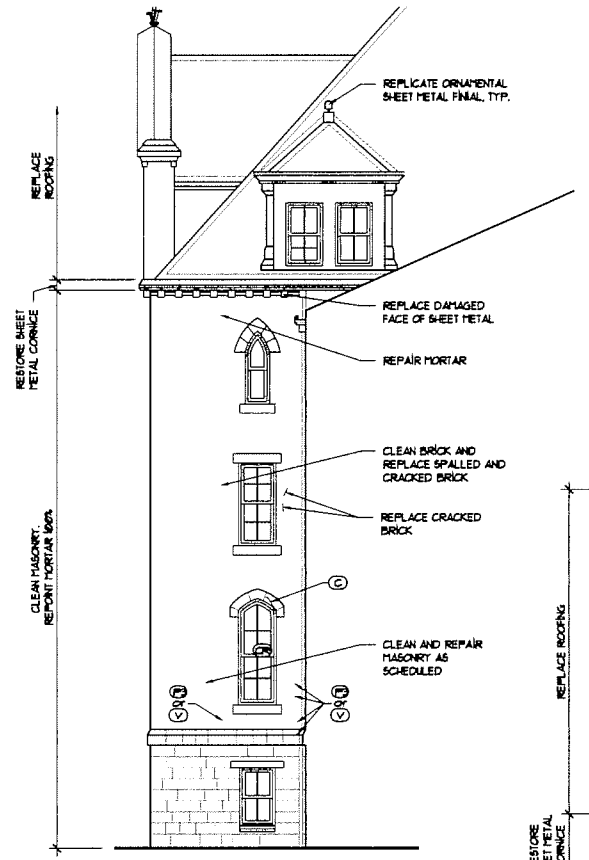
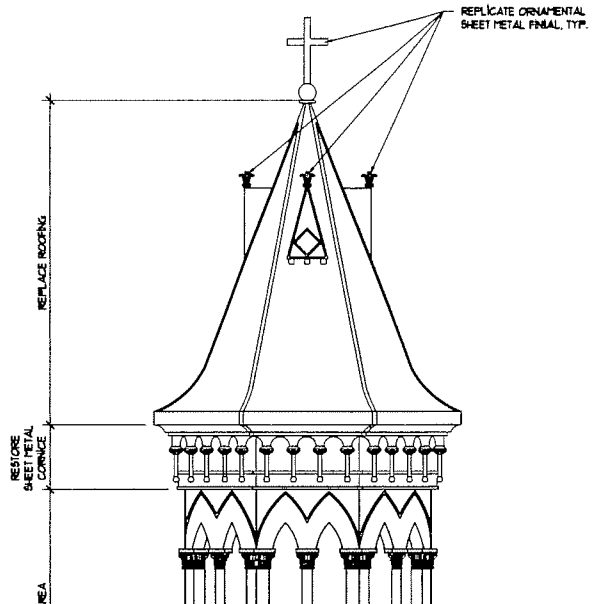
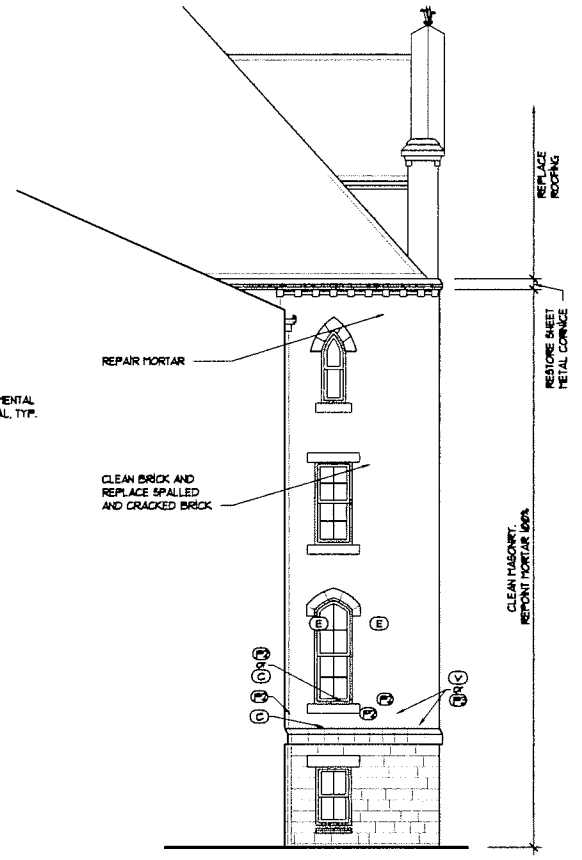
MASONRY RESTORATION LEGEND-ELEVATIONS

- (E) - EXISTING PATCH TO BE REPLACED
- (C) - CRACK TO BE FILLED
- (P) - STONE TO BE PATCHED: ALLOW FOR PATCHING OF LESS THAN 20% OF EXPOSED SURFACE AREA.
- (PA) - INDICATES STONE PATCH TO BE PRICED AS AN ALTERNATE.
- (R) - REPLACEMENT STONE
- (CR) - CRACK TO BE REPAIRED
- (PATCH) - PATCH.
- - REPAIR CRACK.

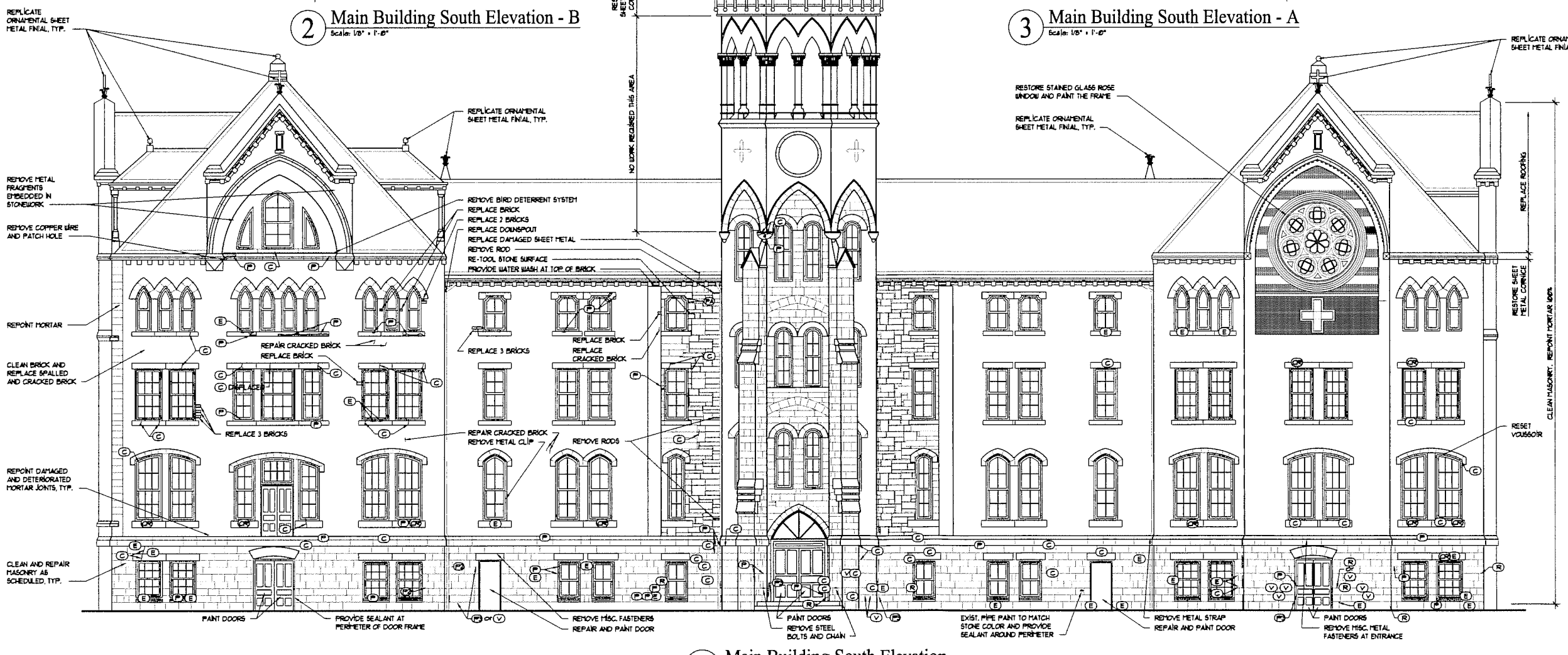


2 Main Building South Elevation - B
Scale: 1/8" = 1'-0"





3 Main Building South Elevation - A
Scale: 1/8" = 1'-0"



1 Main Building South Elevation
Scale: 1/8" = 1'-0"

St. Edward's University
Main Building
and Holy Cross - Exterior Restoration
Austin, Texas

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2900 S. CONGRESS, #200
AUSTIN, TEXAS 78704
512.444.4220 FAX 512.444.4221
WEB WWW.ARCHITEXAS.COM

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DESIGN DEVELOPMENT SET

REVISIONS

Main Building - South Exterior Elevation

DRAWN BY: JJ
CHECKED BY: LI
DATE: February 19, 2016
PROJECT NO.: 1544
SHEET NO.: MB3.01

Guidelines & Methodology for Masonry Treatment

Description - Construction

Exterior Walls
The exterior walls of the building are load bearing masonry walls. The base of the building is faced with a rusticated limestone in a rough-cut finish. The upper portion of the walls, typically extending from the 2rd to the 3rd floors, is faced with a cream tan colored modular brick in a running bond pattern. A smooth cut limestone sill course separates the limestone base from the upper brick walls. The only exception to this are the north entry porticos and the south Main Building tower, which are fully constructed with load bearing limestone blocks. Column capitals at the north porticos and the Main Building are adorned with limestone columns and decorative Corinthian capitals.

Masonry treatment recommendations:
The intent of the project is to preserve as much existing fabric as possible (minimize intervention), ensure that the building components are structurally sound and watertight, and improve aesthetics while responsibly using available funds. Masonry treatment recommendations proposed for use in this project include:

Causes:
Limestone elements of the St. Edward's Main Building have been damaged by four major causes, as cited below:

1) Exposure. Limestone elements that are positioned with two or more sides available for weathering or a horizontal top surface tend to evidence deterioration at a faster rate. Occurs at railing ledges, balusters, coping caps, capitals, column bases and parapets and produces spalling, cracking and chipping.
2) Improper bedding or inferior quality. Stone laid with bedding plane on the vertical causing delamination. Randomly occurs.
3) Water damage. Prolonged saturation of stone caused by improper drainage. Resulting in staining and erosion. Occurs at window sills, main entrance and building corners.

General treatments that apply to masonry materials

1) Stabilize
Removal of loose and/or unsound material. This treatment will be used throughout unless conditions warrant otherwise. Remove loose and spalling stone and do minor tooling to surface to get back to sound material and retain general overall finish and texture of original stone.

2) Masonry cleaning
a) General masonry cleaning (limestone, and brick):
Option 1: A low pressure water wash or water of slightly higher pressure or with mild non-ionic detergent additive will be specified based on results of field testing. Bristle brushes may be used to supplement water washing particularly at ornamental units where heavier soiling is evident. This treatment will be used to safely remove light to moderate atmospheric soiling.
Option 2: If the above option does not provide satisfactory results, a proprietary cleaning product and procedures for its use will be specified based on results of field testing.
b) Removal of staining (Asphalt, metal): A variety of proprietary cleaning products and procedures for their use will be specified based on results of field testing. This treatment will be limited to those areas where the above listed staining is apparent.

3) Repoint mortar joints
Remove and replace mortar 100% with mortar that matches the original in composition, color, and joint profile. Contractor will be required to perform petrographic analysis on three original unweathered mortar samples. At the limestone, original mortar joints have tooled projecting v-shape profile. Mortar joints vary in thickness from 3/8-1/2 inch, and were originally similar in color to the limestone. Match original V-shape mortar profile, strength, texture, color, etc. Brick typically has mortar joints with a uniform thickness of 3/8 inch. Mortar joints are to have a flush face. Repoint mortar joints at brick 100% and match original in texture, color, strength, and finish.

Brick
1) Damaged brick
Remove damaged face brick and replace with new brick matching existing color, texture, size.

2) Displaced brick
Remove displaced face brick, salvage and re-use existing brick if possible. If not replace with new brick matching existing color, texture, size, and coursing.

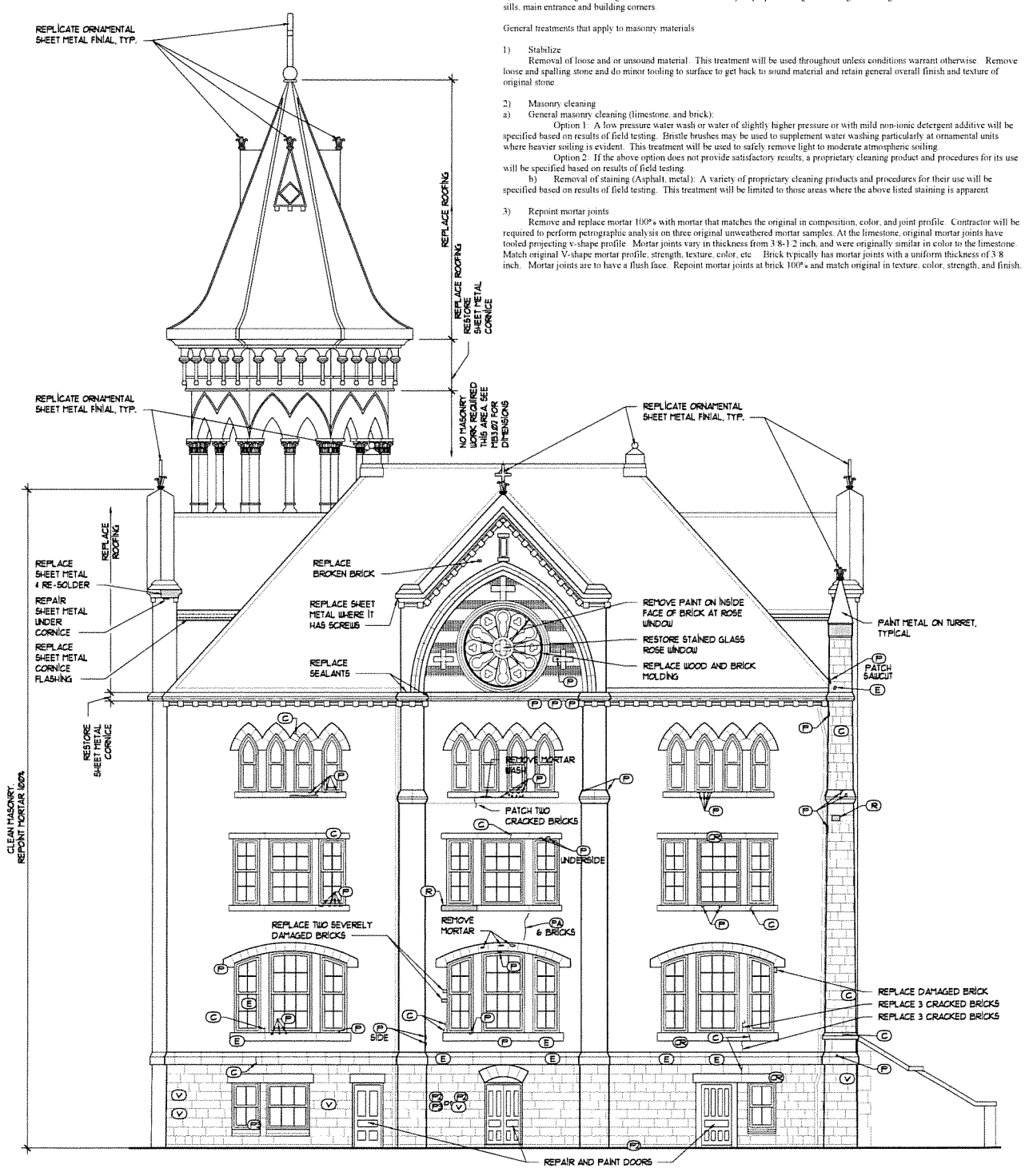
Limestone repair treatment:
Stabilize: This treatment should be used except where conditions warrant otherwise. It involves simply maintaining the status quo. A rare or unique element, such as the column capitals on the first floor, should always be stabilized to preserve the original craftsmanship.
Retool: Appropriate for slightly to moderately unsound or damaged stones that are either common or not readily visible. As long as the element maintains its physical integrity and the retooling does not impair its function, the craftsman can reshape the stone to the degree necessary to remove deteriorated material or improve its intended functionality, i.e. creating a drip edge where it did not exist.

Patch: Used only when a part of the stone has been damaged by alteration or poor water drainage, the element serves a vital functional role and is not highly visible. Cementitious material can also be used to patch small areas that are highly exposed to weather and require increased performance, especially coping caps and the top face of a horizontal surface. Patching material is usually used to fill holes caused by attachments. A patch is not used when the entire exposed face requires treatment.
Veneer Dutchmen: A veneer is used when an element is moderately damaged throughout and cannot be retooled without damaging the function or aesthetic quality. A stone veneer or dutchmen is used rather than cementitious materials in for areas of moderate damage where the stone is readily visible, such as at building entries. A dutchmen in used in lieu of total replacement in-kind when the element cannot be feasibly removed. A limestone veneer or dutchmen is used when less then 50% of the stone is damaged and restoring the profile of the element is important to form a continuous visual feature.
Replacement in-kind: Unless a unique element, replacement of an element should occur when it is severely damaged and/or wherever a vertically bedded element is eroding and the erosion is expected to continue. Also used where an element is highly visible, serves as a significant structural or functional role and is at least moderately damaged. Rarely used for slightly damaged stones due to cost and efforts to minimize intervention.
Crack repair
Hairline cracks up to 3/16-inch width, stabilization followed by preparation of the stone to allow for injection of a custom color-matched grouting material. This treatment will be used throughout as required to maintain structural integrity of unit and a weather-tight envelope.

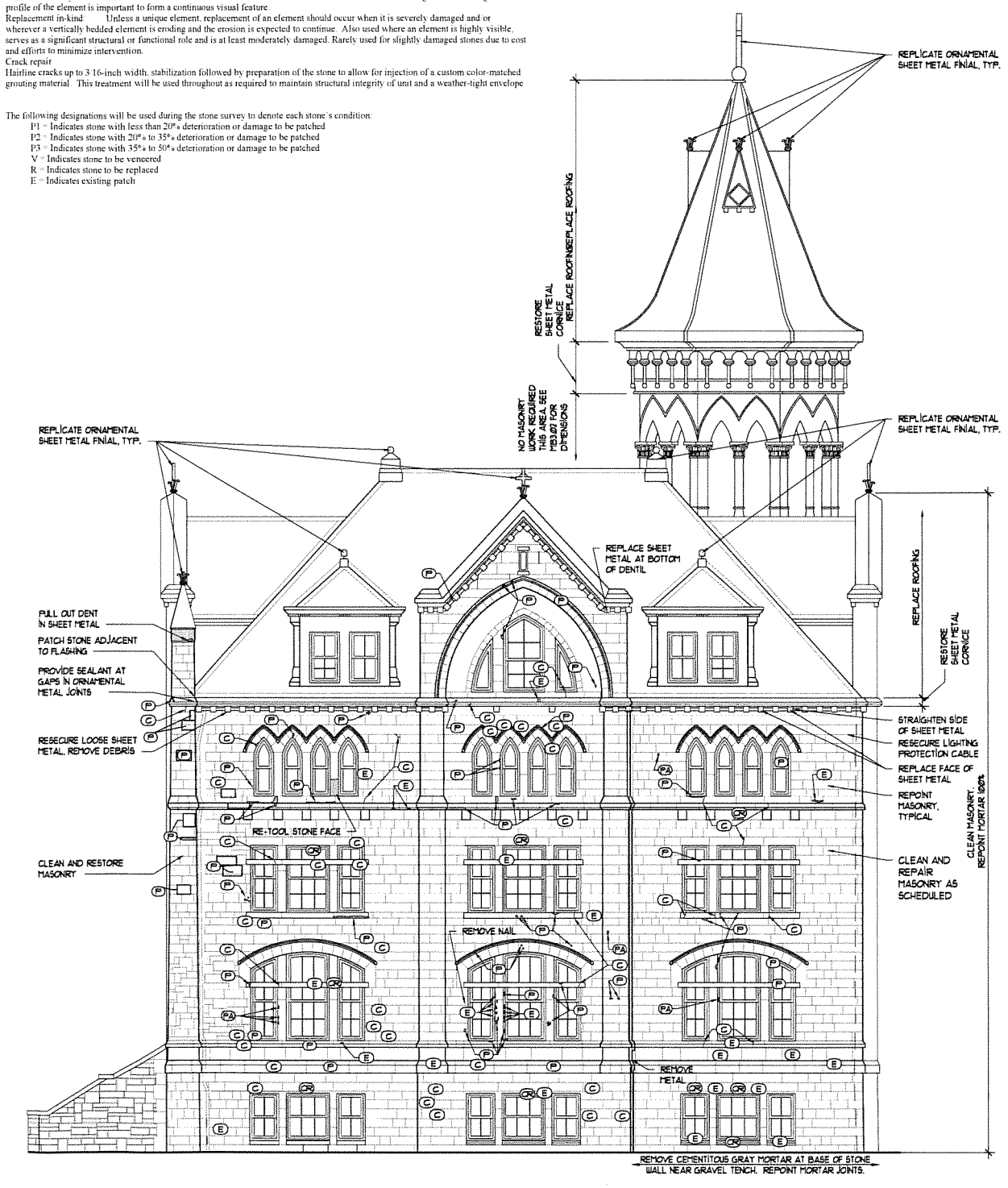
The following designations will be used during the stone survey to denote each stone's condition:
P1 = Indicates stone with less than 20% deterioration or damage to be patched
P2 = Indicates stone with 20% to 35% deterioration or damage to be patched
P3 = Indicates stone with 35% to 50% deterioration or damage to be patched
V = Indicates stone to be veneered
R = Indicates stone to be replaced
E = Indicates existing patch

MASONRY RESTORATION LEGEND-ELEVATIONS

- (E) - EXISTING PATCH TO BE REPLACED
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- (P1) - STONE TO BE PATCHED. ALLOW FOR PATCHING OF LESS THAN 20% OF EXPOSED SURFACE AREA.
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- (R) - REPLACEMENT STONE
- (CR) - CRACK TO BE REPAIRED
- [ ] - PATCH.
- ~ - REPAIR CRACK.



1 East Elevation
Scale: 1/8" = 1'-0"



2 West Elevation
Scale: 1/8" = 1'-0"

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Main Building
and Holy Cross - Exterior Restoration
Austin, Texas

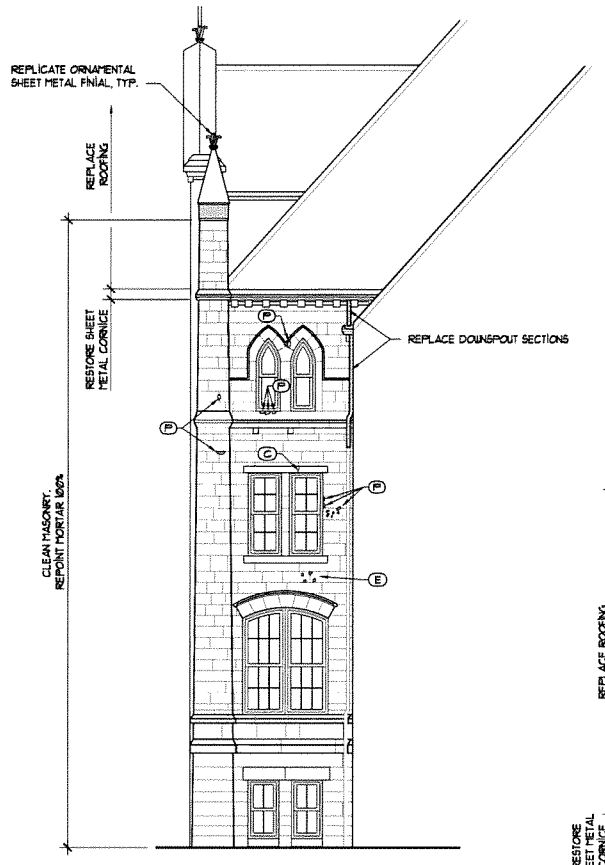
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2900 S. CONGRESS, #200
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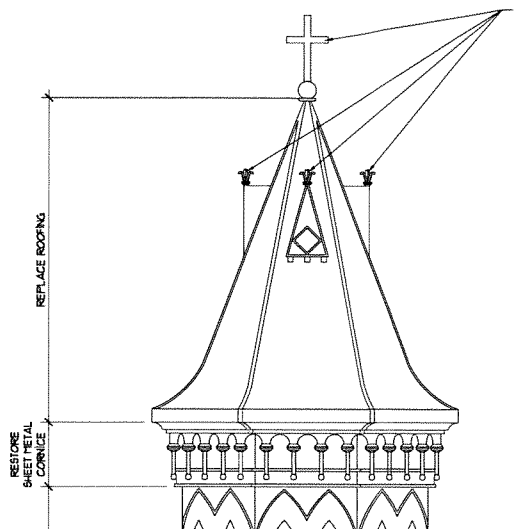
REVISIONS

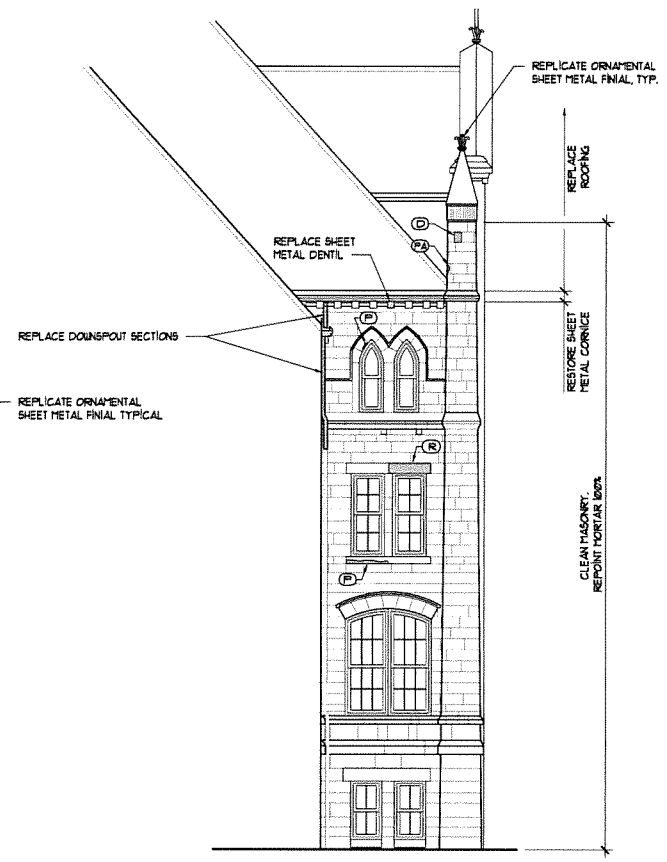
East and West Exterior Elevations - Main Building

DRAWN BY: JJ
CHECKED BY: LI
DATE: February 19, 2016
OWNER PROJECT NOS:
PROJECT NOS: 1544
SHEET NO: MB3.02

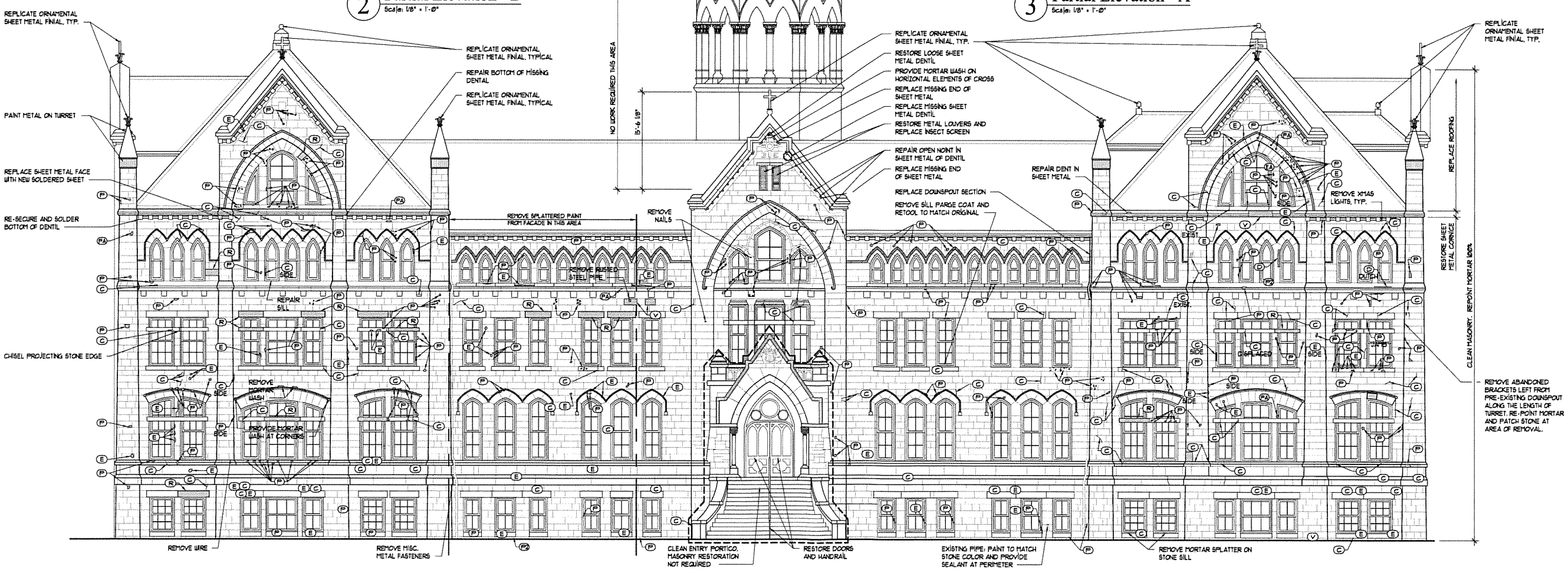


2 Partial Elevation - B
Scale: 1/8" = 1'-0"





3 Partial Elevation - A
Scale: 1/8" = 1'-0"



1 North Elevation at Main Building
Scale: 1/8" = 1'-0"

MASONRY RESTORATION LEGEND-ELEVATIONS

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- (CR) - CRACK TO BE REPAIRED
- - PATCH.
- - REPAIR CRACK.

St. Edward's University
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2900 S. CONGRESS, #200
AUSTIN, TEXAS 78704
512.444.4220 FAX 512.444.4221
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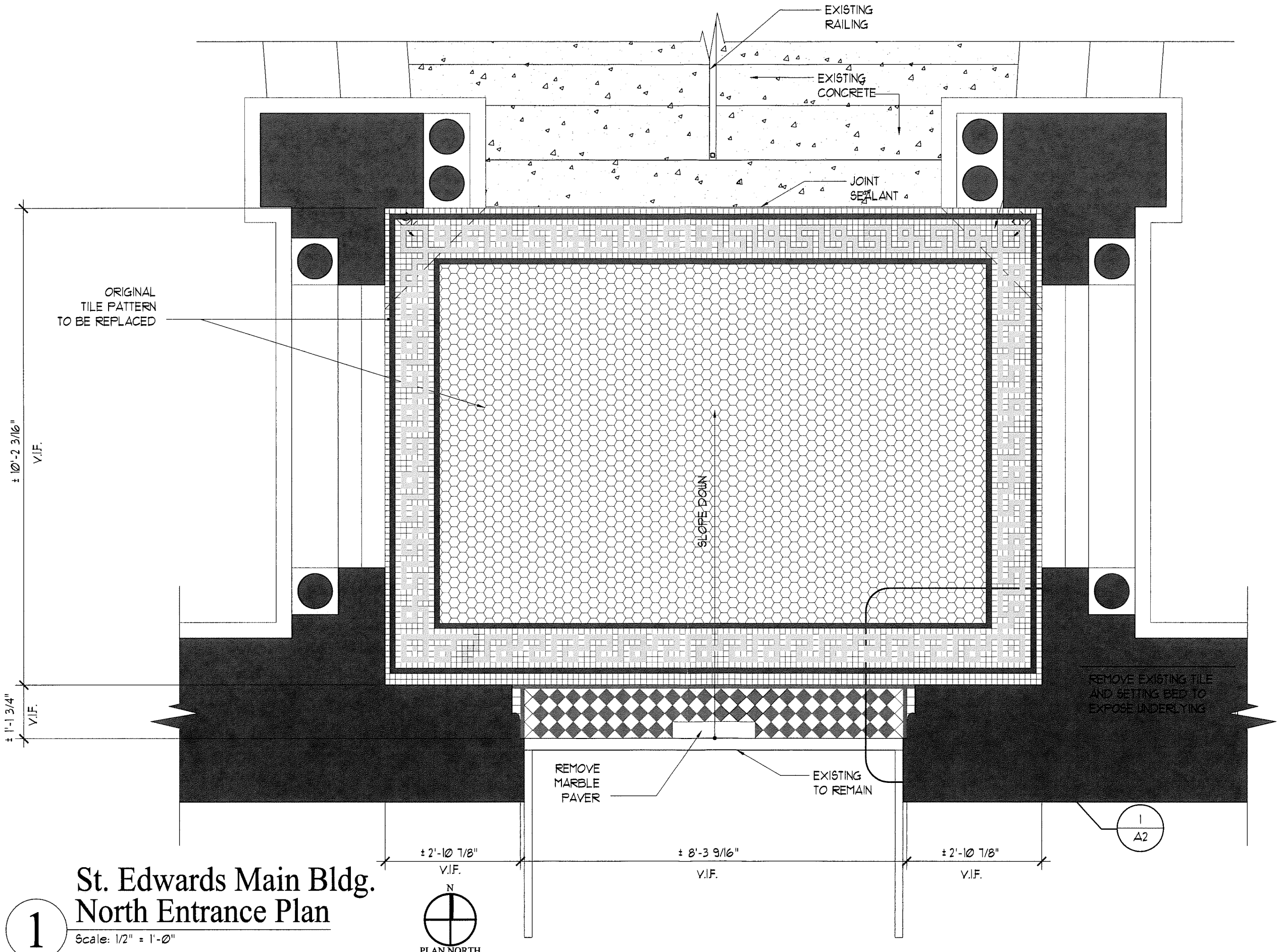
DESIGN DEVELOPMENT SET

NOT FOR CONSTRUCTION

REVISIONS

Main Building - North Exterior Elevation

DRAWN BY: JJ
CHECKED BY: LI
DATE: February 19, 2016
OWNER PROJECT NOS.
PROJECT NOS: 1544
SHEET NO: MB3.00



1 St. Edwards Main Bldg. North Entrance Plan

Scale: 1/2" = 1'-0"

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MAIN PORCH
Austin, TX

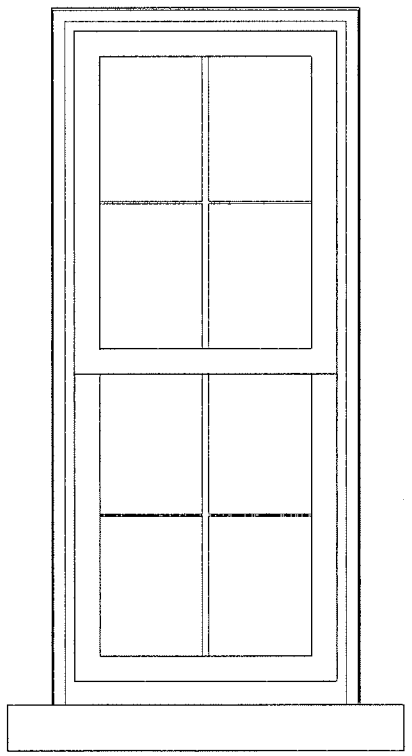
REGISTERED ARCHITECT
LARRY W. IRSIK
17676
STATE OF TEXAS
11.13.07

Construction Documents

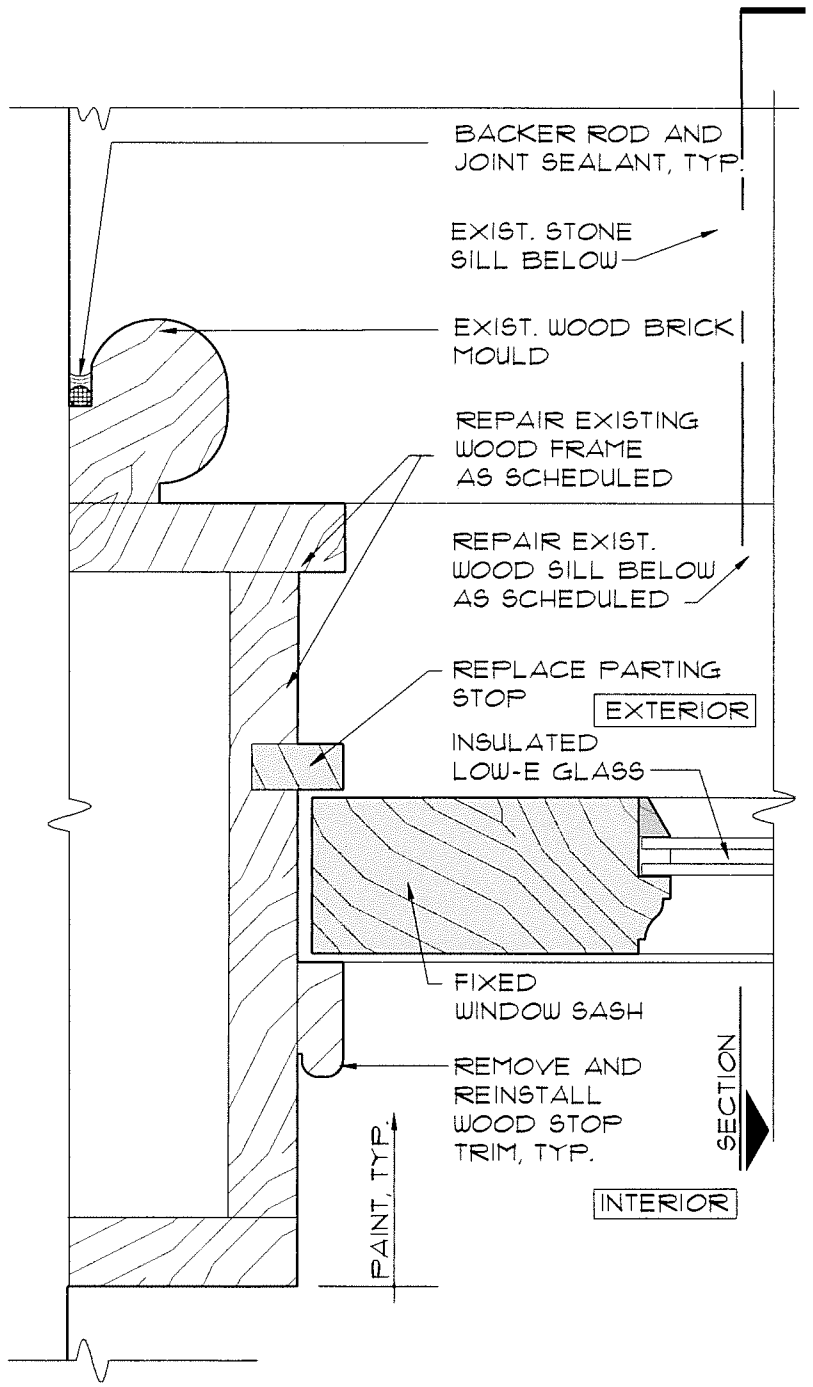
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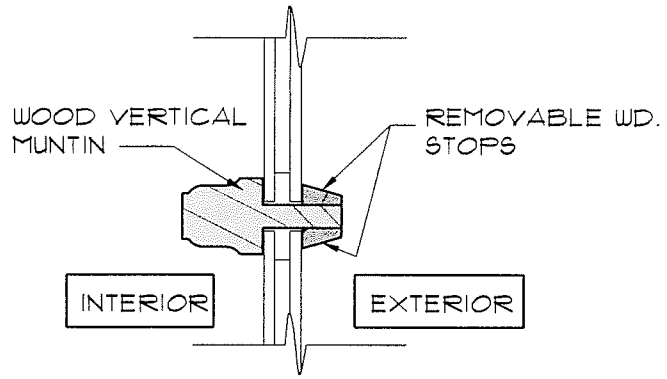
DRAWN BY JW
CHECKED BY LI
DATE Nov. 12, 2007
PROJECT NO. 0720
SHEET NO. A1



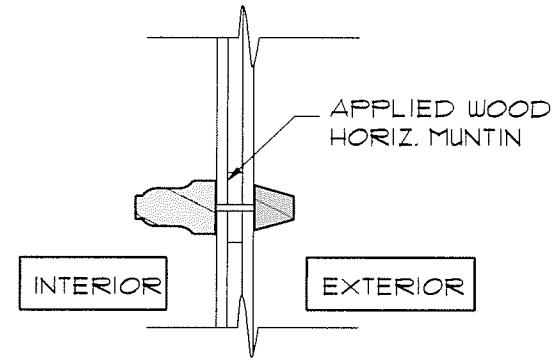
1 Typ. Window Elev.
Scale: 1/2" = 1'-0"



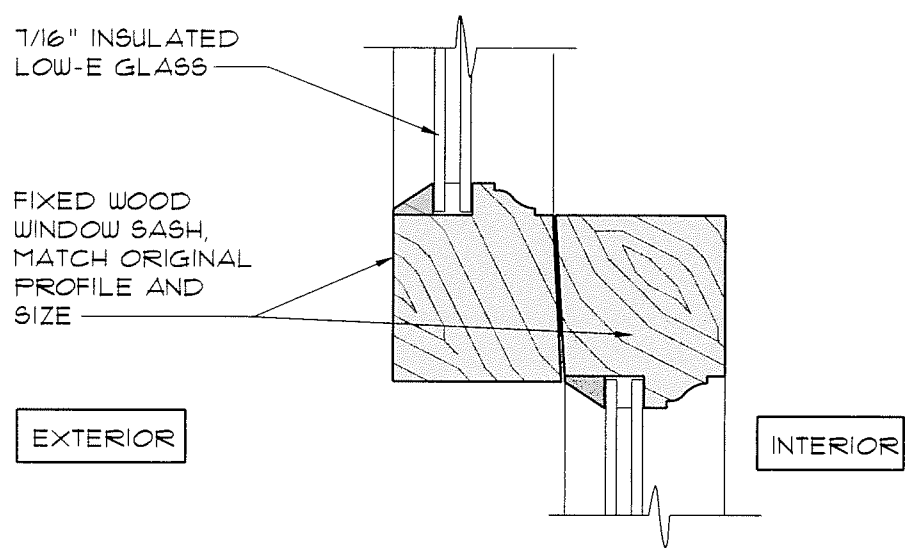
2 Window Jamb Detail, Typ.
Scale: 6" = 1'-0"



4 Vert. Window Muntin
Scale: 6" = 1'-0"



5 Horiz. Window Muntin
Scale: 6" = 1'-0"



3 Window Rail Detail, Typ.
Scale: 6" = 1'-0"

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St. Edward's University
Insulated Window Details
March 10, 2016