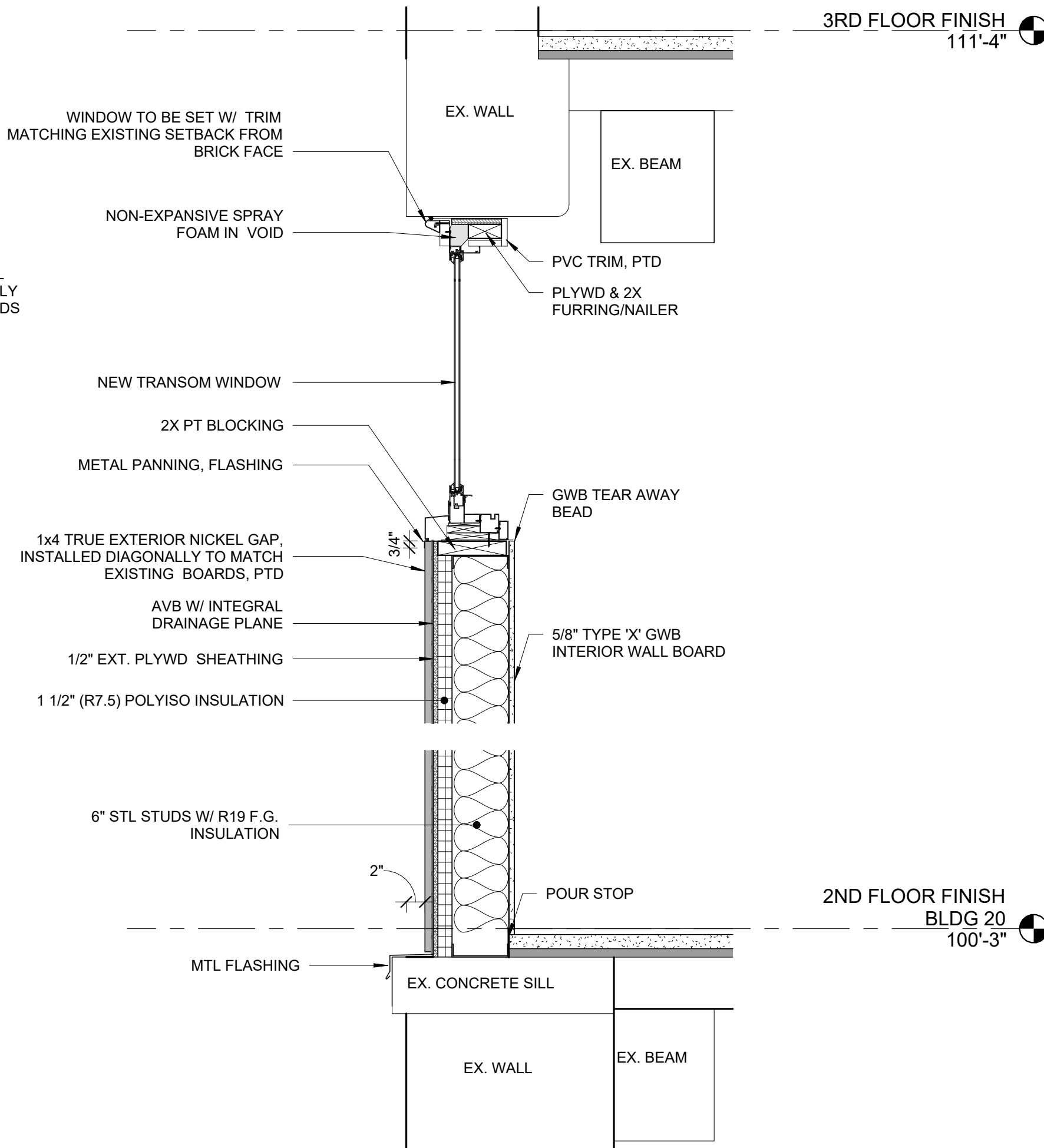
2A | BUILDING 20 DOOR INFILL
1/2" = 1'-0"



B | DOOR DETAIL
3/4" = 1'-0"



1A | INFILL ELEVATION
1/2" = 1'-0"



1B | WALL OPENING INFILL
1" = 1'-0"

Prepared For:
1921 Pepperell,
LLC

Consultant:

Architect:
**ARCHETYPE
ARCHITECTS**
48 Union Wharf Portland, Maine 04101
(207) 772-0022 ARCHETYPE@ARCHETYPEDA.COM

Project:
LACONIA

Revisions:
3 10/09/24 Submission for Review by
Bideford HP

Date: 10-09-2024
Scale: As indicated
OPENING INFILL
DETAILS

A5.06







If you can dream it, we can build it.



Architectural Window Systems 700 Series



www.stergis.com





For half a century...

...Stergis Windows and Doors has been manufacturing custom architectural windows and doors using the best materials and techniques. This chemistry allows us to provide you with the most energy-efficient, longest-lasting and best eco-friendly solution to your window and door needs. Bring the best to your next building project with Stergis.



Tilt Single & Double Hung

Stergis is a single-source manufacturer for Heavy commercial and AW rated aluminum single & double hung windows. These high-performance architectural windows meet, or exceed, all air, water, and structural load requirements set forth in AAMA/NWDA 101/I.S.2 - 97 for Commercial Grades. The top and bottom sash tilt design offers lower cost cleaning and maintenance. All windows are made to any size required.

Features:

- Extruded aluminum, 6063-T5 or T6, tempered
- Factory-glazed with 1" Insulated Glass (various glazing options available)
- Thermally improved frame and sash extrusion keeping the interior frame warmer
- Reinforced cast molded aluminum spring catch on all sashes
- Concealed Safety Latches and Full end to end Interlocks at Meeting Rails and Sil
- Duracron baked enamel finish and Kynar Finishes in all Colors
- Every type of Panning, Inside Trim and Grids available (Historic, Curved and Custom)
- Variable Arch tops and Mulled Configurations – If you can Draw it we can Make it

Applications:

Mill conversions, oversized windows, high rise structures, impact requirements, architectural shapes



Fixed & Sliding Windows

Stergis' fixed thermal and sliding windows have a 3-1/4" extruded aluminum frame depth with integral structural polyurethane thermal break to allow for a warmer interior and thermal performance. Fixed windows are interior access glazed and the sliding windows have removable sashes. All built to heavy commercial standards and testing, these units operate smoothly and hold up to high rise requirements.

Features:

- Commercial quality extruded aluminum 6063-T5 alloy
- Factory-glazed with 1" insulated glass; interior PVC gasket in aluminum glazing bead
- Poly-Aluminizer™ and Struct-Link™ thermal break technology
- Color anodized coating applied to all exposed aluminum areas

A sample window (size and configuration), as per the architect's requirements, may be requested without cost to owner

Applications:

Mill conversions, oversized windows, high rise apartment buildings, impact requirements, architectural shapes,

Architects, Specifiers, Developers...

...have found Stergis Windows and Doors to be a single-source manufacturer and supplier they can depend on to support large projects. You will receive specialized service from the Architectural sales staff for project work consisting of custom windows and doors and exterior building products.



Project Windows

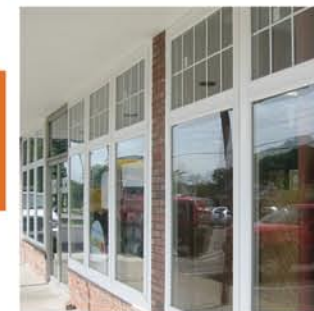
Stergis' Project-Out, top-hinged, thermal windows have a 2" extruded aluminum frame depth with integral structural polyurethane thermal break in each of the equal-leg frame members. Each window is meticulously factory-assembled and factory-finished, providing uniform appearance and performance testing to P-HC90 specifications.

Features:

- Commercial quality extruded aluminum 6063-T5 alloy
- Extruded snap-in-type glazing bead, accommodates up to 1" glass, panels, or louvers
- 2, four-bar, Stainless Steel heavy-duty friction hinge assemblies
- In-track, adjustable nylon friction feature, concealed when closed
- Amazing .125" thick walls mean any size can be built
- Cast Locking Hardware and Cam Action Locks bring the sash secure to the frame
- Stocked in standard Colors – these units can be made in any color or anodized finish
- Built to exact size, these units can be coupled together with every panning, inside trim and installation accessories to make the job a perfect fit and look

Applications:

Replication windows, Office buildings, Mulled large openings, Banks and Government Security building conversions, oversized windows, high rise structures, impact requirements, architectural shapes



Storefront & Curtain Wall

Visit us on the web at: www.stergis.com where you'll find a large assortment of window construction details, performance test results, and more—including our full line of PVC window products. Whatever your next building project is, contact us for a complete window analysis and a competitive price bid.

Stergis' aluminum storefront and curtainwall is a structural glazing system used for all types of commercial applications. Utilizing the highest performance glass, these systems can go stories high and include all types of doors and hardware. Available in any color these custom sizes and configured wall systems allow for security and an appealing look for any building. All units made with thermally improved frames and glass packages specifically for you needs.

Features:

- Extruded Aluminum with Thermal Barrier for superior strength and solid construction (steel reinforced for structural needs)
- Neoprene gaskets set inside & out for a compression seal to 1" OA (25mm) glass
- Sill Flashing, Receptor and Angle Couplers are available to match
- Insulated Warm Edge Glass with every combination of Grilles and Glass coatings (Low E, Tinted) can be accommodated
- Clear, White, Bronze and Custom Paint available in thermal or non-thermal versions
- Clear, Bronze, Black anodized finishes are available

Applications:

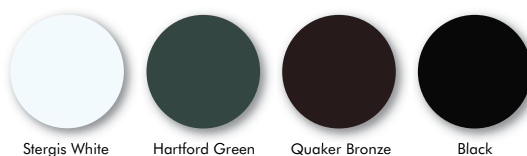
Stergis' storefront and curtainwall is ideally suited for low-rise to high rise commercial buildings such as apartment complex's, Malls, Office Buildings and any other commercial need for standard and special egress doorways .



Augustus J Stergis, President • Stergis Windows and Doors Inc • Walpole, Ma / Mullins, SC • www.stergis.com • www.alliancewindows.com • W: 508.668.9998 • M: 508.958.1158 • F: 508.660.2902

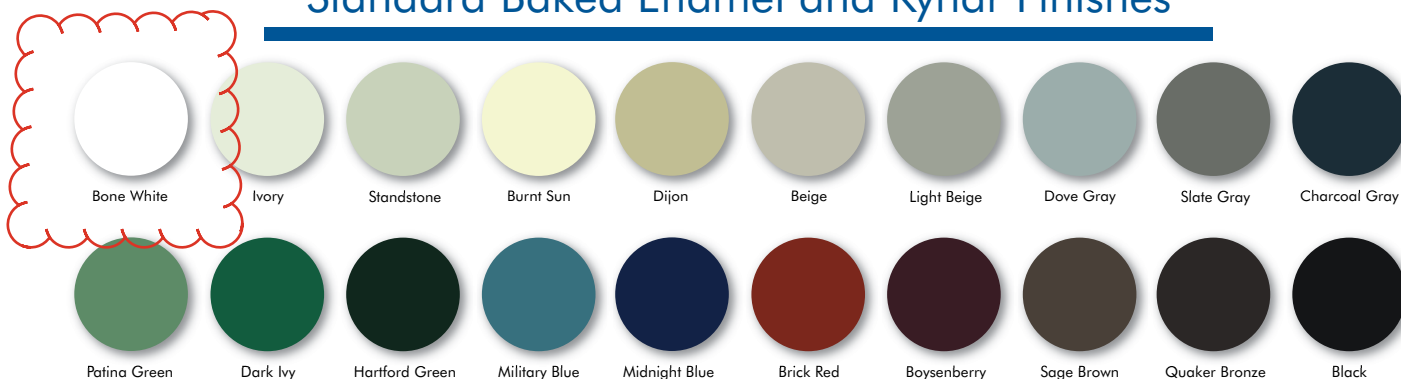


Stock Standard Colors

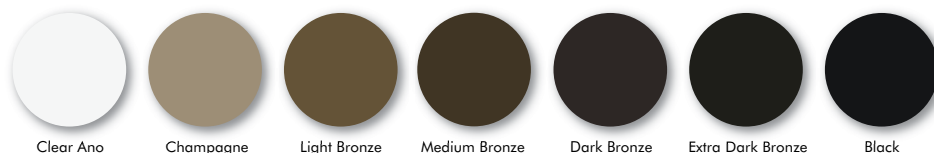


Stergis White Hartford Green Quaker Bronze Black

Standard Baked Enamel and Kynar Finishes

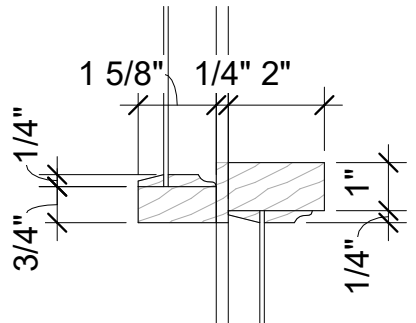
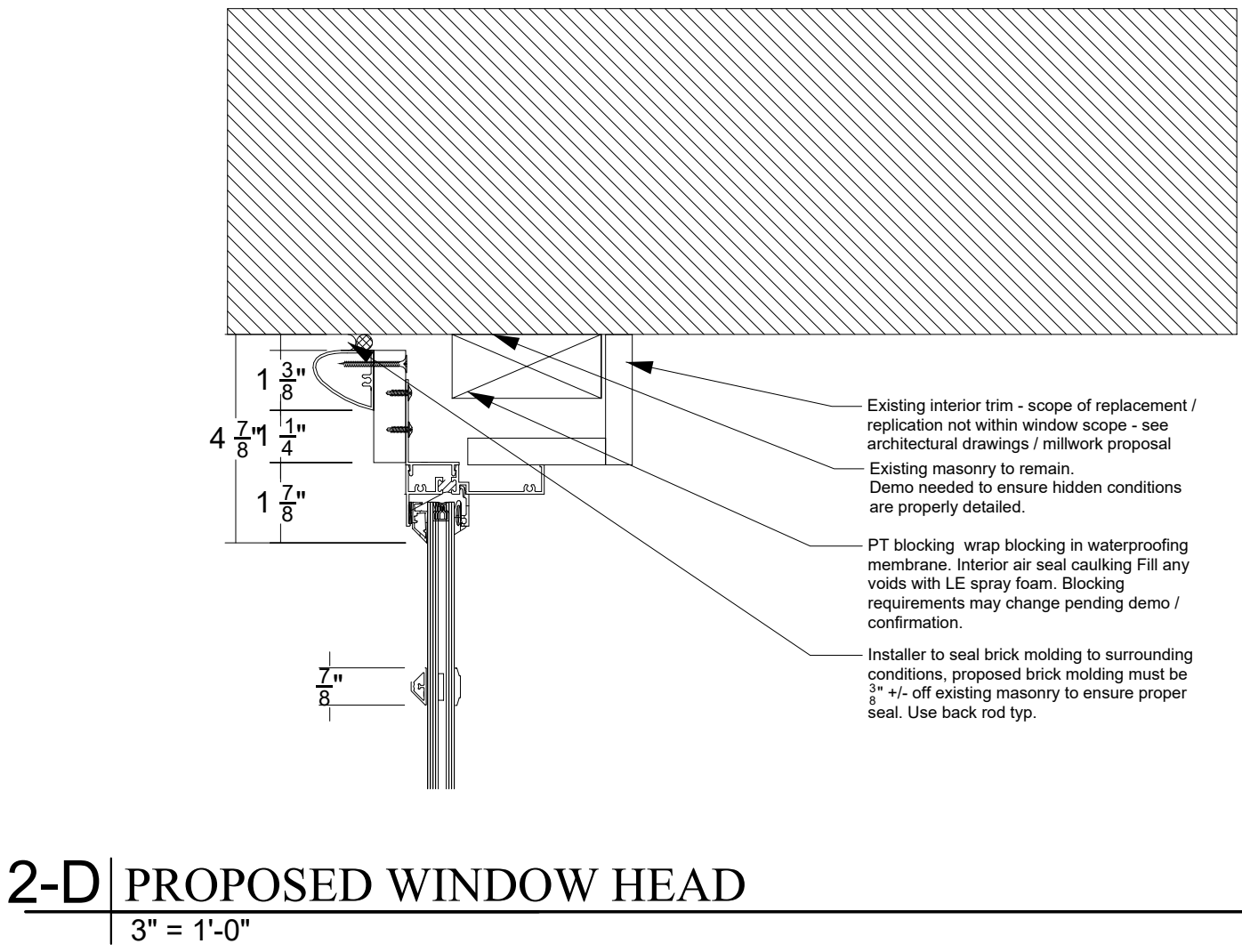
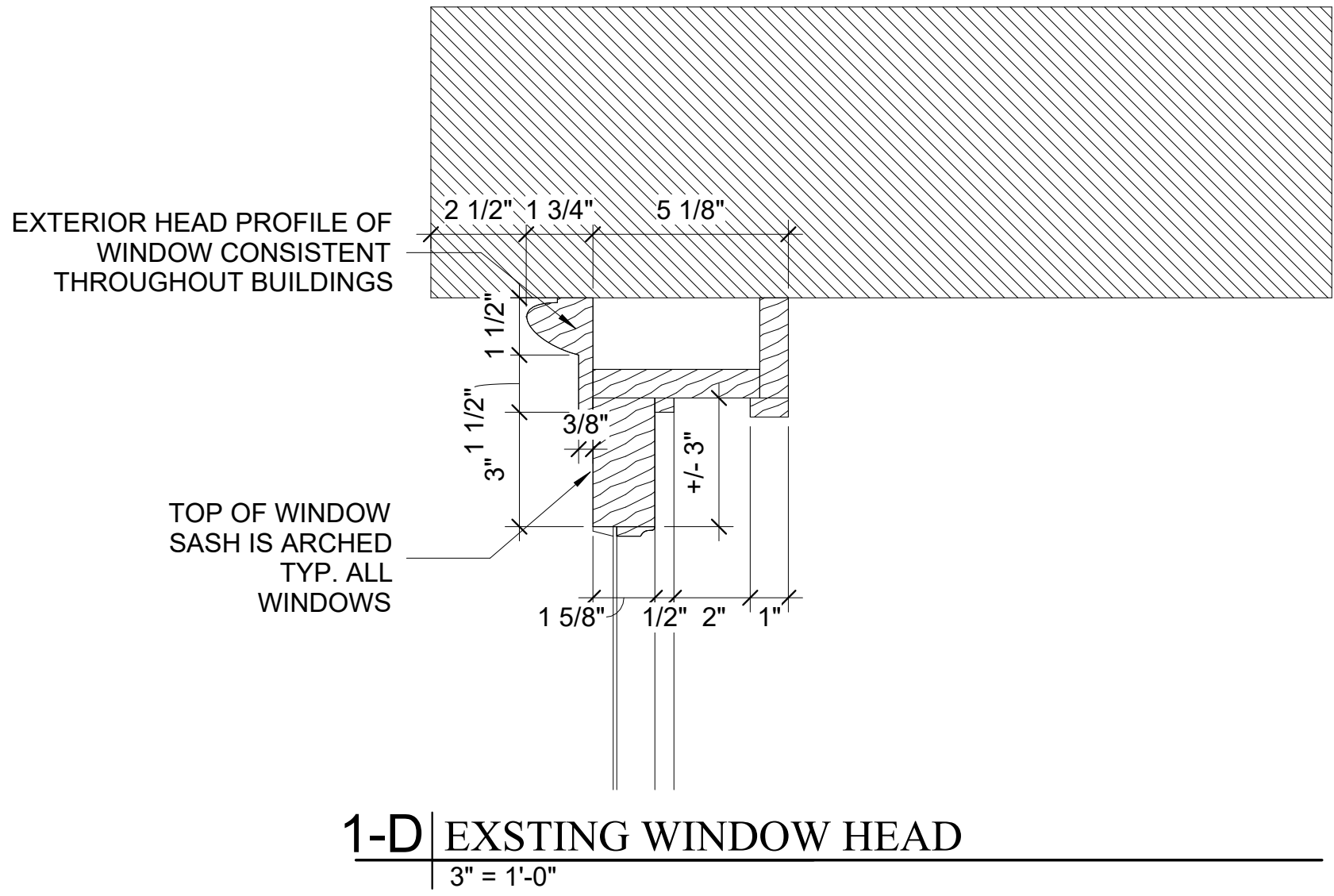


Anodized Finishes

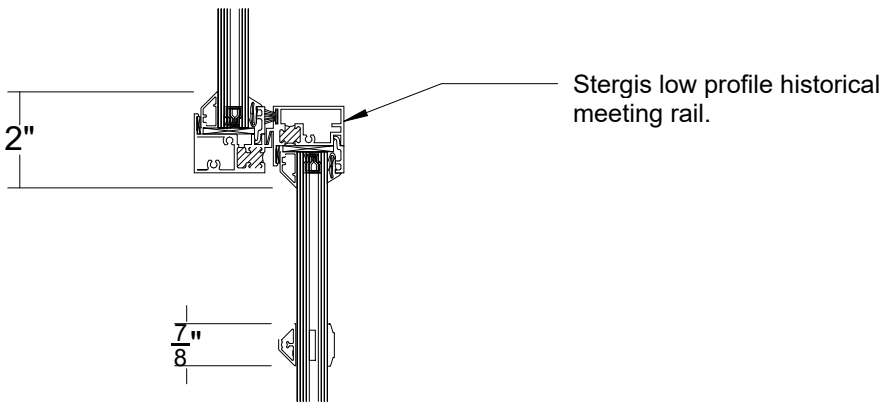


Clear Ano Champagne Light Bronze Medium Bronze Dark Bronze Extra Dark Bronze Black

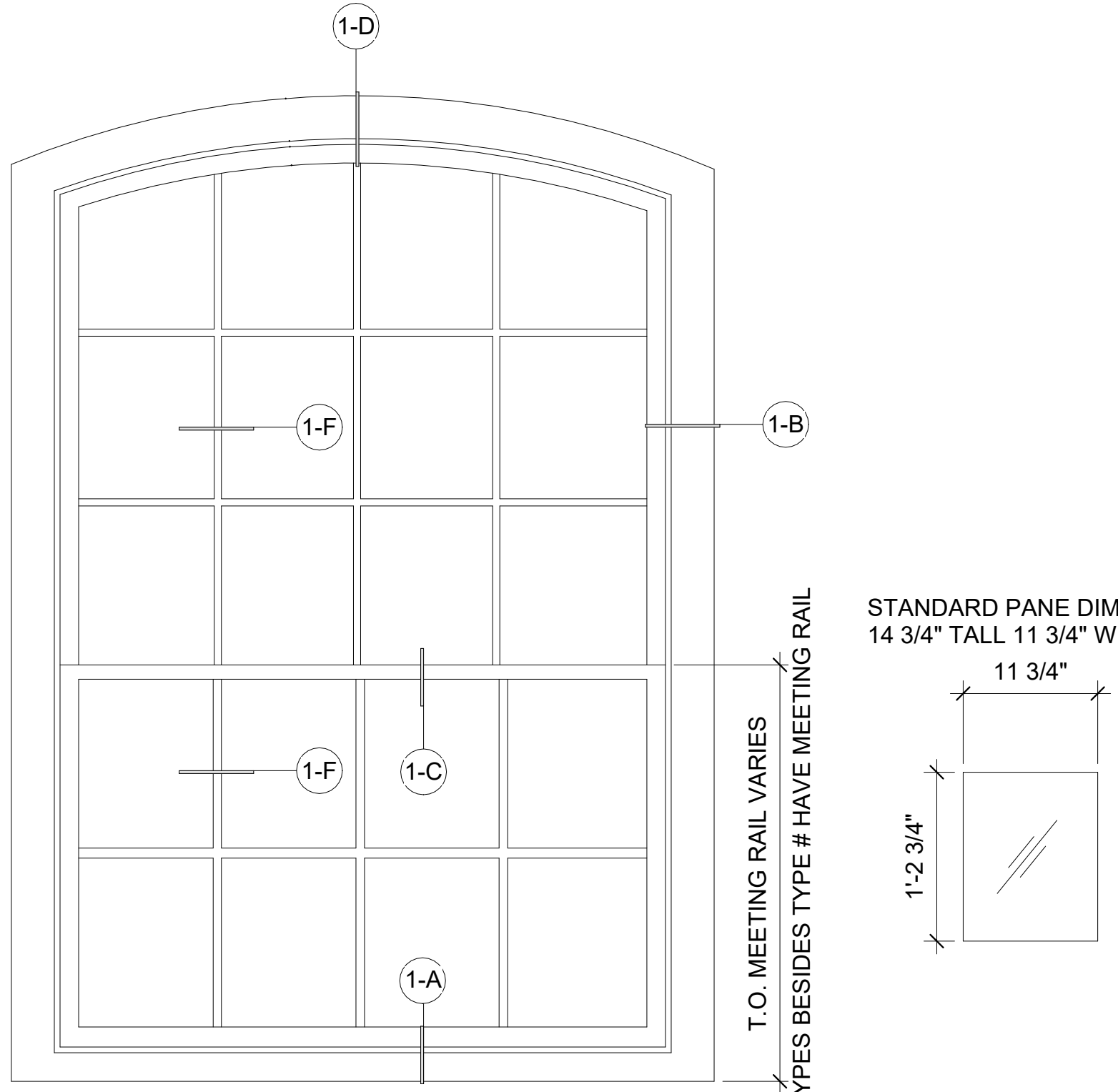




1-C | EXISTING MEETING RAIL
3" = 1'-0"

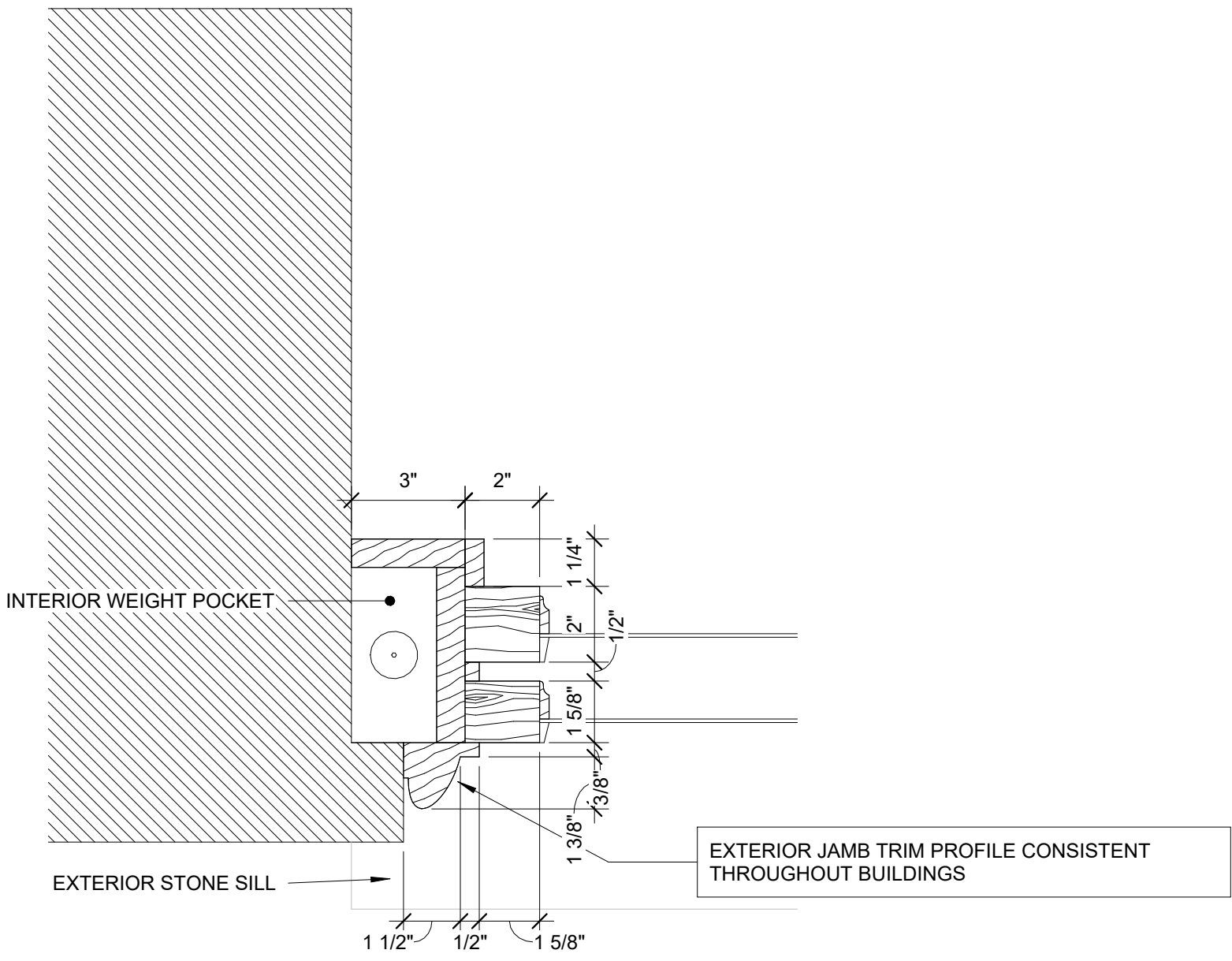


2-C | PROPOSED MEETING RAIL
3" = 1'-0"

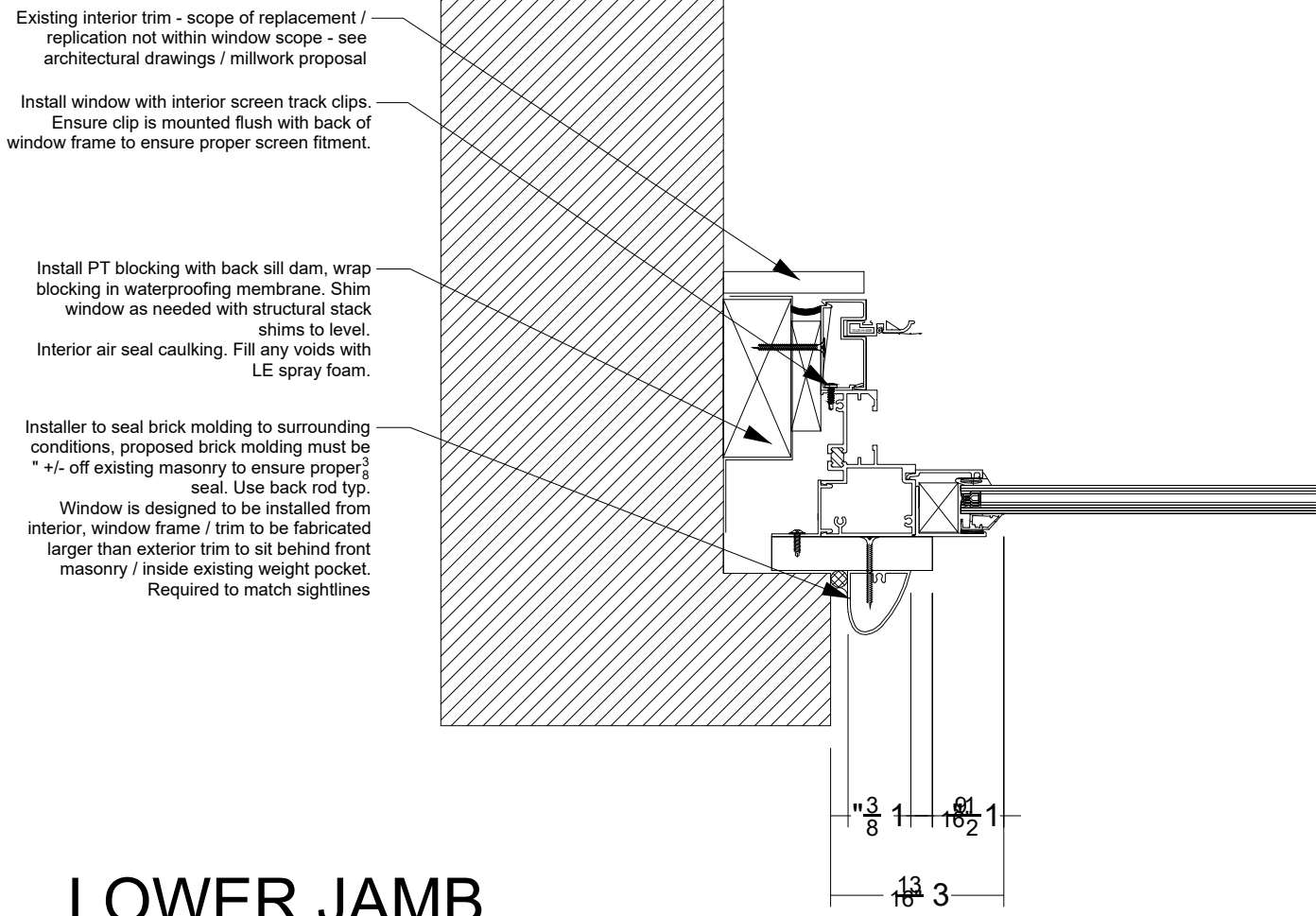


STANDARD PANE DIMENSIONS ARE:
14 3/4" TALL 11 3/4" WIDE

1 | STANDARD WINDOW FOR MANUFACTURER
1" = 1'-0"

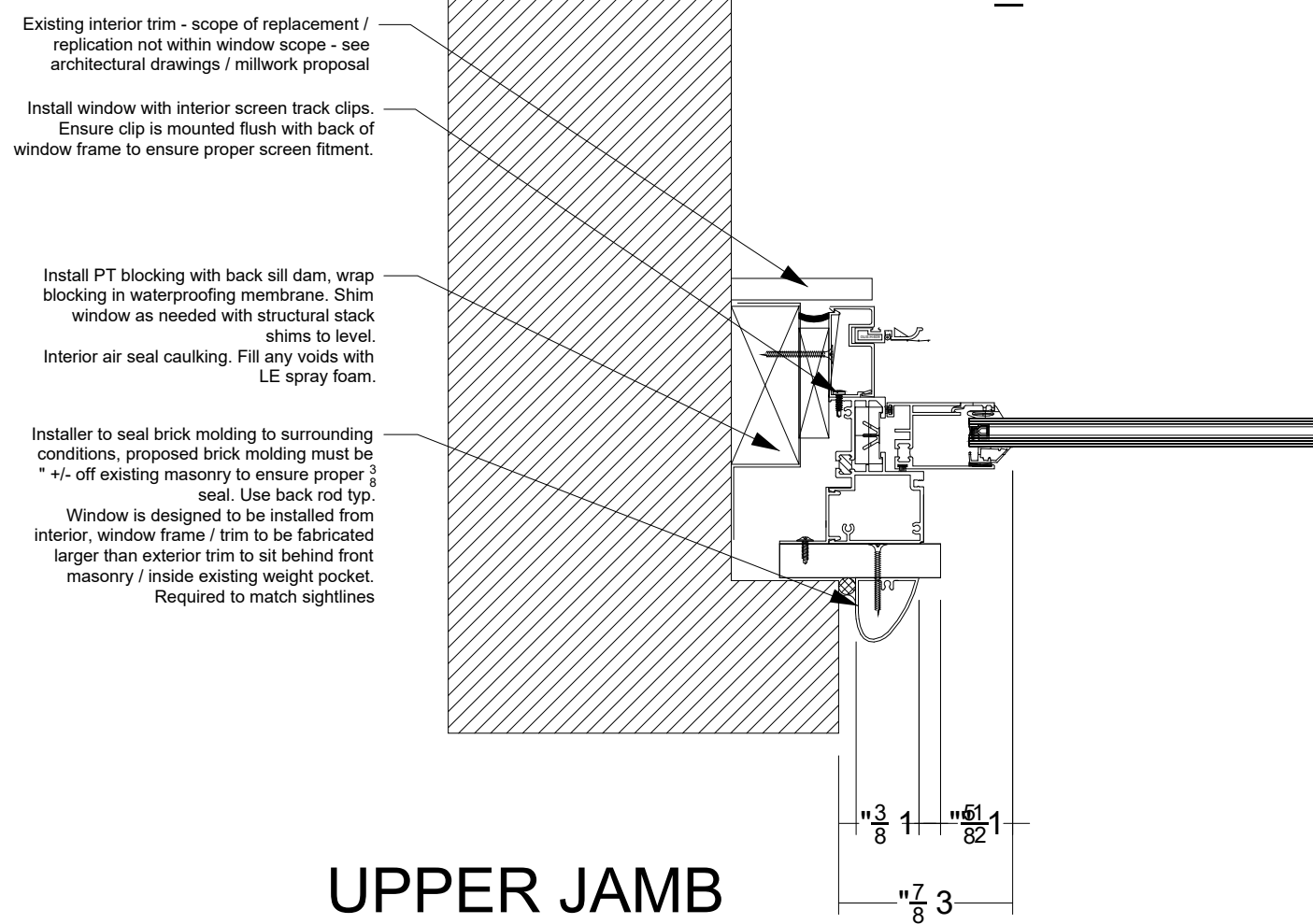


1-B | EXISTING WINDOW JAMBS
3" = 1'-0"

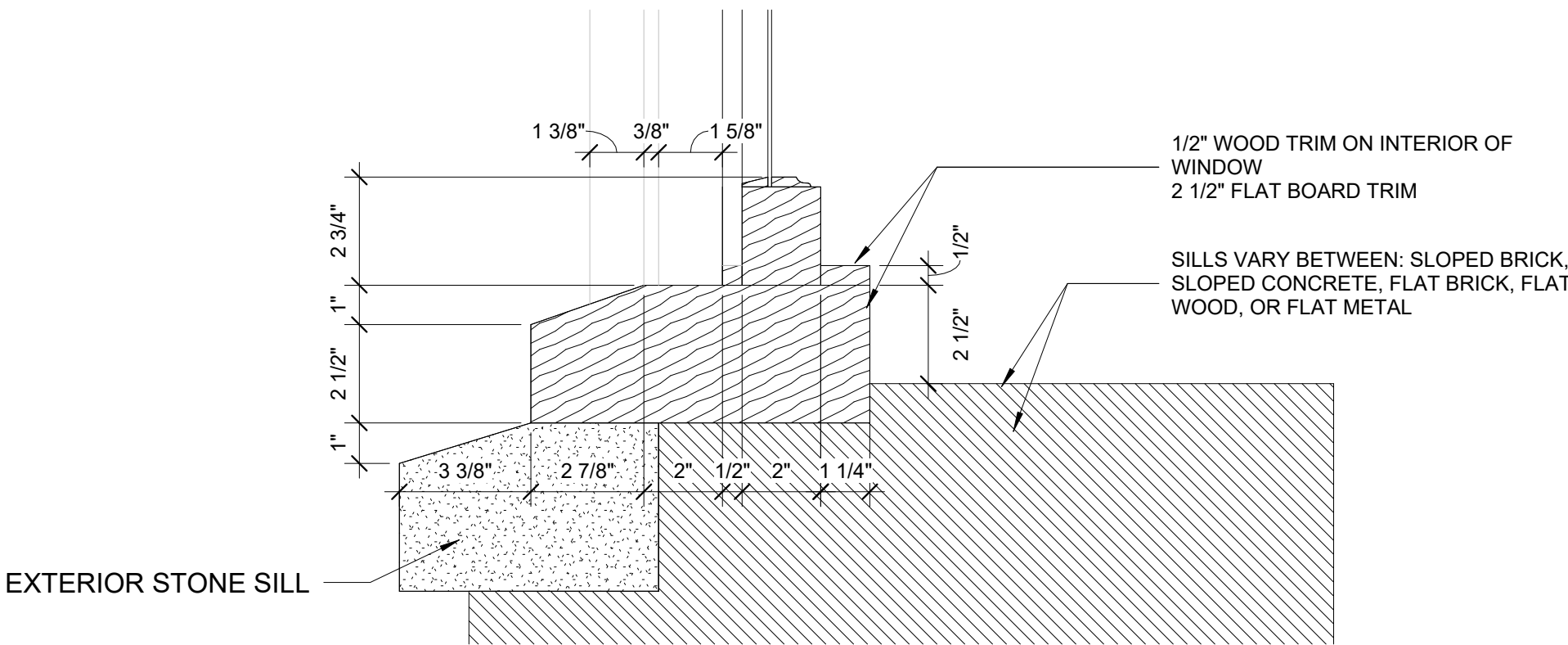


LOWER JAMB

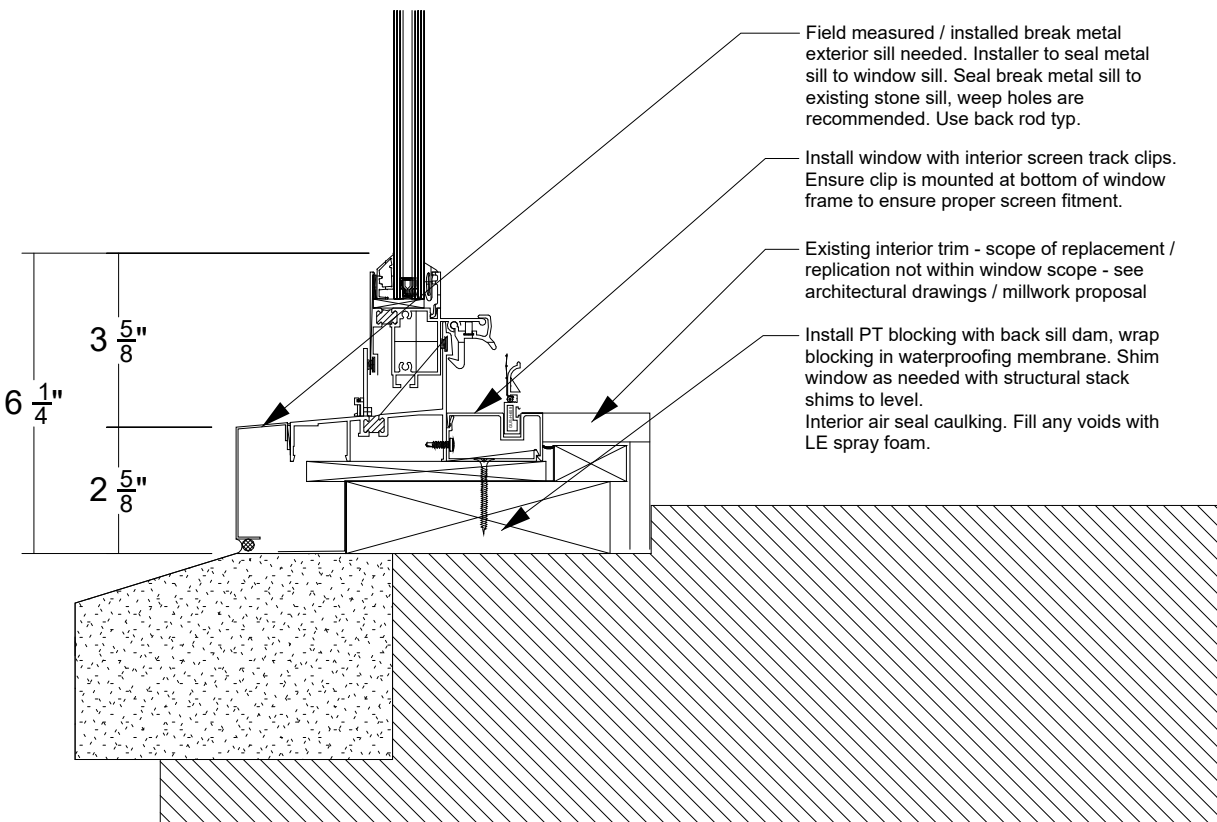
2-B | PROPOSED WINDOW JAMBS
3" = 1'-0"



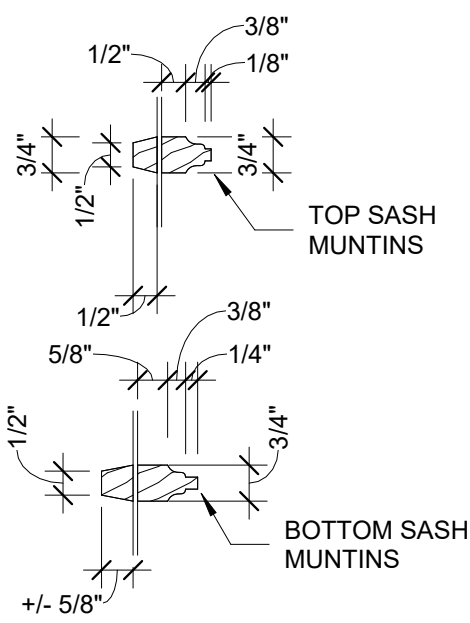
UPPER JAMB



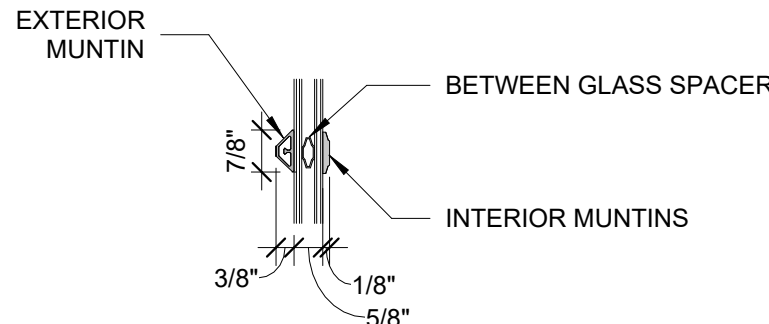
1-A | EXISTING WINDOW SILL
3" = 1'-0"



2-A | PROPOSED WINDOW SILL
3" = 1'-0"



1-F | EXSTING WINDOW MUNTINS
3" = 1'-0"



2-F | PROPOSED WINDOW GRILLES
3" = 1'-0"

EX1.14		Date: 10-09-2024		Scale: As indicated		EXISTING VS. PROPOSED WINDOW COMPARISON	
Revisions:							
Project:		LACONIA		5 MAIN STREET BIDDEFORD, ME 04005		ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-0022ARCHETYPE@ARCHETYPPEPA.COM	
Consultant:				Prepared For:		1921 Pepperell, LLC Address City, State	

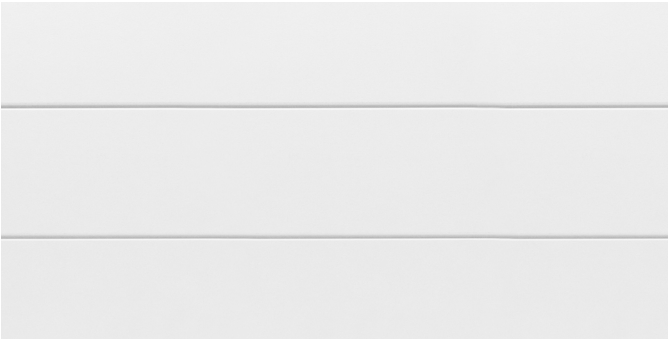


LATURA V-GROOVE *White + Custom Color* | STOCK ILLUMINATION *Cotton* | MODERNBRICK

Pushing the boundaries of lap siding.

Latura V-Groove gives you the classic look of lap siding with the modern performance of our Architectural Wall Panels. The ultra-durable fiber cement panels are resistant to fire, wind, pests and rot, easy to maintain, and have an integrated rainscreen system that offers protection from water intrusion and moisture damage. Latura V-Groove features a sophisticated look with deep shadow lines that are perfect for custom homes or multifamily projects alike.

LATURA V-GROOVE



WHITE



GRAY



CUSTOM HUES MEET MODERN DESIGN

With Color Xpressions, Latura V-Groove panels are available in an array of custom colors. Learn more on page 6.

LATURA V-GROOVE SPECS

AWP 1818

AWP 3030

DIMENSIONS (ACTUAL MM)

17-7/8" H x 71-9/16" L
(455MM H x 1818MM L)

17-7/8" H x 119-5/16" L
(455MM H x 3030MM L)

THICKNESS (ACTUAL MM)

5/8" (16MM)

5/8" (16MM)

WEIGHT (LBS. PER PANEL)

40.35

65.25

WEIGHT (LBS. PER SQ. FT.)

4.54

4.41

EXPOSED COVERAGE (SQ. FT. PER PANEL)

8.88 SQ. FT.

14.81 SQ. FT.

PACKAGING (PIECES PER PACK)

2 [17.76 SQ. FT.]

2 [29.62 SQ. FT.]



AWP 1818 CAN ONLY BE
INSTALLED HORIZONTALLY.



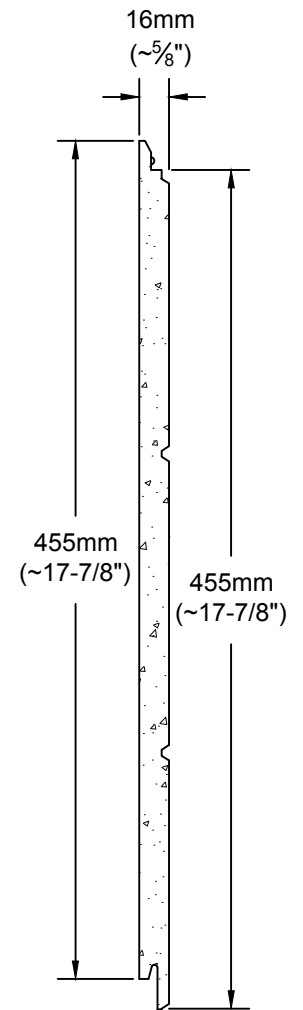
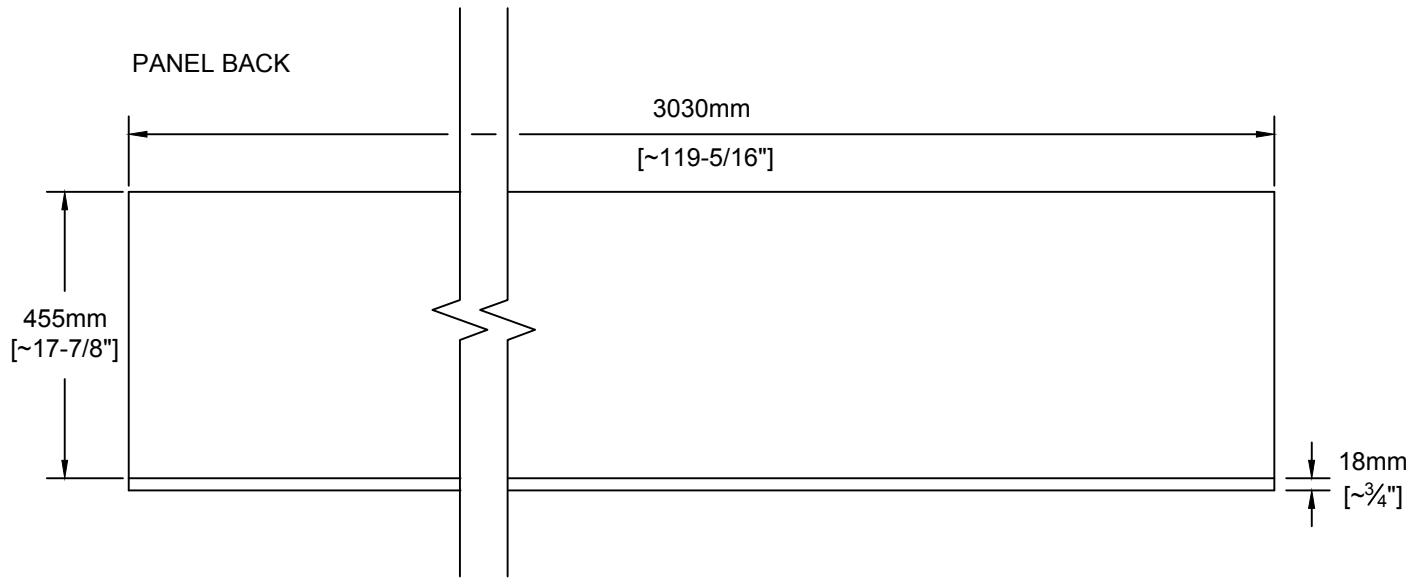
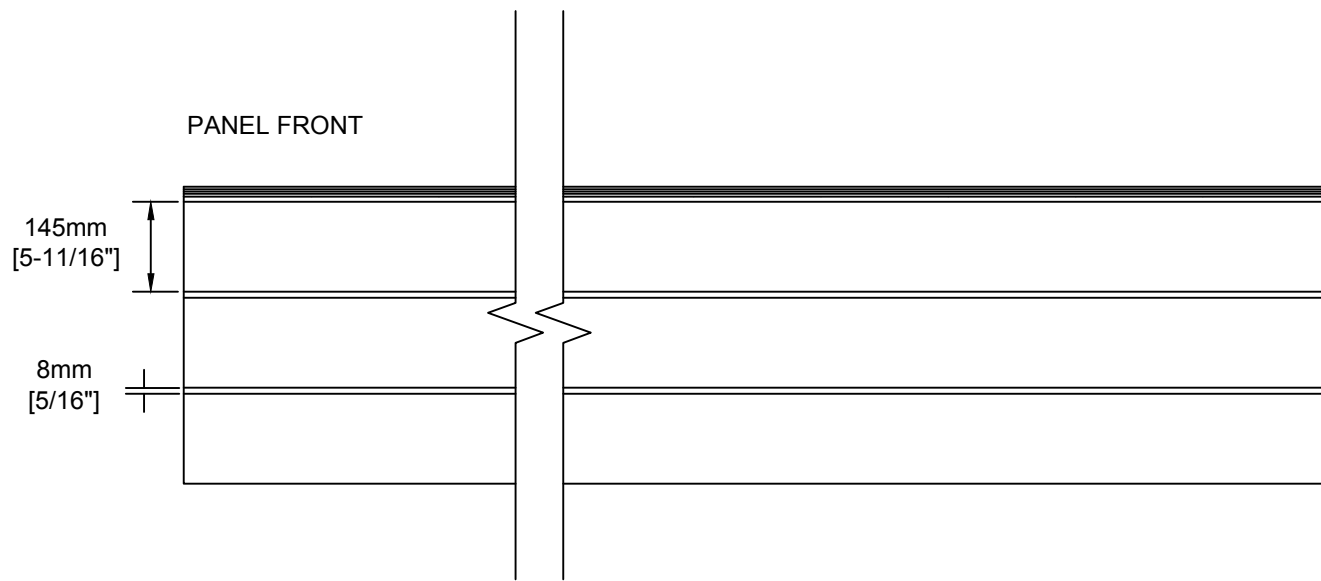
AWP 3030 CAN BE INSTALLED
HORIZONTALLY OR VERTICALLY.



LATURA V-GROOVE *Custom Color*



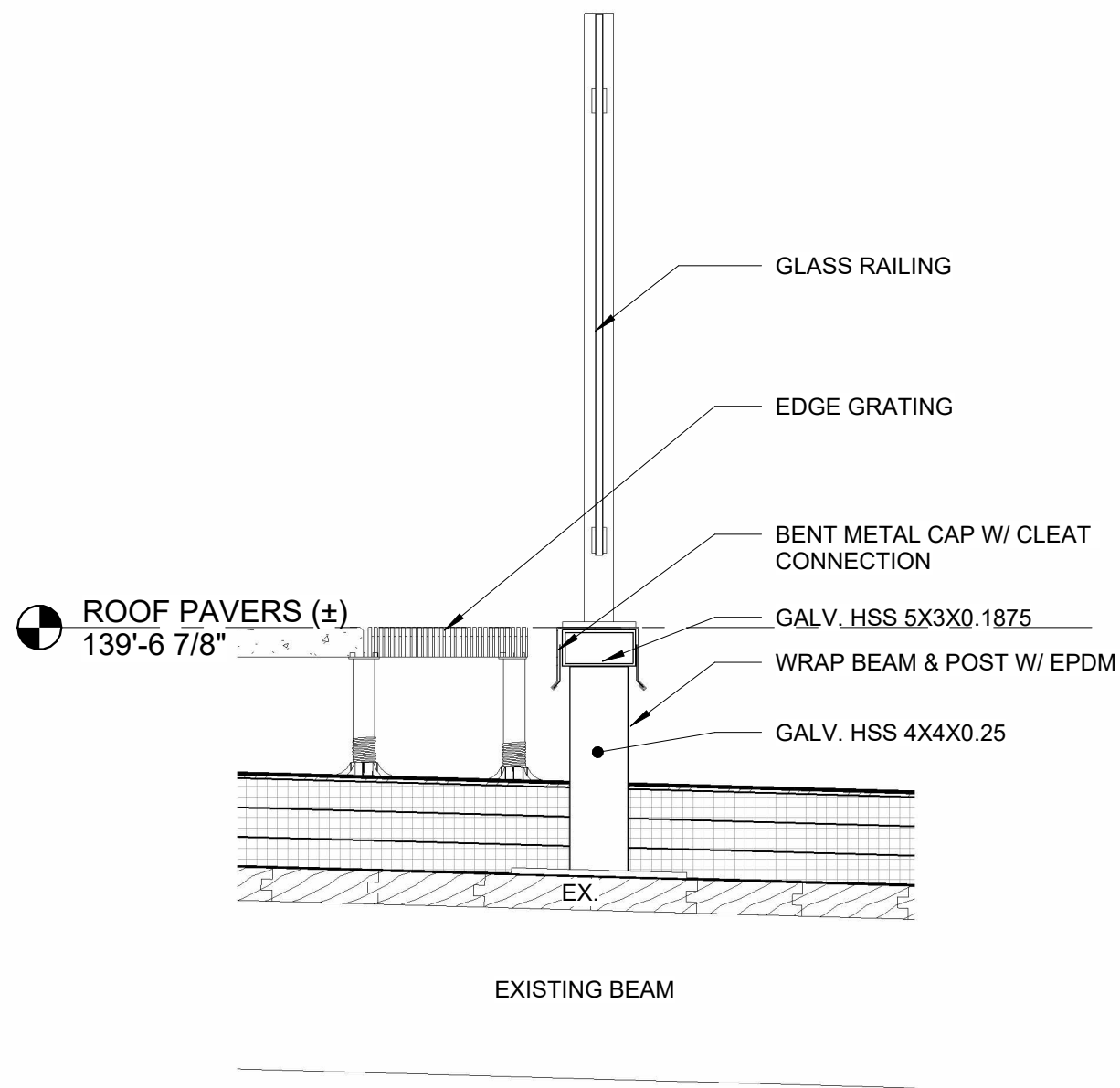
LATURA V-GROOVE *White + Custom Color*



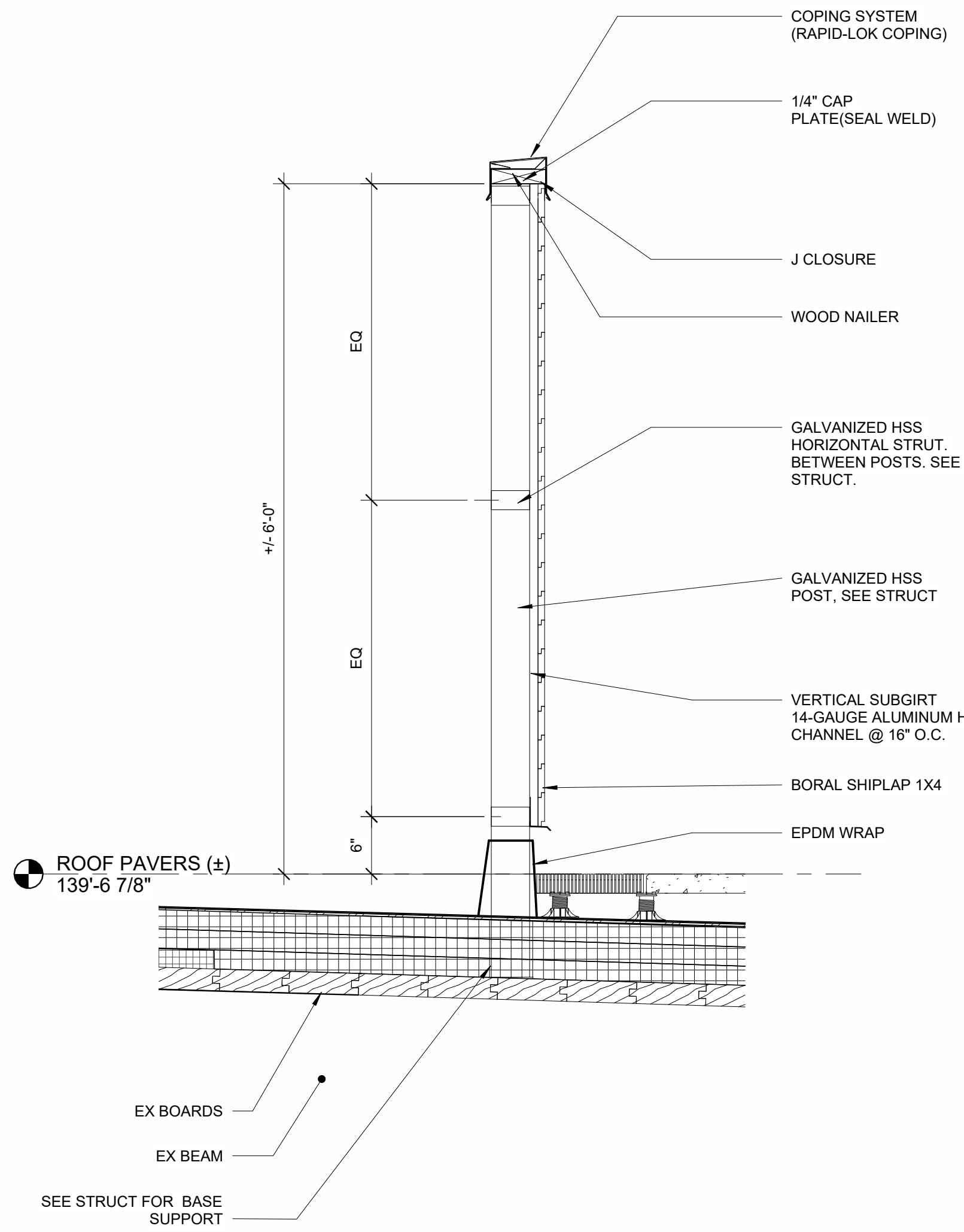
PANEL SECTION

SCALE: 3" = 1'-0"

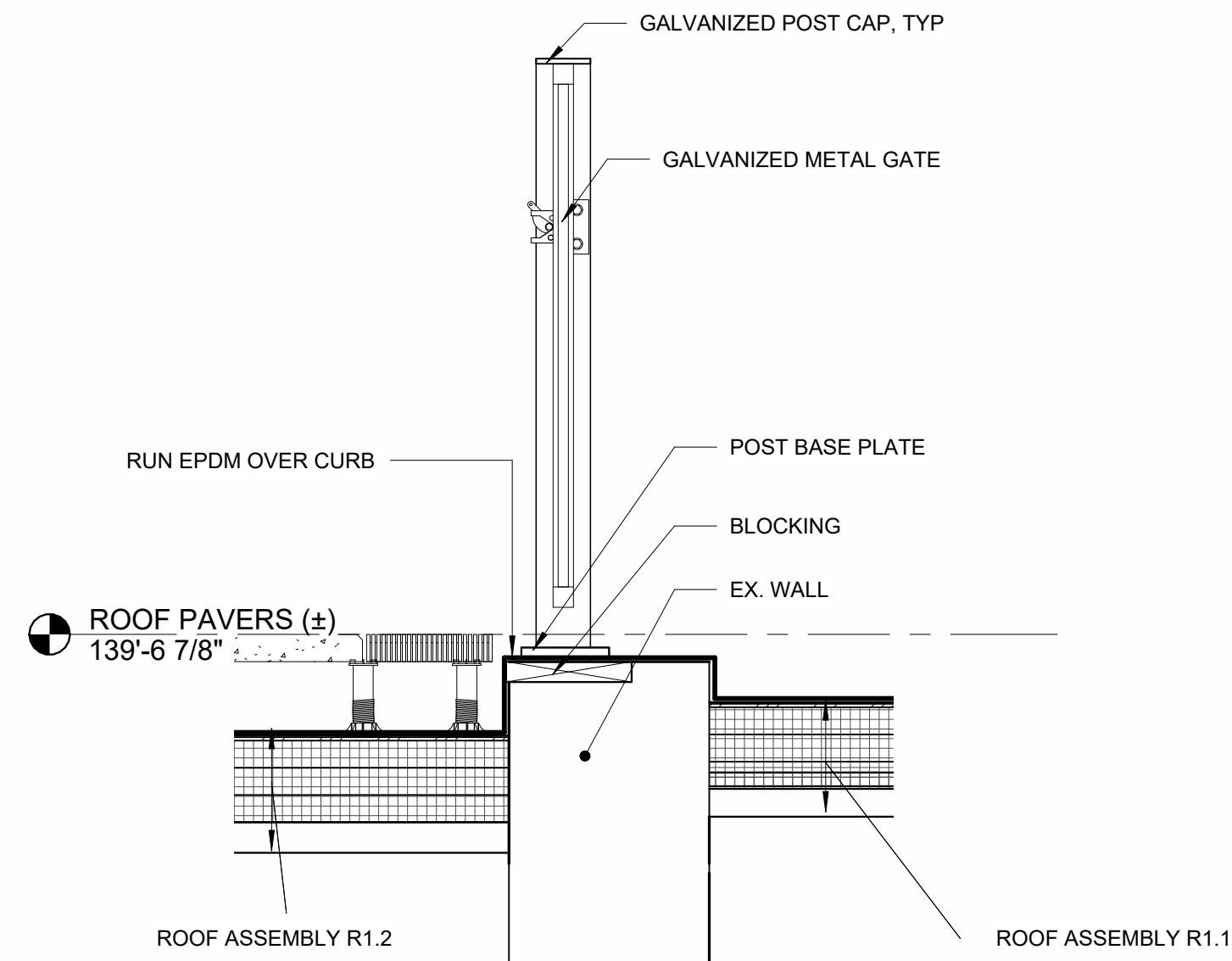
AWP-3030 - LATURA - PANEL DETAIL
SCALE: 1" = 1'-0"



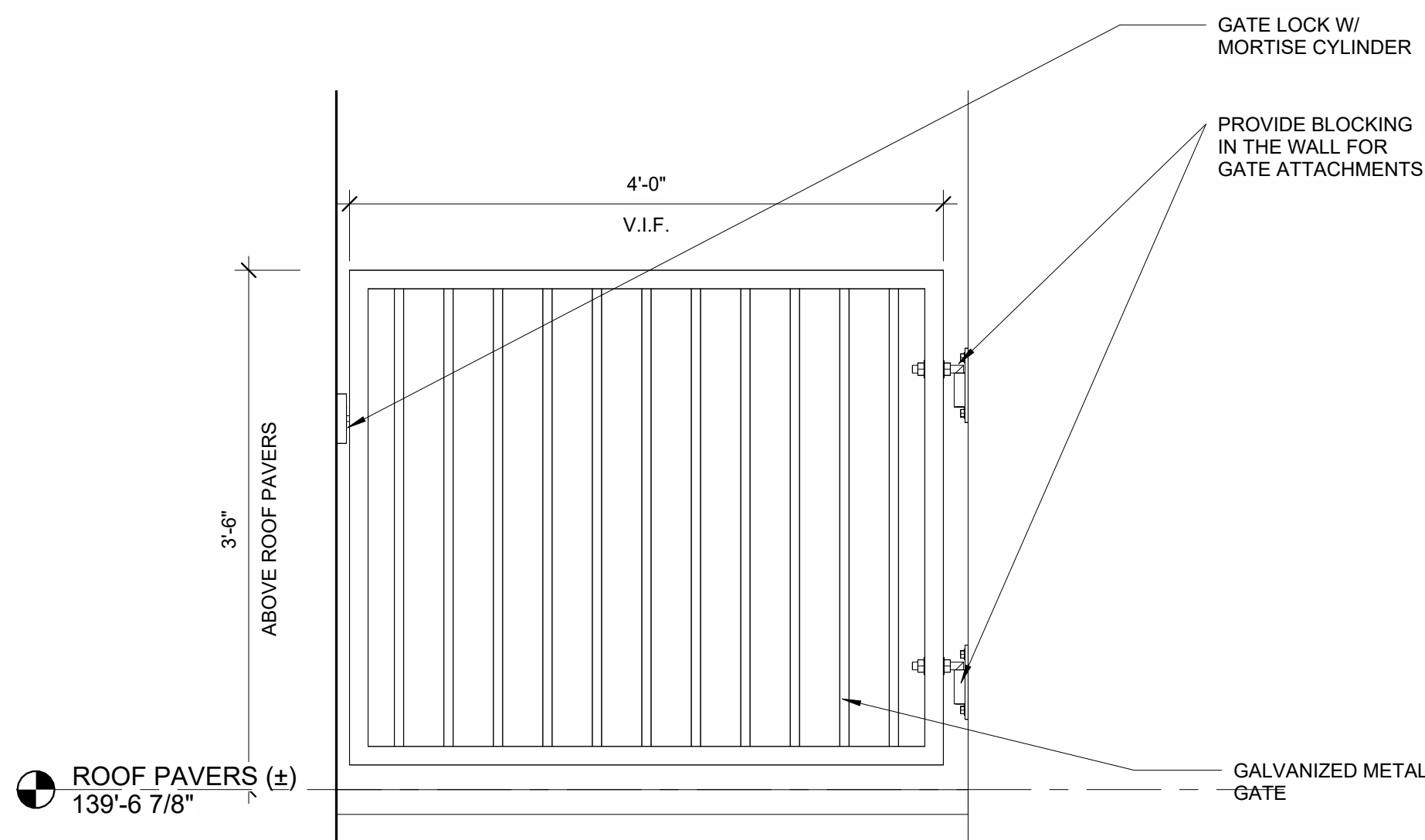
5 | GLASS RAILING CURB
2 / A1.05 | 1" = 1'-0"



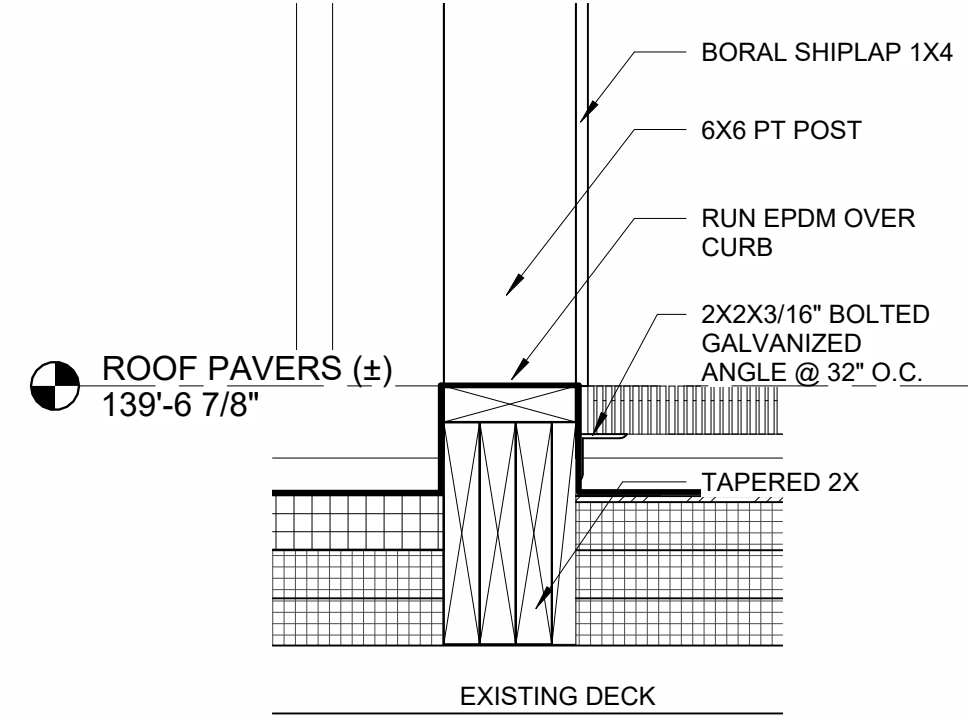
4 | SHIPLAP SCREEN DETAIL
2 / A1.05 | 1" = 1'-0"



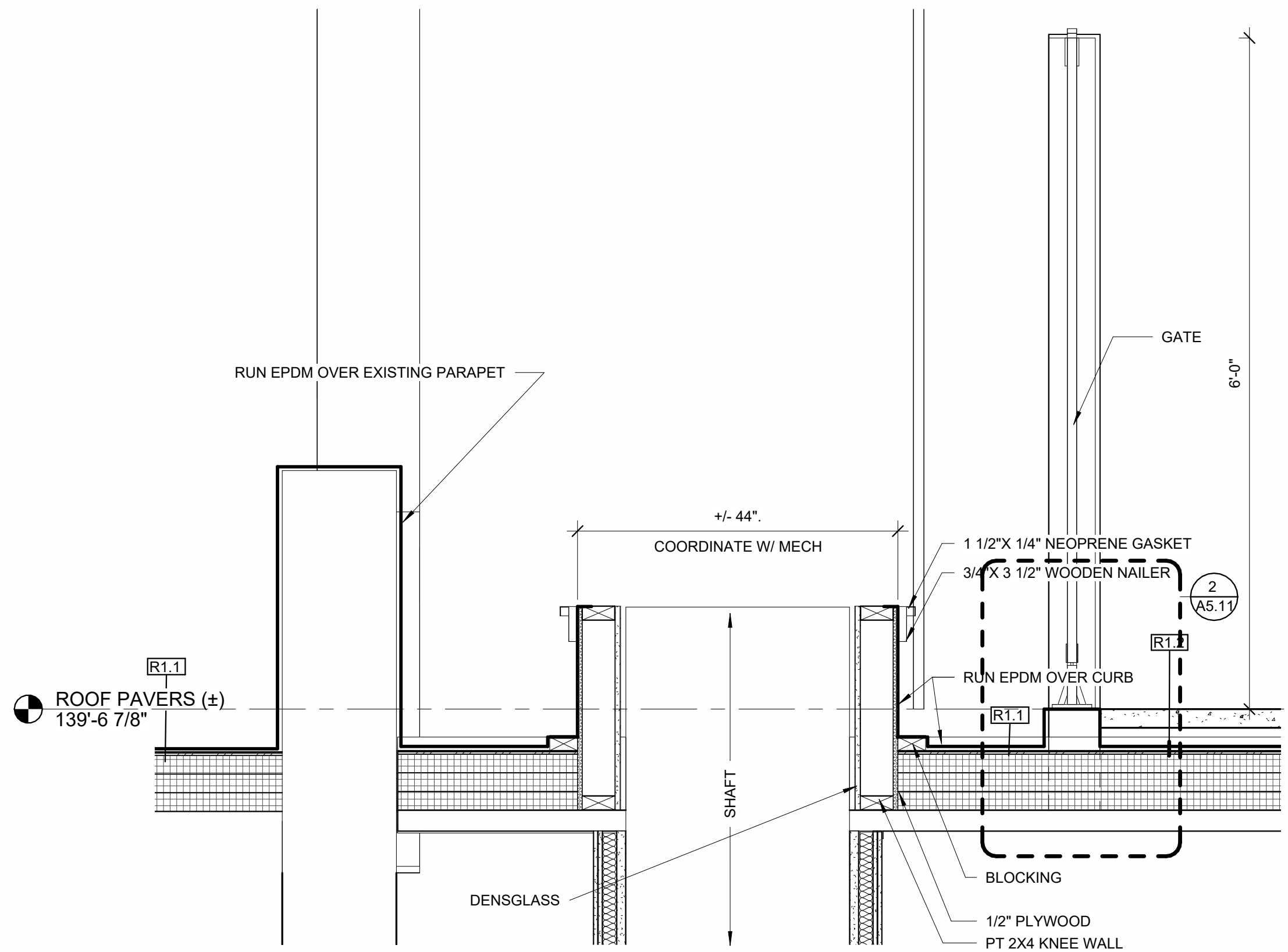
3B | SECTION THROUGH GATE
2 / A1.05 | 1" = 1'-0"



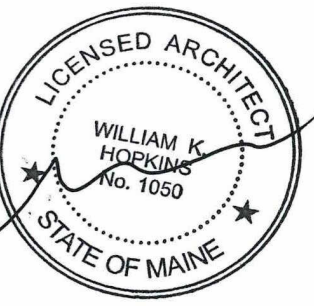
3A | GATE ELEVATION
2 / A1.05 | 1" = 1'-0"



2 | CURB DETAIL
1 / A5.11 | 1 1/2" = 1'-0"



1 | ERV PLATFORM SECTION
1 / A3.03 | 1" = 1'-0"



Prepared For:
1921 Pepperell,
LLC

Consultant:

Architect:
**ARCHETYPE
ARCHITECTS**
48 Union Wharf Portland, Maine 04101
(207) 772-6022 ARCHETYPE@ARCHETYPEDA.COM

Project:
LACONIA

Revisions:
1 08/05/24 Submission for Review by NPS

Date: 10-09-2024
Scale: As indicated
ROOF DETAILS

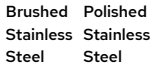
A5.11

[◀ More Choices](#)



Share Print

Finish/Color : Brushed Stainless Steel

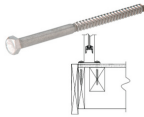
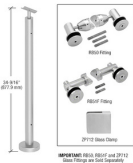
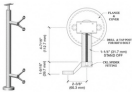


Item #: SPS42CBS

View Technical References ✓

Shipping Weight : 14.63 Pounds
Shipping Limitations : None

Compliance and Restrictions
Warning Reproductive Harm - www.p65warnings.ca.gov

[illegible]

CRL 316 Brushed Stainless 36" P1 Series End Post Railing Kit

Item #: P136EBS

CRL Brushed Stainless 36" P6 Series Spider End Post Railing Kit

Item # : P636EBS

CRL Brushed Stainless 36" P7 Series End Post Railing Kit No Fittings

Item # : P7F36EBS

CRL Brushed Stainless P8 Series 36" End Post Fixed Fitting Railing Kit

Item # : P8F36EBS

Hilti® Kwik Bolt TZ 304
Stainless Steel 3/8" x 3-
3/4" Concrete...

Item # : CA38X334SS

CRL 3/8" x 6" Lag Bolt

Item # : LB600

Product details

Base Plate Cover Included	Yes	Base Plate Width	5 in. (127 mm)
Base Plate Length	5 in. (127 mm)	Finish/Color:	Brushed Stainless Steel
Base Plate Mounting Holes	4	Material	Stainless Steel
Base Plate Thickness	3/8 in. (10 mm)	Mounting Hole Diameter	9/16 in. (14 mm)

Product Overview

2" (51 mm) Square Posts
Square or Round Z-Series Glass Clamps
Ready-to-Install for Both Commercial and Residential Applications
Designed to Accept 1/2" (12 mm) Tempered Glass
Standard Post Heights are 36" (914 mm) and 42" (1.07 m)
Custom Post Heights Also Available
Two Standard Stainless Finishes
Custom Powder Paint Finishes Also Available

CRL's **Glass Clamp Square Post Kits** are manufactured from Schedule 40 2" (51 mm) Stainless Steel Tubing. Kits are supplied complete with a Base Plate, Base Plate Cover Canopy, Welded Top Cap, and Z-Series Glass Clamps factory attached to the Post.

NOTE: CRL's Glass Clamp Post Kits are not designed for guard rail or hand rail applications.

Most shipping weights are approximate and have not been verified. If the exact weight is needed in order to determine shipping costs, and shipping costs are required in order for you to complete your order, please request this prior to submitting your order by contacting CRL Customer Service. Product images shown are of the actual product or a close representation. Colors can vary depending on your computer's video card and on how your monitor's color is adjusted.

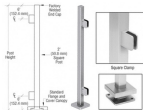
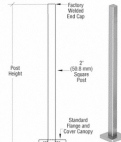
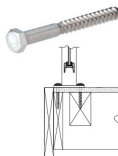
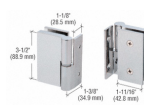
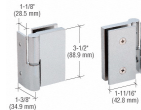
Stainless Steel Advisory:

Although Stainless Steel is resistant to corrosion, it is not rust or stain proof. CRL recommends periodic maintenance to help maintain its factory finish. For more information, view the Stainless Steel Disclaimer found in the Technical References section below.

Technical References & CAD Drawings

Brochures & Literature	Installation Instructions
Windscreen and Pool Fencing Systems Product Information 	P-Series Post Railing Installation Instructions 
Quote Request Forms	Specifications
P-Series Post Railing System Quote Request Form 	P-Series Post Railing Specification 
Templates	Cleaning & Maintenance
SPS36 SPS42 Glass Fabrication Template.pdf 	CRL Stainless Steel Disclaimer 

Frequently Bought Together

						
2" BM ack etal...	CRL Matte Black Vienna 180 Series Glass-to- Glass Hinge	CRL Brushed Stainless 42" Steel Square Glass Clamp End Square Pos...	CRL Brushed Stainless 42" Square Blank Post Railing Kit	CRL 3/8" x 3-1/2" Lag Bolt	CRL 316 Brushed Stainless Single Acting Left Hand Wall-to-Gla...	CRL 316 Brushe Stainless Single Ac Right Hand Wall-
IL	Item # : VIE180MBL	Item # : SPS42EBS	Item # : SPR42BBS	Item # : LB350	Item # : GH037LBS	Item # : GH037RBS

REVERSIBLE SHIPLAP-NICKEL GAP

TruExterior Siding & Trim's Reversible Shiplap/Nickel Gap siding panels offer two authentic, on-trend looks in one for increased versatility and convenience. The profile comes in two formats: one features smooth Nickel Gap on one side and woodgrain Shiplap on the other; the second combines woodgrain Nickel Gap with smooth Shiplap on the flip side. A rabbeted edge ensures panels install with authentic spacing depending on which side is installed—the tight joint appearance of Shiplap or the nickel-sized space of Nickel Gap. Four widths are available for 16 total profile combinations.

Finish Options:

- Smooth Nickel Gap with Woodgrain Shiplap
- Woodgrain Nickel Gap with Smooth Shiplap

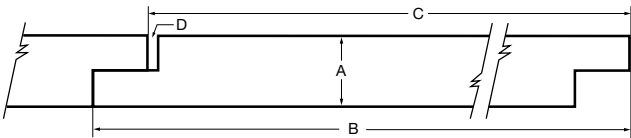
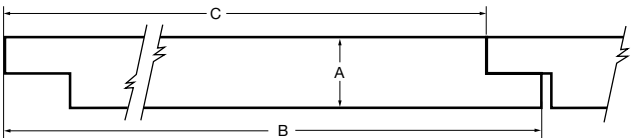


SHIPLAP GAP SIDE

Nominal Size	Actual Thickness (A)	Actual Width (B)	Reveal (C)
1 x 4	11/16"	3-1/2"	3-3/32"
1 x 6	11/16"	5-1/2"	5-3/32"
1 x 8	11/16"	7-1/4"	6-13/16"
1 x 10	11/16"	9-1/4"	8-13/16"

NICKEL GAP SIDE

Nominal Size	Actual Thickness (A)	Actual Width (B)	Reveal (C)	Gap (D)
1 x 4	11/16"	3-1/2"	3-3/32"	5/64"
1 x 6	11/16"	5-1/2"	5-3/32"	5/64"
1 x 8	11/16"	7-1/4"	6-13/16"	5/64"
1 x 10	11/16"	9-1/4"	8-13/16"	5/64"



TruExterior Siding comes pre-primed and does require paint.

SECTION 040120

MASONRY RESTORATION AND CLEANING

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

- A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.2 DESCRIPTION OF WORK

- A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:
 - 1. Repairing clay and stone masonry, including replacing damaged units as indicated on Interior Photo Survey.
 - 2. Repointing mortar joints, removing existing mortar and replacing with new color mortar.
 - 3. Infill masonry openings.
 - 4. Cleaning exposed clay and stone masonry surfaces, including decorative stonework.
 - 5. Provide for repair or replacement of clay and stone masonry broken or damaged during disassembly and reconstruction. Contractor shall be responsible for damage resulting from work of this Section.
 - 6. Provide shoring and bracing required to maintain stability of masonry during work of this Section. Coordinate with requirements of Section 011000 - GENERAL REQUIREMENTS.
- B. Related Work: The following items are not included in this Section and are specified under the designated Sections:
 - 1. Section 024100 - DEMOLITION for demolition, removal and salvage requirements, to the extent not specified in this Section.
 - 2. Section 076200 - SHEET METAL FLASHING AND TRIM for metal flashing installed in or on restored masonry.
 - 3. Section 079200 - JOINT SEALANTS for sealing joints in restored masonry.

1.3 SUBMITTALS

- A. Cleaning: Contractor shall provide a detailed plan of action for performing test patches using cleaning liquids if feasible up to minimal sand blasting. A written report including photos shall be submitted to the Owner for review and action approval before further cleaning is performed.
- B. Product Data: For each type of product indicated. Include recommendations for application and use. Include test data substantiating that products comply with requirements.
- C. Samples for Verification: Before erecting mockup, submit samples of the following:
 - 1. Each type of exposed masonry unit to be used for replacing existing units.
 - a. For each brick type, provide straps or panels containing at least four bricks.
 - b. For each stone type, provide straps or panels containing at least four stones.

2. Each type of sand used for pointing mortar.
 - a. For blended sands, provide samples of each component and blend.
 - b. Identify sources, both supplier and quarry, of each type of sand.
 3. Each type of pointing mortar in the form of sample mortar strips, 6 inches long by 1/2 inch wide, set in aluminum or plastic channels.
 - a. Include with each sample a list of ingredients with proportions of each. Identify sources, both supplier and quarry, of each type of sand and brand names of cementitious materials and pigments if any.
 4. Each type of anchor, insert, dowel, and attachment, full size.
 5. Each type of masonry patching compound in the form of briquettes, at least 3 inches long by 1-1/2 inches wide. Document each sample with manufacturer and stock number or other information necessary to order additional material.
- D. Restoration Program: For each phase of restoration process, provide detailed description of materials, methods, equipment, and sequence of operations to be used for each phase of restoration work including protection of surrounding materials on building and Project site.
1. Include methods for keeping pointing mortar damp during curing period.
 2. If materials and methods other than those indicated are proposed for any phase of restoration work, provide a written description, including evidence of successful use on comparable projects, and a testing program to demonstrate their effectiveness for this Project.
- E. Cleaning Program: Describe cleaning process in detail, including materials, methods, and equipment to be used and protection of surrounding materials on building and Project site, and control of runoff during operations.
1. If materials and methods other than those indicated are proposed for cleaning work, provide a written description, including evidence of successful use on comparable projects, and a testing program to demonstrate their effectiveness for this Project.

1.4 QUALITY ASSURANCE

- A. Cleaning of all surfaces is designated as design/build. Selected contractor must have experience cleaning surfaces in historic buildings and National Park Service requirements. Cleaning and prepping for repainting shall be done with the least abrasive methods possible.
- B. Chemical Manufacturer Qualifications: A firm regularly engaged in producing masonry cleaners that have been used for similar applications with successful results, and with factory-trained representatives who are available for consultation and Project-site inspection and assistance at no additional cost.
- C. Source Limitations: Obtain each type of material for masonry restoration (face brick, stone, cement, sand, etc.) from one source with resources to provide materials of consistent quality in appearance and physical properties.
- D. Preconstruction Testing Service: Owner will engage a qualified independent testing agency to test the following. Provide test specimens and assemblies as indicated.

1. Replacement Brick: For each proposed type of replacement brick, according to sampling and testing methods in ASTM C 67 for compressive strength, 24-hour cold-water absorption, 5-hour boil absorption, saturation coefficient, and initial rate of absorption (suction).
 2. Existing Brick: For each type of existing brick indicated for replacement, according to testing methods in ASTM C 67 for compressive strength, 24-hour cold-water absorption, 5-hour boil absorption, saturation coefficient, and initial rate of absorption (suction). Carefully remove existing bricks from locations designated by Architect.
- E. Mockups: Prepare mockups of restoration and cleaning as follows to demonstrate aesthetic effects and qualities of materials and execution. Prepare mockups on existing walls under same weather conditions to be expected during remainder of the Work.
1. Repair an area approximately 36 inches high by 48 inches wide for each type of masonry material indicated to be rebuilt or replaced.
 2. Patch three small areas at least 1 inch in diameter for each type of masonry material indicated to be patched.
 3. Clean an area approximately 25 sq. ft. in area for each type of masonry and surface condition.
 - a. Test cleaners and methods on samples of adjacent materials for possible adverse reactions unless cleaners and methods are known to have deleterious effect.
 - b. Allow a waiting period of not less than seven days after completion of sample cleaning to permit a study of sample panels for negative reactions.
 4. Rake out joints in two separate areas approximately 36 inches high by 72 inches wide for each type of repointing required and repoint one of the two areas.
- F. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01.
- 1.5 DELIVERY, STORAGE, AND HANDLING
- A. Deliver masonry units to Project site strapped together in suitable packs or pallets or in heavy-duty cartons.
 - B. Deliver other materials to Project site in manufacturer's original and unopened containers, labeled with manufacturer's name and type of products.
 - C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
 - D. Store hydrated lime in manufacturer's original and unopened containers. Discard lime if containers have been damaged or have been opened for more than two days.
 - E. Store lime putty covered with water in sealed containers.
 - F. Store sand where grading and other required characteristics can be maintained and contamination avoided.
- 1.6 PROJECT CONDITIONS
- A. Repoint mortar joints and repair masonry only when air temperature is between 40 and 90 deg F and is predicted to remain so for at least 7 days after completion of work.

- B. Cold-Weather Requirements: Comply with the following procedures for masonry repair and mortar-joint pointing:
 - 1. When air temperature is below 40 deg F, heat mortar ingredients, masonry repair materials, and existing masonry walls to produce temperatures between 40 and 120 deg F.
 - 2. When mean daily air temperature is below 40 deg F, provide enclosure and heat to maintain temperatures above 32 deg F within the enclosure for 7 days after repair and pointing.
- C. Hot-Weather Requirements: Protect masonry repair and mortar-joint pointing when temperature and humidity conditions produce excessive evaporation of water from mortar and repair materials. Provide artificial shade and wind breaks and use cooled materials as required. Do not apply mortar to substrates with temperatures of 90 deg F and above.
- D. Patch masonry only when air and surface temperatures are between and 55 and 100 deg F and are predicted to remain above 55 deg F for at least 7 days after completion of work. On days when air temperature is predicted to go above 90 deg F, schedule patching work to coincide with time that surface being patched will be in shade or during cooler morning hours.
- E. Clean masonry surfaces only when air temperature is 40 deg F and above and is predicted to remain so for at least 7 days after completion of cleaning.

1.7 SEQUENCING AND SCHEDULING

- A. Order replacement materials at earliest possible date, to avoid delaying completion of the Work.
- B. Order sand for repointing mortar immediately after approval of Samples or mockups. Take delivery of and store at Project site a sufficient quantity of sand to complete Project.
- C. As scaffolding is removed, patch anchor holes used to attach scaffolding. Patch holes in masonry units to comply with Part 3 "Masonry Unit Patching and Repairs" Article. Patch holes in mortar joints to comply with Part 3 "Repointing Masonry" Article.

PART 2 - PRODUCTS

2.1 MASONRY MATERIALS

- A. Face Brick and Accessories: Provide face brick and accessories, including specially molded, ground, cut, or sawed shapes where required to complete masonry restoration work.
 - 1. Provide units with colors, surface texture, size, and shape to match existing brickwork and with physical properties not less than those determined from preconstruction testing of selected existing units.
 - a. For replacement brick at existing building provide brick to match existing as approved by Architect.
 - b. For existing brickwork that exhibits a range of colors, provide brick that matches that range rather than brick that matches an individual color within that range.
 - 2. Provide units with colors, surface texture, and physical properties to match Architect's sample. Match existing units in size and shape.

- a. For sample that exhibits a range of colors, provide brick that matches that range rather than brick that matches an individual color within that range.
 3. Provide specially molded shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
 4. Provide specially ground units, shaped to match patterns, for arches and where indicated.
- B. Stone: Reuse existing salvaged stones, where available, and as follows:
1. Varieties, Cut and Finish: To match existing stones, as approved by Architect.
 2. For existing stone that exhibits a range of colors, finishes, sizes, or shapes, provide stone that matches that range rather than stone that matches an individual color, finish, size, or shape within that range.

2.2 MORTAR MATERIALS

- A. Portland Cement: ASTM C 150, Type I or Type II.
1. Provide white cement containing not more than 0.60 percent total alkali when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.
- C. Mortar Sand: ASTM C 144, unless otherwise indicated.
1. Color: Provide natural sand or ground marble, granite, or other sound stone; of color necessary to produce required mortar color.
 2. For pointing mortar, provide sand with rounded edges.
 3. Match size, texture, and gradation of existing mortar sand as closely as possible. Blend several sands, if necessary, to achieve suitable match.
- D. Mortar Pigments: Natural and synthetic iron oxides, compounded for mortar mixes. Use only pigments with a record of satisfactory performance in masonry mortars.
1. Available Products: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. SGS Mortar Colors: Solomon Grind-Chem Services, Inc.
 - b. True Tone Mortar Colors: Davis Colors, a Subsidiary of Rockwood Industries, Inc.
- E. Water: Potable, clean and free from injurious amount of oil, alkali, organic matter or other deleterious material.

2.3 CLEANING MATERIALS

- A. Water: Potable, clean and free from injurious amount of oil, alkali, organic matter or other deleterious material.
- B. Hot Water: Heat water to a temperature of 140 to 160 deg F.
- C. Chemical Manufacturers:

1. American Building Restoration Products, Inc.
2. Diedrich Technologies Inc.
3. Dominion Restoration, Inc.
4. Dumond Chemicals, Inc.
5. Hydrochemical Techniques, Inc.
6. Price Research, Ltd.
7. ProSoCo.

D. Basis of Design Products:

1. Cleaner and Degreaser:
 - a. ProSoCo; Enviro Klean, 2010 All Surface Cleaner.
 - b. ProSoCo; Enviro Klean, Klean 'N Release Cleaner.
2. Acidic Cleaner: ProSoCo; Enviro Klean, 600.
3. Silicone Emulsion Sealer: ProSoCo; Enviro Klean, Interior Masonry Dustproof.
4. Solvent Paste: ProSoCo; Enviro Klean, Safety Peel 1.
5. Paint Stripper: ProSoCo; Enviro Klean, Heavy Duty Paint Stripper.
6. Neutral-pH Stripping Compound: ProSoCo; Enviro Klean, SafStrip 8.

E. Job-Mixed Detergent Solution: Solution prepared by mixing 2 cups of trisodium phosphate (TSP), 1/2 cup of laundry detergent, and 20 quarts of hot water for every 5 gal. of solution required.

F. Job-Mixed Mold, Mildew, and Algae Remover: Solution prepared by mixing 2 cups of trisodium phosphate (TSP), 5 quarts of 5 percent sodium hypochlorite (bleach), and 15 quarts of hot water for every 5 gal. of solution required.

2.4 MISCELLANEOUS MATERIALS

A. Masonry Patching Compound: Factory-mixed cementitious product that is custom manufactured for patching masonry, is vapor- and water permeable, exhibits low shrinkage, and develops high bond strength to all types of masonry.

1. Formulate patching compound used for patching brick in colors and textures to match brick being patched. Provide number of colors needed to enable matching each brick.
2. Available Products:
 - a. Cathedral Stone Products, Inc.; Jahn Restoration Mortar.
 - b. Edison Coatings, Inc.; Custom System 45.
 - c. Bonstone Materials Corp., Stone Repair.

B. Liquid Strippable Masking Agent: Manufacturer's standard liquid, film-forming, strippable masking material for protecting glass, metal, and polished stone surfaces from damaging effects of acidic and alkaline masonry cleaners.

1. Available Products:
 - a. American Building Restoration Products, Inc.; LM 130 Acid Shield.
 - b. Diedrich Technologies Inc.; Diedrich Acid Guard.
 - c. Price Research, Ltd.; Price Mask.
 - d. ProSoCo; Sure Klean Strippable Masking.

- C. Masonry Repair Anchors, Expansion Type: Mechanical fasteners designed for masonry veneer stabilization consisting of 1/4-inch- diameter, Type 316 stainless-steel rod with brass expanding shells at each end and water-shedding washer in the middle. Expanding shells shall be designed to provide positive mechanical anchorage to veneer on one end and backup masonry on the other.
1. Available Products:
 - a. BLOK-LOK, a Hohmann & Barnard Company; Torq-Lok.
 - b. Dur-O-Wal, a Hohmann & Barnard Company; Dur-O-Wal Repair Anchor.
 - c. Hohmann & Barnard, Inc.; #521RA-B Restoration Anchor.
- D. Masonry Repair Anchors, Spiral Type: Type 304 stainless-steel spiral rods designed to anchor to backing and veneer. Anchors are flexible in plane of veneer but rigid perpendicular to it.
1. Provide adhesive-installed anchors complete with manufacturer's standard epoxy adhesive and injection tubes, screens, sleeves, or other devices required for installation.
 2. Provide driven-in anchors designed to be installed in drilled holes and relying on screw effect rather than adhesive to secure them to backup and veneer.
 3. Available Products:
 - a. Dur-O-Wal, a Hohmann & Barnard Company; Dur-O-Flex.
 - b. Heckmann Building Products, Inc.; #391 Spiro Remedial Tie.
 - c. Helifix Ltd.; Helifix HRT60 or Helifix HRT80.
 - d. Hohmann & Barnard, Inc.; Helix Spiro-Ties.
- E. Stone Anchors: Type and size indicated or, if not indicated, to match existing anchors in size and type. Fabricate anchors and dowels from ASTM A 167, Type 304 stainless steel.
1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Halfen USA.
 - b. Heckmann Building Products.
 - c. Hohmann & Barnard, Inc.
 2. Adhesives, for Stone Anchors and Pins: ASTM C 881, Types I, II, IV & V, Grade 1, high modulus, high strength, moisture-insensitive, high-viscosity epoxy adhesive.
 - a. Basis of Design: Sika; Sikadur 31, Hi-Mod Gel, or approved equal by anchor manufacturer.
- F. Stone-to-Stone Adhesive: 2-part polyester or epoxy-resin stone adhesive with a 15- to 45-minute cure at 70 deg F or 1-part cementitious stone adhesive, recommended by adhesive manufacturer for type of stone repair indicated, and matching stone color.
1. Available Products: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Two-Part Polyester or Epoxy:
 - 1) Akemi North America; Akepox.
 - 2) Bonstone Materials, Inc.; A-199-T/B-439-T.

- 3) Edison Coatings, Inc.; Flexi-Weld 520T.
 - a) Aggregate for mixing with epoxy: Granite of the same color as the area to be patched, reduced to a fine aggregate with a mallet. Use particles that pass through a No. 50 sieve and are retained on a No. 200 sieve.
 - b. One-Part Cementitious Stone Adhesive:
 - 1) Cathedral Stone Products, Inc.; Jahn Restoration Adhesive.
 - G. Joint Sealant and Backer Rods: Refer to Section 079200 - JOINT SEALANTS.
- 2.5 MORTAR MIXES
- A. Preparing Lime Putty: Slake quicklime and prepare lime putty according to appendix to ASTM C 5 and manufacturer's written instructions.
 - B. Measurement and Mixing: Measure cementitious materials and sand in a dry condition by volume or equivalent weight. Do not measure by shovel; use known measure. Mix materials in a clean, mechanical batch mixer.
 1. Mixing Pointing Mortar: Thoroughly mix cementitious materials and sand together before adding any water. Then mix again adding only enough water to produce a damp, unworkable mix that will retain its form when pressed into a ball. Maintain mortar in this dampened condition for 15 to 30 minutes. Add remaining water in small portions until mortar reaches desired consistency. Use mortar within one hour of final mixing; do not retemper or use partially hardened material.
 - C. Colored Mortar: Produce mortar of color required by using selected ingredients. Do not alter specified proportions without Architect's approval.
 1. Mortar Pigments: Where mortar pigments are indicated, do not exceed a pigment-to-cement ratio of 1:10 by weight.
 2. Color: Match existing, or as otherwise directed by Architect.
 - D. Do not use admixtures of any kind in mortar, unless otherwise indicated.
 - E. Mortar Proportions: Mix mortar materials in the following proportions:
 1. Pointing Mortar for Brick, Type N: 1 part portland cement, 1 part lime, and 6 parts sand.
 - a. Add mortar pigments to produce mortar colors required.
 2. Rebuilding (Setting) and Pointing Mortar, for Stone: Comply with ASTM C 270, Proportion Specification, Type N, unless otherwise indicated, with cementitious material limited to portland cement and lime.
 - a. Mix: 1 part portland cement, 2 parts lime, and 6-7 parts sand.
 - b. Add mortar pigments to produce mortar colors required.

PART 3 - EXECUTION

3.1 PROTECTION

- A. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from masonry restoration work.
 - 1. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of restoration and cleaning work.
- B. Prevent mortar from staining face of surrounding masonry and other surfaces.
 - 1. Cover sills, ledges, and projections to protect from mortar droppings.
 - 2. Keep wall area wet below rebuilding and pointing work to discourage mortar from adhering.
 - 3. Immediately remove mortar in contact with exposed masonry and other surfaces.
 - 4. Clean mortar splatters from scaffolding at end of each day.

3.2 UNUSED ANCHOR OR EMBEDDED STEEL REMOVAL

- A. Remove embedded masonry anchors, brackets, wood nailers, and other extraneous items no longer in use unless identified as historically significant or indicated to remain.
 - 1. Remove items carefully to avoid spalling or cracking masonry.
 - 2. If item cannot be removed without damaging surrounding masonry, cut off item flush with surface and core drill surrounding masonry and item as close around item as practical.
 - 3. Patch holes where items were removed unless directed to remove and replace units.

3.3 MASONRY REMOVAL AND REPLACEMENT

- A. At locations indicated, remove masonry units that are damaged, spalled, or deteriorated. Carefully demolish or remove entire units from joint to joint, without damaging surrounding masonry, in a manner that permits replacement with full-size units.
 - 1. When removing single bricks, remove material from center of brick and work toward outside edges.
- B. Support and protect remaining masonry that surrounds removal area. Maintain flashing, reinforcement, lintels, and adjoining construction in an undamaged condition.
- C. Notify Architect of unforeseen detrimental conditions including voids, cracks, bulges, and loose masonry units in existing masonry backup, rotted wood, rusted metal, and other deteriorated items.
- D. Remove in an undamaged condition as many whole bricks and stones as possible.
 - 1. Remove mortar, loose particles, and soil from brick and stone by cleaning with hand chisels, brushes, and water.
 - 2. Remove sealants by cutting close to brick and stone with utility knife and cleaning with solvents.
 - 3. Store brick and stone for reuse, as indicated.
 - 4. Deliver cleaned brick and stone not required for reuse to Owner, unless otherwise directed.

- E. Clean masonry surrounding removal areas by removing mortar, dust, and loose particles in preparation for replacement.
- F. Install replacement masonry into bonding and coursing pattern of existing masonry, match existing mortar joints for size. If cutting is required, use a motor-driven saw designed to cut masonry with clean, sharp, unchipped edges.
- G. Lay replacement masonry units with completely filled bed, head, and collar joints. Butter ends with sufficient mortar to fill head joints and shove into place. Maintain joint width for replacement units to match existing joints.
 - 1. Bricks: Wet both replacement and surrounding bricks that have ASTM C 67 initial rates of absorption (suction) of more than 30 g/30 sq. in. per min. Use wetting methods that ensure that units are nearly saturated but surface is dry when laid.
 - 2. Tool exposed mortar joints in repaired areas to match joints of surrounding existing masonry work.
 - 3. Rake out mortar used for laying brick and stone before mortar sets and point new mortar joints in repaired area to comply with requirements for repointing existing masonry, and at same time as repointing of surrounding area.

3.4 MASONRY UNIT PATCHING AND REPAIRS

- A. Patch the following masonry units:
 - 1. Units indicated to be patched.
 - 2. Units with holes.
 - 3. Units with chipped edges or corners.
 - 4. Units with small areas of deep deterioration.
- B. Remove and replace existing patches, unless otherwise indicated or approved by Architect.
- C. Patching Bricks:
 - 1. Remove loose material from brick surface. Remove additional material so patch will not have feathered edges and will be at least 1/4 inch thick, but not less than recommended by patching compound manufacturer.
 - 2. Mask or remove surrounding mortar joints if patch will extend to edge of brick.
 - 3. Mix patching compound in individual batches to match each unit being patched. Combine one or more colors of patching compound, as needed, to produce exact match.
 - 4. Rinse surface to be patched and leave damp, but without standing water.
 - 5. Brush-coat surfaces with slurry coat of patching compound according to manufacturer's written instructions.
 - 6. Place patching compound in layers as recommended by patching compound manufacturer, but not less than 1/4 inch or more than 2 inches thick. Roughen surface of each layer to provide a key for next layer.
 - 7. Trowel, scrape, or carve surface of patch to match texture and surface plane of surrounding brick. Shape and finish surface before or after curing, as determined by testing, to best match existing brick.
 - 8. Keep each layer damp for 72 hours or until patching compound has set.
- D. Stone Repairs and Partial Stone Replacement (Dutchman Repair):
 - 1. At locations indicated, remove rectangular portion of stone units. Carefully remove stone by making vertical and horizontal saw cuts at face of stone and demolishing corner portion of stone unit to depth required for fitting partial replacement (Dutchman). Make

- edges of stone at cuts smooth and square to each other and to finished surface. Make back of removal area flat and parallel to stone face.
2. Remove mortar from joints that abut area of stone removal to same depth as stone was removed. Remove loose mortar particles and other debris from surfaces to be bonded and surfaces of adjacent stone units that will receive mortar by cleaning with stiff-fiber brush.
 3. Trim partial replacement (Dutchman) to accurately fit area where stone was removed.
 4. Apply stone-to-stone adhesive to comply with adhesive manufacturer's written instructions. Coat bonding surfaces of existing stone and partial replacement, completely filling all crevices and voids.
 - a. Apply partial replacement or fit stone fragments onto building stone while adhesive is still tacky and hold fragment securely in place until adhesive has cured.
 - b. Use shims, clamps, wedges, or other devices as necessary to align face of partial replacement with face of stone unit being repaired.
 5. After adhesive has fully cured, further anchor partial replacements where indicated with 1/4-inch- diameter, plain stainless-steel rods set into 1/4-inch- diameter holes drilled at a 45-degree downward angle through face of stone. Center and space anchor rods between 3 and 5 inches apart and at least 2 inches from any edge. Insert rods at least 2 inches into backing stone and 2 inches into partial replacements with end countersunk at least 3/4 inch from exposed face of stone.
 6. Clean residual adhesive from exposed surfaces.

3.5 CLEANING MASONRY, GENERAL

- A. Examination: Examine all surfaces scheduled for cleaning, for roughness, contaminants, unsound structural substrates, or other conditions that may impair the application. Notify the Engineer in writing of any such conditions; do not continue work until directed by Architect on how to proceed.
 1. Monitor weather prior to work to ensure that air temperatures remain between 50°F and 85°F, or as recommended by the manufacturer of chemical compounds and proprietors of cleaning methods.
 2. Ensure that building components not to be cleaned, adjacent persons, property, and plant life are protected from all cleaning activities and wind drift. Test adjacent non-masonry materials for reaction with cleaning materials. Mask all windows, ornamental fixtures, hardware, wood doors, or other non-masonry surfaces.
- B. Proceed with cleaning in an orderly manner; work from top to bottom of each scaffold width and from one end of each elevation to the other.
- C. Use only those cleaning methods indicated for each masonry material and location.
 1. Do not use wire brushes or brushes that are not resistant to chemical cleaner being used. Do not use plastic-bristle brushes if natural-fiber brushes will resist chemical cleaner being used.
 2. Use spray equipment that provides controlled application at volume and pressure indicated, measured at spray tip. Adjust pressure and volume to ensure that cleaning methods do not damage masonry.
 - a. Equip units with pressure gages.
 - b. Provide spray applications as follows:
 - 1) Low-Pressure Spray: 100 to 400 psi; 4 to 6 gpm.
 - 2) Medium-Pressure Spray: 400 to 800 psi; 4 to 6 gpm.

- 3) High-Pressure Spray: 800 to 1200 psi; 4 to 6 gpm.
 3. For chemical cleaner spray application, use low-pressure tank or chemical pump suitable for chemical cleaner indicated, equipped with cone-shaped spray tip.
 4. For water spray application, use fan-shaped spray tip that disperses water at an angle of 25 to 50 degrees.
 5. For high-pressure water spray application, use fan-shaped spray tip that disperses water at an angle of at least 40 degrees.
 6. For heated water spray application, use equipment capable of maintaining temperature between 140 and 160 deg F at flow rates indicated.
 7. For steam application, use steam generator capable of delivering live steam at nozzle.
- D. Perform each cleaning method indicated in a manner that results in uniform coverage of all surfaces, including corners, moldings, and interstices, and that produces an even effect without streaking or damaging masonry surfaces.
- E. Removing Plant Growth: Completely remove plant, moss, and shrub growth from masonry surfaces. Carefully remove plants, creepers, and vegetation by cutting at roots and allowing to dry as long as possible before removal. Remove loose soil and debris from open masonry joints to whatever depth they occur.
- F. Preliminary Cleaning: Before beginning general cleaning, remove extraneous substances that are resistant to cleaning methods being used. Extraneous substances include paint, calking, asphalt, and tar.
 1. Carefully remove heavy accumulations of material from surface of masonry with a sharp chisel. Do not scratch or chip masonry surface.
 2. Remove paint and calking with alkaline paint remover.
 - a. Comply with requirements for paint removal.
 - b. Repeat application up to two times if needed.
 3. Remove asphalt and tar with solvent-type paint remover.
 - a. Apply only to asphalt and tar by brush without prewetting.
 - b. Allow paint remover to remain on surface for 10 to 30 minutes.
 - c. Rinse off with water using low-pressure spray.
 - d. Repeat application if needed.
- G. Water Application Methods:
 1. Water Soak Application, for Stone: Soak stone surfaces by applying water continuously and uniformly to limited area for time indicated. Apply water at low pressures and low volumes in multiple fine sprays using perforated hoses or multiple spray nozzles. Erect a protective enclosure constructed of polyethylene sheeting to cover area being sprayed.
 2. Spray Applications, for Brick and Stone: Unless otherwise indicated, hold spray nozzle at least 6 inches from surface of stone and apply water in horizontal back and forth sweeping motion, overlapping previous strokes to produce uniform coverage.
- H. Steam Wash: Apply steam to masonry surfaces at pressures not exceeding 80 psi. Hold nozzle at least 6 inches from surface of masonry and apply steam in horizontal back and forth sweeping motion, overlapping previous strokes to produce uniform coverage.

- I. Chemical Cleaner Application Methods: Apply chemical cleaners to masonry surfaces to comply with chemical cleaner manufacturer's written instructions; use brush or spray application methods, at Contractor's option. Do not spray apply at pressures exceeding 50 psi. Do not allow chemicals to remain on surface for periods longer than those indicated or recommended by manufacturer.
- J. Rinse off chemical residue and soil by working upward from bottom to top of each treated area at each stage or scaffold setting. Periodically during each rinse, test pH of rinse water running off of cleaned area to determine that chemical cleaner is completely removed.
 - 1. Apply neutralizing agent and repeat rinse, if necessary, to produce tested pH of between 6.7 and 7.5.
- K. After cleaning is complete, remove protection no longer required. Remove tape and adhesive marks.

3.6 PAINT REMOVAL

A. Paint Removal with Alkaline Paste Paint Remover:

- 1. Apply paint remover to dry, painted masonry with brushes.
- 2. Allow paint remover to remain on surface for period recommended by manufacturer.
- 3. Rinse with water applied by low-pressure spray to remove chemicals and paint residue.
- 4. Repeat process, if necessary, to remove all paint.
- 5. Apply acidic cleaner to masonry, while surface is still wet, using low-pressure spray equipment or soft-fiber brush. Let cleaner remain on surface for period recommended by chemical cleaner manufacturer.
- 6. Rinse with cold water applied by low-pressure spray to remove chemicals and soil.

B. Paint Removal with Covered or Skin-Forming Alkaline Paint Remover:

- 1. Apply paint remover to dry, painted masonry with trowel, spatula, or as recommended by manufacturer.
- 2. Apply cover, if required by manufacturer, per manufacturer's written instructions.
- 3. Allow paint remover to remain on surface for period recommended by manufacturer or as determined in test panels.
- 4. Scrape off paint and remover and collect for disposal.
- 5. Rinse with water applied by low-pressure spray to remove chemicals and paint residue.
- 6. Use alkaline paste paint remover according to "Paint Removal with Alkaline Paste Paint Remover" Paragraph, if necessary, to remove remaining paint.
- 7. Apply acidic cleaner to masonry, while surface is still wet, using low-pressure spray equipment or soft-fiber brush. Let cleaner remain on surface for period recommended by chemical cleaner manufacturer.
- 8. Rinse with cold water applied by low-pressure spray to remove chemicals and soil.

C. Paint Removal with Solvent-Type Paint Remover:

- 1. Apply thick coating of paint remover to painted masonry with natural-fiber cleaning brush, deep-nap roller, or large paint brush.
- 2. Allow paint remover to remain on surface for period recommended by manufacturer. Agitate periodically with stiff-fiber brush.
- 3. Rinse with cold water applied by low-pressure spray to remove chemicals and paint residue.

3.7 MASONRY CLEANING

- A. Cold-Water Wash: Use cold water applied by low-pressure spray.
- B. Cold Water Soak:
 - 1. Apply cold water by intermittent soaking.
 - 2. Use perforated hoses or other means that will apply a fine water mist to entire surface being cleaned.
 - 3. Apply water in cycles with at least 30 minutes between cycles.
 - 4. Continue water application until surface encrustation has softened sufficiently to permit its removal by water wash, as indicated by cleaning tests.
 - 5. Remove soil and softened surface encrustation from masonry with cold water applied by low-pressure spray.
- C. Hot-Water Wash: Use hot water applied by low-pressure spray.
- D. Steam Cleaning: Apply steam at pressures not exceeding 80 psi.
- E. Detergent Cleaning:
 - 1. Wet masonry with water applied by low-pressure spray.
 - 2. Scrub masonry with detergent solution using medium-soft brushes until soil is thoroughly dislodged and can be removed by rinsing. Use small brushes to remove soil from mortar joints and crevices. Dip brush in solution often to ensure that adequate fresh detergent is used and that masonry surface remains wet.
 - 3. Rinse with water applied by low-pressure spray to remove detergent solution and soil.
 - 4. Repeat cleaning procedure above where required to produce cleaning effect established by mockup.
- F. Mold, Mildew, and Algae Removal:
 - 1. Wet masonry with water applied by low-pressure spray.
 - 2. Apply mold, mildew, and algae remover by brush or low-pressure spray.
 - 3. Scrub masonry with medium-soft brushes until mold, mildew, and algae are thoroughly dislodged and can be removed by rinsing. Use small brushes for mortar joints and crevices. Dip brush in mold, mildew, and algae remover often to ensure that adequate fresh cleaner is used and that masonry surface remains wet.
 - 4. Rinse with water applied by low-pressure spray to remove mold, mildew, and algae remover and soil.
 - 5. Repeat cleaning procedure above where required to produce cleaning effect established by mockup.
- G. Nonacidic Gel Chemical Cleaning:
 - 1. Wet masonry with water applied by low-pressure spray.
 - 2. Apply nonacidic gel cleaner in 1/8-inch thickness by brush, working into joints and crevices. Apply quickly and do not brush out excessively so area will be uniformly covered with fresh cleaner and dwell time will be uniform throughout area being cleaned.
 - 3. Let cleaner remain on surface for period indicated below:
 - a. As recommended by chemical cleaner manufacturer.
 - b. As established by mockup.

4. Remove bulk of nonacidic gel cleaner by squeegeeing into containers for disposal.
5. Rinse with water applied by low-pressure spray to remove chemicals and soil.
6. Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not repeat more than once. If additional cleaning is required, use steam wash.

H. Nonacidic Liquid Chemical Cleaning:

1. Wet masonry with water applied by low-pressure spray.
2. Apply cleaner to masonry in two applications by brush. Let cleaner remain on surface for period indicated below:
 - a. As recommended by chemical cleaner manufacturer.
 - b. As established by mockup.
 - c. Two to three minutes.
3. Rinse with water applied by low-pressure spray to remove chemicals and soil.
4. Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not repeat more than once. If additional cleaning is required, use steam wash.

I. Mild Acidic Chemical Cleaning:

1. Wet masonry with cold water applied by low-pressure spray.
2. Apply cleaner to masonry in two applications by brush or low-pressure spray. Let cleaner remain on surface for period indicated below:
 - a. As recommended by chemical cleaner manufacturer.
 - b. As established by mockup.
 - c. Two to three minutes.
3. Rinse with cold water applied by low-pressure spray to remove chemicals and soil.
4. Repeat cleaning procedure above where required to produce cleaning effect established by mockup. Do not repeat more than once. If additional cleaning is required, use steam wash.

3.8 REPOINTING MASONRY – As directed by Owner

A. Do not rake out and repoint joints where not required.

B. Rake out joints as follows:

1. Remove mortar from joints to depth of 2 times joint width, but not less than 1/2 inch or not less than that required to expose sound, unweathered mortar.
2. Remove mortar from masonry surfaces within raked-out joints to provide reveals with square backs and to expose masonry for contact with pointing mortar. Brush, vacuum, or flush joints to remove dirt and loose debris.
3. Do not spall edges of masonry units or widen joints. Replace or patch damaged masonry units as directed by Architect.
 - a. Cut out mortar by hand with chisel and mallet. Do not use power-operated grinders without Architect's written approval based on submission by Contractor of a satisfactory quality-control program and demonstrated ability of operators to use

- tools without damaging masonry. Quality-control program shall include provisions for supervising performance and preventing damage due to worker fatigue.
- b. Cut out center of mortar bed joints using angle grinders with diamond-impregnated metal blades. Remove remaining mortar by hand with chisel and mallet. Strictly adhere to written quality-control program. Quality-control program shall include provisions for demonstrating ability of operators to use tools without damaging masonry, supervising performance, and preventing damage due to worker fatigue.
- C. Notify Architect of unforeseen detrimental conditions including voids in mortar joints, cracks, loose masonry units, rotted wood, rusted metal, and other deteriorated items.
- D. Point joints as follows:
- 1. Rinse masonry-joint surfaces with water to remove dust and mortar particles. Time rinsing application so, at time of pointing, joint surfaces are damp but free of standing water. If rinse water dries, dampen masonry-joint surfaces before pointing.
 - 2. Apply pointing mortar first to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch until a uniform depth is formed. Fully compact each layer thoroughly and allow it to become thumbprint hard before applying next layer.
 - 3. After low areas have been filled to same depth as remaining joints, point all joints by placing mortar in layers not greater than 3/8 inch. Fully compact each layer and allow to become thumbprint hard before applying next layer.
 - a. Where existing bricks have worn or rounded edges, slightly recess finished mortar surface below face of masonry to avoid widened joint faces.
 - b. Take care not to spread mortar over edges onto exposed masonry surfaces or to featheredge mortar.
 - 4. When mortar is thumbprint hard, tool joints to match original appearance of joints. Remove excess mortar from edge of joint by brushing.
- E. Cure mortar by maintaining in thoroughly damp condition for at least 72 hours including weekends and holidays.
- 1. Acceptable curing methods include covering with wet burlap and plastic sheeting, periodic hand misting, and periodic mist spraying using system of pipes, mist heads, and timers.
 - 2. Adjust curing methods to ensure that pointing mortar is damp throughout its depth without eroding surface mortar.
- F. Where repointing work precedes cleaning of existing masonry, allow mortar to harden at least 30 days before beginning cleaning work.
- 3.9 FINAL CLEANING
- A. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter; use wood scrapers, stiff-nylon or -fiber brushes, and clean water, spray applied at low pressure.
- 1. Do not use metal scrapers or brushes.
 - 2. Do not use acidic or alkaline cleaners.

- B. Wash adjacent woodwork and other nonmasonry surfaces. Use detergent and soft brushes or cloths.
- C. Clean masonry debris from roof; remove debris from gutters and downspouts. Rinse off roof and flush gutters and downspouts.
- D. Sweep and rake adjacent pavement and grounds to remove masonry debris. Where necessary, pressure wash surfaces to remove mortar, dust, dirt, and stains.

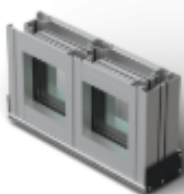
3.10 FIELD QUALITY CONTROL

- A. Inspectors: Owner will engage qualified independent inspectors to perform inspections and prepare test reports. Coordinate with inspectors and provide access. Allow inspectors use of lift devices and scaffolding, as needed, to perform inspections.

END OF SECTION

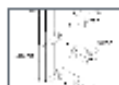
STOREFRONT FRAMING

TRIFAB® VERSAGLAZE® 451/451T FRAMING SYSTEM



Trifab® VersaGlaze® Framing System is built on the proven and successful Trifab® Framing platform – with all the versatility its name implies. Designed for performance and unmatched fabrication flexibility, the Trifab® VersaGlaze® Framing System can be used on almost any project. Trifab® VersaGlaze® Framing System also offers a pre-glaze option for the existing center set screw spline assembly application, available on non-thermal, thermal and ultra-thermal frame types. Pre-glaze units can be completely fabricated and glazed in the shop, minimizing job-site costs and enhancing field-installed quality.

- 2" (50.8mm) sightline
- 4-1/2" (114.3mm) depth
- High-thermal performance
- Front, center, back or multi-plane glass applications
- Blast mitigation (451T), hurricane resistance
- Structural silicone glazed (SSG) options, pre-glazed options



+2

Features

Sustainability

Documentation

Finishes

Specs

CAD Details

Revit / BIM

Warranty

Safety Data Sheets

- Hurricane impact tested on shutter application only
- 4-1/2" (114.3) deep with a 2" (50.8) sightline
- Front, center, back or multi-plane glass applications
- Flush glazed from either the inside or outside
- Screw spline, shear block, stick or type-B fabrication
- Screw spline pre-glaze option
- SSG / weather seal option
- Isolock® lanced and debridged thermal break option
- Infill options up to 1-1/8" (28.6) thickness
- Anodized finishes in four choices
- Painted finishes in standard and custom choices

Optional Features

- Acoustical rating per AAMA 1801 and ASTM E 1425
- Project specific U-factors (see Thermal Charts in Architectural Detail Manual)
- ProfitSMaker® plus die sets available

Pre-glaze option features*

- Tested solution with installation instructions enables shop fabrication and reduces field labor
- Vertical mullions with 1/4" reveal provide uniform aesthetics
- High-performance sill flashing and clip design reduce installation time
- Composite end jamb allows for ease of installation of the last bay
- Trifab® 451/451T/451UT Framing Systems provide the right thermal performance for your project
- View our pre-glaze option flyer [here](#)

*For Trifab® 451/451T/451UT Framing System center set screw spline assembly applications only

Product Applications

- Storefront, ribbon window or punched openings
- Single span
- Integrated entrance framing allowing Kawneer standard entrances or other specialty entrances to be incorporated
- Kawneer windows are easily incorporated

Thermal Technology

Find out more [here](#).

Blast Resistant

Find out more [here](#).

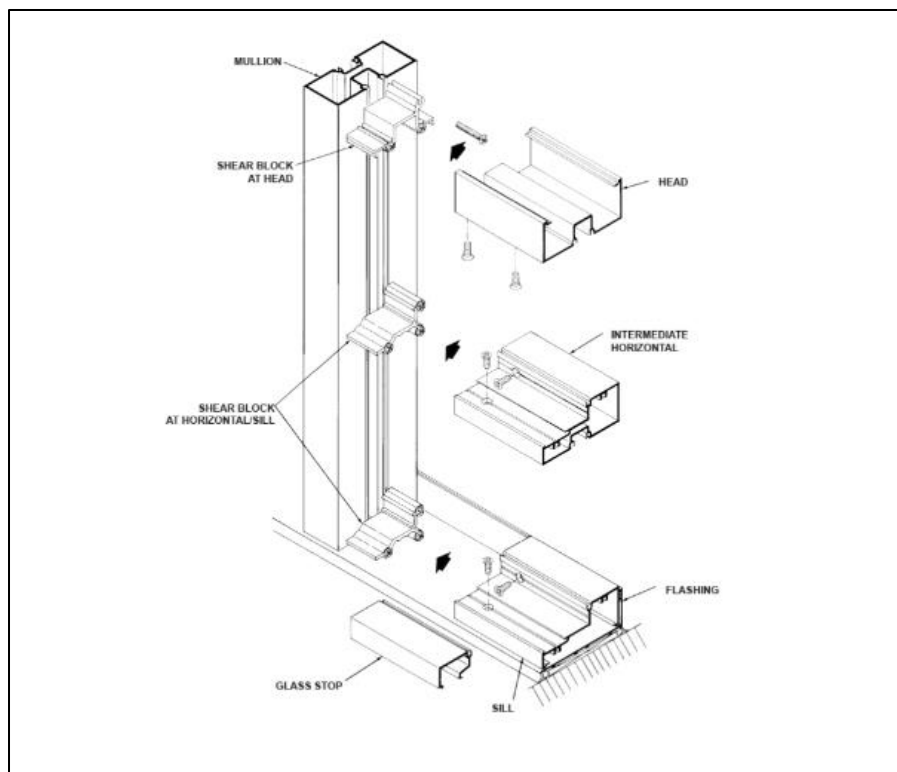
Hurricane Resistant

Find out more [here](#).

Related Product Approvals

- [Florida Product or Application Search](#) 7237.2, 14287.1, 32590.1, 37876
- [Texas TDI-Developed Evaluation Reports](#) CWSF-74

Find out more [here](#).





CITY OF BIDDEFORD PLANNING DEPARTMENT

HISTORIC PRESERVATION COMMISSION APPLICATION FOR A CERTIFICATE OF APPROPRIATENESS

Applicant's/Owner's Information:

Applicant's Name: _____

Applicant's Address: _____

Applicant's Phone(s): _____

Applicant's E-mail: _____

Applicant's Legal Interest in the Property:

Owner

Purchase and Sale

Tenant - Lease/Rental Agreement

Owner's Name: _____

Owner's Address: _____

Owner's Phone(s): _____

Owner's E-mail: _____

Representative(s) - Agent, Engineer, Architect, and/or Contractor Information:

Agent's Name: _____

Agent's Address: _____

Agent's Phone(s): _____

Agent's E-mail: _____

Attach separate pages where multiple representatives are involved.



CITY OF BIDDEFORD PLANNING DEPARTMENT

Project Information:

Project Address: _____

Project Zone: _____ Property Map & Lot Number(s): _____

Existing Use of Property:

☐ Residential ☐ Commercial ☐ Mixed Use ☐ Industrial ☐ Institutional

COMMISSION Full Review Project Activities \$275.00 Fee (check all that apply):

Alterations and Repair

Removal and/or replacement of architectural detailing (for example porch spindles and columns, railings, windows and window moldings, and cornices)

Installation or replacement of siding

Porch replacement or construction of new porches

Installation or replacement of either roofing or gutters when they are a significant and integral feature of the structure

Alteration of accessory structures such as garages

Other: _____

Additions and New Construction

New Construction

Building additions, including rooftop additions, dormers or decks

Construction of accessory structures

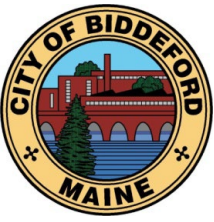
Installation of exterior access stairs or fire escapes

Installation of antennas and satellite receiving dishes

Installation of solar collectors

Rooftop mechanicals (e.g., HVAC)

Other: _____



CITY OF BIDDEFORD PLANNING DEPARTMENT

Moving and Demolition

Moving of structures or objects on the same site or to another site

Any demolition or relocation of a landmark contributing and/or contributing structure within a district

Other: _____

SUBCOMMITTEE Review Project Activities \$50.00 Fee (check all that apply):

Alterations and Repair

Masonry work, including repointing, sandblasting, chemical cleaning, painting where the masonry has never been painted, or conversely, removal of paint where the masonry historically has been painted

Other: _____

Signage and Exterior Utilities

Installation or alteration of any exterior sign, awning, or related lighting

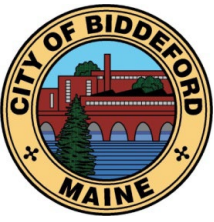
Exterior lighting where proposed in conjunction with commercial and institutional signage or awnings

Exterior utilities, including mechanical, plumbing, and electrical, where placed on or near clearly visible facades

Other: _____

Note: In cases where the project is minor in nature, the Planning Department may determine that even if the activity qualifies for full Commission review it would be more appropriate to have it delegated to Subcommittee review.

Note: Your project may also require a building permit. Please call the Code Enforcement Office (284-9236) to make this determination.



CITY OF BIDDEFORD PLANNING DEPARTMENT

Submittal Information Checklist:

Required Application Fee: If full Commission review is required - \$275.00

 If Subcommittee review is required – \$50.00

Completed Application Form

Description of Proposed Activity

Photographs of the building involved as well as adjacent buildings

Samples of materials proposed for use in the activity

Drawings (i.e., exterior elevations) and/or plans to illustrate the proposed activity for
which the certificate is being applied for, including lettering styles (if applicable)

Signature of applicant: _____

Date: _____

Signature of
property owner (Required): _____

Date: _____



Biddeford Design Guidelines

COLORS:



R: 27
G: 77
B: 121



R: 51
G: 120
B: 183



R: 149
G: 46
B: 41

FONTS:

Gills Sans MT
Garamond

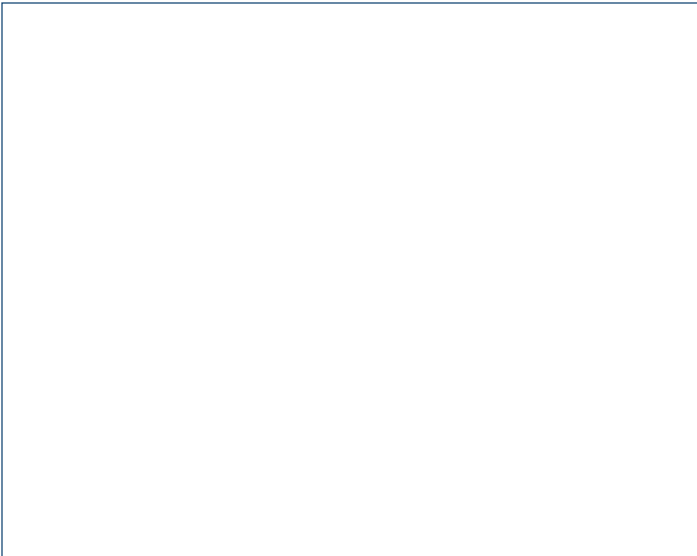


Figure X: Text.

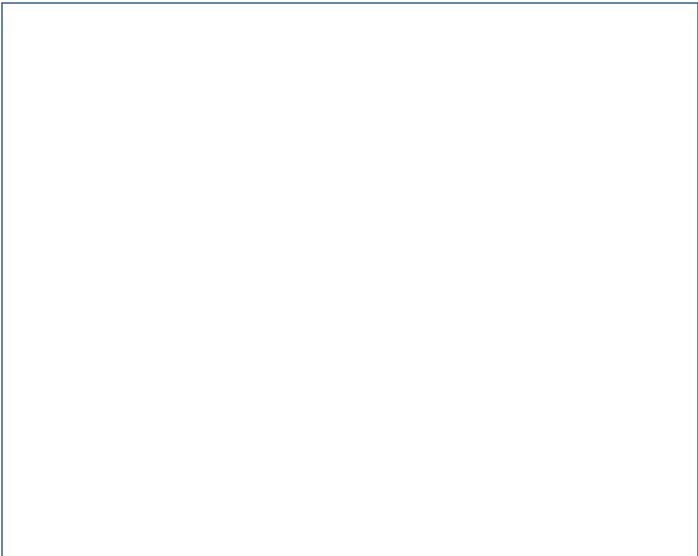


Figure X: Text.

Chapter 2: Biddeford Historic Preservation Program

2.1 Introduction to the Biddeford Historic Preservation Program

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- a) HPC Membership, Powers, and Duties
- b) HPC Review Area

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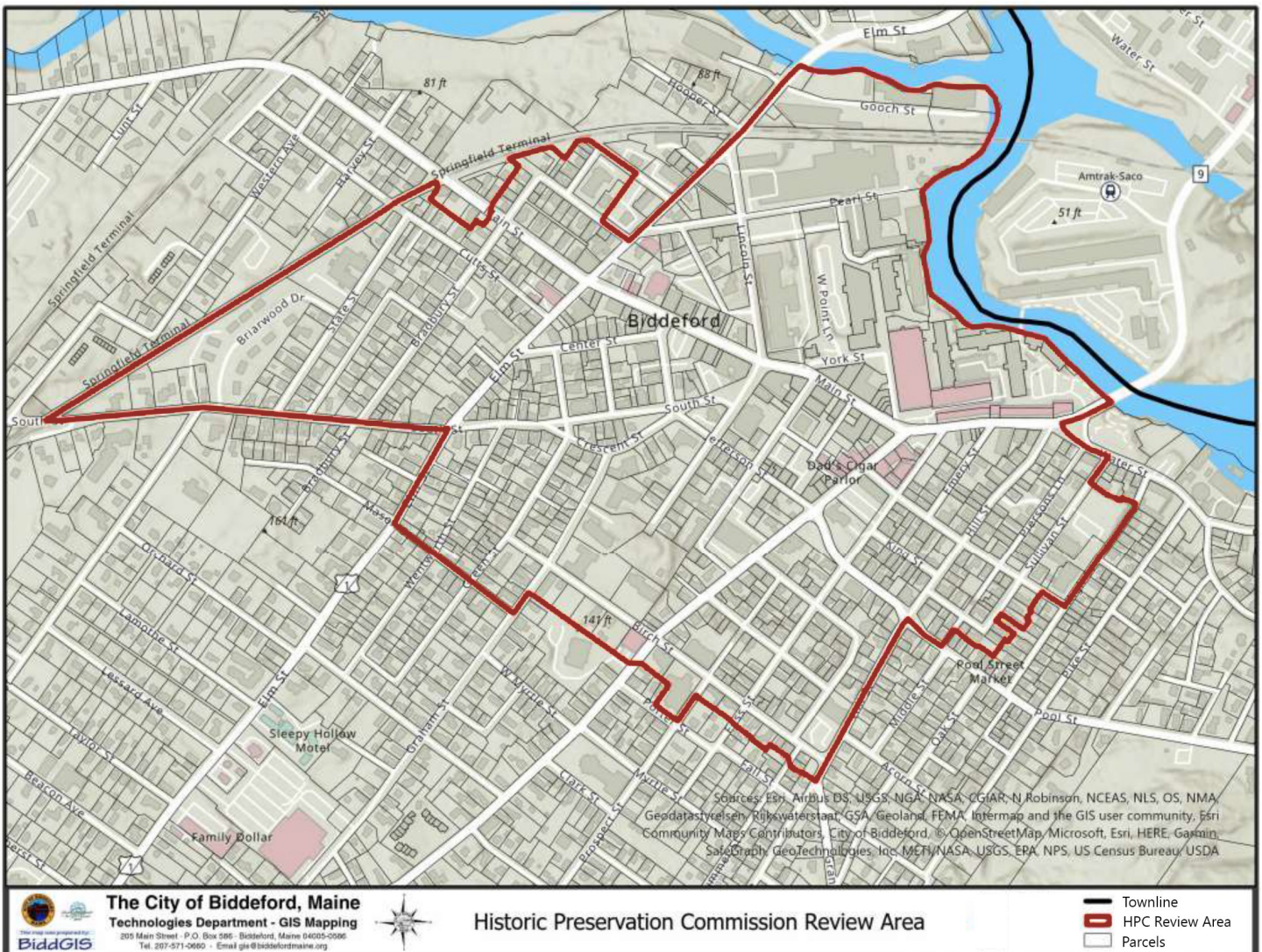


Figure 1: Map of the Historic Preservation Commission Review Area.

Chapter 5: Design Guidelines

5.1 Overarching Design Guidelines for All Projects

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Guideline 5.1.1. Preserve/Retain Significant Features

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- a) Lorem ipsum dolor sit amet, consectetur adipiscing elit.
- b) Maecenas porttitor congue massa.

Guideline 5.1.2. Repair Rather than Replace

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- b) Maecenas porttitor congue massa.

Past Projects: A Review

Has the outcome of this project protected
Biddeford's historic resources?

Project: 146 Alfred Street

The applicant rehabilitated a former commercial building into a single family dwelling.

Project: 146 Alfred Street



Before – June 2024



After - September 2024

Project: 146 Alfred Street



Before – June 2019



After - September 2024