

34 Beacon St – Scope of Work

- Exterior renovations to include masonry repointing and cleaning to front and side facades
- Misc. metal replacement and painting on Beacon Street side.
- Removal and replacement of first floor balcony including T&G roof, wood decking, and deteriorating metal railing, anchors and roof framing.
- Replacement of (qty 3) balcony door sashes on Beacon Street side.
- Replacement of windows at 1st, 2nd, 3rd, and 4th floors (qty 41) custom operable African mahogany windows with new brick molds all to match existing profiles.



GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO THE COMMONWEALTH OF MASSACHUSETTS STATE BUILDING CODE, 9th EDITION.
2. THE GENERAL CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL PERMITS.
3. THE GENERAL CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL POLICE DETAILS.
4. THE BUILDING WILL BE OCCUPIED DURING CONSTRUCTION; MAINTAIN ALL EGRESS COMPONENTS AND PATHWAYS - DO NOT BLOCK EGRESS COMPONENTS.
5. PROVIDE TEMPORARY BARRIERS AND PROTECTION FOR ALL OCCUPANTS.
6. PROVIDE A MINIMUM 72-HOUR NOTICE TO THE OWNER PRIOR TO SHUTTING DOWN MEP/FP/TEL/DATA SERVICES.
7. PROVIDE SUBMITTALS, PRODUCT DATA AND SHOP DRAWINGS FOR REVIEW AND/OR APPROVAL BY CONSULTANT FOR ALL WORK, PRIOR TO START OF CONSTRUCTION. SEE PROJECT CONTRACT AND SPECIFICATION REQUIREMENTS.
8. PROVIDE DEMOLITION AND SELECTIVE DEMOLITION AS SHOWN ON PLANS; REMOVE THE WASTE DEBRIS FROM THE SITE TO A RECYCLE CENTER COMPANY AND/OR LEGAL LANDFILL DISPOSAL SITE. REMOVE DEBRIS IMMEDIATELY; DO NOT ALLOW TO STOCKPILE ON FLOORS AND ROOF.
9. SHORING, BRACING AND PINNING MEANS AND METHODS IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
10. PROTECT ALL EXISTING BUILDING COMPONENTS TO REMAIN. PROVIDE A PRE-CONSTRUCTION PHOTO SURVEY (INTERIOR AND EXTERIOR). ALL BUILDING COMPONENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED AT NO COST TO THE OWNER.
11. CONTRACTOR SHALL BE RESPONSIBLE TO CHECK AND COORDINATE ALL DIMENSIONS WITH CONSULTANT DRAWINGS. IN CASE OF CONFLICT, THE CONSULTANT SHALL BE NOTIFIED AND SHALL RESOLVE THE CONFLICT.
12. IN ANY CASE OF CONFLICT BETWEEN THE DRAWINGS AND THE PROJECT SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
13. THE CONTRACTOR SHALL MAKE NO DEVIATION FROM DESIGN DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR REVIEW BY THE CONSULTANT.
14. WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT THE CORRESPONDING PLACES SHALL BE REPEATED.
15. ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND LOCAL LAWS AND REGULATIONS.
16. CONTRACTOR SHALL NOT SCALE DRAWINGS. CONTRACTOR SHALL REQUEST ALL DIMENSIONS OR INFORMATION REQUIRED TO PERFORM THE WORK FROM THE CONSULTANT. WORK COMPLETED BY THE CONTRACTOR WITHOUT DIMENSIONS OR INFORMATION SHALL BE DONE AT THEIR OWN RISK AND SHALL BE REMOVED AND REINSTALLED TO THE SPECIFICATIONS OF THE CONSULTANT AT NO ADDITIONAL COST TO THE OWNER.
17. CONTRACTOR SHALL COOPERATE WITH THE WORK OF OTHER TRADES AS REQUIRED TO ALLOW PROPER EXECUTION OF WORK IN THESE AREAS.
18. CONTRACTOR SHALL REFER TO PROJECT MANUAL FOR ADDITIONAL PROJECT REQUIREMENTS AND CONDITIONS.
19. MEANS AND METHODS OF CONSTRUCTION, COMPLIANCE WITH OSHA AND OTHER SAFETY LAWS AND REGULATION IS EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR, HIS SUBCONTRACTOR(S), SUPPLIERS, CONSULTANTS AND SERVANTS.
20. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS. BRING TO THE ATTENTION OF THE OWNER/CONSULTANT ANY UNEXPECTED EXISTING CONDITIONS UNCOVERED DURING THE PROJECT. NO WORK SHALL COMMENCE UNTIL THE CONDITIONS IN QUESTION ARE REVIEWED, EVALUATED, APPROVED & DIRECTED BY THE OWNER AND CONSULTANT.
21. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR WINDOW AND DOOR REPLACEMENT WORK.



NORTHEASTERN UNIVERSITY
34 Beacon Boston, Massachusetts

FACADE RESTORATION

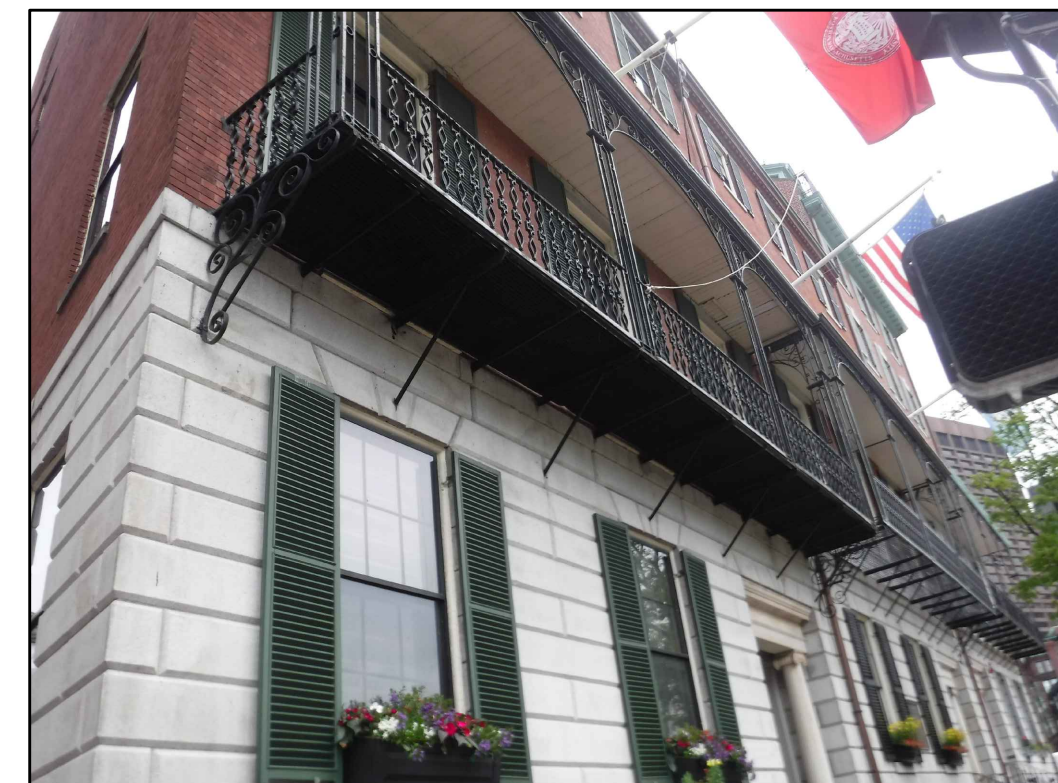
DRAWING LIST

- ARCHITECTURAL:
- CS COVER SHEET
 - A001 PHOTO SHEET
 - A002 SCOPE OF WORK
 - A003 SCOPE OF WORK
 - A100 PROPOSED ROOF PLAN
 - A200 PROPOSED ELEVATION
 - A300 PROPOSED SECTIONS
 - A400 PROPOSED DETAILS
 - A401 PROPOSED DETAILS



SOUTH ELEVATION

1 EXISTING CONDITIONS - PHOTO 1
SCALE: NOT TO SCALE



SOUTH ELEVATION

2 EXISTING CONDITIONS - PHOTO 2
SCALE: NOT TO SCALE



WEST ELEVATION

3 EXISTING CONDITIONS - PHOTO 3
SCALE: NOT TO SCALE



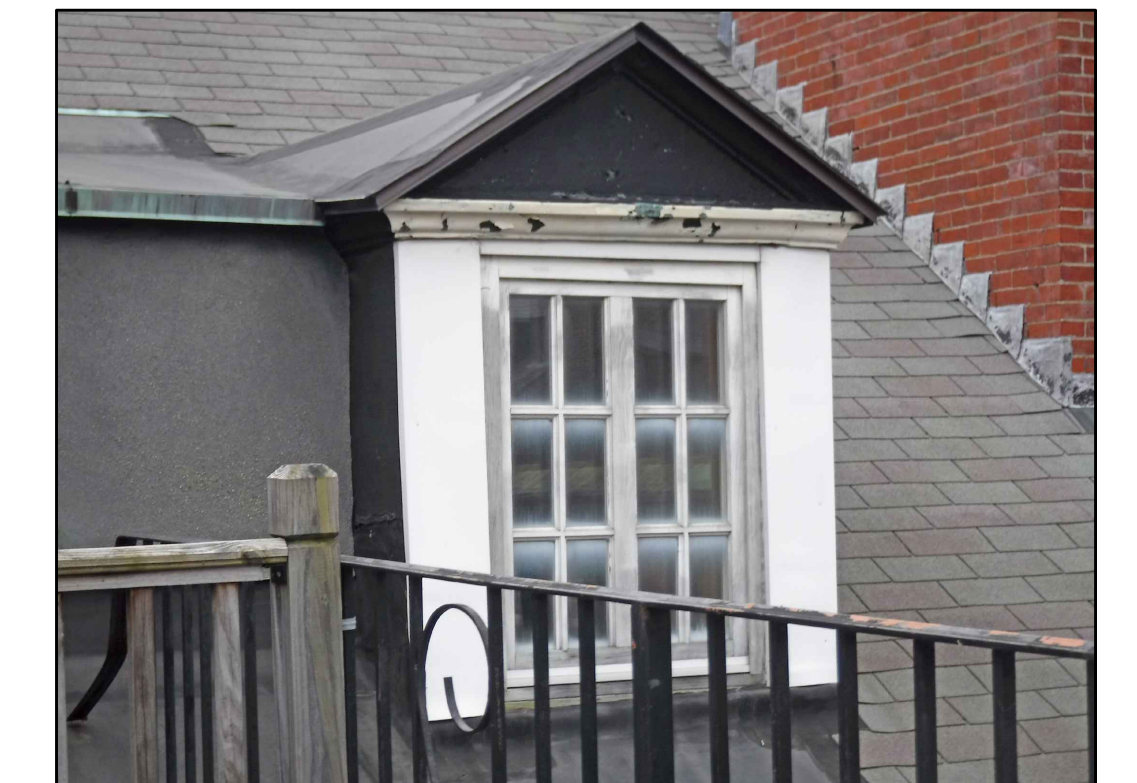
FLAT PORTION OF ROOF

4 EXISTING CONDITIONS - PHOTO 4
SCALE: NOT TO SCALE



NORTH ELEVATION

5 EXISTING CONDITIONS - PHOTO 5
SCALE: NOT TO SCALE



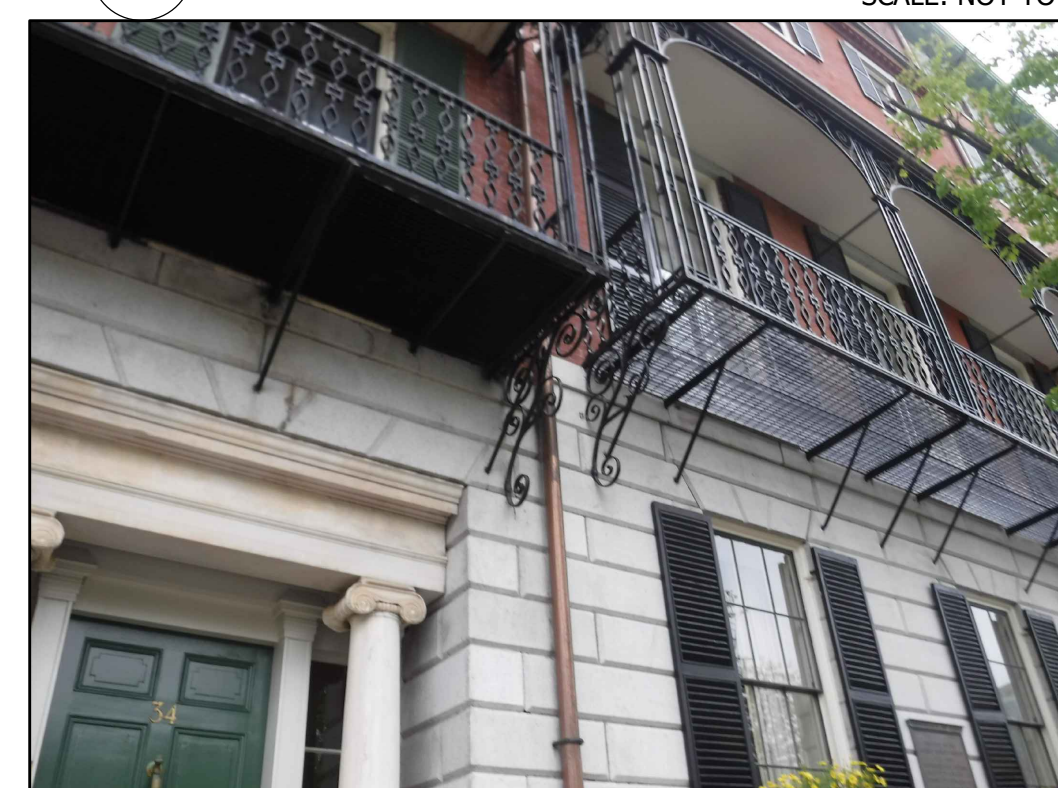
NORTH ELEVATION WINDOW

6 EXISTING CONDITIONS - PHOTO 6
SCALE: NOT TO SCALE



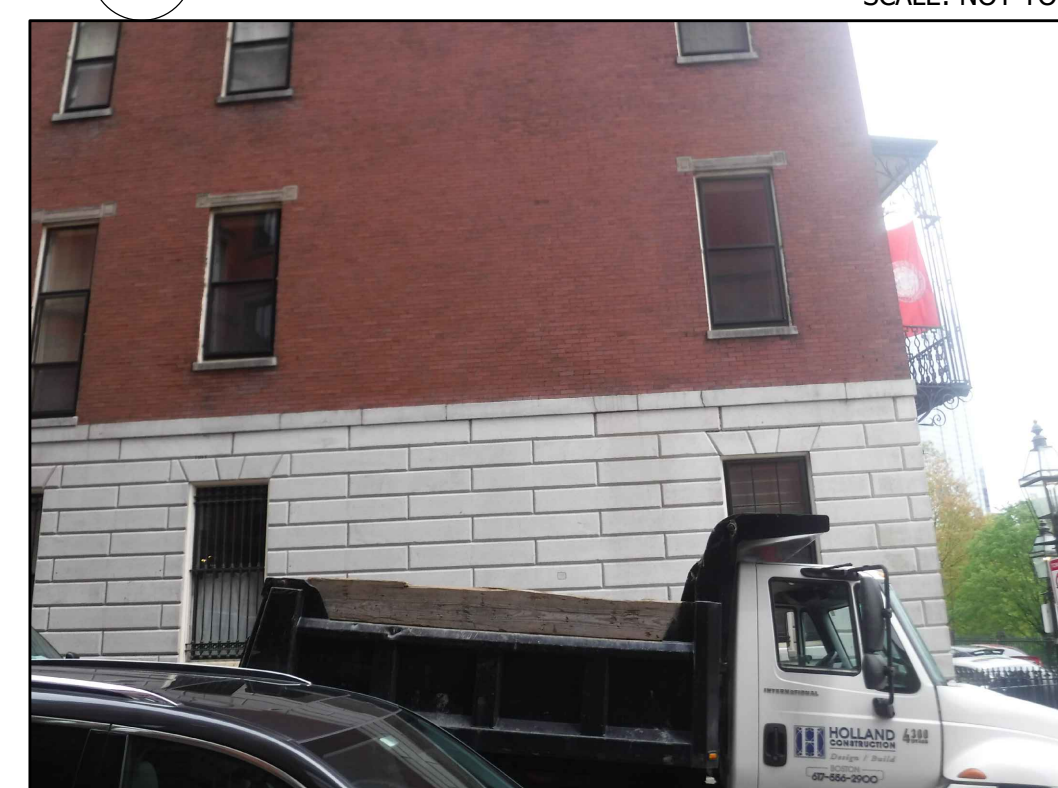
SOUTH ELEVATION CANOPY

7 EXISTING CONDITIONS - PHOTO 7
SCALE: NOT TO SCALE



SOUTH ELEVATION

8 EXISTING CONDITIONS - PHOTO 8
SCALE: NOT TO SCALE



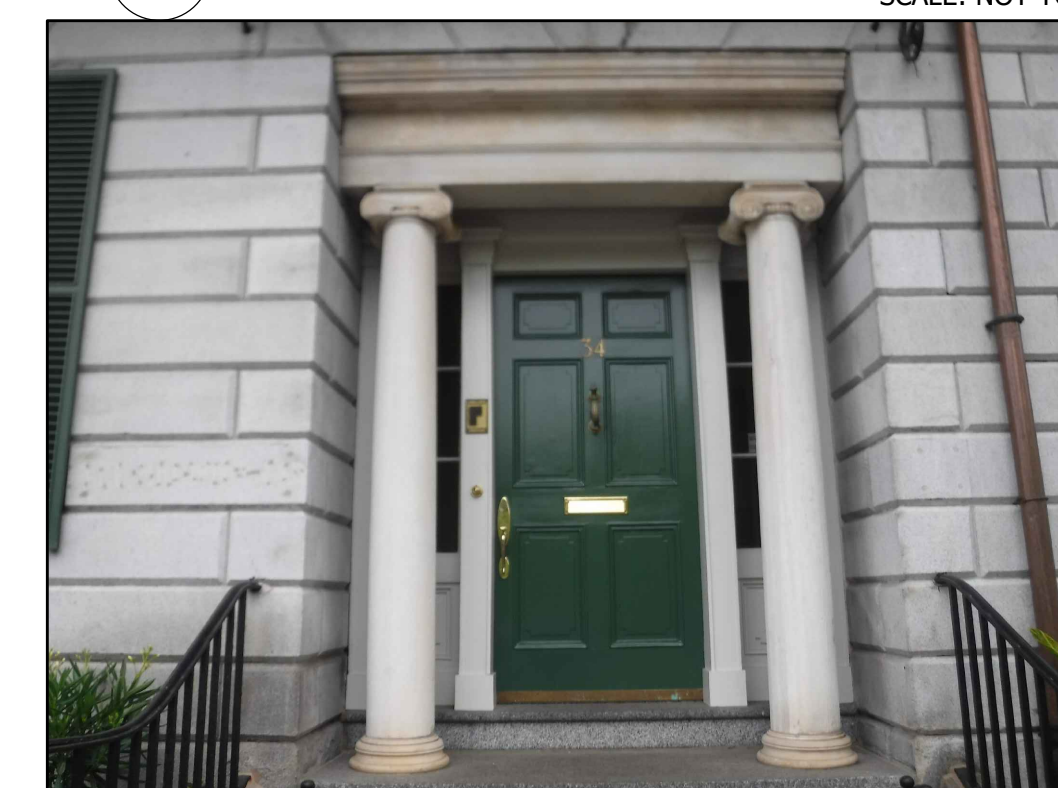
WEST ELEVATION

9 EXISTING CONDITIONS - PHOTO 9
SCALE: NOT TO SCALE



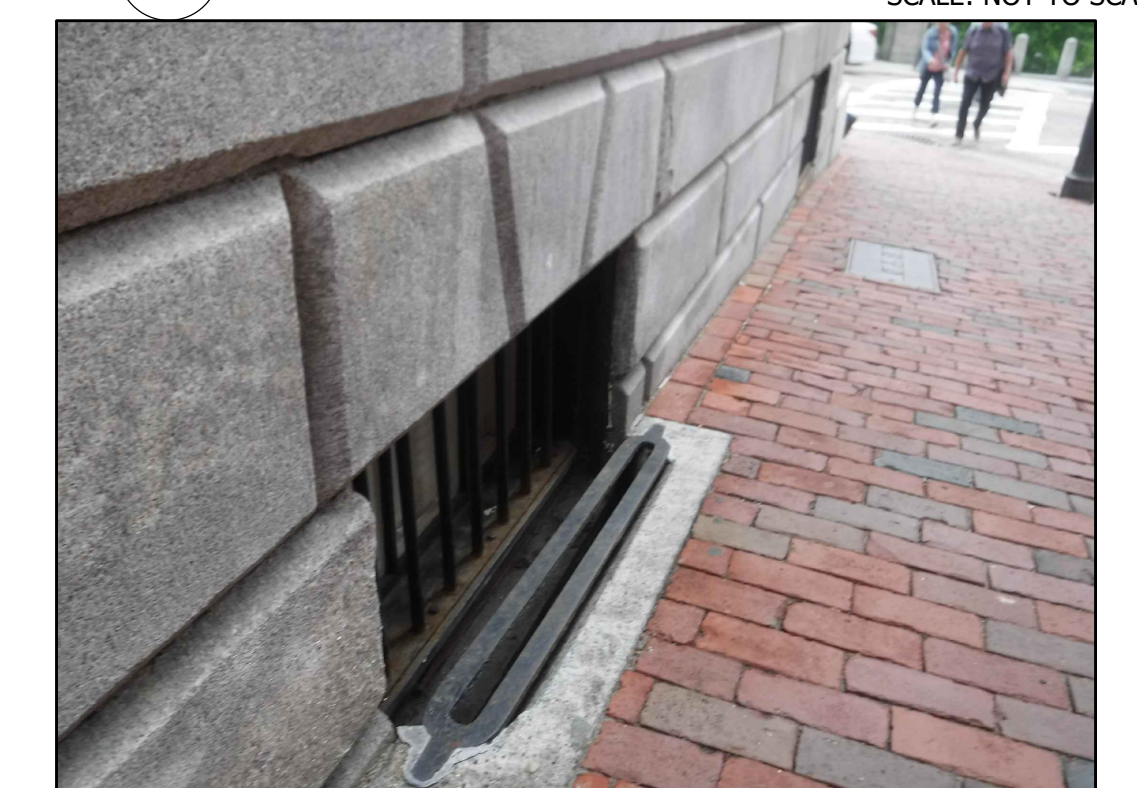
PORTION OF FLAT ROOF

10 EXISTING CONDITIONS - PHOTO 10
SCALE: NOT TO SCALE



ENTRANCE ON SOUTH ELEVATION

11 EXISTING CONDITIONS - PHOTO 11
SCALE: NOT TO SCALE



BASEMENT WINDOWS

12 EXISTING CONDITIONS - PHOTO 12
SCALE: NOT TO SCALE



Northeastern University
140 Cullinane Hall
360 Huntington Avenue
Boston, MA 02115
617-373-7611



Building Enclosure
ASSOCIATES LLC

Charlestown Navy Yard
31 Fifth Street
Boston, Massachusetts 02129
617-520-9555

NORTHEASTERN UNIVERSITY – 34 BEACON STREET BOSTON, MA.
EXTERIOR RESTORATION

COVER SHEET

				Date Issued: May 25, 2018	
				Project Number:	
				Drawing Scale: AS NOTED	
				Drawn By:	
				Checked By:	
				Approved by: -	
No	Date	Description	No	Date	Description
Issues			Revisions		

PRICING

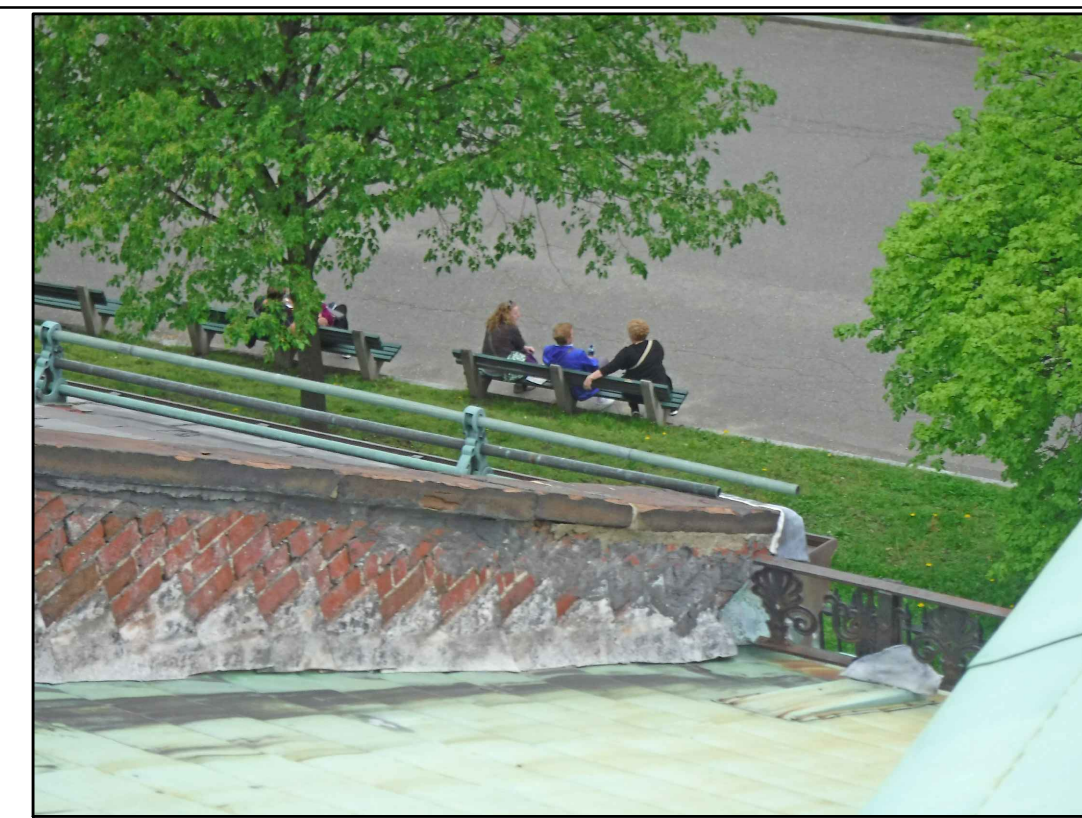
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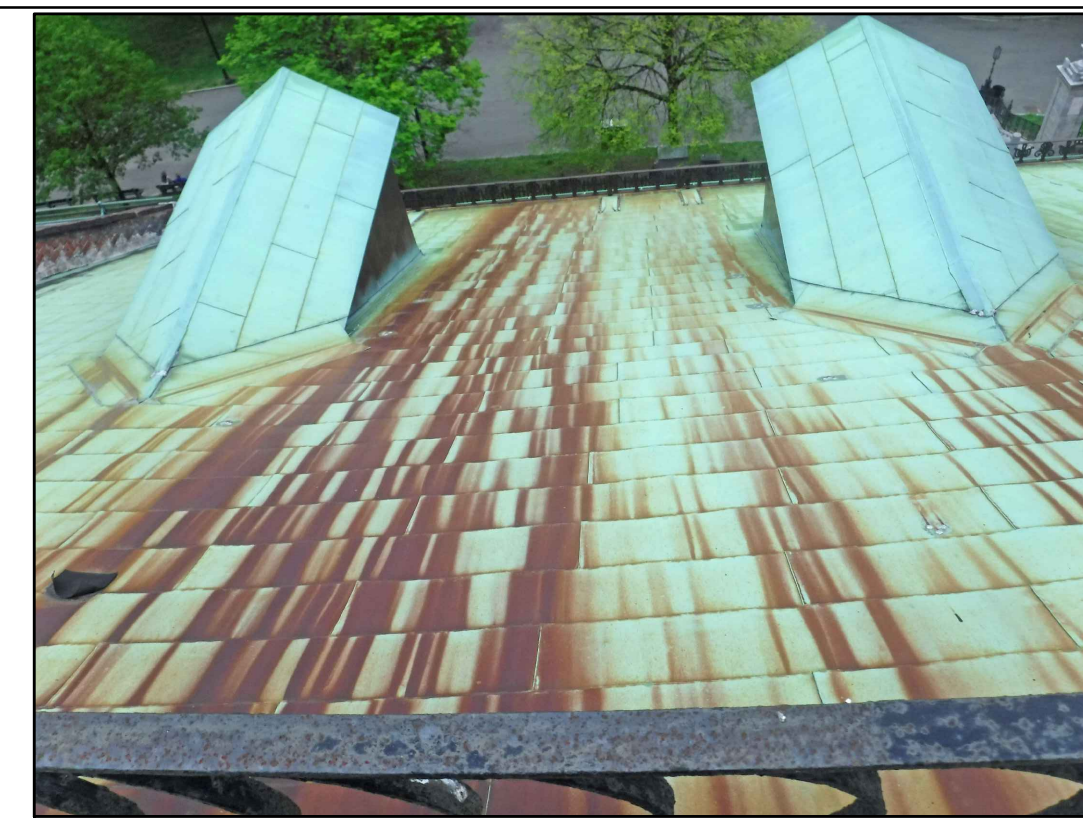
VIEW OF SOUTH EAST ROOF
1 EXISTING CONDITIONS - PHOTO 1
SCALE: NOT TO SCALE



FLASHING AT SOUTH EAST CHIMNEY
2 EXISTING CONDITIONS - PHOTO 2
SCALE: NOT TO SCALE



FLASHING AT SOUTH EAST PARTY WALL
3 EXISTING CONDITIONS - PHOTO 3
SCALE: NOT TO SCALE



VIEW OF SOUTH ROOF
4 EXISTING CONDITIONS - PHOTO 4
SCALE: NOT TO SCALE



VIEW OF SOUTH ROOF ORNAMENTAL EDGE
5 EXISTING CONDITIONS - PHOTO 5
SCALE: NOT TO SCALE



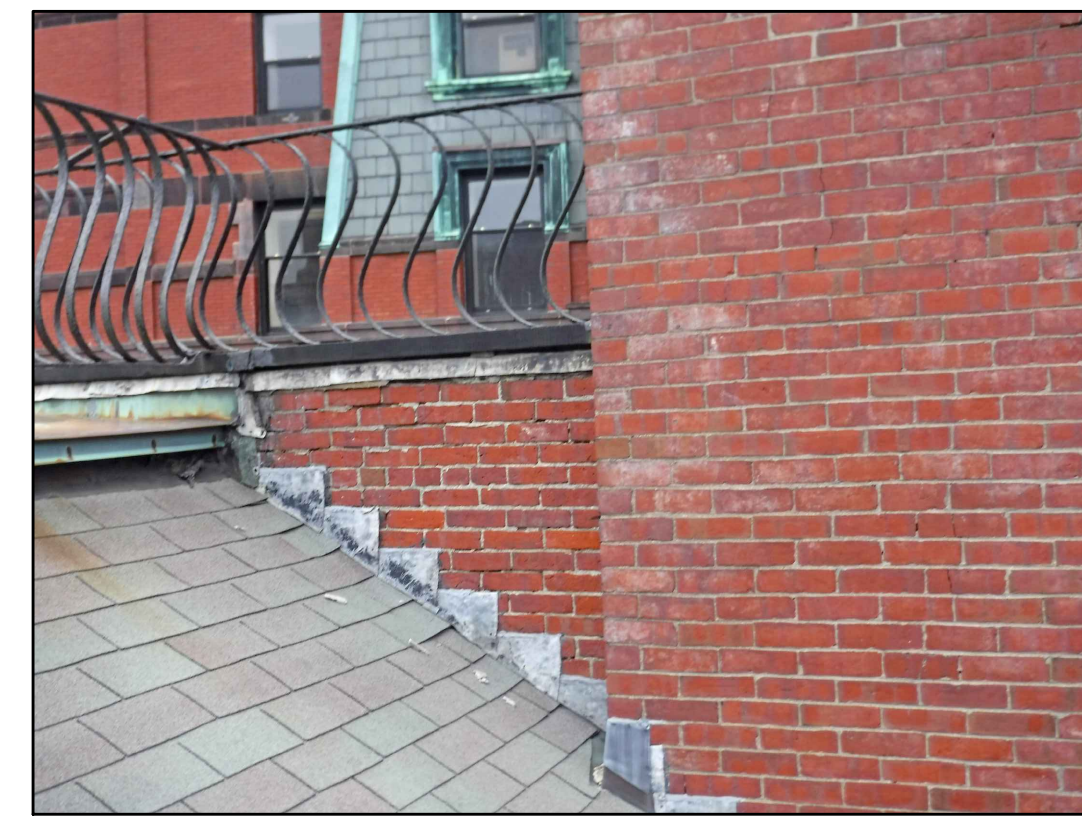
PARTY WALL AT SOUTH WEST CORNER OF ROOF
6 EXISTING CONDITIONS - PHOTO 6
SCALE: NOT TO SCALE



WEST VIEW OF NORTH ROOF
7 EXISTING CONDITIONS - PHOTO 7
SCALE: NOT TO SCALE



NORTH WEST CHIMNEY
8 EXISTING CONDITIONS - PHOTO 8
SCALE: NOT TO SCALE



WEST PARAPET WALL FLASHING AT NORTH ROOF
9 EXISTING CONDITIONS - PHOTO 9
SCALE: NOT TO SCALE



WEST PARAPET WALL FLASHING AT NORTH ROOF
10 EXISTING CONDITIONS - PHOTO 10
SCALE: NOT TO SCALE



WEST PARAPET AT SOUTH ROOF
11 EXISTING CONDITIONS - PHOTO 11
SCALE: NOT TO SCALE



FLASHING AT WEST PARAPET SOUTH ROOF
12 EXISTING CONDITIONS - PHOTO 12
SCALE: NOT TO SCALE



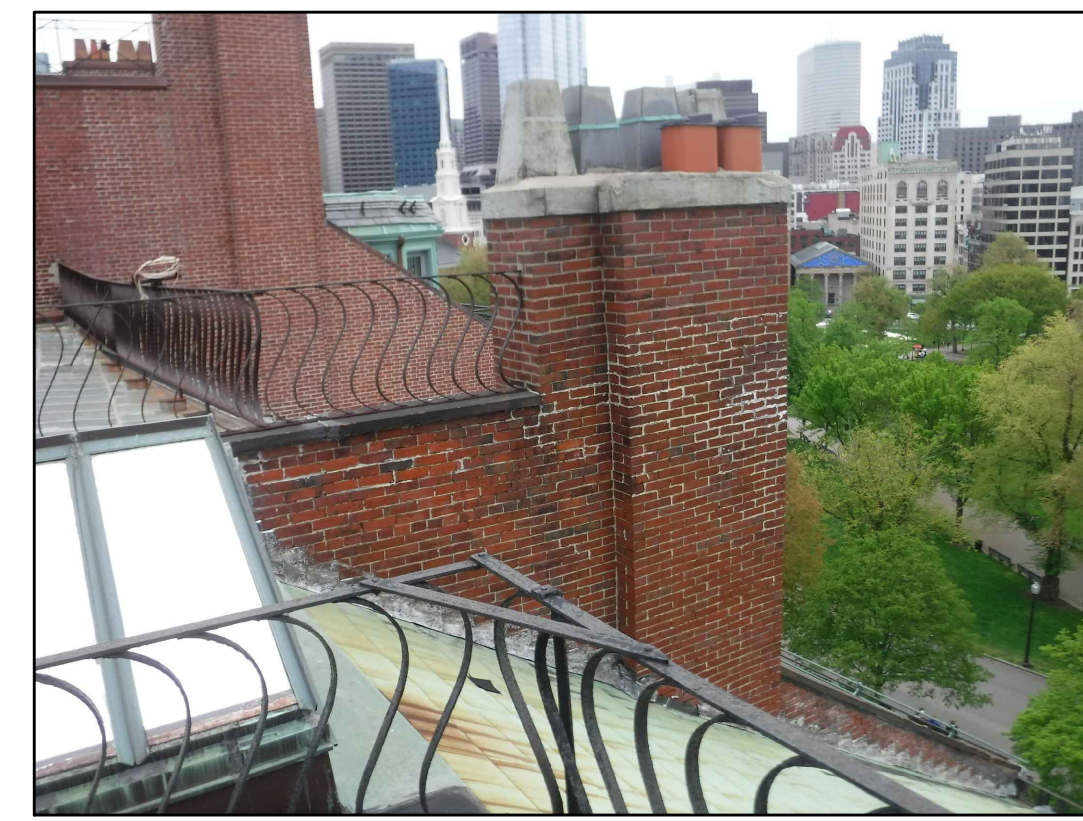
NORTH EAST CHIMNEY CAP
13 EXISTING CONDITIONS - PHOTO 13
SCALE: NOT TO SCALE



VIEW OF NORTH EAST CHIMNEY
14 EXISTING CONDITIONS - PHOTO 14
SCALE: NOT TO SCALE



NORTH EAST CHIMNEY
15 EXISTING CONDITIONS - PHOTO 15
SCALE: NOT TO SCALE



SOUTH EAST CHIMNEY
16 EXISTING CONDITIONS - PHOTO 16
SCALE: NOT TO SCALE



SOUTH ELEVATION WINDOW
17 EXISTING CONDITIONS - PHOTO 17
SCALE: NOT TO SCALE



SOUTH ELEVATION STEP CRACK
18 EXISTING CONDITIONS - PHOTO 18
SCALE: NOT TO SCALE



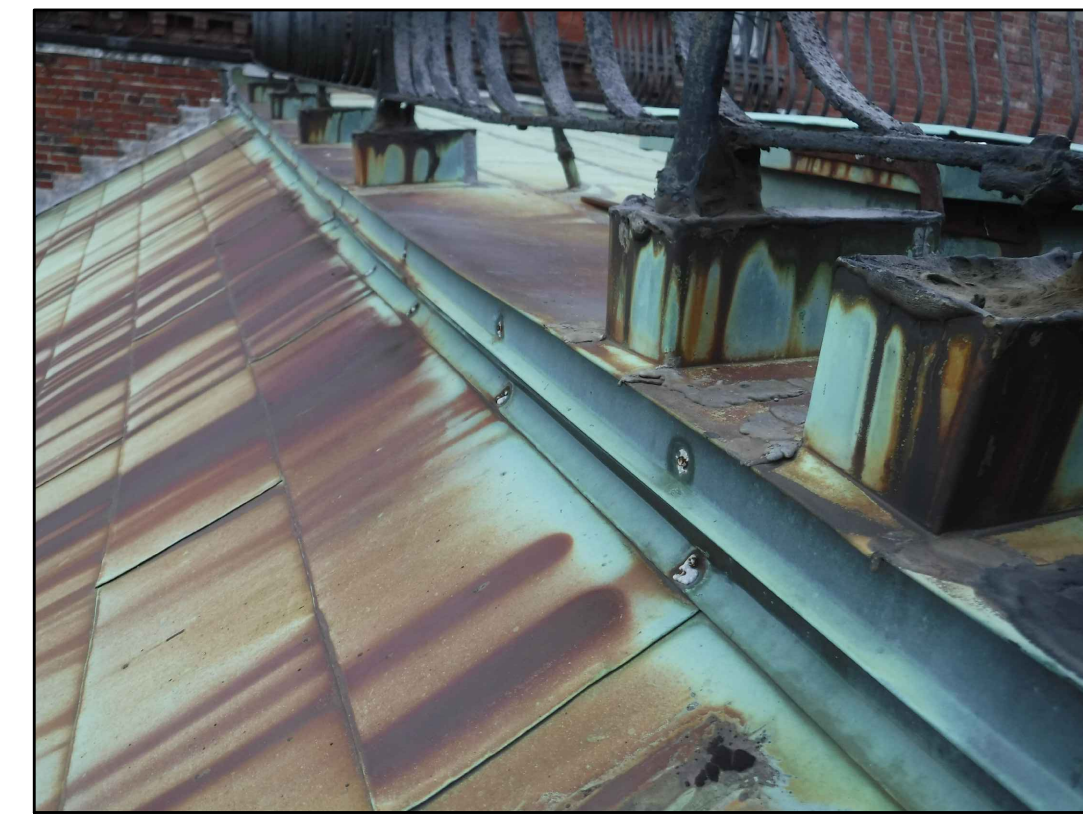
NORTH WEST VIEW OF FLAT ROOF
19 EXISTING CONDITIONS - PHOTO 19
SCALE: NOT TO SCALE



EAST END OF FLAT ROOF
20 EXISTING CONDITIONS - PHOTO 20
SCALE: NOT TO SCALE



SKYLIGHT AND EAST END OF FLAT ROOF
21 EXISTING CONDITIONS - PHOTO 21
SCALE: NOT TO SCALE



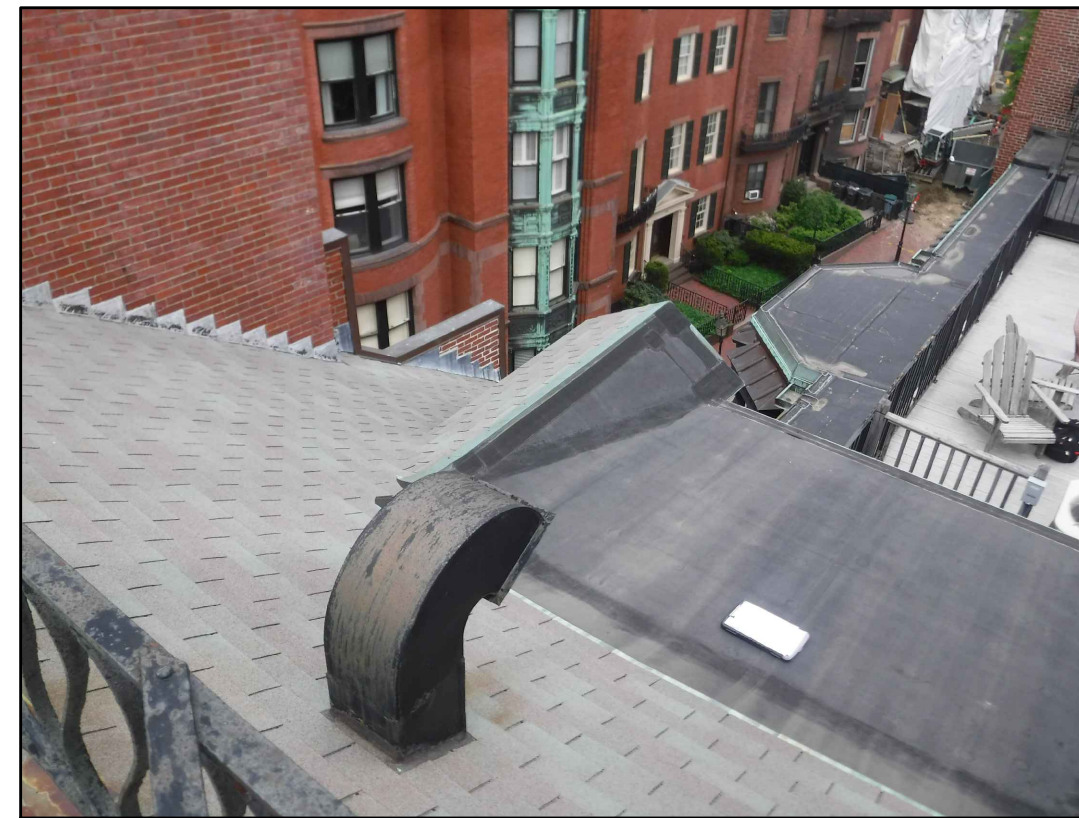
SOUTHERN EDGE OF FLAT ROOF
22 EXISTING CONDITIONS - PHOTO 22
SCALE: NOT TO SCALE



EAST END OF FLAT ROOF
23 EXISTING CONDITIONS - PHOTO 23
SCALE: NOT TO SCALE



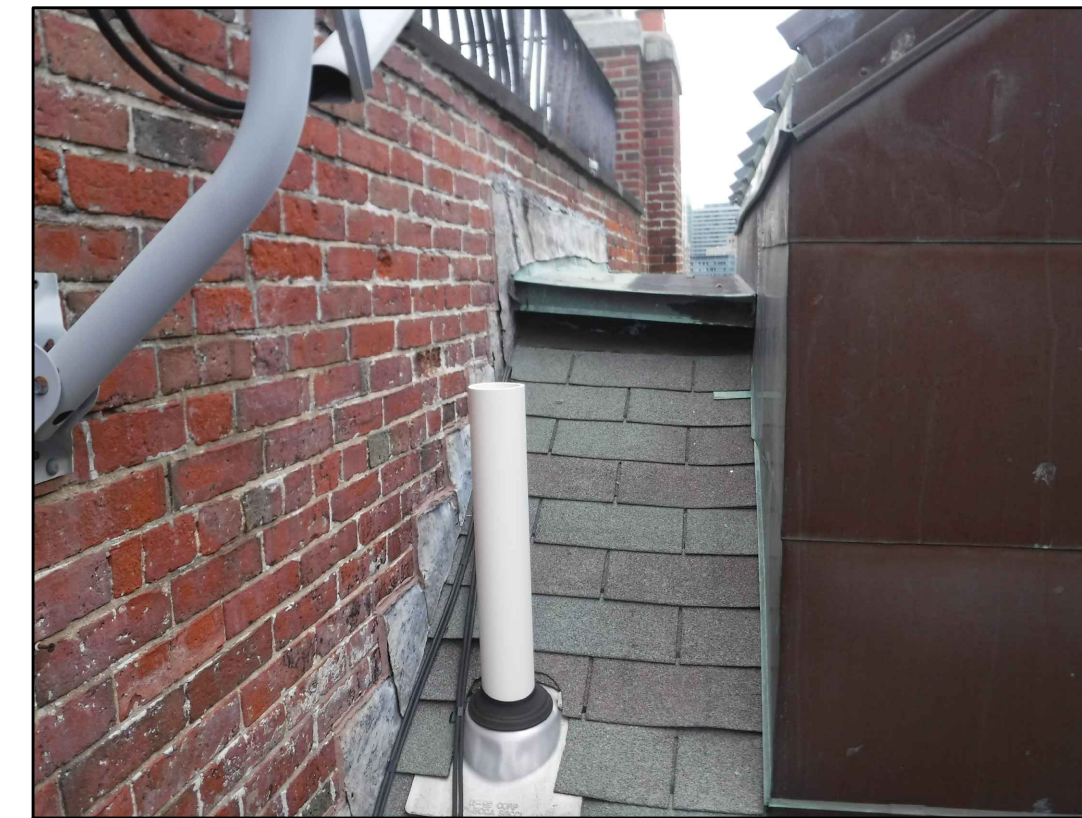
ROOF HATCH ON FLAT ROOF
24 EXISTING CONDITIONS - PHOTO 24
SCALE: NOT TO SCALE



NORTH ROOF LOOKING NORTH EAST
25 EXISTING CONDITIONS - PHOTO 25
SCALE: NOT TO SCALE



NORTH ROOF LOOKING EAST
26 EXISTING CONDITIONS - PHOTO 26
SCALE: NOT TO SCALE



NORTH ROOF RIDGE AND EAST PARAPET
27 EXISTING CONDITIONS - PHOTO 27
SCALE: NOT TO SCALE



NORTH ROOF RIDGE AND EAST PARAPET
28 EXISTING CONDITIONS - PHOTO 28
SCALE: NOT TO SCALE



FLASHING AT EAST PARAPET RIDGE
29 EXISTING CONDITIONS - PHOTO 29
SCALE: NOT TO SCALE



VIEW OF LOOKING DOWN AT RAILING SUPPORT
30 EXISTING CONDITIONS - PHOTO 30
SCALE: NOT TO SCALE

No.	Date	Description	No.	Date	Description
No	Date	Description	No	Date	Description
Issues			Revisions		

Date Issued:	May 25, 2018
Project Number:	
Drawing Scale:	AS NOTED
Drawn By:	
Checked By:	
Approved by:	-

SECTION 02050- DEMOLITION

PART 1 - SCOPE OF WORK

- A. Work includes furnishing all labor, materials, equipment and supervision to demolish, haul, and dispose of materials in accordance with the Drawings and Specifications.
1. Removal and store existing front entrance door for restoration.
2. Demolition of windows at locations indicated on drawings.
3. Demolition of T & G ceiling over first floor balcony.
4. Demolition of wood decking from top of existing metal floor grate at balcony floor.
5. Demolition of cracked stone lintels at locations indicated on drawings;
6. Removal of existing brownstone caps at sloped roof edge for re-installation

SECTION 04320 - MASONRY REPAIRS

1.02 SCOPE OF WORK

- A. Work includes, but is not limited to, the following items required to complete the work of this SECTION, as shown on the Drawings and specified herein:
1. Tuckpoint all brck joints and on the Beacon Street Elevation. Tuckpoint all deteriorated granite joints on the Beacon Street Elevation.
2. Tuckpoint all brck joints on the Joy Street Elevation. Tuckpoint all deteriorated granite joints on the Joy Street Elevation.
3. Tuckpoint all brck joints at the area identified on the drawings as the return on the Joy Street Elevation.
4. Tuckpoint all brck joints on the four chimneys except those brck joints on adjacent property;
5. Patch spalled areas of masonry chimney cap;
6. Replace cracked or spalled brick with new brick. New brick shall match the exiting brick color, texture, appearance, compressive strength and absorption;
7. Clean all masonry and granite surfaces to remove all dirt, stains, mildew following completion of the work.
8. Provide all equipment, labor and materials required to complete the work as specified in a safe and timely manner.

1.03 ALTERNATE WORK

- A. Remove & reinstall brownstone cap to accommodate new metal flashing below.
1. Alternate #1: Dispose of brownstone and install new precast cap to match existing.
2. Alternate #2: Install new copper cap to replace or cover brownstone cap.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Mortar Components
1. Portland Cement: Shall conform to ASTM C150, Type I or II.
2. Hydrated Lime: Shall conform to ASTM C207, Type 5.
3. Sand: Shall conform to ASTM C144.
4. Water: Shall be clean and potable.
5. All cement, lime, and sand for work shall come from same sources throughout the project.

2.02 MORTAR MIX

- A. Repointing Mortar Components:
1. The Contractor shall use Lime Putty Mortar specifically formulated for this Building as manufactured by US Hentage Group, 3516 N. Kostner Ave., Chicago, IL 60641 P. 773-286-2100 / F. 773-286-1852 info@ushentage.com.
Contractor shall submit to US Hentage Group samples of mortar and brick from existing building for analysis of existing mix design and formulation/production of mortar for this building. Preliminary mix design, subject to confirmation by US Hentage Group shall be as follows:

Structural Mortar: TYPE N (1 : 1-1/2 : 7)
(White Portland Cement:Slaked Lime Putty:Sand)

Re-pointing Mortar: TYPE O (1 : 2 : 8)
(White Portland Cement:Slaked Lime Putty:Sand)

2.03 MASONRY CLEANING MATERIALS

- B. Restoration Cleaners from Prosooco for masonry surfaces or equal. Manufacturer shall determine appropriate product, application methods and dilution ratios. Contractor shall prepare cleaned samples for approval by the Consultant before cleaning process is begun.
C. It is the sole responsibility of the masonry contractor to clean the masonry and remove all dirt, stains, mildew, algae on all cast stone and masonry surfaces to the satisfaction of the Consultant regardless of the product used for cleaning. All cleaning shall be performing without causing damage to the masonry surfaces.

2.04 FLASHING

- A. Through wall flashing shall be metal with a membrane flashing above. Metal and membrane flashing shall be one of the following or approved equal:
1. Flashing shall be WR Grace Company Perm-A-Barrier. Seal all lap splices and terminations with Liquid Mastic (LM 3000) from WR Grace.
2. Flashing Pan/Drp:
Stainless steel through-wall/pan/reglet/drip: Type 302/304, ASTM A167, 22 gage.
2.05 CAST STONE REPAIR MATERIALS
A. Provide repair materials from one of the following manufacturers with final color and texture to match existing cleaned cast stone elements:
1. M-100 Repair Mortar from Jahn Restoration Mortars.
2. Custom System 45 repair mortar from Edison Chemicals, Waterbury, CT

- Repair mortars must be premixed cementitious patching material formulated to match the color and texture of polymer additives. The mortar need only be mixed with potable water at the site. The mortar must be vapor permeable, frost and salt resistant, shrink resistant, and be physically compatible with the substrate, including, but not limited to, porosity, tensile, and compressive strength. If proposed equal is submitted, thorough lab testing shall be required to establish equivalent performance levels. An independent laboratory shall be utilized as determined by the Consultant and paid for by the contractor.
B. Setting anchors in existing masonry: Jahn Anchor Setting Mortar (M80) or Hilti Hit epoxy adhesive from Hilti.
C. Mechanical anchors and dowels: One quarter inch (1/4") diameter stainless steel threaded rod (ASTM F593) bent and cut to lengths required to achieve a minimum two inch embedment into sound substrate or as shown on the Contract Drawings. Cut ends of rod square.
D. Sikatop 123 mortar, for filling large (greater than six inches deep) missing cast stone voids.

2.06 ARCHITECTURAL PRECAST UNITS

- A. As specified in SECTION 03450 - Architectural Precast Concrete.

2.07 WALL TIES/MASONRY REINFORCING

- A. Individual wall ties, shall be galvanized steel from Heckman Building Products, Dur-o-wall or approved equivalent.
B. Masonry reinforcing shall be truss type from Heckman Building products, Inc., Dur-o-wall or approved equivalent.

2.08 MASONRY ANCHORS

- A. Hilti Hit Epoxy Fasteners, Dur-o-Wall Series epoxy fasteners, Dur-o-Wall replacement masonry anchors or approved equivalent.
B. Precast and stone anchors shall be stainless steel.

2.09 MASONRY BRICK

- A. New brick shall match the existing brick color, texture, appearance, compressive strength and absorption.

SECTION 05500 - MISCELLANEOUS METALS

1.02 SCOPE OF WORK

- A. The work of this Section includes, but is not limited to the following:
1. Supply, prepare, paint and install new lateral braces for metal trellis to match existing braces on adjacent property.
2. Inspect and repair deteriorated metal railings, connections and anchors at balcony including balcony roof framing.
3. Inspect and repair deteriorated metal railings, connections and anchors at roof line.
4. Remove, prepare and paint roof railings at stone cap to accommodate for new roof flashing installation.
5. Reinstall roof railings at stone cap after new roof flashing is installed.
6. Inspect, repair, prepare and paint all ornamental rails on Beacon Street excluding landscape railing.
7. Remove all window security bars, prepare, paint and reinstall.
8. Inspect and repair ornamental snow guard connections on the Beacon Street Elevation.
9. Prepare and paint existing ornamental snow guards.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General: Provide products and materials of new stock, free from defects, and of best commercial quality for each intended purpose.
B. Steel Plates, Shapes, and Bars: ASTM A36
C. Steel Tubing: ASTM A 500 or A 501, hot or cold rolled, as required for design loading
D. Steel Pipe: ASTM A 53, schedule 40, Type S (seamless), black except where galvanized is indicated, Grade A for cold-bending
E. Steel Sheet: ASTM A 366, A 570, or A 611, grade required for design loading
F. Stainless Steel Rods ASTM A 276
G. Stainless Steel Sheet: ASTM A 666
H. Bolts and fasteners: ASTM A 307 and A 325
I. Aluminum: Alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than the strength and durability properties of the alloy and temper designated below for each aluminum form required:
1. Extruded Bars and Shapes: ASTM B 221 (ASTM B 221M), 6063-T6
2. Extruded Pipe and Tubes: ASTM B 429, 6063-T6
3. Drawn Seamless Tubes: ASTM B 483 (ASTM B 483M), 6063-T832
4. Plate and Sheet: ASTM B 209 (ASTM B 209M), 6061-T6
5. Die and Hand-Forging: ASTM B 247 (ASTM B 247M), 6061-T6

- G. Castings: ASTM B 26/B 26M, A356-T6

2.02 FABRICATION - GENERAL

- J. Inserts: Threaded or wedge type, galvanized ferrous castings; either ASTM A 47 malleable iron or ASTM A 27 cast steel. Provide threaded inset and wedge insets manufactured by one of the following or Consultant approved equal:
1. Hohmann and Barnard
2. Gateway Erections, Inc.
3. Richmond Screw Anchor Co.
K. Provide anchors, bolts, sockets, sleeves, and other parts required for securing each item of work to other construction. Furnish anchors, bolts, and other items required to be built-into masonry under Division 4.
1. Anchor bolts, bolts smaller than 5/8 in., and fasteners shall be steel castings conforming to ASTM A 307. Bolts larger than 5/8 in. shall conform to ASTM A 325.
L. Provide exposed fastenings of same material and finish as metal to which applied, unless otherwise noted.
M. Welding rods: Conform to AWS Standards and recommendations of welding rod manufacturer.
N. Grout for Exterior Applications: Provide factory-packaged, non-shrink, non-staining, hydraulic controlled expansion cement formulation for mixing with water at project site. Provide formulation that is resistant to erosion from water exposure without need for protection by a sealer or waterproof coating. Provide Super Por-Rok, Erosion-Resistant Anchoring Cement, manufactured by Minwax Construction Products Division, or equal as approved by Consultant.
O. Bituminous-based paint for electrolytic isolation shall be cold-applied black asphaltic mastic conforming to SSPC Paint 12, with non-asbestos fibers.
P. Sealant: Sealant for shop and field sealing of the aluminum assemblies and for joints between metal and other surrounding material by this or other trades shall be low-modulus silicone based sealant, "Silpruf", by General Electric Co. Color shall match color of aluminum member with which used.
A. Fabricate work of this Section to be straight, plumb, level and square, and to sizes, shapes and profiles indicated on approved shop drawings. Ease exposed edges. Cut, reinforce, drill and tap metal work as required for proper assembly.
1. Fabricate miscellaneous supports, brackets, braces and the like required to fully complete the work.
2. Obtain loading requirements from suppliers of work to be supported. Design and support systems with a safety factor of at least 6 unless otherwise indicated.
3. Allow for thermal movement resulting from the following maximum change (range) in ambient temperature in the design, fabrication, and installation of installed metal assemblies to prevent buckling, opening up of joints, and overstressing of welds and fasteners. Base design calculations on actual surface temperatures of metals due to both solar heat gain and nighttime sky heat loss.
a. Temperature Change (Range): plus or minus 50 degrees F, total range 100 degrees F.
4. Shear and punch metals accurately. Remove burrs.
5. Ease exposed edges to a radius of approximately 1/32 in., unless indicated otherwise. Form bent corners to smallest radius possible without causing grain separation or impairing work.
6. Remove sharp or rough areas on exposed traffic surfaces.
7. Weld corners and seams continuously to comply with the following:
a. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
b. Obtain fusion without undercut or overlap.
c. Remove welding flux immediately.
d. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing, and contour of welded surface matches those adjacent.
B. Work Exposed to View: For work exposed to view, select materials with special care. Provide materials which are smooth and free of blemishes such as pits, roller marks, trade names, scale and roughness. Fabricate work with uniform hairline joints. Form welded joints and seams continuously. Grind welds flush to be smooth after painting. Provide exposed fasteners as indicated on the Drawings.
C. Provide for anchorage of types shown; coordinate with supporting structure. Fabricate and install space-anchoring devices to secure metal fabrication rigidly in place and to support required loads.
D. Shop Assembly: Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
E. Cut, reinforce, drill, and tap metal fabrications as shown to receive finish hardware, screws, and similar items.
F. Fabricate joints that will be exposed to weather in a manner to exclude water, or provide weep holes where water may accumulate.
G. Miscellaneous Framing and Supports: Fabricate miscellaneous framing and supports to adequately support live and dead loads with a safety factor of 5. Provide necessary anchors, inserts, and fasteners. Fabricate support system to carry entire load of work being supported to structure above. Do not transfer any loads to ceiling systems.
1. Cut, drill, and tap units to receive hardware, hangers and similar items.
2. Coordinate loading and attachment requirements for miscellaneous framing and supports with manufacturers of items being supported.
2.03 HOT-DIP GALVANIZING AND SHOP PRIMING OF GALVANIZED SURFACES
A. Galvanizing: For those items shown for galvanizing, apply nickel zinc coating by the hot-dip process complying with the following requirements:
1. ASTM A 153 for galvanizing iron and steel hardware.
2. ASTM A 123 for galvanizing both fabricated and unfabricated iron and steel products made of uncoated rolled, pressed, and forged shapes, plates, bars, and strip 0.0299 inch (0.76 mm) thick or thicker.
B. Hot-Dip galvanizing: Provide coating for iron and steel fabrications applied by the hot-dip process with 0.05 to 0.09 percent nickel and other earthy materials in the galvanizing kettle forming an alloy, DELTAGALV by Duncan Galvanizing or approved equal meeting all requirements of this specification. Comply with ASTM A 123 for fabricated products and ASTM A 153 for hardware. Provide thickness of galvanizing specified in referenced standards.
C. Factory-Applied Universal Primer: provide factory-applied polyamide epoxy primer, 2.0-3.0 mils dry film thickness, PRIMERGALV by Duncan Galvanizing, Tremec 27 Typoxy, or approved equal meeting all requirements of this specification. Blast clean galvanized surfaces prior to application of primer in accordance with SSPC SP7, including use of abrasive media, to achieve an anchor profile of 0.75 mils uniformly. Primer shall be applied in a controlled environment meeting applicable environmental regulations, and as recommended by coating manufacturer. Primer shall be compatible with field-applied finish coats specified in Section 09900 - PAINTING.
D. Galvanizing Application: Galvanize materials in accordance with specified standards and this specification. Galvanizing shall provide an acceptable substrate for applied coatings. The dry

kettle process shall be used to eliminate any flux inclusions on the surface of the galvanized material.

- E. Metal Coating Application: apply metal coatings over hot-dip galvanizing in accordance with specified requirements.

2.04 FINISHING (NON-GALVANIZED SURFACES)

- Shop Primer for Ferrous Metal Not Indicated to Be Galvanized: Fast-curing, lead- and chromate-free, zinc-rich primer, Tremec Urethane 90-97 at 3.0 to 3.5 mils dry film thickness, or equal, selected for good resistance to normal atmospheric corrosion, compatibility with finish paint systems shown, and capability to provide a sound foundation for field-applied top coats despite prolonged exposure.
1. Surface preparation for shop coating shall be SSPC-SP6 Commercial Blast Clean.
F. Bituminous Paint: Cold-applied asphalt mastic complying with SSOC-Paint 12, except containing no asbestos fibers.

SECTION 06110 - WOOD FRAMING AND TRIM REPAIRS

1.02 SCOPE OF WORK

- A. Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:

- 1. Wood blocking, nailers and window brick moulds.
2. New tongue and groove wood paneling ceiling above balcony.
3. Repair of deteriorated wood framing at sidewalk level windows on Joy Street.
4. Repair and/or replace all deteriorated wood elements as indicated on the Drawings and as discovered during the course of the project.

PART 2 - PRODUCTS

2.01 MANUFACTURERS OF WOOD REPAIR PRODUCTS

- A. Subject to compliance with requirements, provide products by the following, or equal:

- 1. Abatron, Inc. Kenosha, WI (800)445-1754
2. Advanced Repair Technology, Cherry Valley, NY (607)264-9040
3. Housecraft Associates, Newton NJ (201) 570-1112

2.02 WOOD REPAIR MATERIALS

- A. Low viscosity Epoxy Consolidant: Two-part epoxy consolidant.

- 1. LiquidWood
2. Primtrate
3. Conserv flexible epoxy consolidant

- B. Fillers for Epoxies: As required to provide epoxy putty of correct viscosity for each application.

- 1. WoodEpoxy
2. Flex-tec HV
3. Conserv flexible epoxy patch

- C. Dispensers: Provide manufacturer's special pumps or applicators designed to be used in dispensing and measuring resins and hardeners.

- D. Other Materials: All other materials required but not specifically described shall be selected by the Contractor and subject to the approval of the Engineer.

2.04 REPLACEMENT WOOD

- A. All replacement wood shall be kiln dried clear fir with moisture content of 7% or less, milled to match existing deteriorated section to be replaced.

- B. Fasteners: Provide concealed galvanized wood screws to secure replacement sections of wood framing to existing structure.

Logos for Northeastern University and Building Enclosure Associates, Inc. Address: Charlestown Navy Yard, 31 Fifth Street, Boston, Massachusetts 02129, 617-520-9555.

NORTHEASTERN UNIVERSITY - 34 BEACON STREET BOSTON, MA. EXTERIOR RESTORATION. SCOPE OF WORK table with columns for No, Date, Description, No, Date, Description, Issues, Revisions.

Table with columns for Date Issued (May 25, 2018), Project Number, Drawing Scale (AS NOTED), Drawn By, Checked By, and Approved by. Includes large PRICING A-002 text.

SECTION 07620 - SHEET METAL FLASHING & TRIM

I.02 SCOPE OF WORK

A. Provide all labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:

- 1. Option A: Replace all existing copper roofing with new patina copper roofing to match existing shingle or sheet size and pattern at the following locations:
 - a. Balcony roof,
 - b. Main roof - Beacon Street Elevation,
 - c. Flat roof on top of the building.

- 2. Option B: Check, re-solder all existing copper seams and clean/refinish roof to the satisfaction of Northeastern University/BBAC.
 - a. Repair copper clad roof shingles covered by existing roof membrane patch.
 - b. Repair or replace damaged roof shingles.

- 3. Work required outside of Option A or B:
 - a. Flashing under brownstone roof caps.
 - b. Replace gutter on Beacon Street to match existing.
 - c. Stainless steel through wall, reglet and pan flashings.
 - d. Zinc / tin coated copper drip edge, gutter and downspout and fascia for locations requiring repair and/or replacement.
 - e. Parapet masonry through-wall flashing.
 - f. Reglet and through-wall flashing at roof membrane terminations.
 - g. Pan flashing for thresholds at doors.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Metal flashings for roofing systems shall be zinc/tin coated copper. Metal flashings for through wall, reglet, counter flashing, etc. shall be stainless steel.

B. Miscellaneous Metals and Flashings:

Minimum gauge of steel as indicated on Drawings and as specified in accordance with Architectural Sheet Metal Manual, Sheet Metal and Air Conditioning Contractor's National Association, Inc. recommendations.

- 1. Zinc-Coated Steel Sheet: ASTM A526, 0.20% copper, 26 gage (0.0179"); designation G90 hot-dip galvanized, mill phosphitized.
- 2. Aluminum Sheet: Aluminum, ASTM B209, alloy 3105 H14, in thickness of 0.032" and 0.040" nominal, baked enamel, color as selected by Owner (at areas where required to match existing).
- 3. Copper Sheet: ASTM B370, 16 oz. (0.0216), temper H00 (cold-rolled). Coated both sides with zinc/tin alloy approximately 0.5 mils thick. Composition of alloy shall be 50-percent zinc and 50-percent tin with trace elements controlled for durability, corrosion resistance and color. Provide "FreedomGray" as manufactured by Reverse Copper Products, Inc; or approved equal.
- 4. Zinc Alloy Sheet: Zinc with 0.6% copper and 0.14% titanium; 0.27" thick (21 gauge); standard (soft) temper, mill finish.
- 5. Flashing, through wall, Pan/Drip: Stainless steel: Type 302/304, ASTM A167, 22 gage.
- 6. Membrane flashing placed over metal flashings shall be WR Grace Company Perm-A-Barrier. Seal all lap splices and terminations with Liquid Mastic (LM 3000) from WR Grace.

2.02 RELATED MATERIALS

A. Metal Primer: Zinc chromate type compatible to existing metal type and surface.

B. Plastic Cement: ASTM D 4586

C. Sealant: Specified in Section 07900 or on drawings.

D. Lead: Meets Federal Specification QQ-L-201, Grade B, four pounds per square foot.

E. Fasteners:

- 1. Concealed, corrosion resistant screw fastener as recommended by metal manufacturer. Finish exposed fasteners same as flashing metal.
- 2. Fastening shall conform to Factory Mutual I-90 requirements or as stated on section details, whichever is more stringent.

F. Termination Bars:

- 1. Shall be aluminum unless otherwise recommended by membrane manufacturers.
- 2. Material shall be 0.125" x 1" (minimum) aluminum conforming to ASTM B-221, mill finish. Bar shall have caulk cup.

SECTION 07900 - JOINT SEALANTS

I.02 SCOPE OF WORK

A. A single installer shall be responsible for providing complete and compatible high performance silicone sealant at all exterior locations.

B. The work includes furnishing all labor, materials, equipment and supervision to install in accordance with the Drawings and Specifications, all items listed, but not limited to:

- 1. Replace existing sealants at exterior perimeter joints of all windows on Joy and Beacon Streets

- 2. Remove and replace sealants at all masonry joints where other work is being performed.

- 3. Seal cracks in brick masonry and cast stone elements as authorized by the Consultant.

- 4. Remove and replace all existing sealants at exterior perimeter joints, including; at base of building and sidewalk (at entire perimeter of building except for landscaped areas).

- 5. Seal perimeter of all penetrations through exterior walls;

- 6. Provide new sealants at all other locations discovered during the course of the project and as directed by the Consultant.

PART 2 - PRODUCTS

2.01 MANUFACTURERS: Subject to compliance with requirements, provide products of one the following:

A. Manufacturers of Sealants:

- 1. Pecora Corp.
- 2. Tremco, Inc.
- 3. Approved Equal

2.02 MATERIALS: Provide colors as selected and approved by Engineer and Owner from manufacturer's standards. Select materials for compatibility with surfaces and exposures: select modulus of elasticity and hardness recommended by manufacturer for application indicated.

A. Acrylic Latex Sealant: Acrylic Latex sealant from Tremco, Pecora or approved equal.

2.03 MISCELLANEOUS MATERIALS:

- A. Joint Primer/Sealer: Type recommended by sealant manufacturer for joint surfaces to be primed or sealed.
- B. Cleaners: Non-staining, chemical cleaner or type acceptable to manufacturer of sealant materials which is not harmful to substrates and adjacent surfaces. All cleaners, primers and solvents shall be compliant to latest State of Massachusetts VOC Regulations.

SECTION 08200 - WOOD DOORS AND SHUTTERS

I.02 SCOPE OF WORK

A. Restore existing front entrance door to original appearance, finish and color. Door framing to remain.

B. Supply and install new balcony door sashes at Beacon Street Elevation. Match existing door sashes in appearance, construction, finish and color. Door frame and casings to remain.

C. Remove, prepare, paint and reinstall all existing shutters to match existing in appearance, finish and color.

2.01 Manufacturers

Listed manufacturers conform to the criteria stated for material quality standards, function and appearance. Manufacturers are subject to meeting the requirements for 5-ply hot-pressed (cold-pressed will not be accepted) door construction procedures and warranties set forth in this specification. Substitutions will not be accepted.

- 1. Algoma Hardwoods, Inc.
- 2. Eggers Hardwood Products Corporation
- 3. Oshkosh Architectural Door Company
- 4. Approved equal

2.02 Material and Components

To match existing.

A. Cores:

- 1. Solid Core: to match existing.

E. Door Hardware:

- 1. Reinstall existing hardware

SECTION 08550 - WOOD WINDOWS

I.02 SCOPE OF WORK

A. Provide and install new custom operable wood windows with new brick molds, divided lights, with factory-installed glass and glazing, with shop-applied primer and paint. Profiles to match existing.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. 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:

- 1. Wood Windows:
 - a. Dynamic Architectural Windows & Doors.
 - b. JB Sash & Door Company, Inc.
 - c. Zeluck Architectural Windows and Doors.

2.02 MATERIALS

A. Wood: Honduran mahogany at interior and exterior for painted finish. Fingerjointed wood is not acceptable.

2.03 GLAZING

- A. Vacuum Glazing: Pilkington Spacia Vacuum Glass, total thickness 6.5 mm.
 - 1. Outer Layer: 1/8 in. thick clear annealed glass with Low-E sputter coating on second surface.
 - 2. Inner Layer: 1/8 in. thick clear annealed glass.
 - 3. Vacuum Space: 1/32 in. thick.

SECTION 09900 - PAINTING

I.02 SCOPE OF WORK

A. Provide surface preparation and field application of paints and coatings, for:

- 1. All exposed metal elements shall be scraped, primed and painted; including metal post, railings, bracing, snow guards, window security bars and exterior miscellaneous ferrous metals;
- 2. Brick mold at doors, wood trim, casings, shutters, side lites and all other exposed wood framing;
- 3. Interior and exterior surfaces of existing entrance door;
- 4. New wood paneling ceiling at balcony;

PART 2 - PRODUCTS

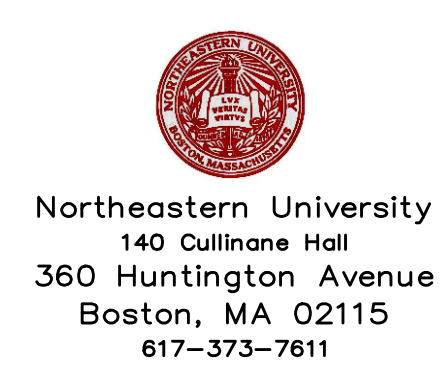
2.01 MANUFACTURERS

A. Standard paints and finishes shall be manufactured by:

- 1. RD Coatings
- 2. Sherwin Williams
- 3. Approved Equivalent

2.02 MATERIALS

A. Coatings: Ready mixed. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating; good flow and brushing properties; capable of drying or curing free of streaks or sags.



Charlestown Navy Yard 31 Fifth Street Boston, Massachusetts 02129 617-520-9555

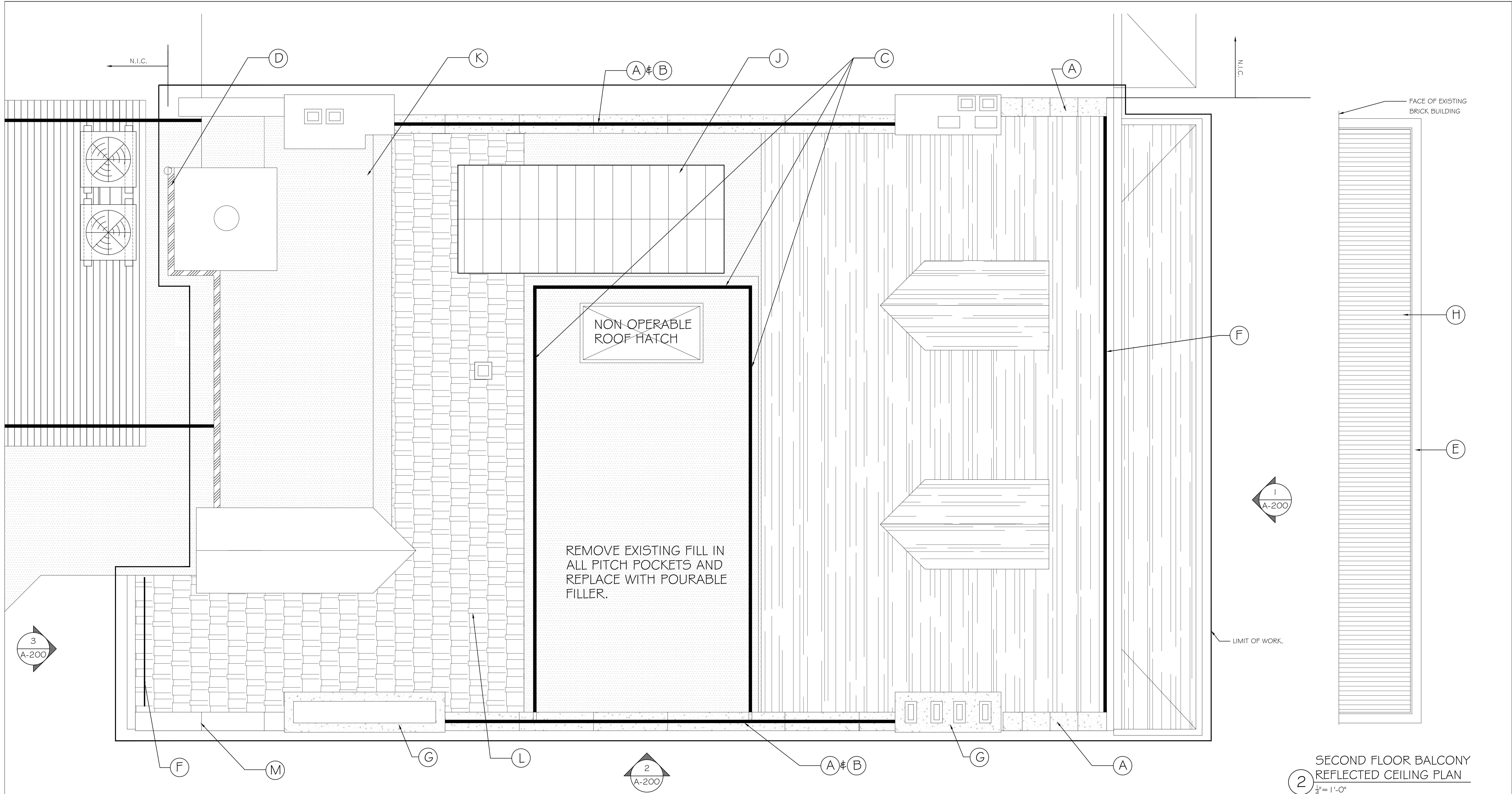
NORTHEASTERN UNIVERSITY – 34 BEACON STREET BOSTON, MA. EXTERIOR RESTORATION

SCOPE OF WORK

No	Date	Description	No	Date	Description

Date Issued: May 25, 2018
Project Number:
Drawing Scale: AS NOTED
Drawn By:
Checked By:
Approved by: —

PRICING A-003

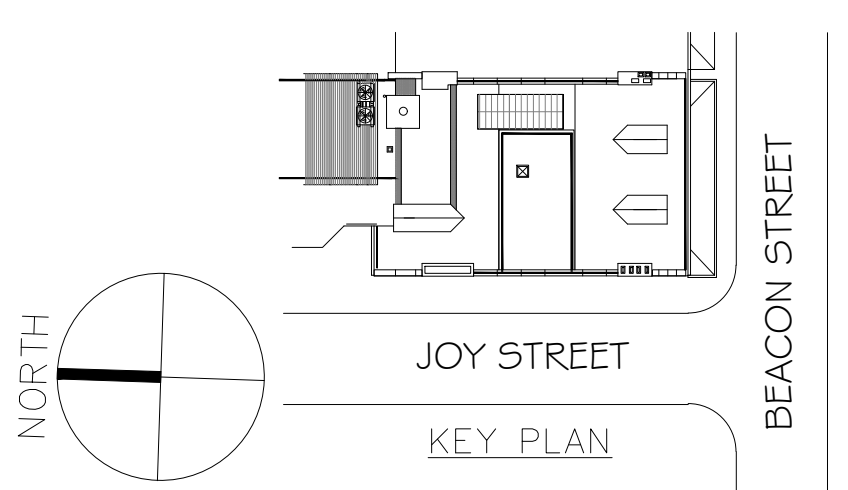


1 ROOF PLAN
1/4" = 1'-0"

2 SECOND FLOOR BALCONY REFLECTED CEILING PLAN
1/4" = 1'-0"

ROOF KEY LEGEND

- | | | |
|---|---|---|
| <p>(A) REMOVE & REINSTALL BROWNSTONE CAP TO ACCOMMODATE NEW METAL FLASHING BELOW.</p> <p>ALTERNATE #1:
DISPOSE OF BROWNSTONE AND INSTALL NEW PRECAST CAP TO MATCH EXISTING</p> <p>ALTERNATE #2:
INSTALL NEW COPPER CAP TO REPLACE OR COVER BROWNSTONE CAP</p> | <p>(B) REMOVE EXISTING RAILS, PREPARE & PAINT. REINSTALL PAINTED RAILS AFTER TEM A IS COMPLETED.</p> <p>(C) REMOVE EXISTING RAILS, PREPARE, PAINT & REINSTALL RAILS.</p> <p>(D) REMOVE EXISTING ROOF EDGE & CUT BACK EXISTING ROOF MEMBRANE TO ACCOMMODATE NEW GUTTER SYSTEM. INSTALL NEW GUTTER & DOWNSPOUT. PREPARE AND PAINT TO MATCH EXISTING.</p> <p>(E) REMOVE EXISTING GUTTER & REPLACE WITH NEW GUTTERS TO MATCH EXISTING</p> | <p>(F) PREPARE AND PAINT SNOW GUARDS.</p> <p>(G) REPAIR CHIMNEY CAPS (TYP.)</p> <p>(H) REMOVE EXISTING WOOD CEILING & REPLACE WITH NEW T&G WOOD PANEL CEILING. PREPARE & PAINT TO MATCH EXISTING REFER TO 2/A100.</p> <p>(J) EXISTING SKYLIGHT TO REMAIN.</p> <p>(K) EXISTING EPDM ROOF TO REMAIN.</p> <p>(L) EXISTING ASPHALT SHINGLES TO REMAIN.</p> <p>(M) EXISTING COPPER COPING CAP TO REMAIN.</p> |
|---|---|---|



Date Issued: May 25, 2018	
Project Number:	
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Checked By:	
Approved by: —	

No	Date	Description	No	Date	Description

ROOF KEY LEGEND

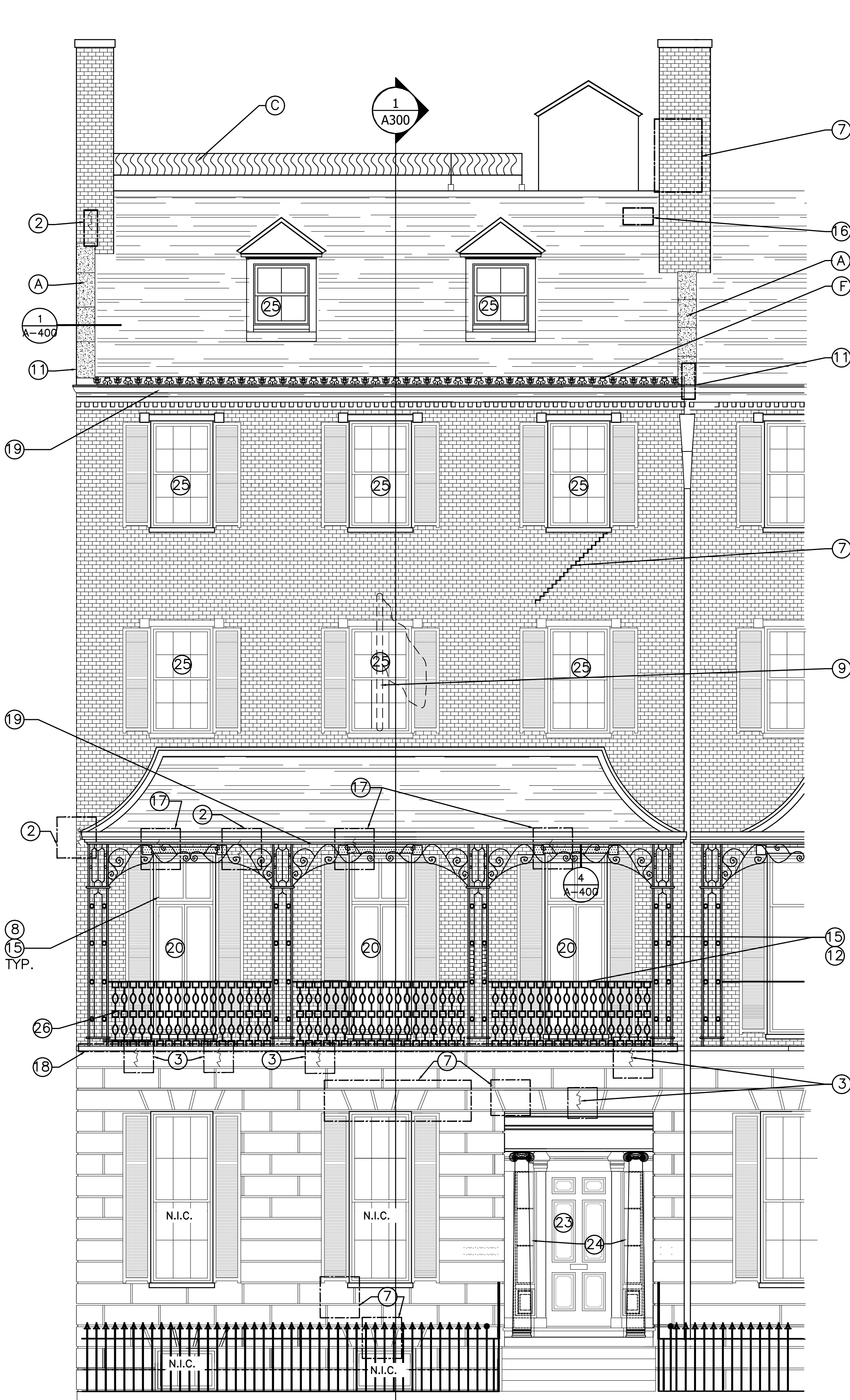
- (A) REMOVE & REINSTALL BROWNSTONE CAP TO ACCOMMODATE NEW METAL FLASHING BELOW.
- (B) REMOVE EXISTING RAILS, PREPARE & PAINT. REINSTALL PAINTED RAILS AFTER ITEM A IS COMPLETED.
- (C) REMOVE EXISTING RAILS, PREPARE, PAINT & REINSTALL RAILS.
- (D) REMOVE EXISTING ROOF EDGE & CUT BACK EXISTING ROOF MEMBRANE TO ACCOMMODATE NEW GUTTER SYSTEM. INSTALL NEW GUTTER & DOWNSPOUT. PREPARE AND PAINT TO MATCH EXISTING.
- (E) REMOVE EXISTING GUTTER & REPLACE WITH NEW GUTTERS TO MATCH EXISTING
- (F) PREPARE AND PAINT SNOW GUARDS.
- (G) REPAIR CHIMNEY CAPS (TYP.)
- (H) REMOVE EXISTING WOOD CEILING & REPLACE WITH NEW T&G WOOD PANEL CEILING. PREPARE & PAINT TO MATCH EXISTING REFER TO 2/A100.
- (J) EXISTING SKYLIGHT TO REMAIN.
- (K) EXISTING EPDM ROOF TO REMAIN.
- (L) EXISTING ASPHALT SHINGLES TO REMAIN.
- (M) EXISTING COPPER COPING CAP TO REMAIN.

NOTES:

1. ALL DAMAGE / DETERIORATION MAY NOT BE SHOWN. CONTRACTOR TO IDENTIFY ALL AREAS TO BE REPAIRED.
2. REMOVE & REPLACE ALL EXISTING SEALANTS AT PERIMETER JOINTS OF WINDOWS AND DOORS (TYP). PREPARE & PAINT ALL WOOD MOLDINGS TO REMAIN. (TYP).

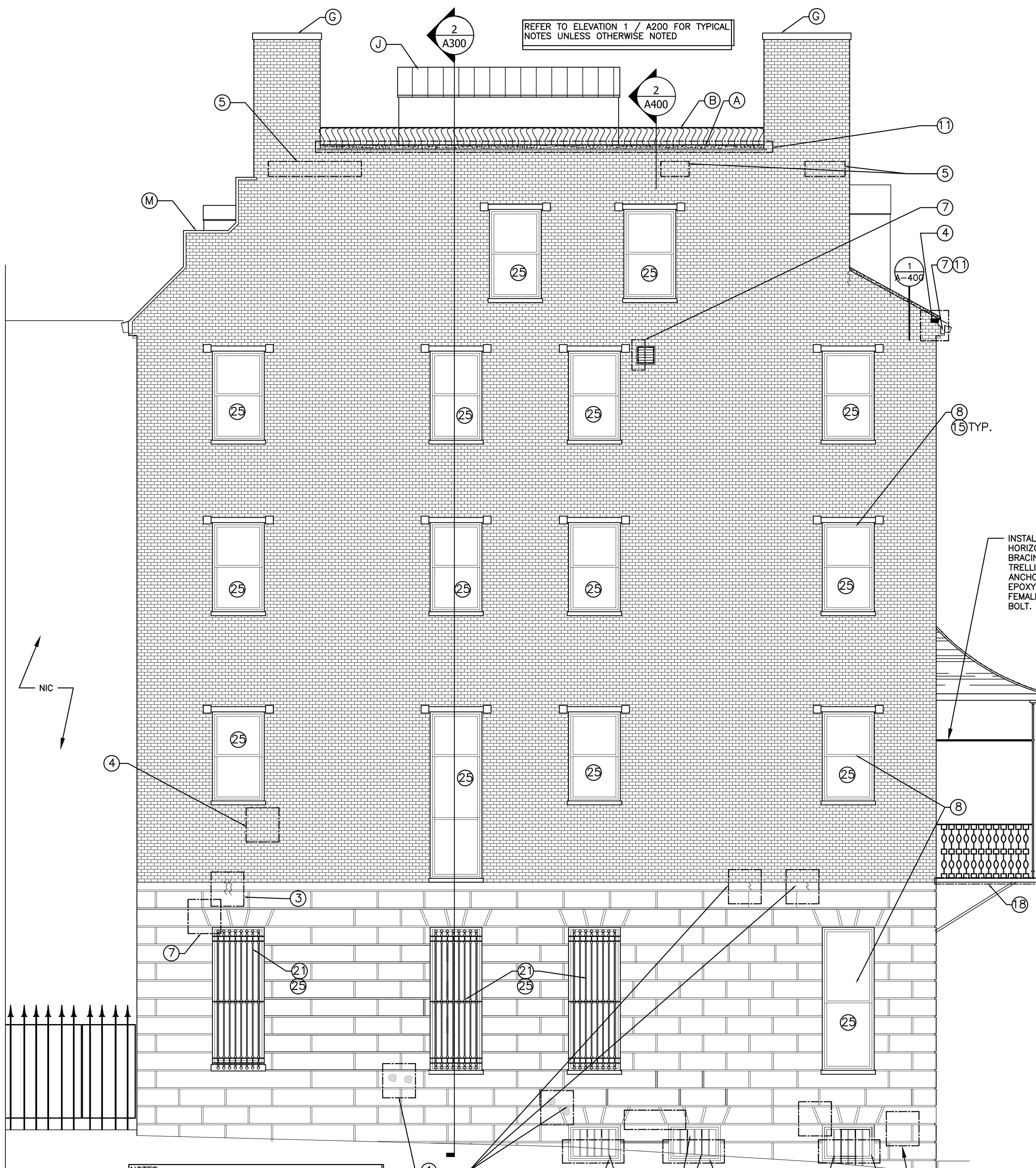
KEY LEGEND

- (1) CRACKS IN STONE REPAIRED WITH SEALANT
- (2) REPAIR CRACKS IN BRICK
- (3) REPAIR CRACK IN STONE
- (4) CRACK IN BRICK
- (5) DETERIORATED BRICK
- (6) REPAIR SPALLING OF STONE
- (7) DETERIORATED MORTAR
- (8) FAILED SEALANT
- (9) EXISTING FLAG POLE
- (10) OPEN JOINT
- (11) LOOSE FLASHING
- (12) CORRODED METAL
- (13) DETERIORATED WOOD
- (14) PEELING PAINT
- (15) ROOF MEMBRANE PATCH
- (16) REMOVE EXISTING CRACKED STONE LINTEL & REPLACE WITH NEW STONE LINTEL TO MATCH EXISTING
- (17) REMOVE EXISTING WOOD DECKING FROM TOP OF EXISTING METAL FLOOR GRATE AT BALCONY. PREPARE & PAINT EXISTING METAL GRATE. PROVIDE & INSTALL NEW HEEL PROOF GRATE ON TOP OF EXISTING METAL GRATE.
- (18) REMOVE EXISTING GUTTER & REPLACE WITH NEW GUTTERS TO MATCH EXISTING
- (19) REMOVE EXISTING BALCONY DOORS AND STORM WINDOWS THAT COVER THE DOORS. REPLACE WITH NEW INSULATED WOOD DOORS TO MATCH EXISTING DOOR SASHES IN APPEARANCE. CONSTRUCTION FINISH AND COLOR. DOOR FRAMING & BRICK MOULDS TO REMAIN.
- (20) REMOVE, PREPARE, PAINT AND REINSTALL ALL WINDOW SECURITY BARS.
- (21) PREPARE AND PAINT METAL
- (22) RESTORE EXISTING FRONT DOOR TO ORIGINAL APPEARANCE, FINISH AND COLOR. DOOR FRAME & MOULDS TO REMAIN.
- (23) REPLACE GLASS IN EXISTING SIDELIGHTS AT FRONT ENTRANCE.
- (24) PROVIDE AND INSTALL NEW CUSTOM OPERABLE WOOD WINDOWS WITH NEW BRICK MOLDS, DIVIDED LIGHTS. WITH FACTORY-INSTALLED GLASS AND GLAZING. WITH SHOP-APPLIED PRIMER AND PAINT. PROFILES TO MATCH EXISTING.
- (25) PREPARE AND PAINT ALL POST, GUARD RAIL, AND BRACING.
- (26) PREPARE AND PAINT ALL WOOD MOLDING AND TRIM



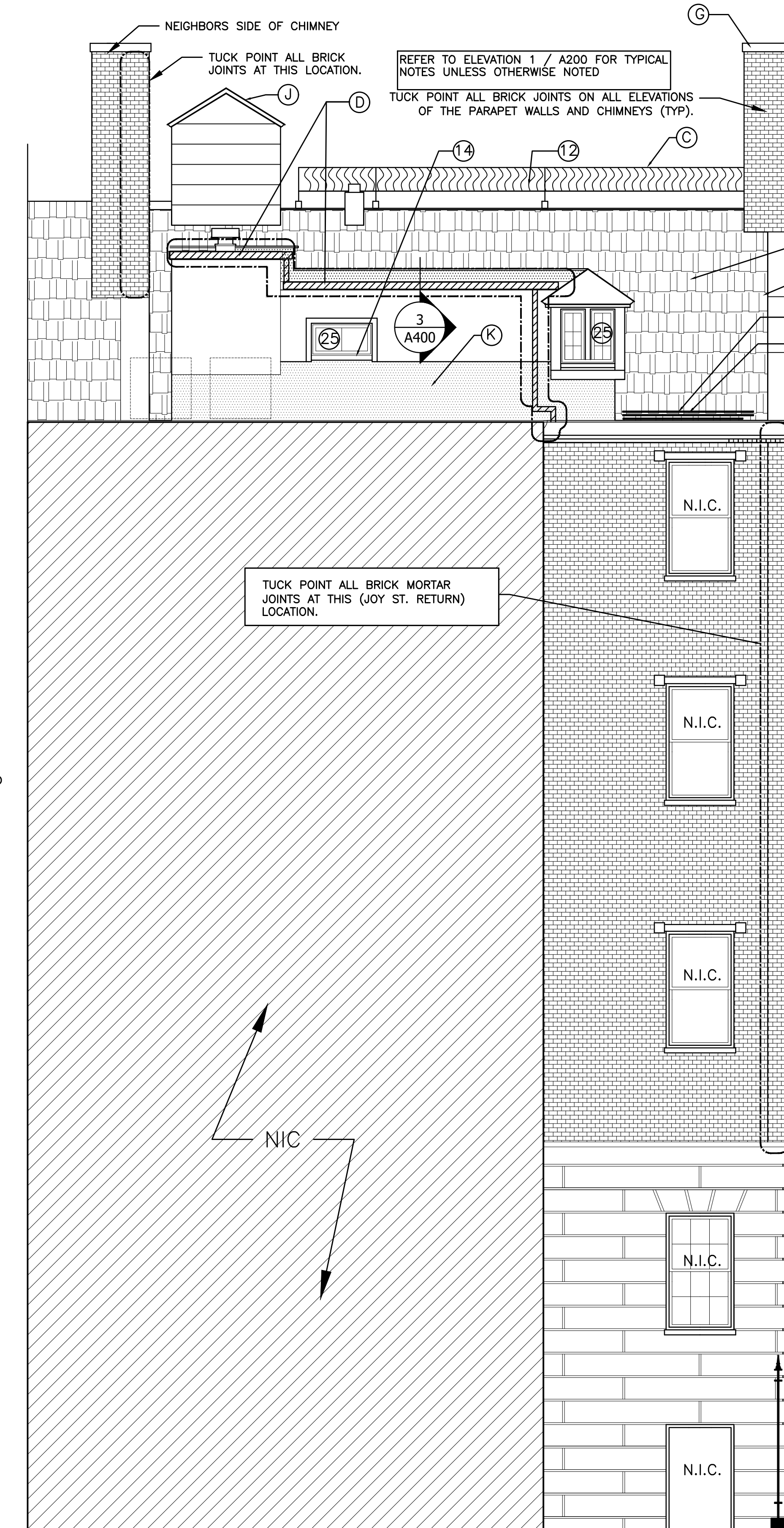
1 SOUTH ELEVATION - BEACON STREET
SCALE: 1/4"=1'-0"

- NOTES:
- TUCKPOINT ALL BRICK MORTAR JOINTS AT THIS ELEVATION.
 - TUCKPOINT ALL DETERIORATED GRANITE MORTAR JOINTS AT THIS ELEVATION.

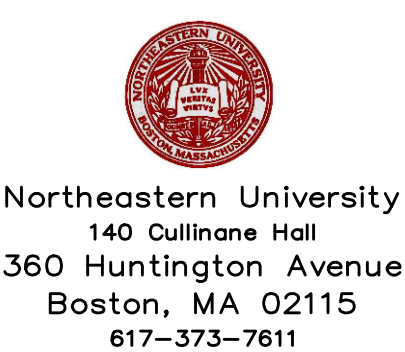


2 WEST ELEVATION - JOY STREET
SCALE: 1/4"=1'-0"

- NOTES:
- TUCKPOINT ALL BRICK MORTAR JOINTS AT THIS ELEVATION.
 - TUCKPOINT ALL DETERIORATED GRANITE MORTAR JOINTS AT THIS ELEVATION.



3 NORTH ELEVATION - BEACON STREET
SCALE: 1/4"=1'-0"



Northeastern University
140 Cullinane Hall
360 Huntington Avenue
Boston, MA 02115
617-373-7611



Charlestown Navy Yard
31 Fifth Street
Boston, Massachusetts 02129
617-520-9555

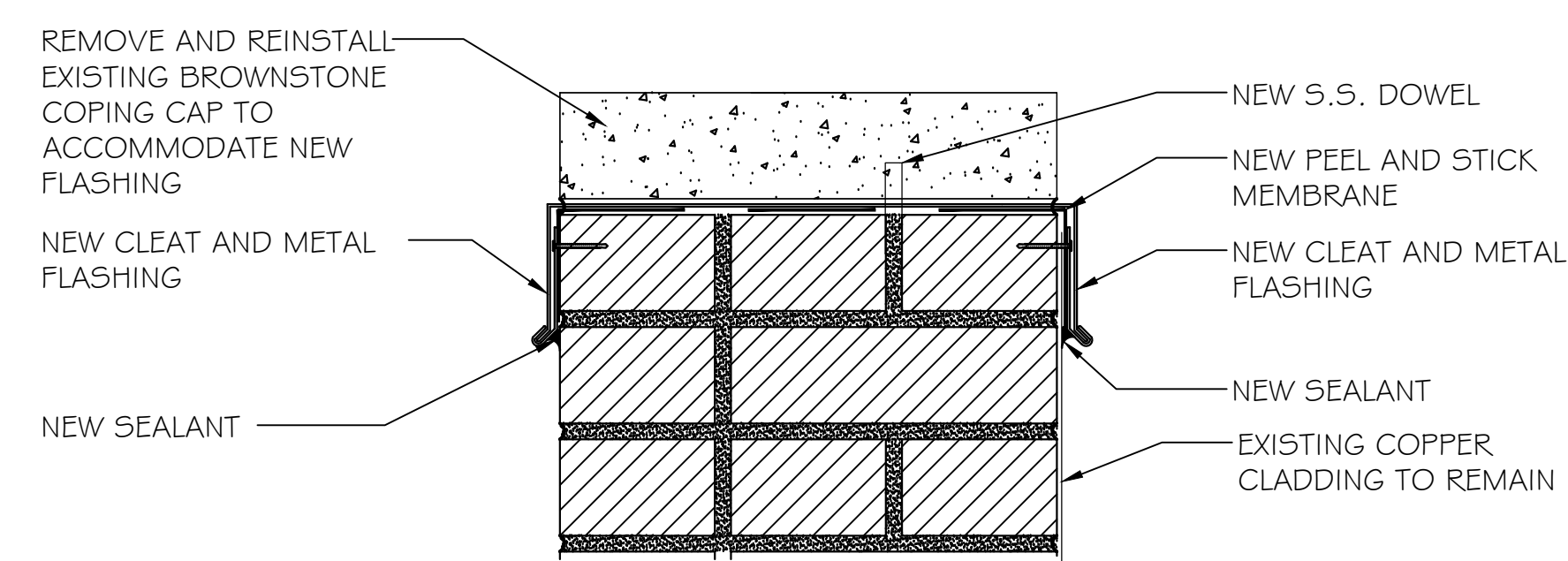
NORTHEASTERN UNIVERSITY – 34 BEACON STREET BOSTON, MA.
EXTERIOR RESTORATION

PROPOSED ELEVATIONS

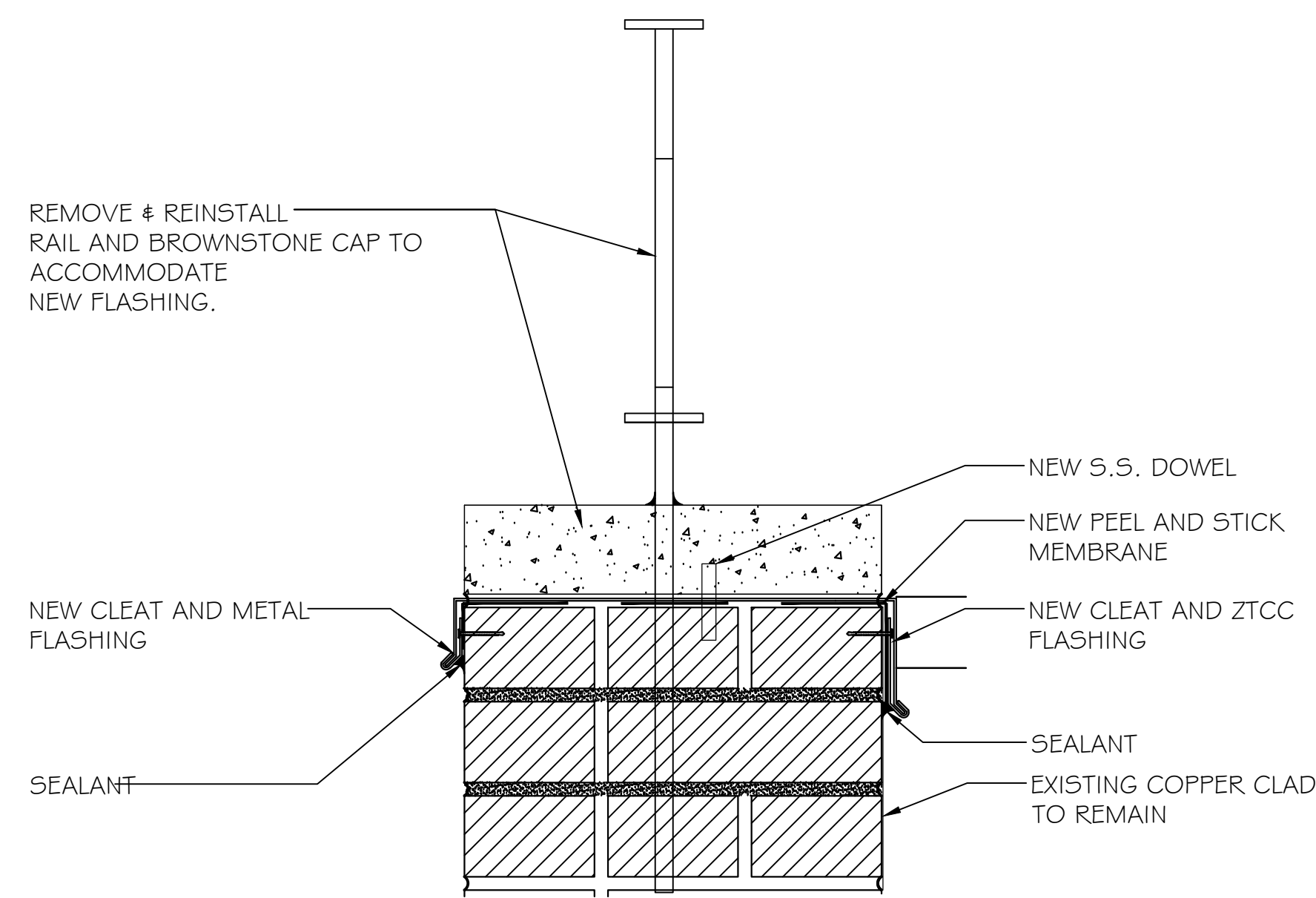
No		Date		Description		No		Date		Description	
Issues		Revisions									

Date Issued: May 25, 2018
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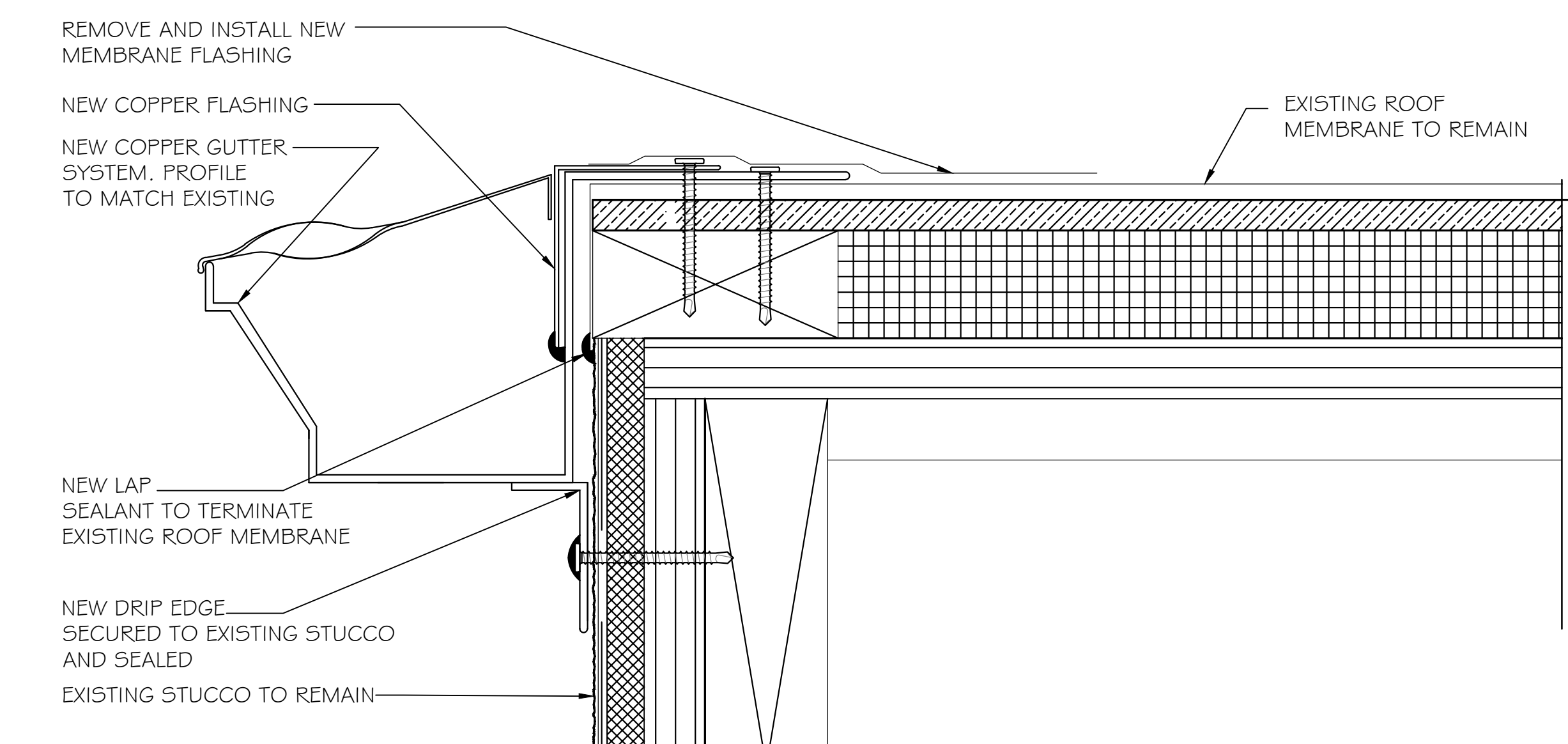
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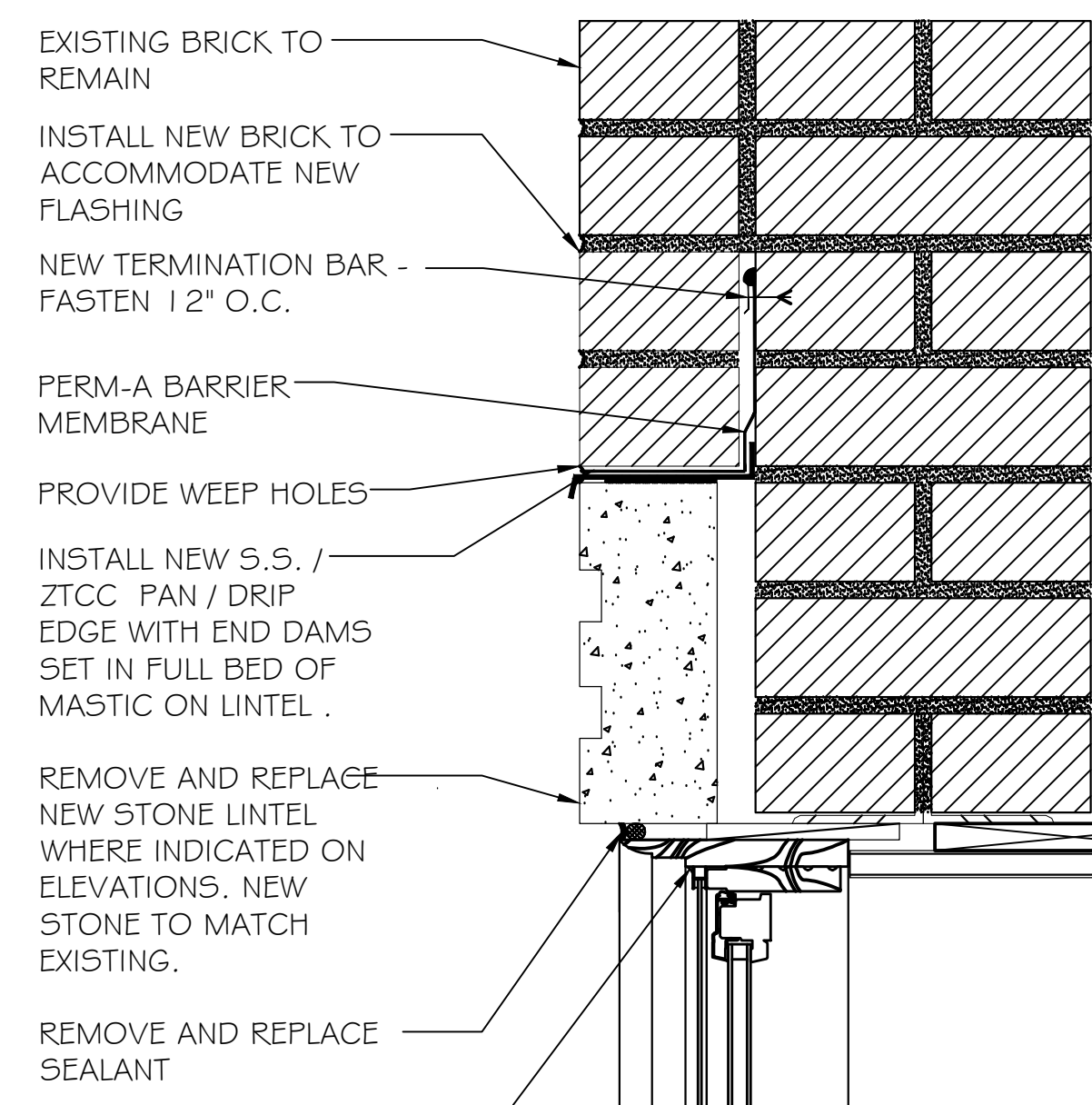
1 PROPOSED BROWNSTONE CAP DETAIL
3" = 1'-0"



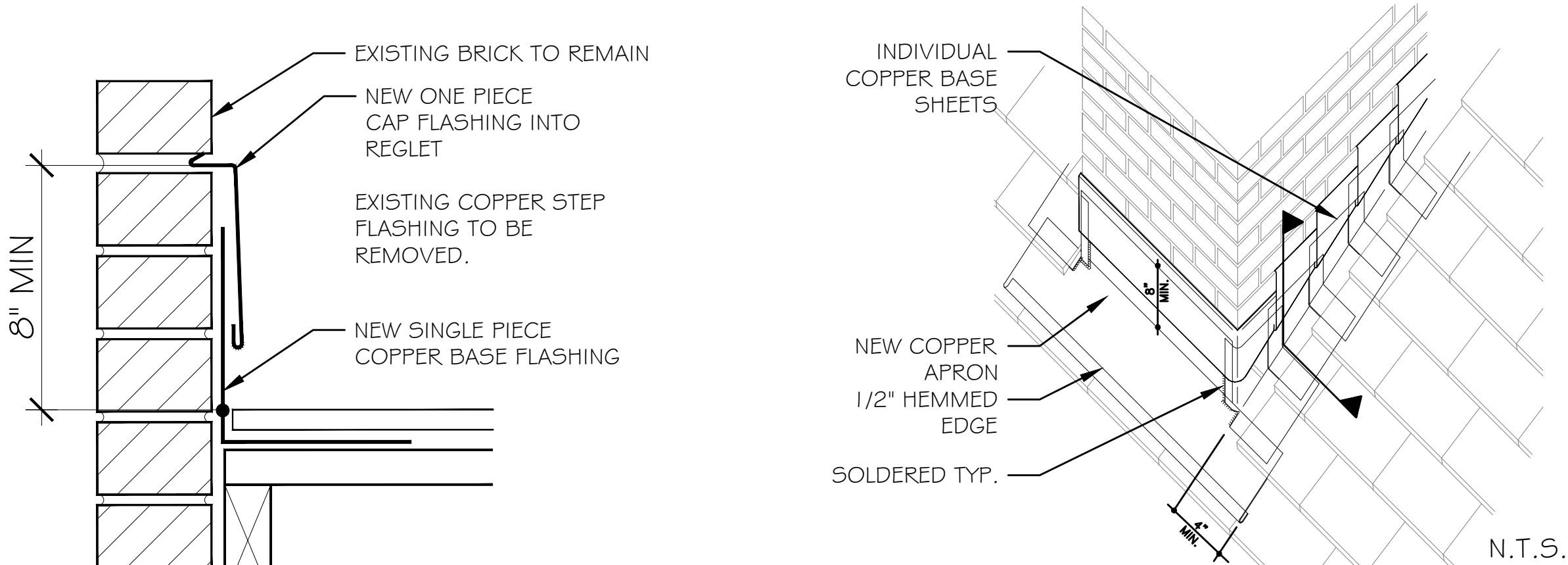
2 PROPOSED BROWNSTONE CAP WITH RAILING DETAIL
3" = 1'-0"



3 PROPOSED ROOF EDGE DETAIL
6" = 1'-0"



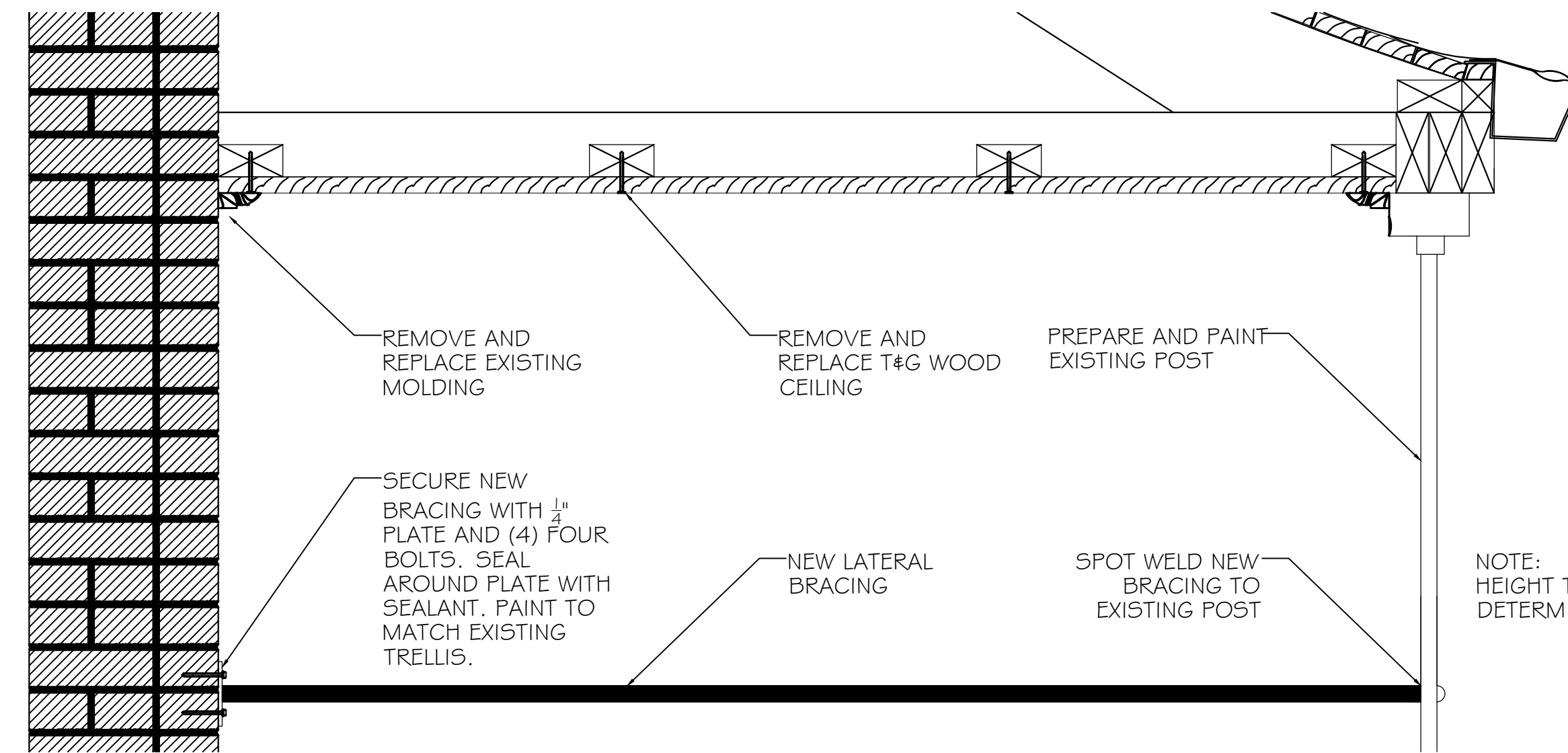
4 PROPOSED STONE LINTEL DETAIL
3" = 1'-0"



5 EXISTING COPPER / REGLET DETAIL AT STEP FLASHING
3" = 1'-0"



7 EXISTING AT STEP FLASHING CONDITION AT ASPHALT ROOFING



6 PROPOSED TRELLIS - REPAIRS
1/2" = 1'-0"



D EXISTING CONDITIONS - PHOTO 4
NOT TO SCALE

NOTE: CRACKED STONE HEADER ABOVE BALCONY DOORS



C EXISTING CONDITIONS - PHOTO 3
NOT TO SCALE



B EXISTING CONDITIONS - PHOTO 2
NOT TO SCALE

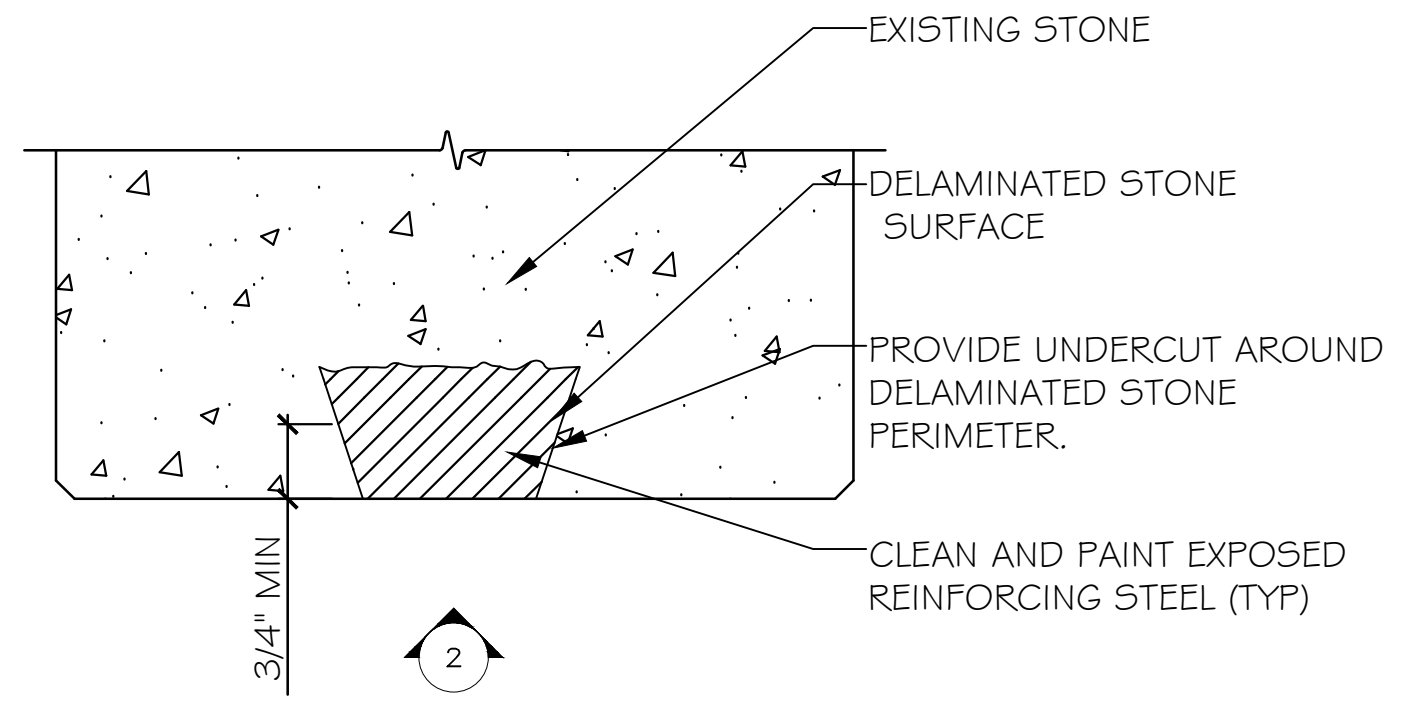


A EXISTING CONDITIONS - PHOTO 1
NOT TO SCALE

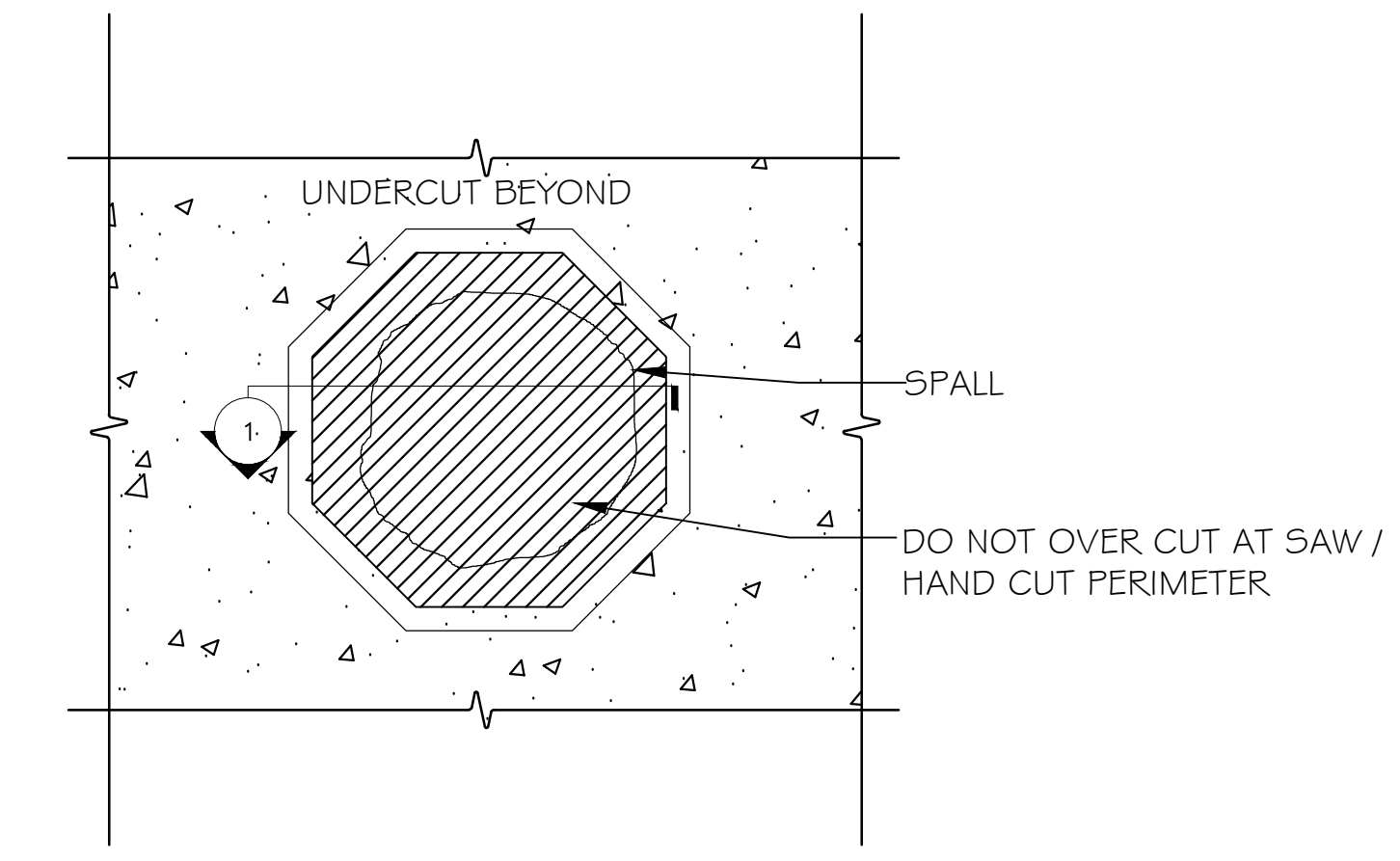
No	Date	Description	No	Date	Description
4	06-11-12	Per Beacon Hill Hist Comments			
Issues			Revisions		

Date Issued: May 25, 2018
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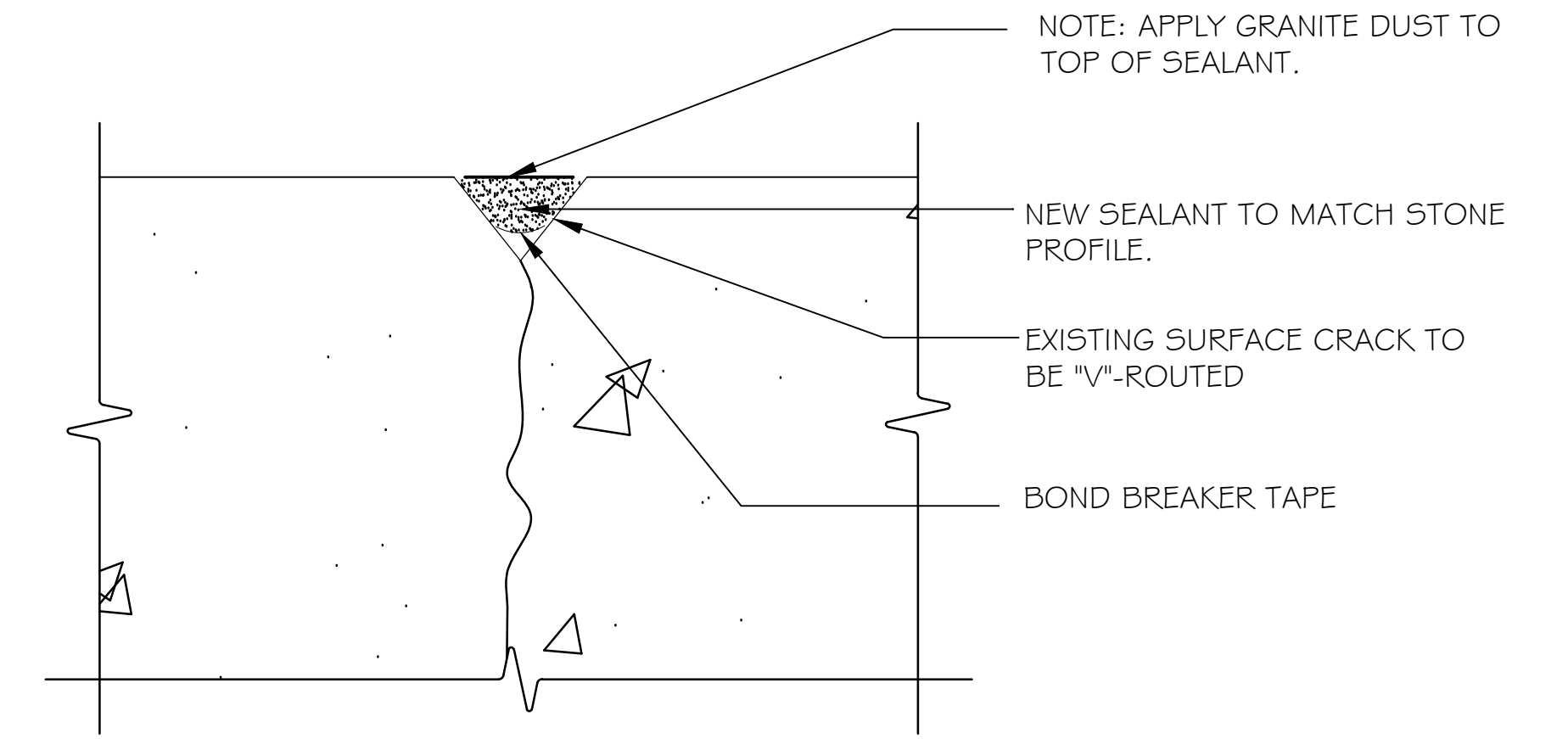
NOTE:
NEW PATCH TO MATCH ADJACENT SURFACE COLOR,
AND FINISH. SUBMIT SAMPLE PRODUCT FOR APPROVAL.
MIN. OF 4 TEST AREAS AS LOCATED BY CONSULTANT.



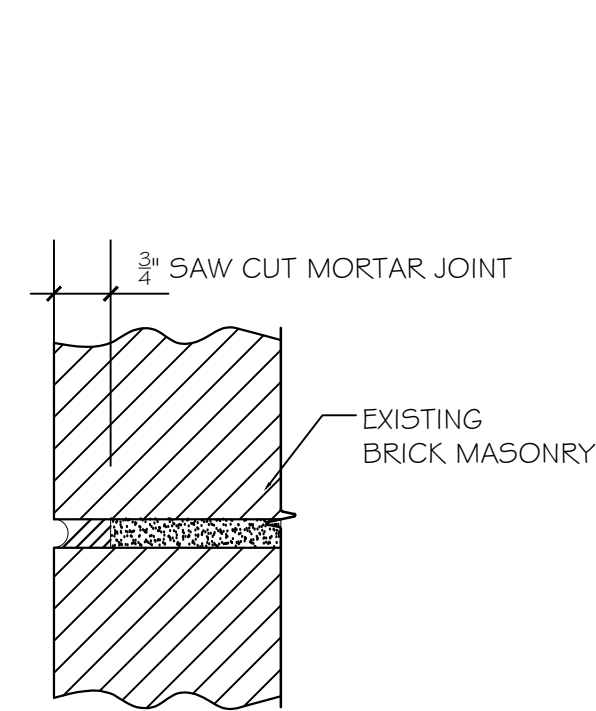
1 PROPOSED GRANITE SPALL REPAIR
3\"/>



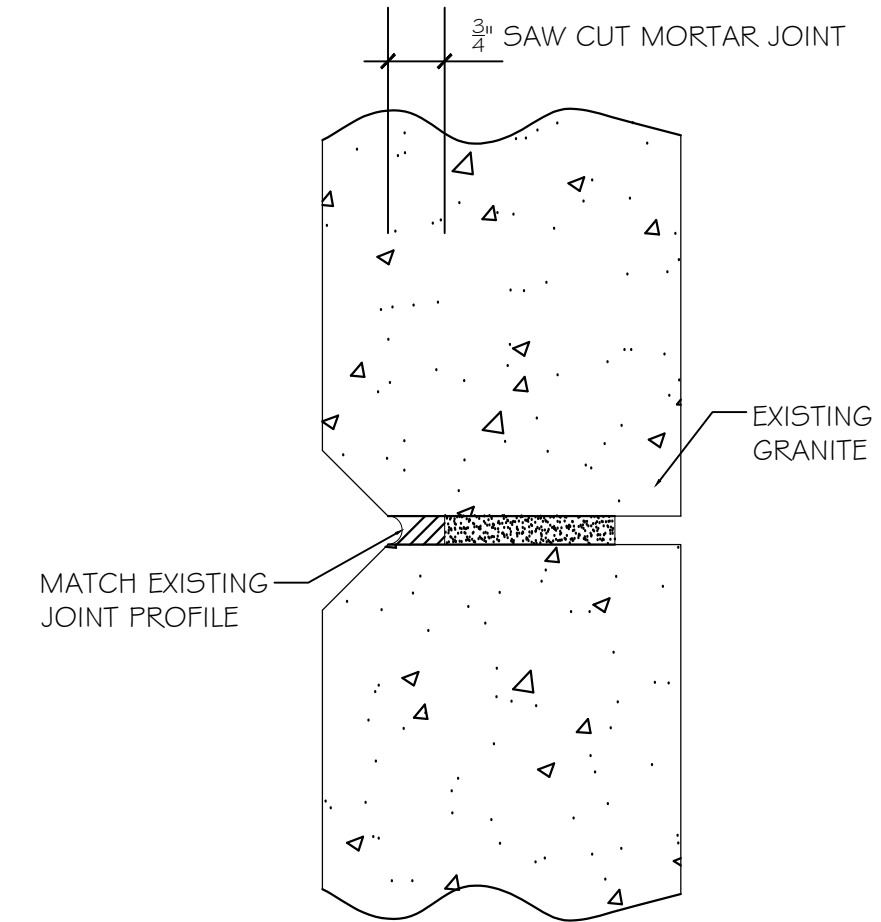
2 GRANITE PATCHING
ELEVATION UP TO 6\"/>



3 PRE CAST GRANITE CRACK REPAIR
3\"/>



4 BRICK TUCKPOINT DETAILS
3\"/>



5 GRANITE TUCKPOINT DETAILS
3\"/>



Northeastern University
140 Cullinane Hall
360 Huntington Avenue
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617-375-7611



Charlestown Navy Yard
31 Fifth Street
Boston, Massachusetts 02129
617-520-9555

NORTHEASTERN UNIVERSITY – 34 BEACON STREET BOSTON, MA.
EXTERIOR RESTORATION

PROPOSED DETAILS

No	Date	Description	No	Date	Description

Date Issued: May 25, 2018
Project Number:
Drawing Scale: AS NOTED
Drawn By:
Checked By:
Approved by: -

PRICING

A-401

Historic Window & Door Holdings
12 Forest Road
Alstead, N.H. 03602

5 January 2019

The following letter is my Corporation's recommendation to obtain approval from The Beacon Hill Landmarks Commission for all sash sets & doors at 34 Beacon Street, Boston, M.A. 02108

For new custom manufactured & installed sash sets, doors/mill work:

Existing windows in dormers are non-original jambliners and are 2 over 2 lights: Replace in kind. Current windows have a 1 ½" muntin. New wood sash sets will have a ¾" original Beacon Hill muntin design(profile) at interior. Exterior will be true divided light, 3/16" wood stem & oil based glazed at all daylight openings.

The front 4th,3rd & 1st Floor are non-operational, rotten wood, stained glass, no existing correct weights for counter balance, interior sash profile is almost gone, lead paint, asbestos caulking & beyond reasonable repair. All these sash will be replaced with double hung, true-divided light, true track, wood custom sash sets in existing frames.

The front 2nd Floor are currently cannibalized lower door sets and above 2 light transoms. H.W.D. proposes to replace in what would have been original French doors & new 2 light transom. Existing transom & doors do not operate/ panels have been removed and replaced with plexiglass & aluminum mounted on front of frame/doors & transom. H.W.D. will custom manufacture 1 ¾" mahogany French doors & transom to what the original specs would have been with clear glass and new hardware at interior.

All new manufactured sash sets will be painted Tri-Corn Black (oil) at exterior: 3 coats.

New wood parting beads will be fabricated for all sash sets.

New as would have been original ½" bull nose trim at interior: Headers/side stops.

All glass wood sash will be clear, no logos. Options for original period correct glass have been discussed.

Sash wood rails will be made to an original Beacon Hill spec:
Top rail/top sash: 1 5/8". Bottom rail/top sash: 7/8"

Top rail/bottom sash: 1 3/8". Bottom rail/bottom sash: 2 3/4"
All side wood rails on top & bottom sash: 1 5/8"

French doors will be manufactured & installed in kind: 2" side rails
Bottom rails: 2 3/4"
Top Rails: 1 5/8"
Mortised hinges at interior: "swing in": 2 per door: 3 1/2" x 3 1/2" solid brass.
Interior: surface mounted bolts for locking door.
Side rail: 2 flush bolts for locking.

Transom will be manufactured & installed in kind: above glass daylight openings will match doors below.

Original frames/brick mold will remain.

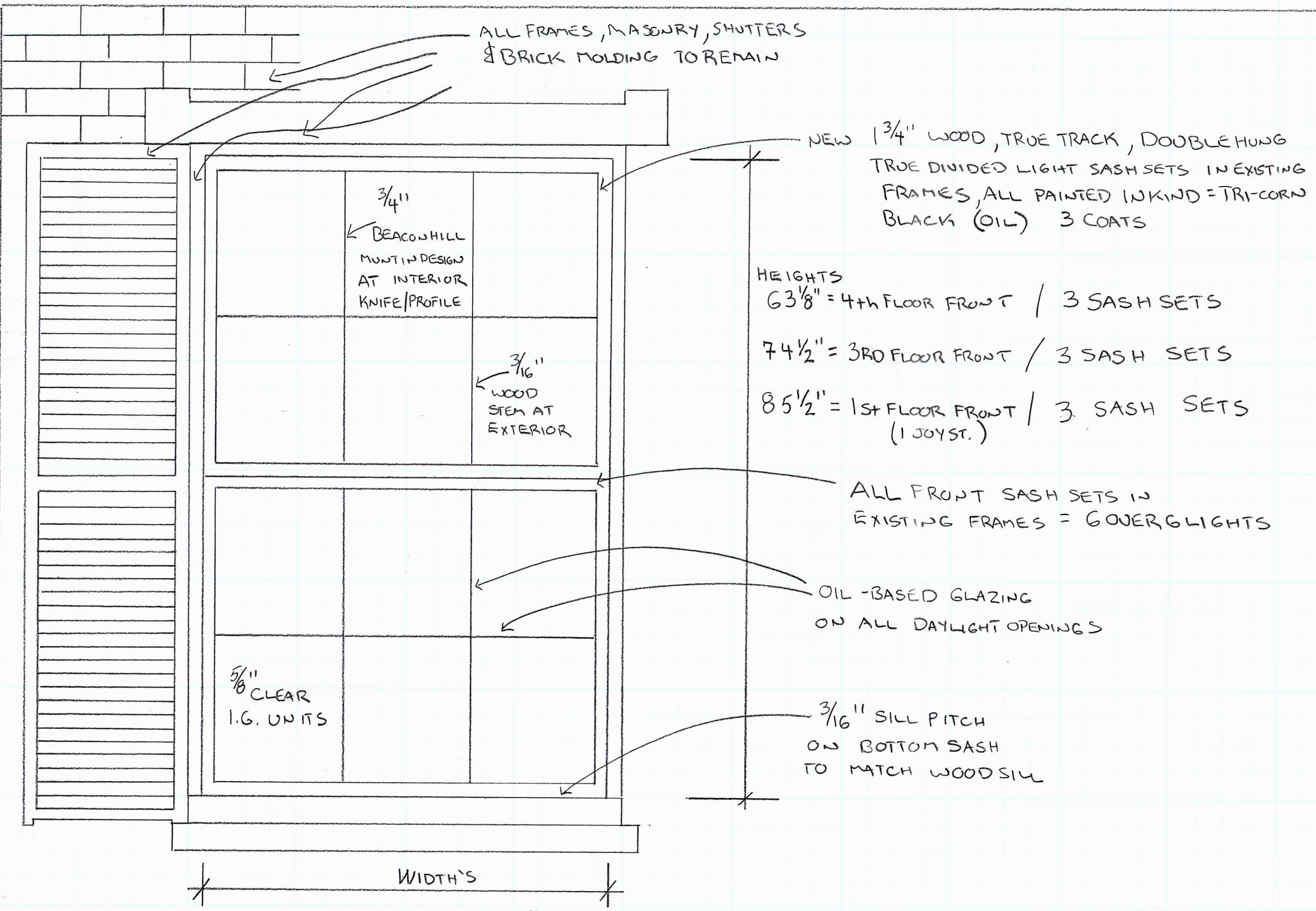
All glass on project will be clear, no logos.(no tint)

All exterior glass openings will be oil based putty glazed and painted in kind: Tri-Corn Black(oil).

All muntin design will be in kind: 3/4" profile.

I believe the above information to be reasons that the existing sash/doors to be beyond reasonable repair.

Sean P. Cryts
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ALL FRAMES, MASONRY, SHUTTERS
& BRICK MOLDING TO REMAIN

NEW 3/4" WOOD, TRUE TRACK, DOUBLE HUNG
TRUE DIVIDED LIGHT SASH SETS IN EXISTING
FRAMES, ALL PAINTED IN KIND = TRI-CORN
BLACK (OIL) 3 COATS

HEIGHTS
 63 1/8" = 4th FLOOR FRONT / 3 SASH SETS
 74 1/2" = 3RD FLOOR FRONT / 3 SASH SETS
 85 1/2" = 1st FLOOR FRONT / 3 SASH SETS
 (1 JOYST.)

ALL FRONT SASH SETS IN
EXISTING FRAMES = GOVERGLIGHTS

OIL-BASED GLAZING
ON ALL DAYLIGHT OPENINGS

3/16" SILL PITCH
ON BOTTOM SASH
TO MATCH WOODSILL

3/4"
← BEACONHILL
MOUNTING DESIGN
AT INTERIOR
KNIFE/PROFILE

3/16"
← WOOD
STEM AT
EXTERIOR

5/8" CLEAR
I.G. UNITS

WIDTH'S

40 1/8" = 4th, 3RD &
1st FLOOR

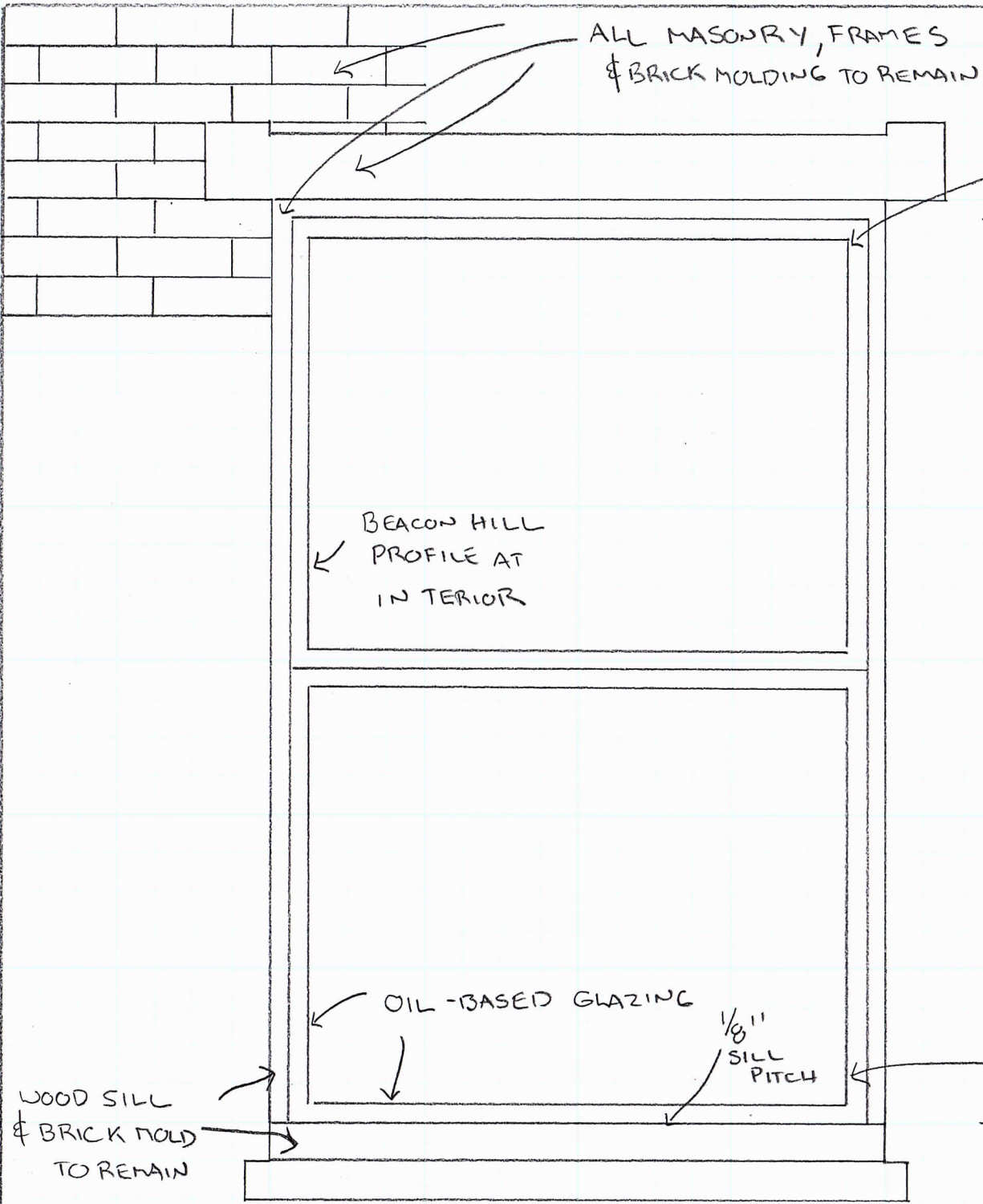
* ALL EXISTING STORM WINDOWS
TO BE REMOVED

34 BEACON STREET, BEACON HILL
BOSTON, M.A. 02108

FRONT VIEW / BEACON STREET

SHEET NO. 1 OF 8

Historic Window & Door Holdings
12 Forest Road, Junction 123&123A
P.O. Box 138
Alstead, N.H. 03602-0138



ALL SIDE SASHSETS BELOW:
 LOWER LIGHTS, IN EXISTING
 FRAMES

HEIGHTS

1. $63\frac{1}{8}''$ = 4th FLOOR, JOY STREET (SIDE) / 4 SASHSETS
2. $61\frac{1}{16}''$ = 4th FLOOR, JOY STREET (BACK) / 1 SASH SET
3. $57''$ = 5th FLOOR, JOY STREET (SIDE) / 2 SASH SETS
4. $74\frac{1}{2}''$ = 3rd FLOOR, JOY STREET (SIDE) / 4 SASH SETS
5. $74\frac{1}{2}''$ = 3rd FLOOR, JOY STREET (BACK) / 1 SASH SET
6. $86\frac{1}{16}''$ = 2nd FLOOR, JOY STREET (SIDE) / 4 SASH SETS
7. $86''$ = 1st FLOOR, JOY STREET (SIDE) / 3 SASH SETS
8. $71''$ = 1st FLOOR, JOY STREET (SIDE) / 1 SASH SET
9. $72\frac{1}{8}''$ = 1st FLOOR, JOY STREET (SIDE) / 3 SASH SETS
10. $72''$ = 1st FLOOR, JOY STREET (SIDE) / 1 SASH SET

NEW $1\frac{3}{4}''$ WOOD, TRUE TRACK, DOUBLE HUNG
 TRUE-DIVIDED LIGHT, SASH SETS, ALL PAINTED
 IN KIND = TRI-CORN BLACK (OIL) 3 COATS

WIDTH'S
 1. = $40\frac{1}{16}''$, 2. = $30\frac{1}{2}''$ 3. = $33''$ 4. = $40\frac{1}{16}''$
 5. = $30\frac{1}{2}''$ 6. = $40''$ 7. = $39\frac{1}{8}''$ 8. = $40''$

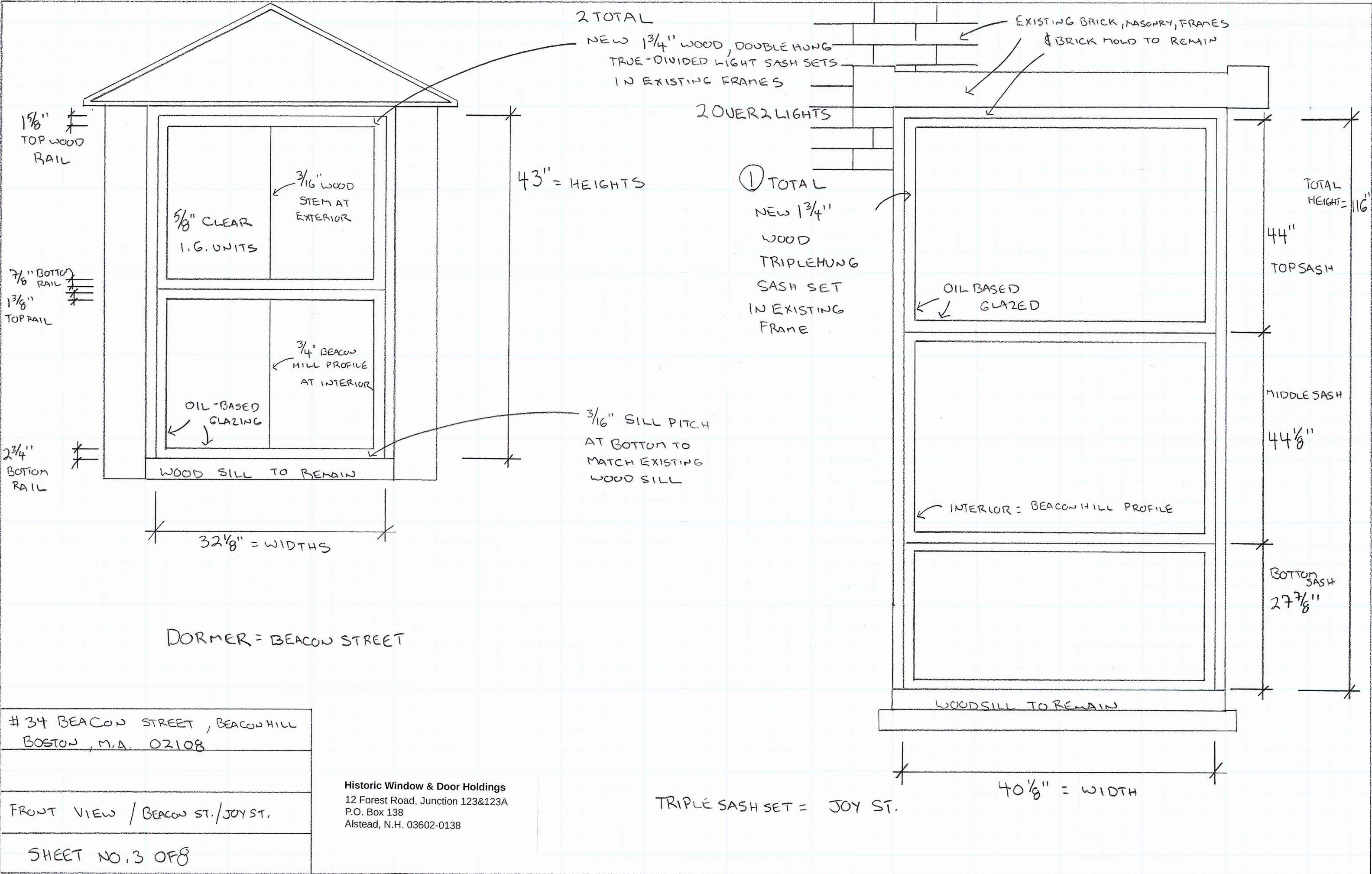
9. = $31\frac{1}{16}''$ 10. = $45\frac{1}{2}''$

* ALL EXISTING STORM WINDOWS
 TO BE REMOVED

#34 BEACON STREET, BEACON HILL
 BOSTON, M.A. 02108

FRONT VIEW / JOY STREET

SHEET NO. 2 OF 8



34 BEACON STREET, BEACON HILL
 BOSTON, M.A. 02108

FRONT VIEW / BEACON ST. / JOY ST.

SHEET NO. 3 OF 8

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TRIPLE SASH SET = JOY ST.

DORMER = BEACON STREET

2 TOTAL
 NEW 1 3/4" WOOD, DOUBLE HUNG
 TRUE-DIVIDED LIGHT SASH SETS
 IN EXISTING FRAMES

EXISTING BRICK, MASONRY, FRAMES
 & BRICK MOLD TO REMAIN

2 OVER 2 LIGHTS

① TOTAL
 NEW 1 3/4" WOOD
 TRIPLE HUNG
 SASH SET
 IN EXISTING
 FRAME

43" = HEIGHTS

3/16" SILL PITCH
 AT BOTTOM TO
 MATCH EXISTING
 WOOD SILL

1 5/8" TOP WOOD
 RAIL

7/8" BOTTOM
 RAIL
 1 3/8" TOP RAIL

2 3/4" BOTTOM
 RAIL

5/8" CLEAR
 I.G. UNITS

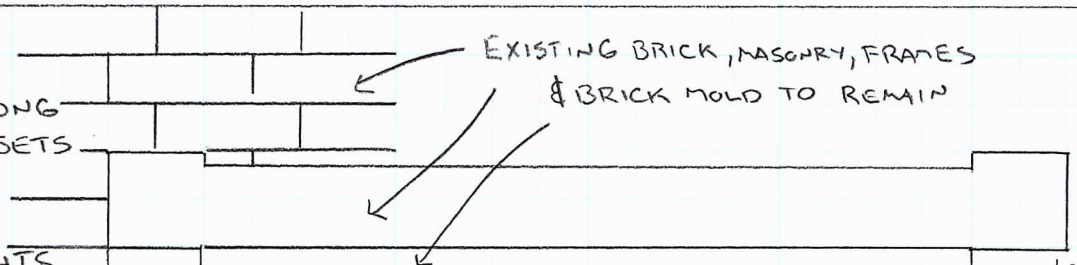
3/16" WOOD
 STEM AT
 EXTERIOR

3/4" BEACON
 HILL PROFILE
 AT INTERIOR

OIL-BASED
 GLAZING

WOOD SILL TO REMAIN

32 1/8" = WIDTHS



TOTAL
 HEIGHT = 116"

44" TOP SASH

MIDDLE SASH
 44 1/8"

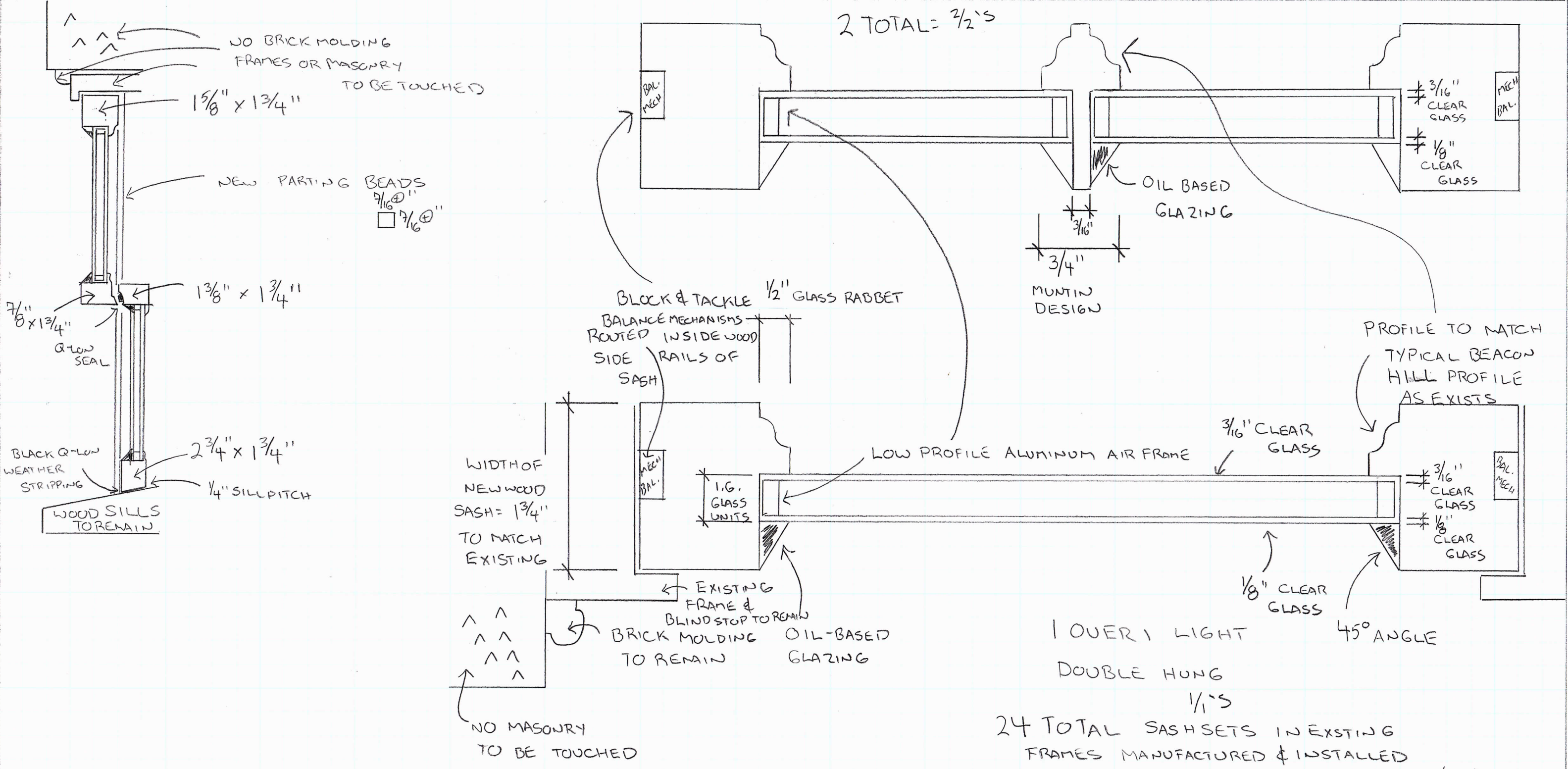
BOTTOM SASH
 27 7/8"

OIL BASED
 GLAZED

INTERIOR = BEACON HILL PROFILE

WOODSILL TO REMAIN

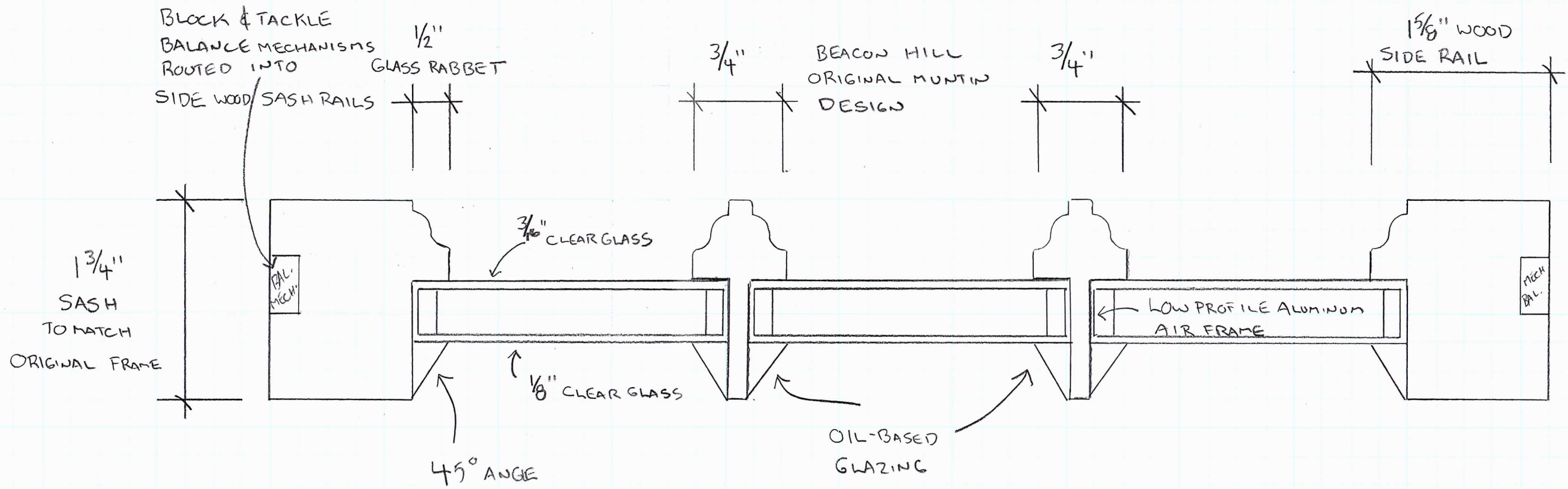
40 1/8" = WIDTH



1 OVER 1 LIGHT
 DOUBLE HUNG
 1/1'S
 24 TOTAL SASH SETS IN EXISTING
 FRAMES MANUFACTURED & INSTALLED
 IN KIND, FINISH PAINTED TRI-CORN (OIL)
 BLACK AT EXTERIOR

34 BEACON STREET, BEACONHILL BOSTON, M.A. 02108
RESIDENCE OF:
SIDE & OVERHEAD VIEW
SHEET NO. 4 OF 8

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9 TOTAL, 6 OVER 6 LIGHTS, WOOD SASH SETS IN EXISTING FRAMES, MANUFACTURED & INSTALLED ALL PAINTED IN KIND = TRI-CORN BLACK (OIL)

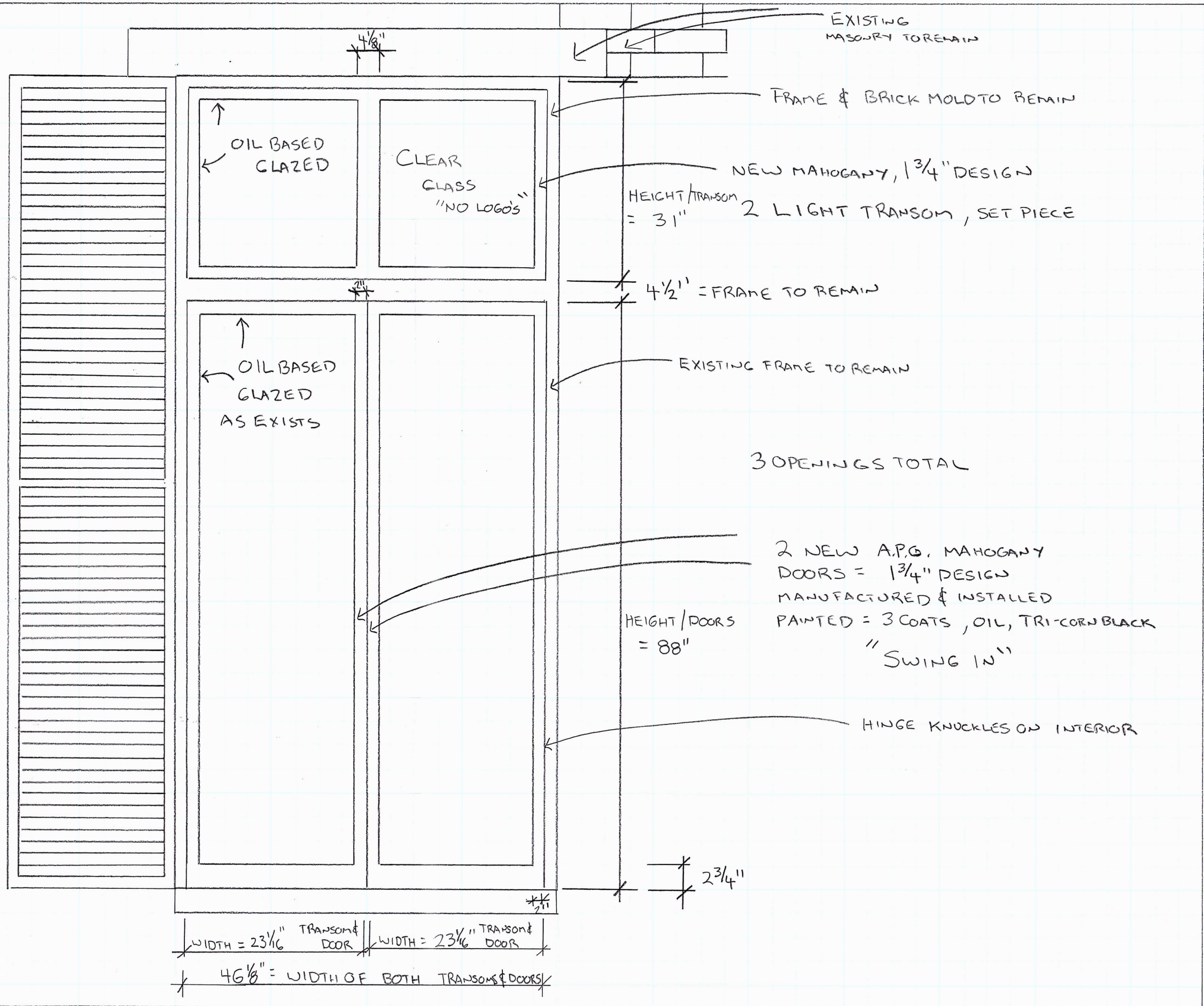
* ALL STORM WINDOWS TO BE REMOVED

34 BEACON STREET, BEACON HILL
 BOSTON, M.A. 02108

OVER HEAD VIEW

SHEET NO. 5 OF 8

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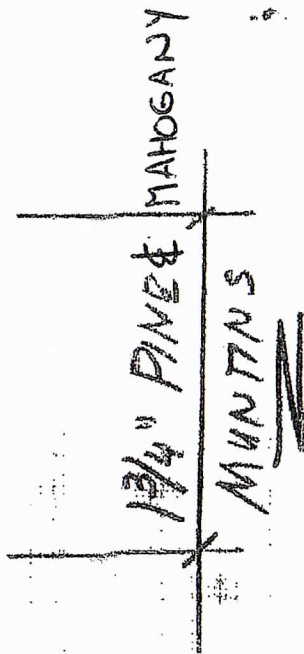
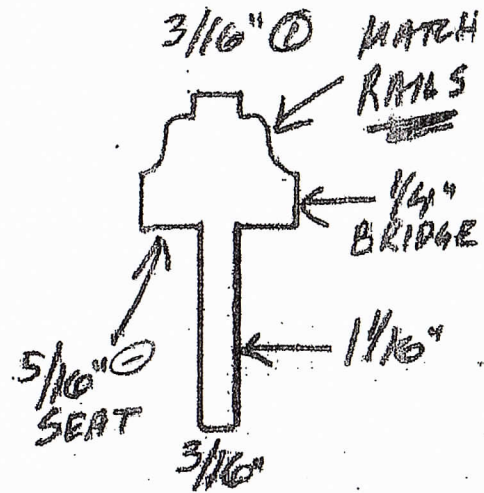


34 BEACON STREET, BEACON HILL
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FRONT VIEW / BEACON STREET

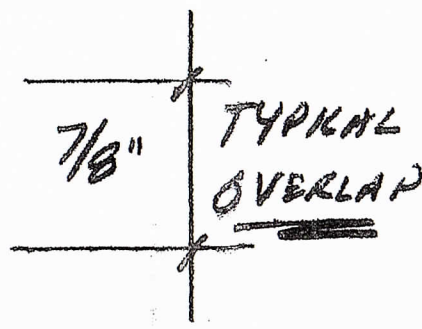
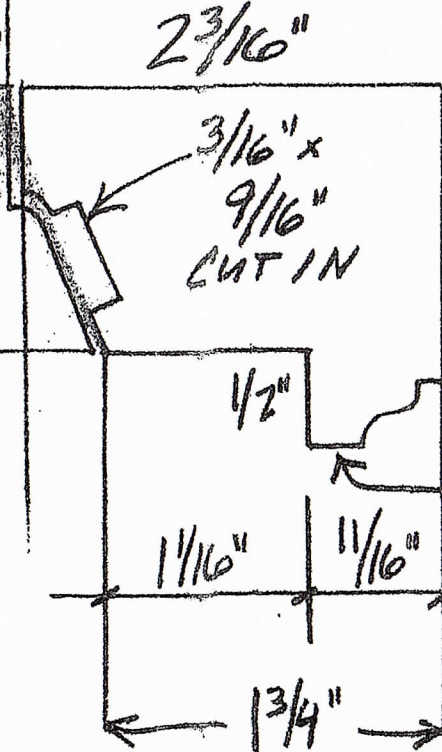
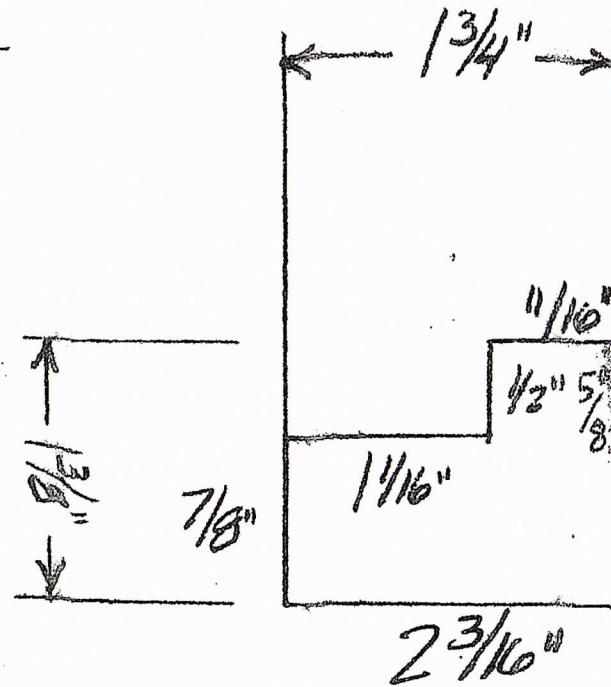
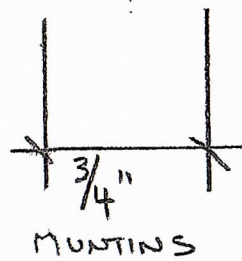
SHEET NO. 6 OF 8

BEACON HILL



WINDOW/SASH DETAIL
= BEACON HILL

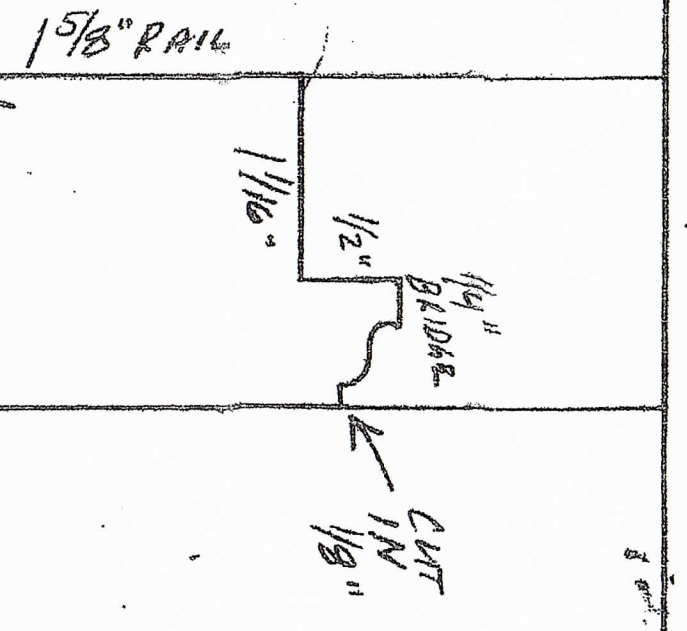
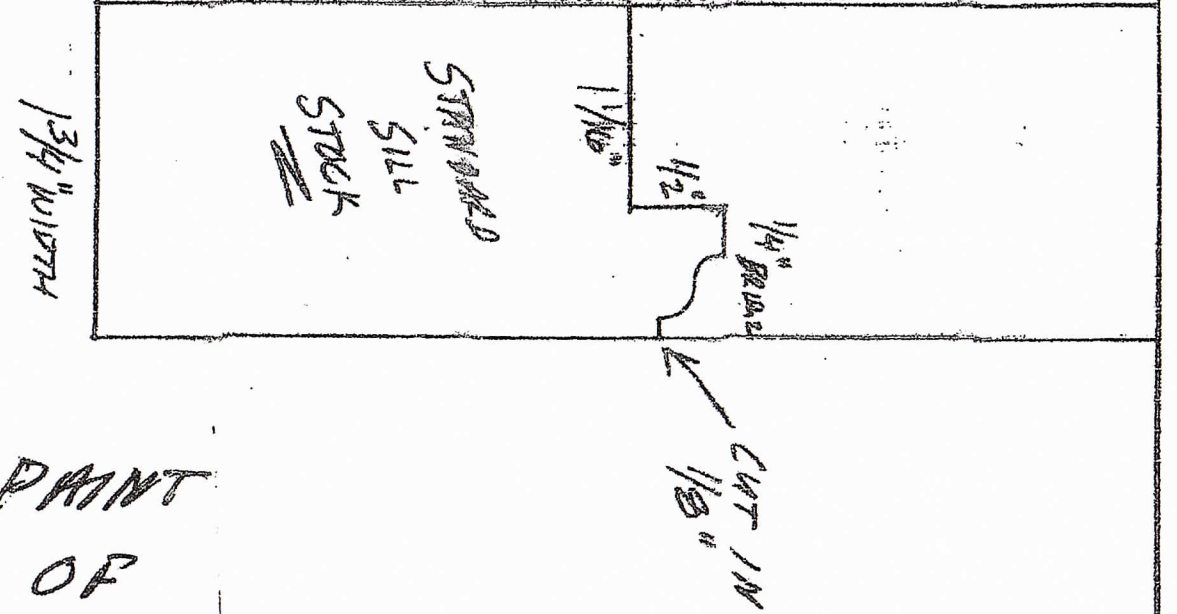
7/16" OVERLAP. MORE = PAINT WILL RUB ON INSIDE OF TOP SASH. LESS = AIR WILL PASS THRU BOTTOM WINDOW WEATHER STRIPPING.



1/4" BRIDGE IS TYPICAL

103" - 112"
FACE CUTTING

2 3/4" SILL



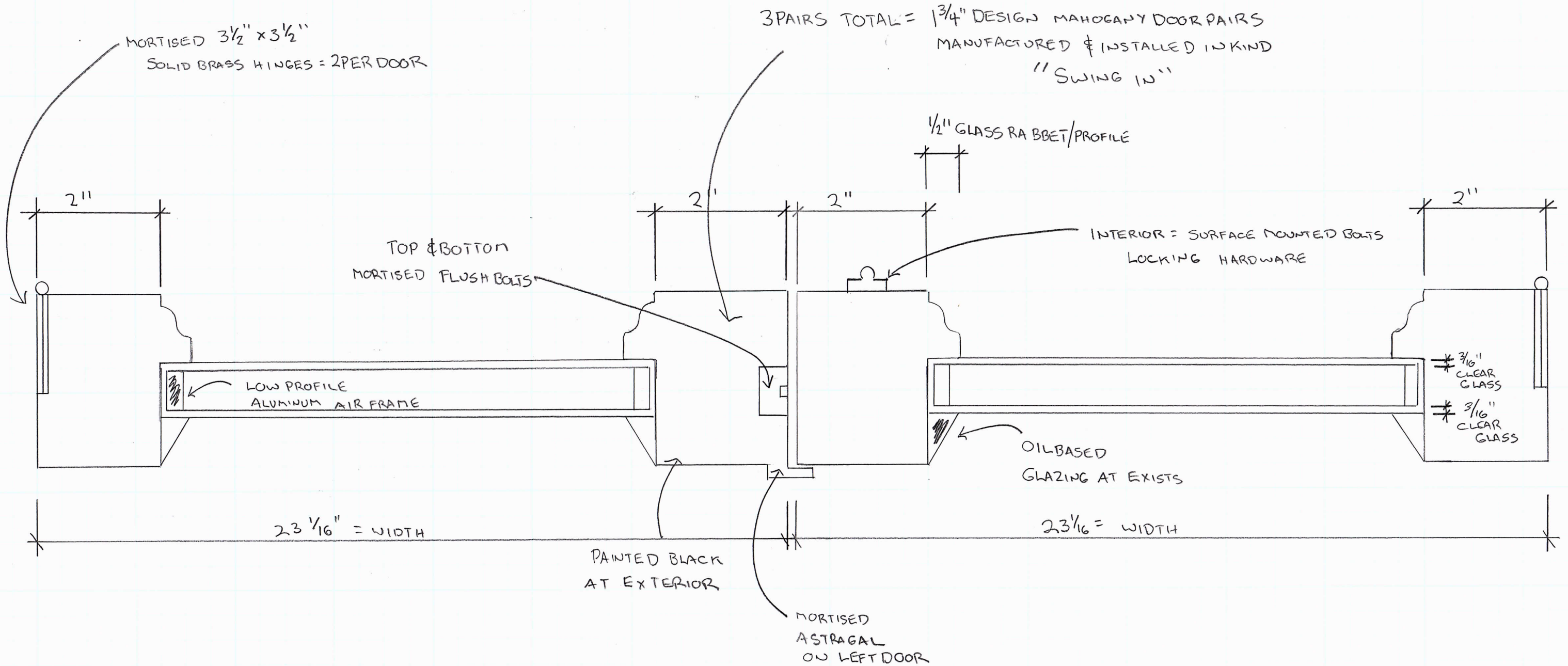
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#34 BEACON STREET, BEACON HILL
BOSTON, MA. 02108

DETAIL SHEET

SHEET NO. 7 OF 8

DOORS, 2nd FLR, BEACONST.



34 BEACON STREET, BEACON HILL
BOSTON, M.A. 02108

OVER HEAD VIEW

SHEET 8 OF 8

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SEA-DAR
CONSTRUCTION