





**A. GENERAL REQUIREMENTS**

- 1. APPLICABLE CODES**
- 1.1. 2015 INTERNATIONAL EXISTING BUILDING CODE WITH WISCONSIN MODIFICATIONS  
CHAPTER 12 - HISTORIC BUILDINGS - REPAIRS
- 2. STRUCTURAL LOADING CRITERIA USED FOR DESIGN**
- 2.1. LIVE LOADS  
ROOF 30 PSF
- 2.2. WIND DESIGN DATA  
WIND UPLIFT: 90 PSF
- 2.3. SNOW LOAD DESIGN DATA  
DRIFT: 90 PSF

**B. MATERIAL DESIGN PROPERTIES**

- 1.1 MASONRY STRENGTHS:**
- CONCRETE MASONRY UNIT (CMU) ASTM C90, GRADE N FM= 2500 PSI
- CONCRETE BRICK ASTM C55, GRADE N FM=2500 PSI
- CLAY BRICK ASTM C 216, C 67, GRADE SW TYPE FBS
- 1.2 MORTAR (ASTM C 270)**
- TYPE O (ABOVE GRADE) FU =350 PSI
- 1.3 STRUCTURAL STEEL STRENGTHS:**
- WF SHAPES (ASTM A 992) Fy= 50,000 PSI
- ANGLES, CHANNELS, PLATES, & BARS (ASTM A36) Fy= 36,000 PSI
- SQUARE & RECTANGULAR TS OR HSS SECTIONS Fy= 46,000 PSI
- ROUND HSS SECTIONS (ASTM A500, GRADE B) Fy= 42,000 PSI
- STEEL PIPE (ASTM A53, GRADE B) Fy= 35,000 PSI
- 1.4 WOOD STRENGTHS:**
- DIMENSIONAL LUMBER (SEE PLANS & WOOD FRAMING NOTES)
- LAMINATED VENEER LUMBER (LVL) E= 1,900 KSI

**C. MATERIALS**

- 1. MEMBRANE:**
- a. SYSTEM: SINGLE-PLY
- b. TYPE: EPDM (ETHYLENE PROPYLENE DIENE MONOMER) - BLACK CURED THERMOSET ELASTOMER
- c. APPLICATION: FULLY ADHERED
- d. PHYSICAL PROPERTIES
- THICKNESS: 60 MIL
  - REINFORCEMENT: NONE
  - SHEET WIDTH: 20' (MINIMUM)
  - WEIGHT: 35 LB/FT<sup>2</sup>
  - TENSILE STRENGTH: 1600 PSI (ASTM D412)
  - TEAR STRENGTH: 200 LB/IN (ASTM D24)
  - ELONGATION: 465% (ASTM D412)
  - WATER VAPOR PERMEANCE: 0.03 (ASTM E96)
- e. SEAMING
- 8" SEAM TAPE (FACTORY PRE-APPLIED PREFERRED)
  - SEAM TAPE THICKNESS: .030"
  - SITUATE SEAMS DOWNSLOPE WHERE FEASIBLE.
  - STRIP IN ALL SEAMS WITH 6" WIDE, PRESSURE SENSITIVE, EPDM FLASHING PLY.
- f. FLASHING
- EPDM - CONTINUATION OF FIELD MEMBRANE
  - 6" 45 MIL REINFORCED EPDM SECUREMENT STRIP AT ALL VERTICAL TRANSITIONS.
  - ATTACH SECUREMENT STRIP WITH FASTENERS & 2" SEAM PLATES @ 12" O.C.
  - WHEREVER POSSIBLE SECUREMENT STRIP WILL BE ANCHORED INTO THE VERTICAL PLANE.
- g. SPECIAL FLASHING MEMBRANE
- UNCURED, NON-REINFORCED EPDM
  - USED TO REINFORCE ALL INSIDE/OUTSIDE FLASHING CORNERS.
  - USED TO WRAP PIPES, CONDUITS, PITCH PANS AND OTHER AWKWARD TRANSITIONS.
  - NOMINAL THICKNESS 60 MIL
  - PRESSURE SENSITIVE
- h. ADHESIVES/SEALANTS/CLEANERS/PRIMERS
- BONDING ADHESIVE: HIGH STRENGTH, SYNTHETIC RUBBER ADHESIVE FOR ADHERING THE EPDM MEMBRANE TO INSULATION SUBSTRATES, WALLS AND CURBS.
  - SPLICE CLEANERS: SOLVENT BASED CLEANER TO PREPARE BOTH SURFACES OF EPDM BEFORE APPLYING SEAM TAPE OR SPLICING CEMENT.
  - SPLICING CEMENT: HIGH STRENGTH BUTYL BASED, BLACK CEMENT. TO BE USED TO MATE ALL EPDM SEAMS AT AREAS WHERE THE USE OF TAPE ADHESIVE IS NOT PRACTICAL.
  - WATER CUT-OFF MASTIC: ONE COMPONENT, LOW VISCOSITY, SELF-WETTING, BUTYL BLEND MASTIC. TO BE USED BENEATH THE EPDM MEMBRANE AT DRAIN SUMPS, SCUPPER SUMPS, EDGE FASCIA FLANGES AND BEHIND THE TOP EDGE OF ALL WALL AND CURB FLASHINGS.
  - LAP SEALANT: BLACK, HEAVY BODIED CAULK USED TO SEAL ALL SEAMS WITH EXPOSED CUT EDGES AND TO SEAL THE EDGES OF ALL UNCURED EPDM REINFORCEMENT PATCHES.
- i. OTHER CLEANERS/PRIMERS AS REQUIRED TO PROPERLY PREPARE SUBSTRATES FOR APPLICATION OF FIELD AND FLASHING MEMBRANE
- j. ALL PRODUCTS AND PROCEDURES USED TO INSTALL THE FIELD AND FLASHING MEMBRANE SHALL BE SUPPLIED AND/OR APPROVED BY THE MEMBRANE MANUFACTURER.
- 2. MECHANICAL FASTENERS:**
- a. WOOD FASTENERS
- MASONRY ANCHORS / METAL PANELS
    - THREADED SCREWS - NAILS WILL NOT BE ACCEPTABLE
    - SIZE: # 10 DIAMETER
    - 300 SERIES STAINLESS STEEL
    - LENGTH TO ACHIEVE MINIMUM OF 2" EMBEDMENT IN TO STUDS
  - PERIMETER WOOD BLOCKING - MULTI LAYERS TO WOOD
    - THREADED SCREWS - NAILS WILL NOT BE ACCEPTABLE
    - SIZE: #10 DIAMETER
    - 300 SERIES STAINLESS STEEL
    - LENGTH TO ACHIEVE MINIMUM OF 1" EMBEDMENT (OR) LENGTH TO PENETRATE THROUGH PLYWOOD A MINIMUM OF 1/2".
    - NEW PERIMETER WOOD BLOCKING, IF REQUIRED, TO BE FASTENED 8" O.C. STAGGERED.
  - PERIMETER WOOD BLOCKING - TO TERRA COTTA
    - THREADED SCREWS - NAILS WILL NOT BE ACCEPTABLE
    - STAINLESS STEEL - AGGREGATOR 300 SERIES OR APPROVED EQUAL
    - SIZE: 1/2" DIAMETER
    - LENGTH TO ACHIEVE MINIMUM OF 1 3/4" EMBEDMENT
    - NEW PERIMETER WOOD BLOCKING, IF REQUIRED, TO BE FASTENED 8" O.C. STAGGERED.
  - WOOD CONSTRUCTIONS TO BE FASTENED AS COMMON TO STANDARD INDUSTRY PRACTICES OR CALLED OUT ON PLANS.
  - ALL WOOD FASTENERS TO BE GALVANIZED OR COATED AND APPROVED FOR INSTALLATION IN PRESSURE TREATED LUMBER
- b. FASTENING PLATES
- USED AS PART OF HORIZONTAL-VERTICAL FLASHING BASE SECUREMENT WITH FASTENERS
  - 2 3/8" METAL PLATES.
  - BARBED
- c. MASONRY FASTENERS - SECUREMENT STRIP
- STAINLESS STEEL - AGGREGATOR 300 SERIES OR APPROVED EQUAL
  - SIZE: 1/2" DIAMETER
  - LENGTH TO ACHIEVE MINIMUM OF 1 1/2" EMBEDMENT
  - DRIVEN INTO PRE-DRILLED HOLES.
- d. MASONRY FASTENERS - ROOF DECK SUPPORT
- THREADED SCREWS - NAILS WILL NOT BE ACCEPTABLE
  - STAINLESS STEEL - AGGREGATOR 300 SERIES OR APPROVED EQUAL
  - SIZE: 1/2" DIAMETER
  - LENGTH TO ACHIEVE MINIMUM OF 1 3/4" EMBEDMENT
  - DECKING SUPPORT METAL, TO BE FASTENED 12" O.C. STAGGERED.
- 3. WOOD MATERIALS**
- a. DIMENSIONAL LUMBER
- 2" X 8" WOOD FRAMING/BLOCKING
  - 2" X 6" WOOD BLOCKING
  - 1" X 6" WOOD BLOCKING
  - SPRUCE PINE OR FIR SPECIES NO. 2 OR BETTER
  - KILN DRIED PRESSURE TREATED - (FOR ALL WALL FRAMING AND ROOF BLOCKING)
  - WOOD BLOCKING AT PERIMETER EDGES FASTENED 8" O.C. STAGGERED.
- b. PLYWOOD ROOF SHEATHING
- 3/4" THICK PLYWOOD (OSB NOT ACCEPTABLE)
  - EXTERIOR EXPOSURE RATED.
  - INSTALL BLOCKING IN ALL UNSUPPORTED JOINT.
  - PROVIDE 1/8" SPACE BETWEEN ALL PIECES.
- 4. SHEET METAL ITEMS:**
- a. (2) PIECE EDGE METAL:
- REFER TO CONSTRUCTION DETAIL FOR SPECIFIC DESIGN.
  - INSTALLATION:
    - INSTALL NEW WOOD BLOCKING ON TOP OF PROPERLY FASTENED WALL TOP PLATES WALL WITH FASTENERS @ 12" O.C. STAGGERED.
    - 24 GA. PREFINISHED STEEL SNAP-ON FACIA
    - 12" SECTIONS.
    - COLOR TO BE DETERMINED AND APPROVED BY OWNER.
    - 22 GA. GALVANIZED STEEL CLIPS
    - FASTEN CLIPS TO WOOD BLOCKING WITH #12 X 1 1/2" SCREWS.
    - INCORPORATE ALL NECESSARY MITERS AND END PIECES.
    - INCORPORATE FASCIA EXTENDER WITH CONTINUOUS CLEAT ON EXTERIOR FACE AS REQUIRED TO COVER WOOD BLOCKING AS DETAILED ON PLANS.
  - INCORPORATE ALL NECESSARY MITERS, END CAPS AND TRANSITION PIECES.
  - WRAP AROUND PENETRATIONS, SCUPPERS AND RAILING POSTS IN SIMILAR FASHION AS EXISTING.
- b. TERMINATION BARS
- 1 3/4" DEEP X 1 1/8" THICK EXTRUDED ALUMINUM.
  - PRE-PUNCHED & FASTENED 6" O.C.
  - LIP TO RECEIVE CAULK.
  - INSTALLED ACROSS THE TOP EDGE OF ALL FLASHING TERMINATED ON THE VERTICAL PLANE.
  - LEAVE 1/2" GAP BETWEEN ADJOINING BARS TO ALLOW FOR EXPANSION.
- c. 2 PIECE REGLET:
- SAW CUT EXISTING JOINT TO RECEIVE NEW METAL REGLET TO MAINTAIN LOCATION OF TOP OF FLASHING
  - INSTALL NEW REGLET AS DETAILED ON PLANS
  - EXPOSED SEALANT TO BE SILICONE: DOWSIL 756 OR TREMCO SPECTRUM 3
- 5. STRUCTURAL METAL DECKING:**
- 1.58 1 1/2" DEEP
  - F20 DECK TYPE
  - 0 - 90 GALVANIZED
  - FASTENED AS NOTED ON DRAWING
  - #12 S S TEK - SUPPORTS
  - #10 S S TEK - SIDE LAPS
  - ALL SUPPORT STEEL TO BE GALVANIZED OR COATED WITH ZINC RICH EPOXY PRIMER
- 6. MASONRY:**
- a. REPLACEMENT BRICK (IF REQUIRED)
- CLAY BRICK ASTM C 216, C 67, GRADE SW TYPE FBS
  - MATCH EXISTING BRICK AS CLOSE AS POSSIBLE FOR SIZE AND COLOR.
  - PERFORM FIELD INITIAL RATE OF ABSORPTION TEST TO DETERMINE IF PRE-WETTING IS REQUIRED
- b. MORTAR
- FOR TUCK-POINTING AND OR REBUILDING SECTIONS
  - TYPE O MORTAR
  - MIX PROPORTION AND GRADATION TO MATCH EXISTING

- MATCH COLOR OF EXISTING MORTAR
  - SOLID BED
  - STRIKE JOINTS TO MATCH EXISTING.
  - JOINT THICKNESS TO MATCH EXISTING
- c. STITCH TIES (HELICAL)
- 1/4" LONG
  - S S AS DIRECTED
  - SHORTER
- d. MASONRY CLEANING
- FINALIZED CLEANING PROCEDURE TO BE VERIFIED BASED ON A/E REVIEWED AND APPROVED RESULTS OF CLEANING TRIAL IN TEST AREA.
  - WATER (LOW PRESSURE POWER WASHER) AND STIFF BRUSH
  - IF NECESSARY, USE PROSOCCO 2010 ALL PURPOSE CLEANER FOR DIFFICULT STAINS
  - USE OF ANY OTHER CLEANING AGENTS TO BE REVIEWED AND APPROVED BY A/E BASED ON RESULTS OF SAMPLE AREA

**D. INSTALLATION PROCEDURES**

**IN-PLACE MOCK-UP , ANCHOR PULL-OUT TESTING**

INSTALLATION PROCEDURES ARE BASED ON VISUAL OBSERVATION AND ASSUMPTIONS OF STABILITY AND SOUNDNESS OF EXISTING MATERIALS TO BE FASTENED INTO. CONTRACTOR TO INCLUDE AN INITIAL IN-PLACE MOCK-UP OF 8' SECTION OF CORNICE REPAIRS, ROOF INSTALLATION, TUCK POINTING, AND SURFACE CLEANING. CONTRACTOR TO PROVIDE 3RD PARTY PULL-OUT TESTING OF SCREW FASTENERS INTO MASONRY AND TERRA COTTA AND STITCH ANCHORS INTO MASONRY IN CORNICE CAVITY. CONTRACTOR TO COORDINATE SCHEDULE WITH ARCHITECT / ENGINEER TO ALLOW FOR IN-PROGRESS OBSERVATIONS TO BE MADE. ALL OBSERVATIONS AND TEST RESULTS OF MOCK UP ASSEMBLY TO BE REVIEWED AND APPROVED BY ARCHITECT / ENGINEER PRIOR TO AUTHORIZING FULL SCALE PRODUCTION WORK OF REPAIRS OUTLINED IN THESE DRAWINGS.

**1. CORNICE DEMOLITION, INSPECTION, REINFORCE**

- NOTE: TO MAINTAIN STABILITY OF CORNICE, SEQUENCE STEPS a - e TO BE COMPLETED IN SECTIONS NOT LONGER THAN 10 FEET.
- a. REMOVE
- METAL ROOFING
  - 3" TERRA COTTA BOOK TILE
  - BED MORTAR
- b. REMOVE ALL DEMOLITION DEBRIS FROM CORES OF STACKED TERRA COTTA
- LARGE PIECES BY HAND
  - SMALL PIECES WITH SHOP VAC
- c. ENGINEER TO PERFORM THOROUGH INSPECTION OF TERRA COTTA TO INCLUDE VISUAL OBSERVATION AND SOUNDING WITH PLASTIC HAMMER.
- d. IF INTERNAL CORNICE MATERIALS ARE FOUND TO BE WET, ADDITIONAL TIME / PROCESSES FOR DRYING MAY BE REQUIRED. PROJECT WORK DURING FALL / WINTER MONTHS MAY COMPLICATE THE PROCESS.
- e. AT DIRECTION OF ENGINEER, PERFORM ISOLATED REPAIRS TO TERRA COTTA TO INCLUDE CRACK REPAIRS, SPALL REPAIRS, PINNING AND PATCHING AS NECESSARY
- f. INSTALL TWO ROWS OF STITCH ANCHORS IN CORNICE CAVITY AS CALLED OUT ON DETAIL
- g. THESE STEPS MUST BE PERFORMED ON A "ONE STRAP AT A TIME" BASIS
- TOP METAL STRAP CUT OFF FROM WALL, PULL OUT OF SLOT IN TERRA COTTA)
  - INSPECT BOTTOM METAL STRAP FOR SOUNDNESS.
  - IF BOTTOM STRAP NOT SOUND, INSTALL NEW PER DETAIL PRIOR TO REMOVING EXISTING
  - IF BOTTOM STRAP IS SOUND, CLEAN TO BRIGHT METAL FINISH AND INSTALL ZINC ENRICHED PRIMER PAINT COVERED WITH A HIGH QUALITY ZINC RICH EPOXY PAINT OR INSTALL TWO COATS OF TNEMC CHEMBUILD 135
  - INSTALL TOP STAINLESS STEEL METAL STRAPS PER DETAIL.

**2. MASONRY FACADE**

- IF NEW BRICK IS TO BE INSTALLED, COLOR SAMPLES AND TEST DATA / ASTM CERTIFICATION ARE TO BE PROVIDED FOR OWNER APPROVAL PRIOR TO INSTALLATION.
- FIELD TEST FOR INITIAL RATE OF ABSORPTION TO BE CONDUCTED BY CONTRACTOR TO VERIFY NECESSITY OF PRE-WETTING BRICK
- INSTALL REPLACEMENT MASONRY FACADE AS DETAILED ON PLANS AND IN THESE WORK INSTRUCTIONS.
- ROUT OUT AND TUCK POINT ANY JOINTS THAT ARE CAULKED, ERODED, OR LOST BOND.

**3. MASONRY CLEANING**

- FINALIZED CLEANING PROCEDURE TO BE VERIFIED BASED ON A/E REVIEWED AND APPROVED RESULTS OF CLEANING TRIAL IN TEST AREA.
- WATER (LOW PRESSURE POWER WASHER) AND STIFF BRUSH
- IF NECESSARY, USE PROSOCCO 2010 ALL PURPOSE CLEANER FOR DIFFICULT STAINS
- USE OF ANY OTHER CLEANING AGENTS TO BE REVIEWED AND APPROVED BY A/E BASED ON RESULTS OF SAMPLE AREA

**4. MEMBRANE INSTALLATION - FIELD**

- INSTALL BLOCKING, ROOF DECK SUPPORT, METAL AND PLYWOOD DECKING AS DETAILED IN PLANS.
- INSTALL BASE SECUREMENT STRIPS AT ALL HORIZONTAL-TO-VERTICAL TRANSITION LOCATIONS. UTILIZE 6" 45 MIL REINFORCED EPDM STRIPS AT THE BASE OF ALL WALLS, CURBS AND OTHER VERTICAL TRANSITIONS. FASTEN INTO THE VERTICAL PLANE AS SHOWN ON SECTION DETAILS USING APPROPRIATE FASTENERS AND 2" SEAM PLATES SPACED 12" ON CENTER.
- PRIOR TO INSTALLATION OF EPDM FIELD MEMBRANE ROLL OUT SHEETS AND ALLOW TO RELAX FOR A MINIMUM OF 1/2 HOUR.
- ADHERE THE MEMBRANE OUT OVER THE FIELD OF THE ROOF WITHOUT WRINKLES.
- MINIMIZE FIELD SEAMS. SITUATE ALL SEAMS DOWN SLOPE WHERE FEASIBLE. ALL SEAMS SHALL BE SEALED WITH 6" SPLICE TAPE ADHESIVE.
- INCORPORATE ALL NECESSARY "T" JOINT REINFORCEMENT PATCHES. APPLY LAP SEALANT TO PERIMETER OF PATCHES.

**5. MEMBRANE INSTALLATION - WALL & CURB FLASHINGS**

- ADHERE FIELD MEMBRANE OVER SECUREMENT STRIPS AND UP ALL VERTICAL SUBSTRATES IN BONDING ADHESIVE.
- AT WALLS EXTEND THE FLASHING TO A MINIMUM HEIGHT OF 8" ABOVE THE FINISHED ROOF SURFACE. (IF THROUGH-WALL FLASHINGS OR WEEP HOLES ARE ENCOUNTERED, INSTALL FLASHING AS HIGH AS POSSIBLE WITHOUT COVERING THEM). INCORPORATE A CONTINUOUS BEAD OF WATER CUT-OFF MASTIC BEHIND THE TOP EDGE OF THE FLASHING.
- WHEREVER REASONABLY POSSIBLE, VERTICAL FLASHING SEAMS WILL BE SEALED WITH 6" SPLICE TAPE ADHESIVE. WHERE NOT PRACTICAL, TO USE SEAM TAPE, AND UPON APPROVAL FROM CONSULTANT, FLASHING SEAMS MAY BE SEALED WITH SPLICING CEMENT.
- WRAP FLASHINGS INTO DOOR OPENING ON THRESHOLD AND JAMBS.
- REINFORCE ALL INSIDE AND OUTSIDE CORNERS WITH 6" X 6" UNCURED EPDM PATCHES PER MANUFACTURER'S REQUIREMENTS. APPLY LAP SEALANT TO THE PERIMETERS OF ALL PATCHES.

**6. SHEET METAL WORK**

- SECURE THE TOP EDGE OF ALL FLASHINGS ON VERTICAL PLANES WITH AN ALUMINUM TERMINATION BAR. SECURE TERMINATION BAR TO SUBSTRATE MATERIAL WITH APPROPRIATE FASTENERS SPACED A MAXIMUM OF SIX (6") INCHES ON CENTER. DO NOT BUTT ENDS OF ADJOINING TERMINATION BARS TOGETHER - LEAVE A 1/2" GAP BETWEEN BARS TO ALLOW FOR EXPANSION. CAULK TOP EDGE OF TERMINATION BAR.
- INSTALL NEW REGLET MOUNTED 2- PIECE COUNTERFLASHING OVER THE TOP EDGE OF THE NEW FLASHINGS ON THE WALLS.
- REGLET TO BE CUT IN SAME GROOVE AS EXISTING.
- INSTALL NEW FACIA EDGE METAL. MOUNT 22 GA. CONCEALED CLIPS THROUGH MEMBRANE INTO WOOD BLOCKING. FASTEN AS DETAILED. SNAP-ON 24 GA. PRE-FINISHED STEEL EDGE METAL. INCORPORATE ALL NECESSARY MITERS, END AND TRANSITION PIECES. ALL COPING WORK SHALL COMPLY WITH MANUFACTURER'S REQUIREMENTS.



| REVISION | BY | CHK | DATE | DESCRIPTION |
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STAMP/STATUS:

**BID SET**

**GENERAL NOTES**

**CORNICE REPAIRS**

GERMANIA BUILDING

135 W. WELLS STREET - MILWAUKEE, WI 53201

PROJECT NUMBER:  
**21EP10152**

SHT SIZE: 24X36 (D)

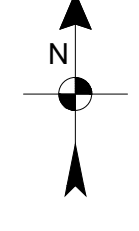
DRN BY: EV

CHK BY: AG

DATE: 11/16/21

SHEET  
**S-000**

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W. WELLS St.

E. WELLS St.

N. 2nd St.

N. PLANKINTON AVE.

PARKING LOT UNDER  
DIFFERENT OWNERSHIP

1  
S100

AREA OF WORK - 3 SIDES TYPICAL  
8th LEVEL CORNICE AND SURROUNDING FACADE  
  
NOTE: HOLLOW SIDEWALK BELOW  
BUILDING TO REMAIN OCCUPIED DURING PROJECT.  
CONTRACTOR TO COORDINATE ACCESS PROTECTION WITH OWNERSHIP.  
CONTRACTOR RESPONSIBLE TO ACCOMMODATE SITE CONDITIONS INCLUDING  
BUT NOT LIMITED TO HOLLOW SIDE WALKS AND POWER LINES.

1  
S-001 SITE PLAN  
SCALE: N.T.S.



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SITE PLAN

CORNICE REPAIRS  
GERMANIA BUILDING

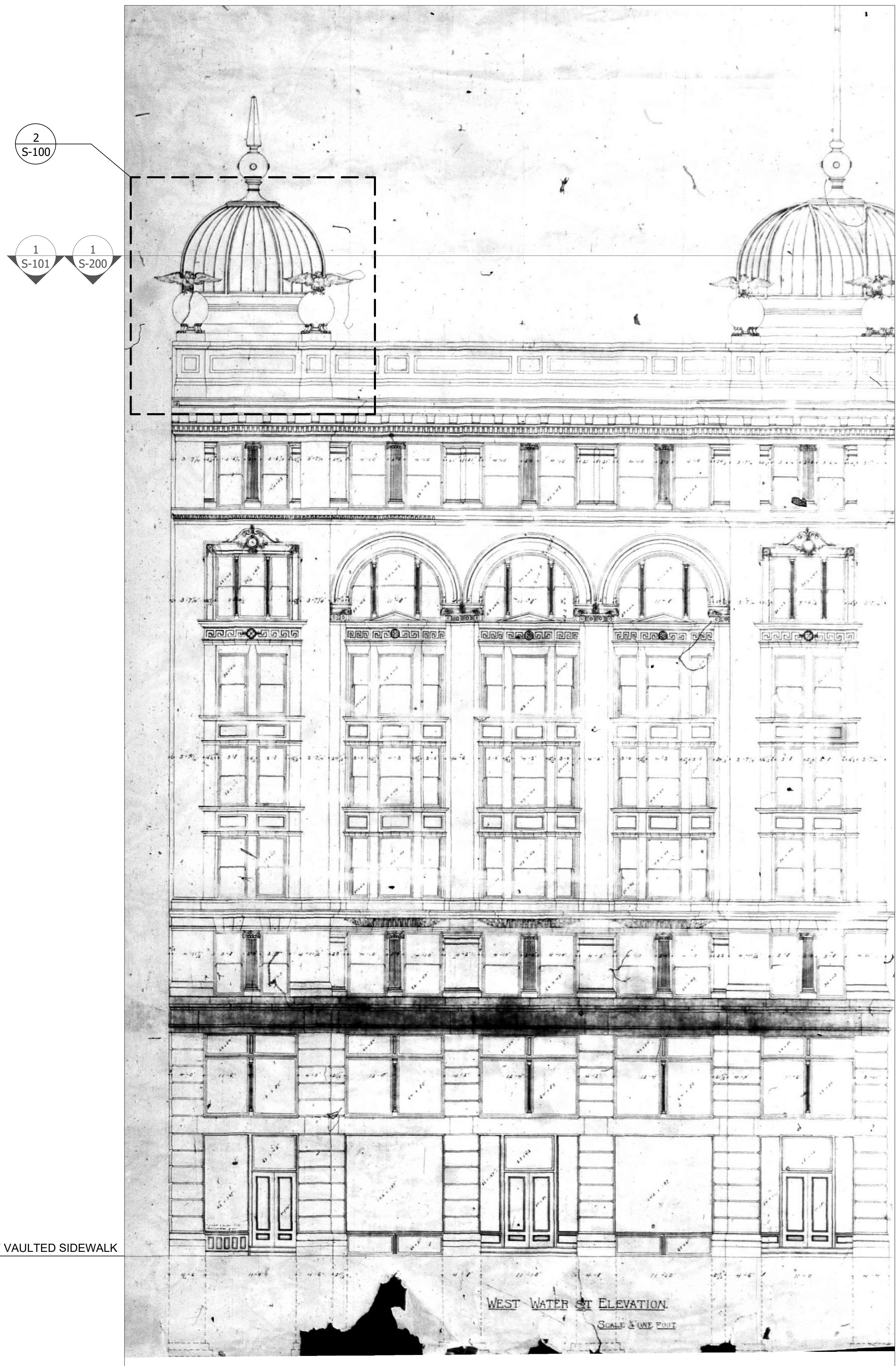
135 W. WELLS STREET - MILWAUKEE, WI 53201

PROJECT NUMBER:  
21EP10152  
SHT SIZE: 24X36 (D)  
DRN BY: EV  
CHK BY: AG  
DATE: 11/16/21

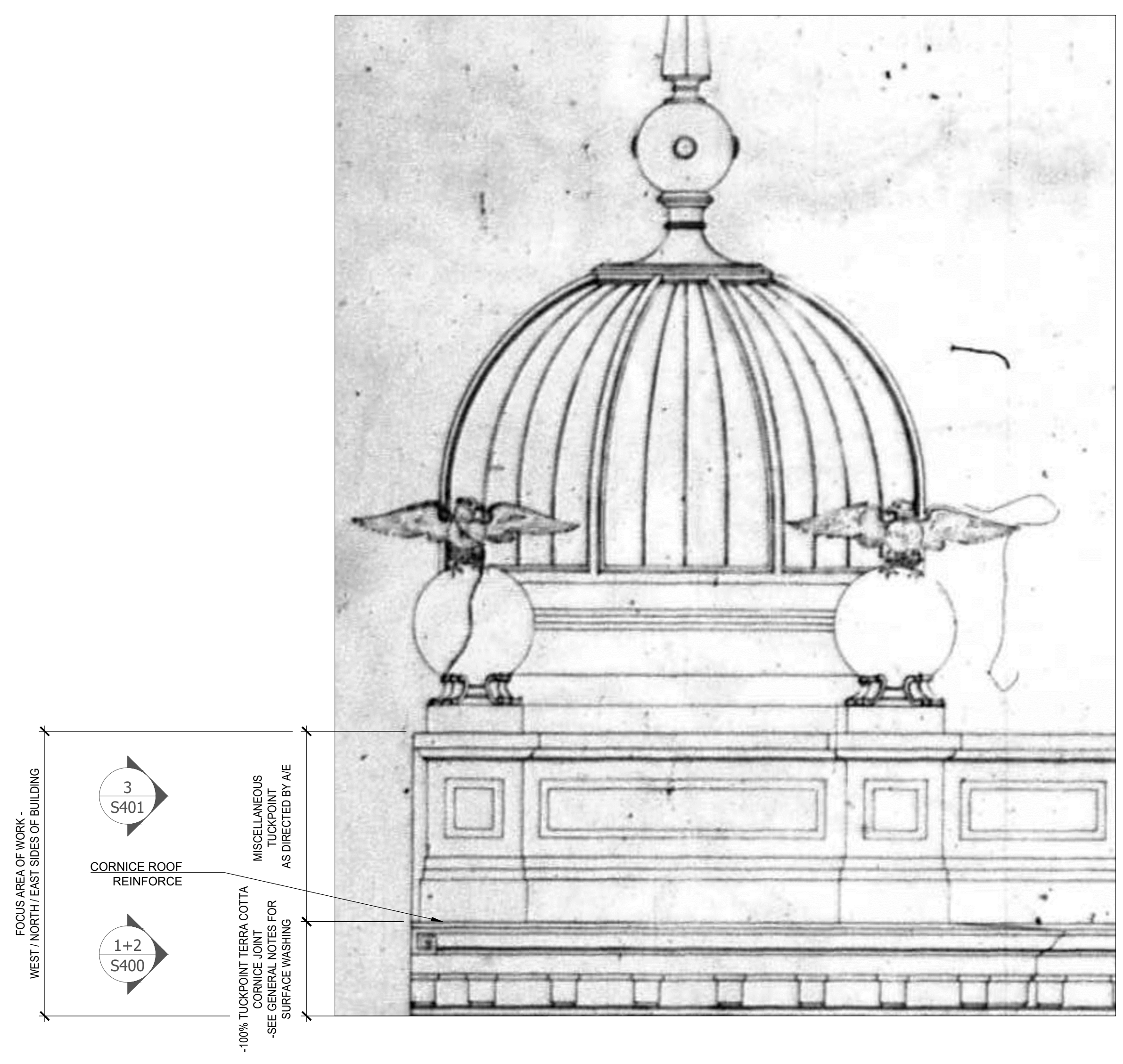
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1  
S-100  
EXISTING PARTIAL EAST ELEVATION  
SCALE: N.T.S.



2  
S-100  
EXISTING ELEVATION DETAIL  
SCALE: N.T.S.

| REVISION | BY | CHK | DATE | DESCRIPTION |
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**BID SET**

**SAMPLE ELEVATION**  
**CORNICE REPAIRS**  
GERMANIA BUILDING  
135 W. WELLS STREET - MILWAUKEE, WI 53201

PROJECT NUMBER:  
**21EP10152**  
SHT SIZE: 24X36 (D)  
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DATE: 11/16/21

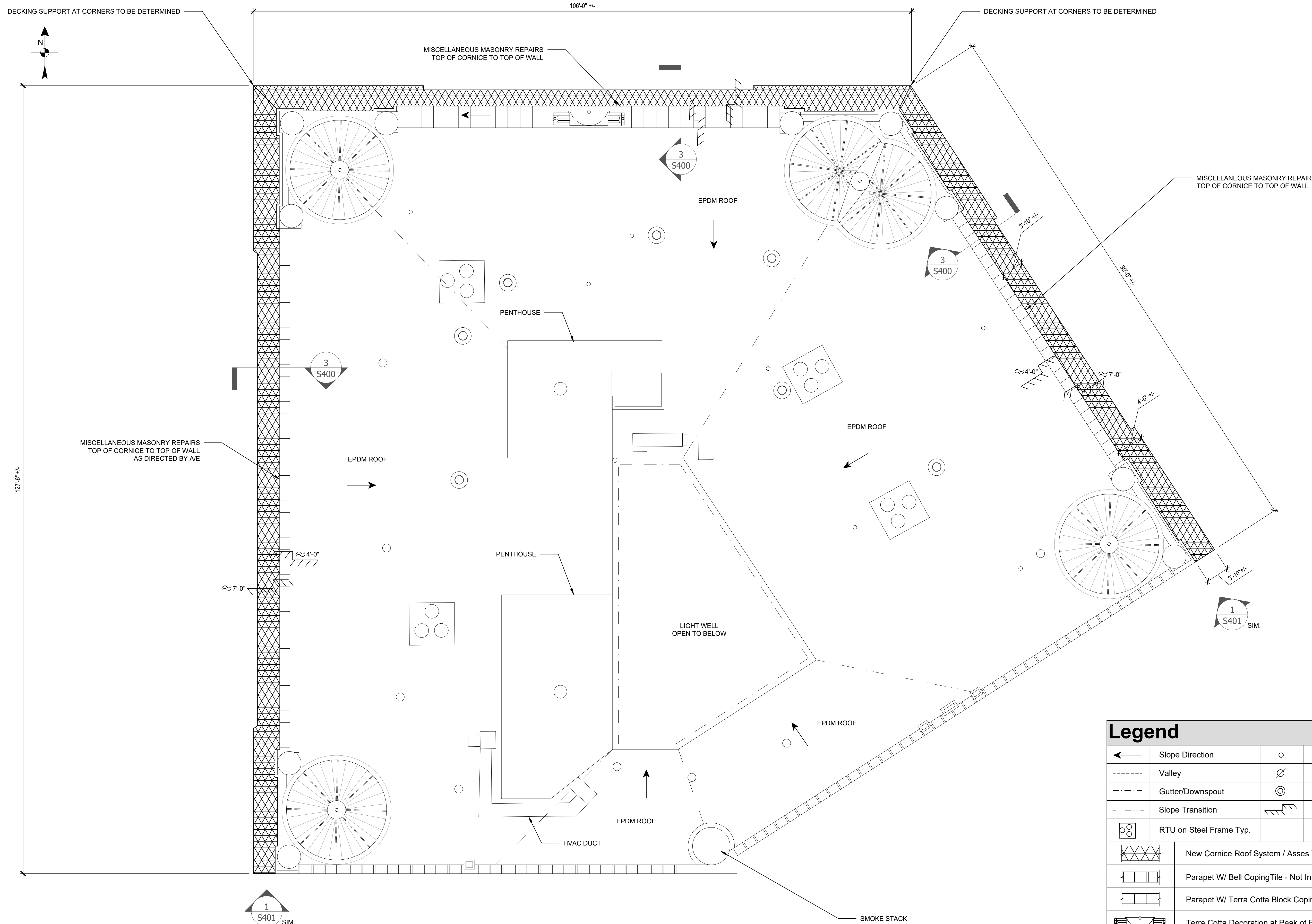
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| Legend          |   |         |               |
|-----------------|---|---------|---------------|
| ←               | Slope Direction   | ○       | Soil Vent     |
| ---             | Valley  | ⊗       | Stack Vent    |
| - - - -         | Gutter/Downspout  | ⊙       | Power Vent    |
| - · - · -       | Slope Transition  | ⌞       | Height Varies |
| ⊠               | RTU on Steel Frame Typ.                                   |         |               |
| [Cross-hatched] | New Cornice Roof System / Asses Terra Cotta Cornice       | (S-400) |               |
| [Coping tile]   | Parapet W/ Bell Coping Tile - Not In Scope                |         |               |
| [Coping block]  | Parapet W/ Terra Cotta Block Coping - Not In Scope        |         |               |
| [Terra cotta]   | Terra Cotta Decoration at Peak of Pediment - Not in Scope |         |               |
| [Dome]          | Copper Clad Dome - Not in Scope                           |         |               |

\* EPDM ROOF TO BE PROTECTED BY CONTRACTOR DURING CONSTRUCTION

1 S-200 NEW ROOF PLAN  
SCALE: 1/8" = 1'-0"

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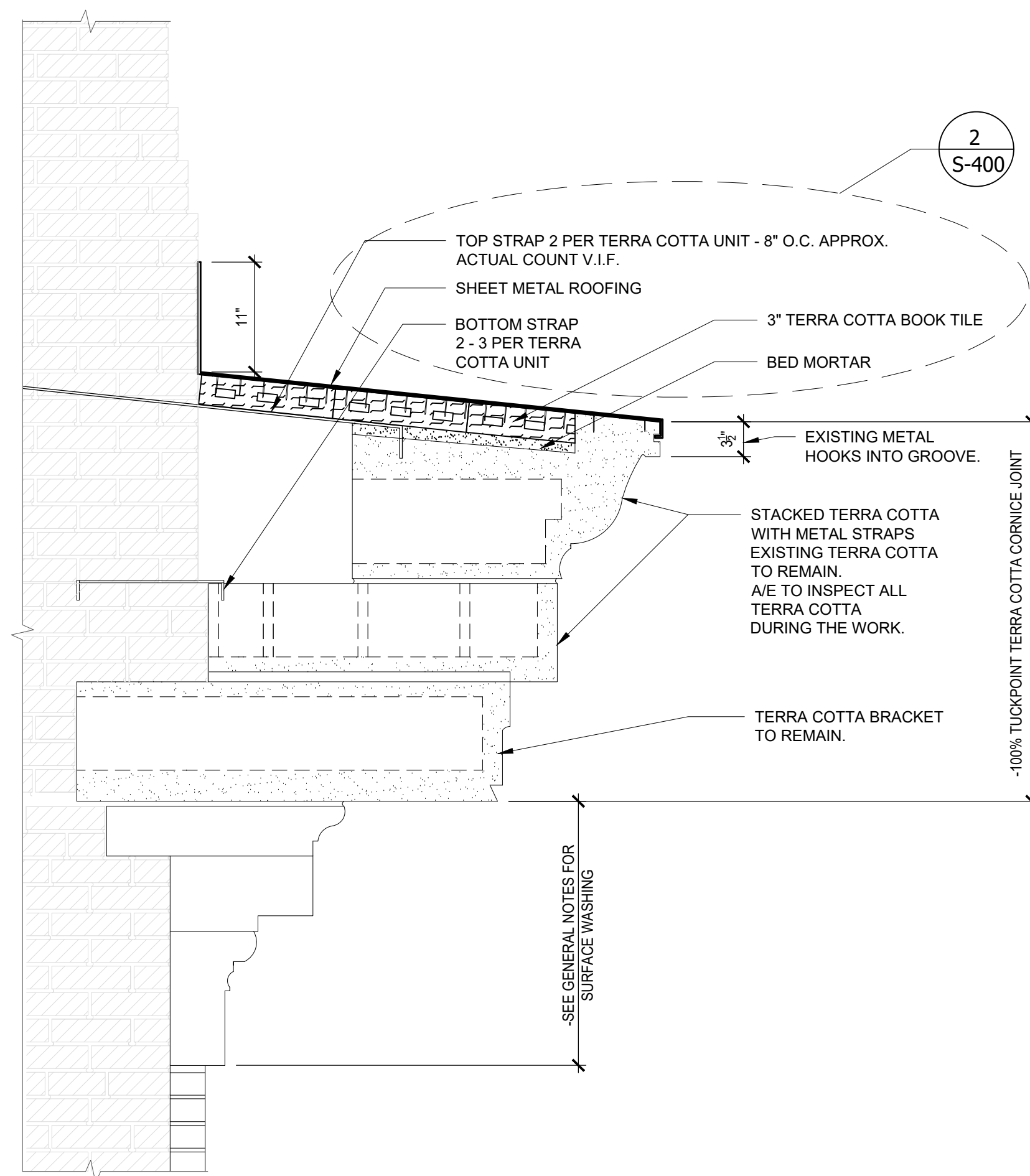
**ROOF PLAN - NEW CONSTRUCTION**  
**CORNICE REPAIRS**  
GERMANIA BUILDING  
135 W. WELLS STREET - MILWAUKEE, WI 53201

PROJECT NUMBER:  
**21EP10152**  
SHT SIZE: 24X36 (D)  
DRN BY: EV  
CHK BY: AG  
DATE: 11/16/21

SHEET  
**S-200**

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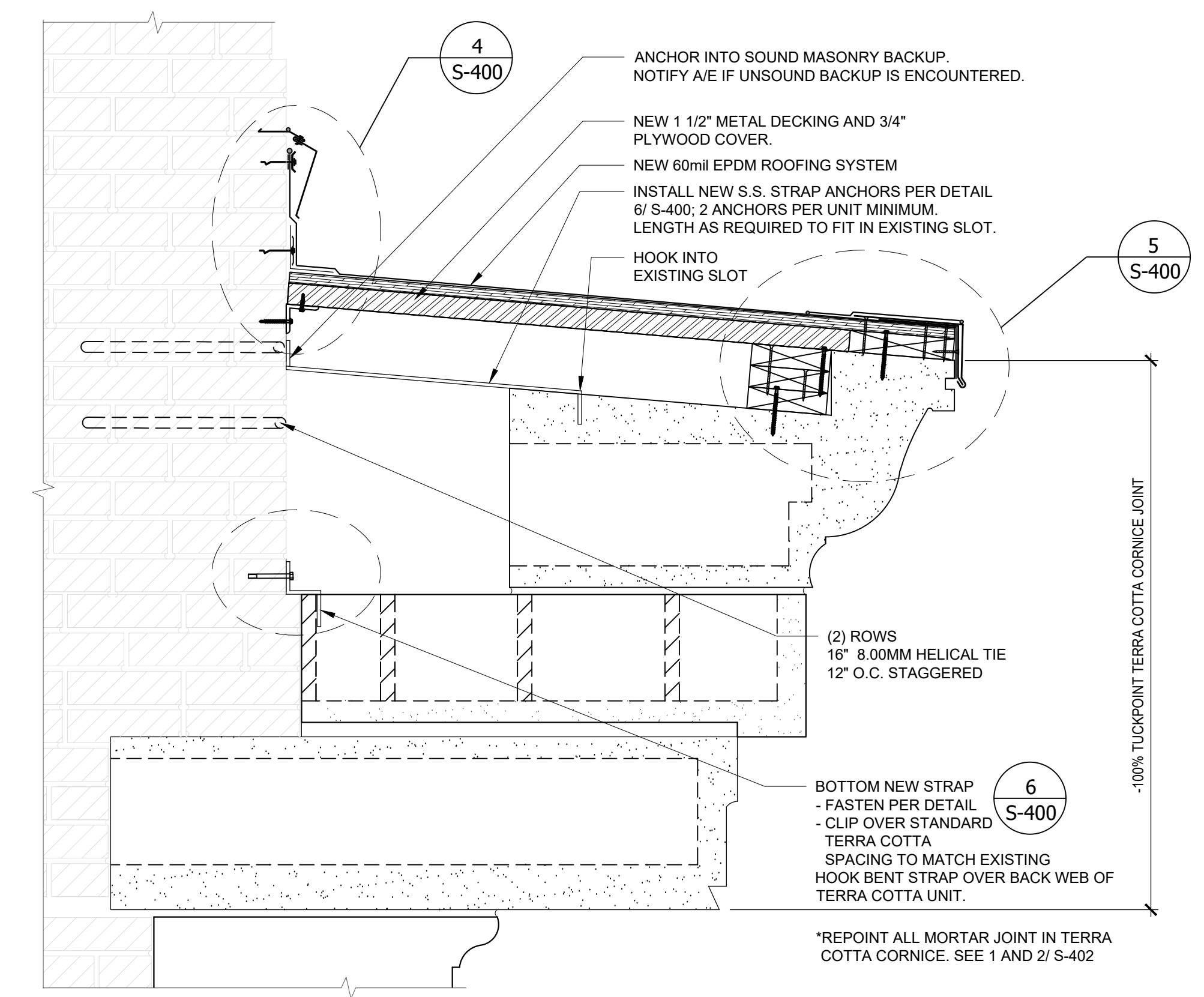




**IN-PLACE MOCK-UP , ANCHOR PULL-OUT TESTING**

INSTALLATION PROCEDURES ARE BASED ON VISUAL OBSERVATION AND ASSUMPTIONS OF STABILITY AND SOUNDNESS OF EXISTING MATERIALS TO BE FASTENED INTO. CONTRACTOR TO INCLUDE AN INITIAL IN-PLACE MOCK-UP OF 8' SECTION OF CORNICE REPAIRS, ROOF INSTALLATION, TUCK POINTING, AND SURFACE CLEANING. CONTRACTOR TO PROVIDE 3RD PARTY PULL-OUT TESTING OF SCREW FASTENERS INTO MASONRY AND TERRA COTTA AND STITCH ANCHORS INTO MASONRY IN CORNICE CAVITY. CONTRACTOR TO COORDINATE SCHEDULE WITH ARCHITECT / ENGINEER TO ALLOW FOR IN-PROGRESS OBSERVATIONS TO BE MADE. ALL OBSERVATIONS AND TEST RESULTS OF MOCK UP ASSEMBLY TO BE REVIEWED AND APPROVED BY ARCHITECT / ENGINEER PRIOR TO AUTHORIZING FULL SCALE PRODUCTION WORK OF REPAIRS OUTLINED IN THESE DRAWINGS.

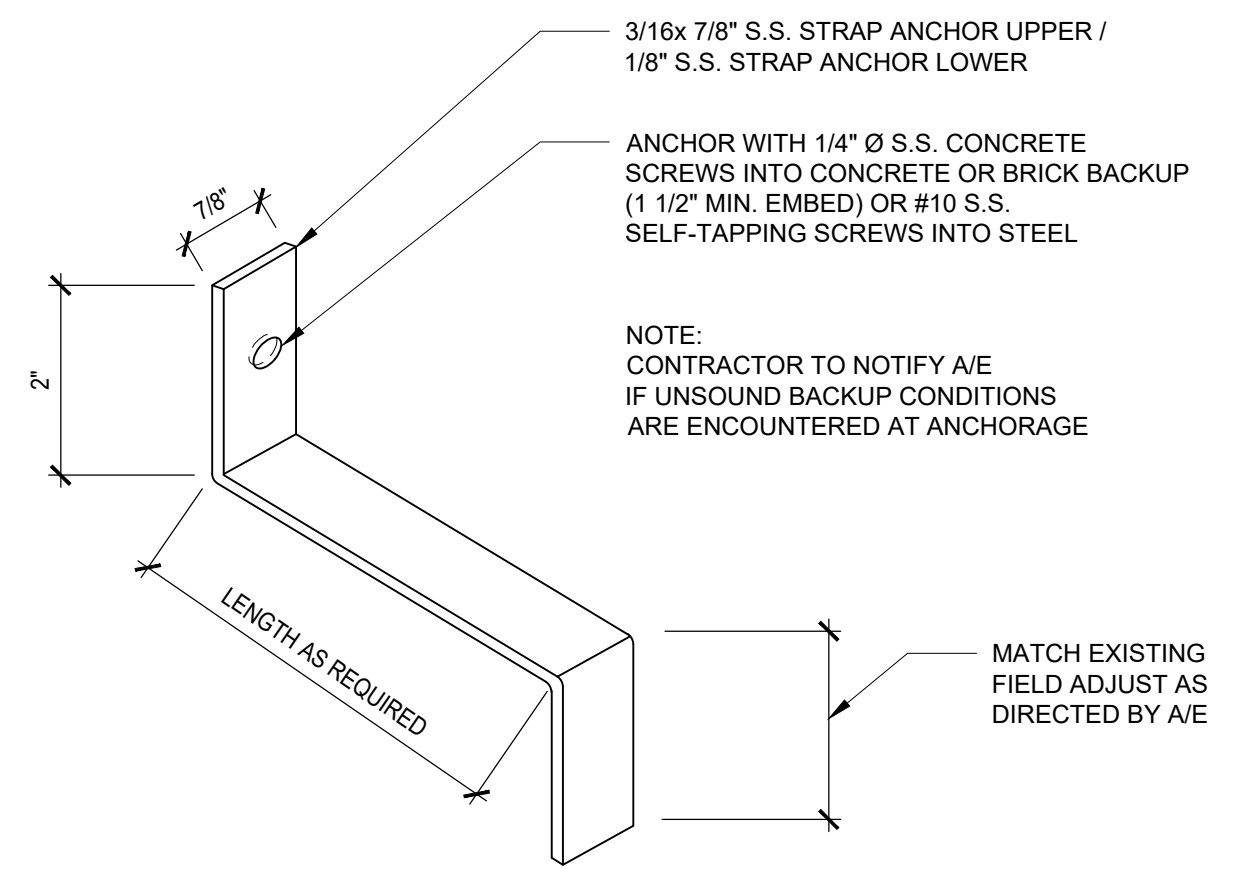
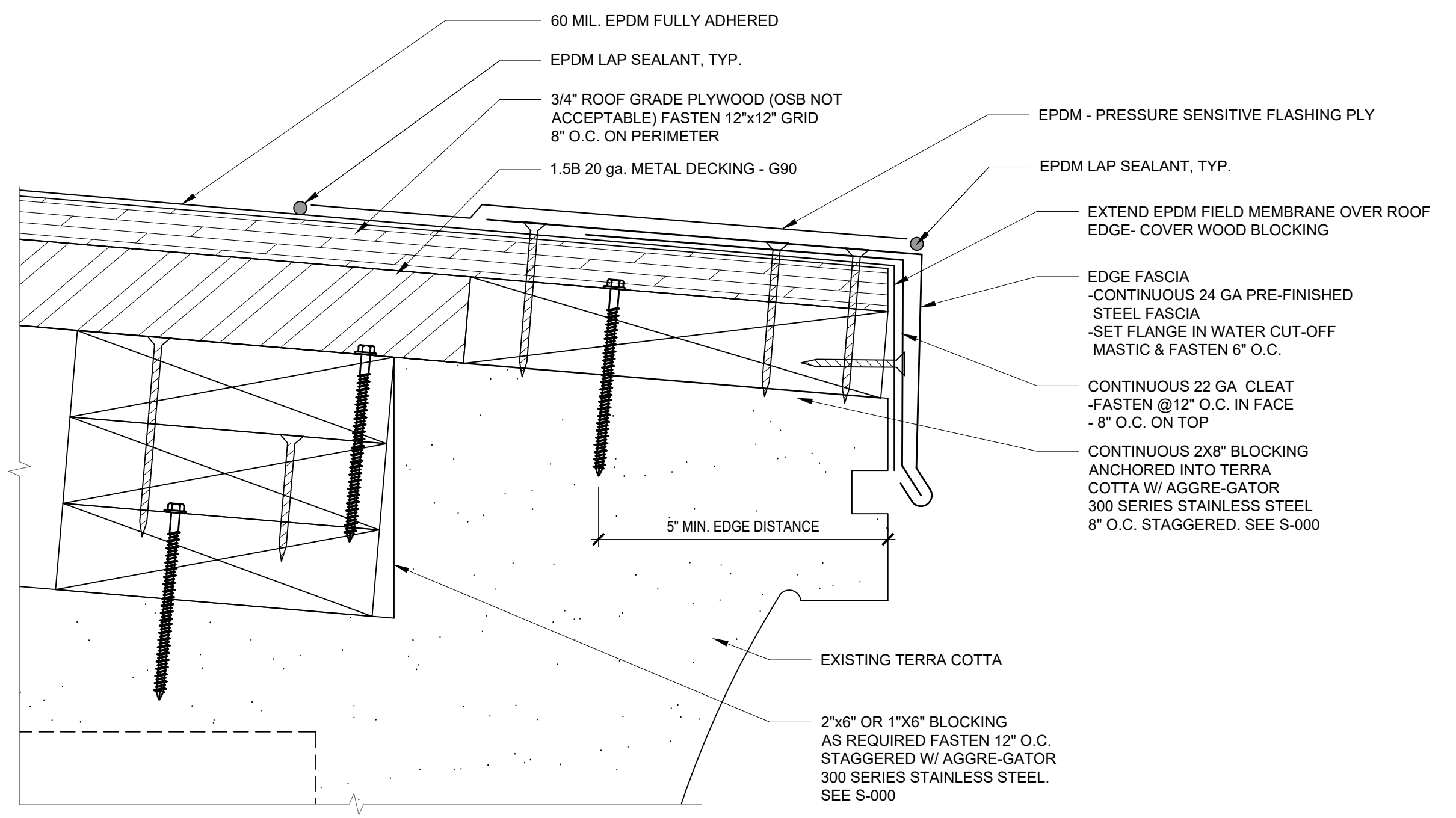
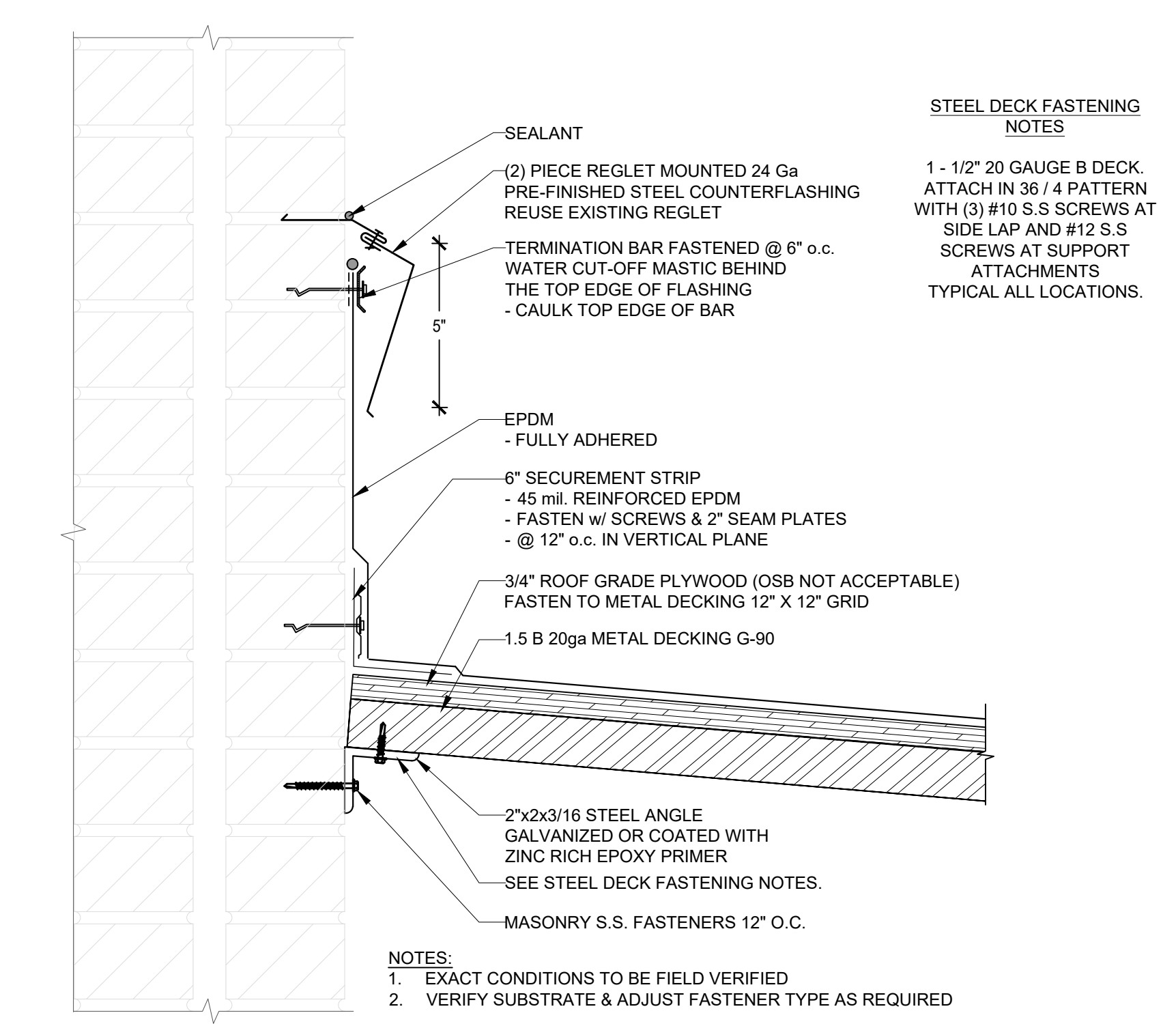
1. CORNICE DEMOLITION, INSPECTION, REINFORCE
  - NOTE: TO MAINTAIN STABILITY OF CORNICE, SEQUENCE STEPS a - e TO BE COMPLETED IN SECTIONS NOT LONGER THAN 10 FEET.
  - a. REMOVE
    - 1) METAL ROOFING
    - 2) 3" TERRA COTTA BOOK TILE
    - 3) BED MORTAR
  - b. REMOVE ALL DEMOLITION DEBRIS FROM CORES OF STACKED TERRA COTTA.
    - 1) LARGE PIECES BY HAND
    - 2) SMALL PIECES WITH SHOP VAC
  - c. ENGINEER TO PERFORM THOROUGH INSPECTION OF TERRA COTTA TO INCLUDE VISUAL OBSERVATION AND SOUNDING WITH PLASTIC HAMMER.
  - d. IF INTERNAL CORNICE MATERIALS ARE FOUND TO BE WET, ADDITIONAL TIME / PROCESSES FOR DRYING MAY BE REQUIRED. PROJECT WORK DURING FALL / WINTER MONTHS MAY COMPLICATE THE PROCESS.
  - e. AT DIRECTION OF ENGINEER, PERFORM ISOLATED REPAIRS TO TERRA COTTA TO INCLUDE CRACK REPAIRS, SPALL REPAIRS, PINNING AND PATCHING AS NECESSARY
  - f. INSTALL TWO ROWS OF STITCH ANCHORS IN CORNICE CAVITY AS CALLED OUT ON DETAIL
  - g. THESE STEPS MUST BE PERFORMED ON A "ONE STRAP AT A TIME" BASIS
    - 1) TOP METAL STRAP (CUT OFF FROM WALL, PULL OUT OF SLOT IN TERRA COTTA)
    - 2) INSPECT BOTTOM METAL STRAP FOR SOUNDNESS
    - 3) IF BOTTOM STRAP NOT SOUND, INSTALL NEW PER DETAIL PRIOR TO REMOVING EXISTING
    - 4) IF BOTTOM STRAP IS SOUND, CLEAN TO BRIGHT METAL FINISH AND INSTALL ZINC ENRICHED PRIMER PAINT COVERED WITH A HIGH QUALITY ZINC RICH EPOXY PAINT OR INSTALL TWO COATS OF TNEMCHEMCEMBUILD 135
    - 5) INSTALL TOP STAINLESS STEEL METAL STRAPS PER DETAIL.



1  
S-400 DEMOLITION CORNICE SECTION DETAILS SCALE: 1" = 1'-0"

2  
S-400 DEMOLITION, INSPECTION, REINFORCE SCOPE OF WORK SCALE: N.T.S.

3  
S-400 CORNICE SECTION REPAIR DETAILS SCALE: 1" 1/2" = 1'-0"



4  
S-400 REGLET MOUNTED COUNTER FLASHING SCALE: 3" = 1'-0"

5  
S-400 CORNICE DETAIL SCALE: 6" = 1'-0"

6  
S-400 HORIZONTAL STRAP ANCHOR SCALE: N.T.S.

| REVISION | BY | CHK | DATE | DESCRIPTION |
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STAMP/STATUS:

**BID SET**

**DETAILS**

**CORNICE REPAIRS**

GERMANIA BUILDING

135 W. WELLS STREET - MILWAUKEE, WI 53201

PROJECT NUMBER:  
**21EP10152**

SHT SIZE: 24X36 (D)

DRN BY: EV

CHK BY: AG

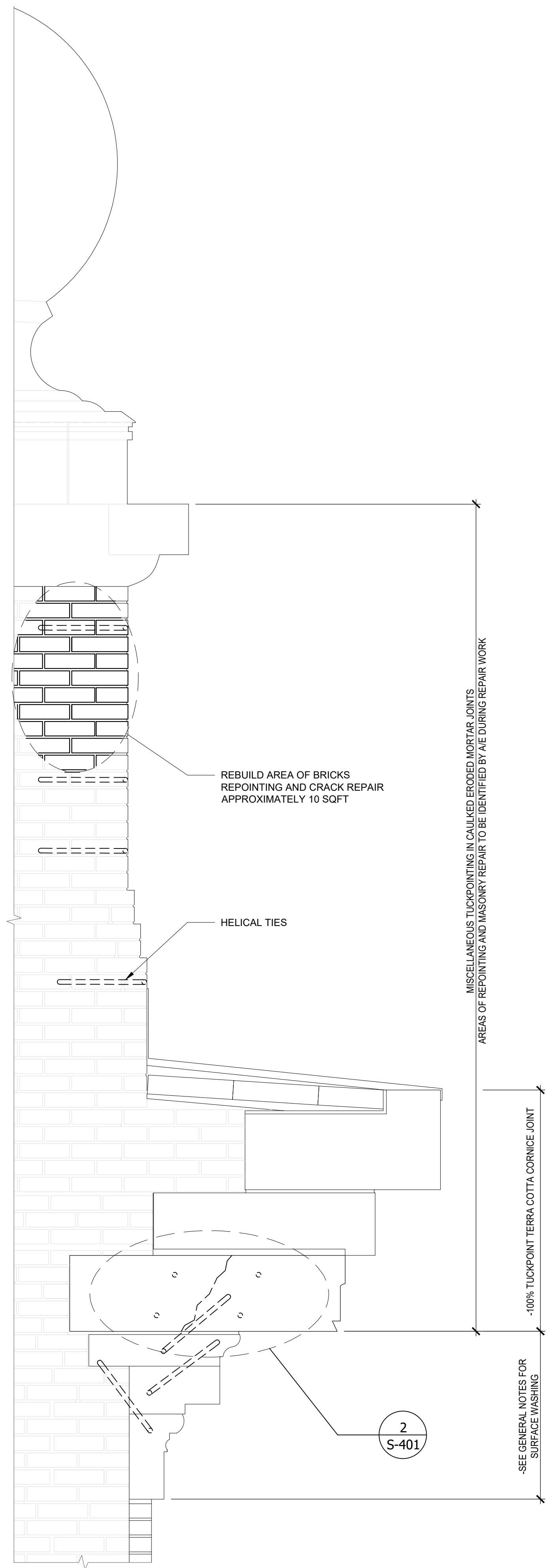
DATE: 11/16/21

SHEET  
**S-400**

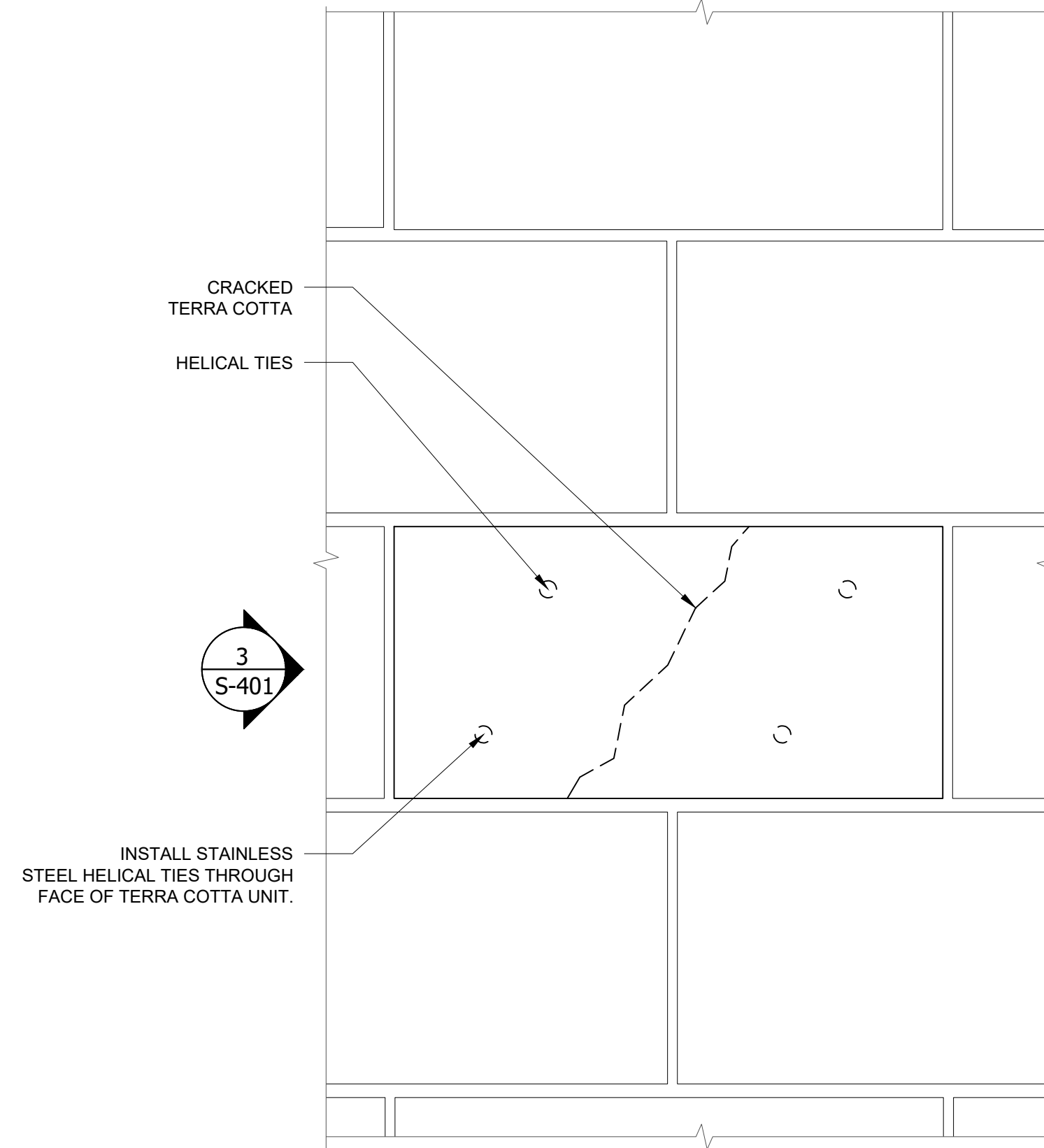
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**1**  
S-401 **CORNICE SIDE ELEVATION**

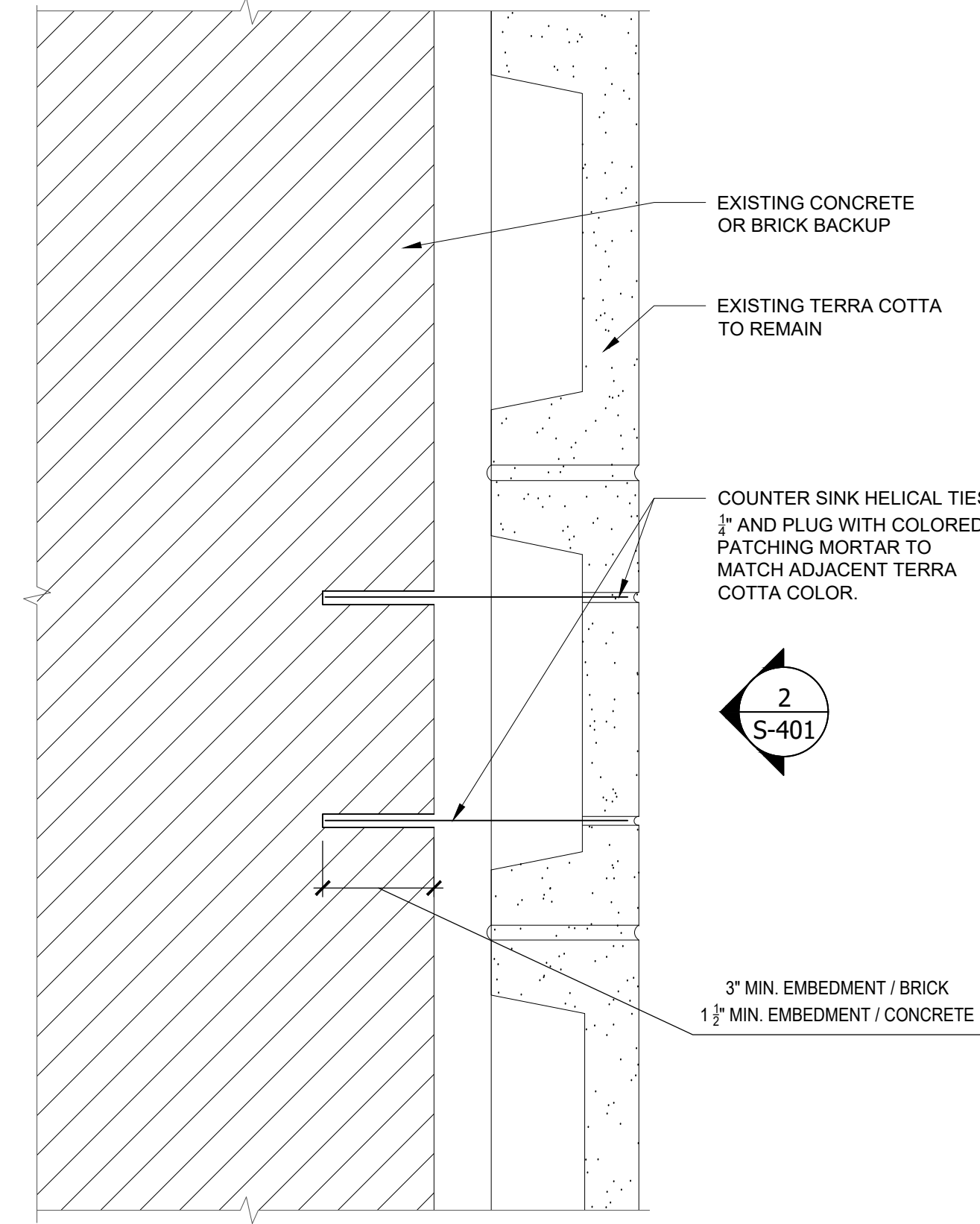


SCALE: 1" = 1'-0"



**2**  
S-401 **ANCHOR REPAIR DETAIL**

SCALE: N.T.S.



**3**  
S-401 **TYP. HELICAL ANCHOR REPAIR**

SCALE: N.T.S.

| REVISION | BY | CHK | DATE | DESCRIPTION |
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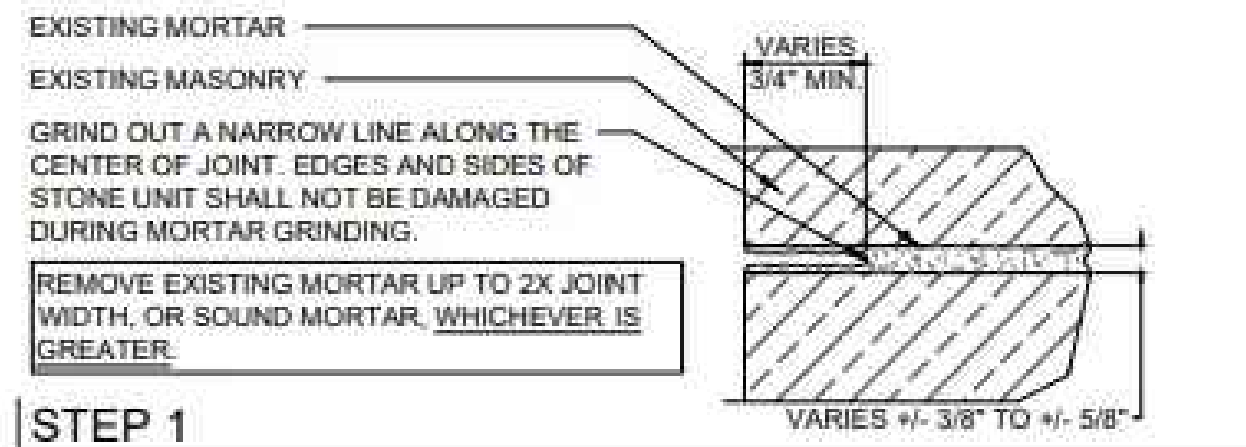
**DETAILS**  
**CORNICE REPAIRS**  
GERMANIA BUILDING  
135 W. WELLS STREET - MILWAUKEE, WI 53201

PROJECT NUMBER:  
**21EP10152**  
SHT SIZE: 24X36 (D)  
DRN BY: EV  
CHK BY: AG  
DATE: 11/16/21

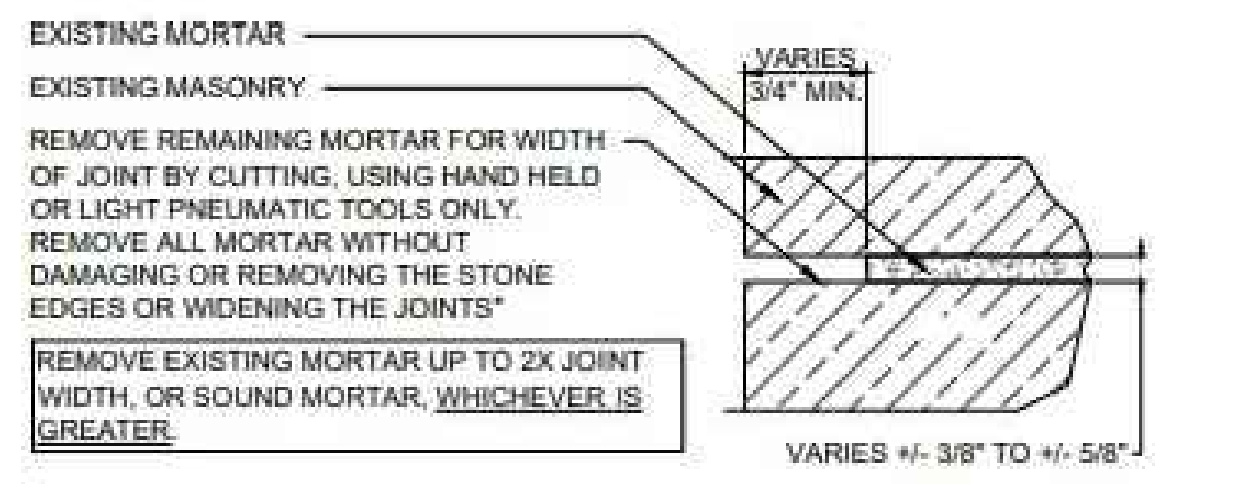
SHEET  
**S-401**

DISCLAIMER: THIS DRAWING CONTAINS INFORMATION WHICH IS CONFIDENTIAL AND PROPRIETARY, AND MUST BE KEPT CONFIDENTIAL AND NOT BE DISCLOSED, IN WHOLE OR IN PART, TO ANYONE WITHOUT PRIOR WRITTEN AUTHORIZATION OF RCL ENGINEERING GROUP. BY ACCESSING THIS DOCUMENT YOU AGREE TO KEEP CONFIDENTIAL ALL THE INFORMATION DISCLOSED IN THE FILE AND RELATED MATERIALS.

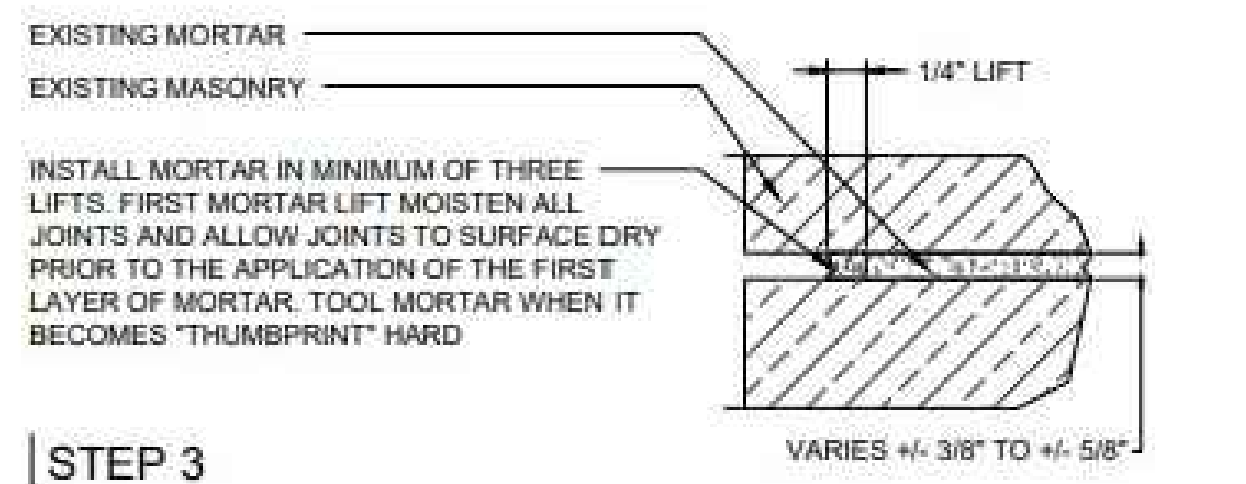




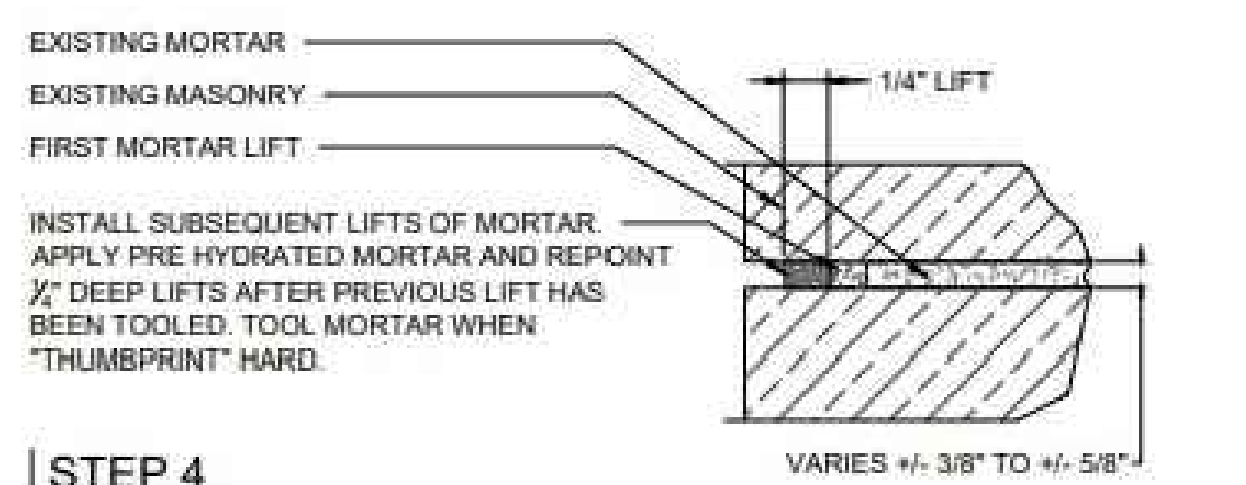
**STEP 1**



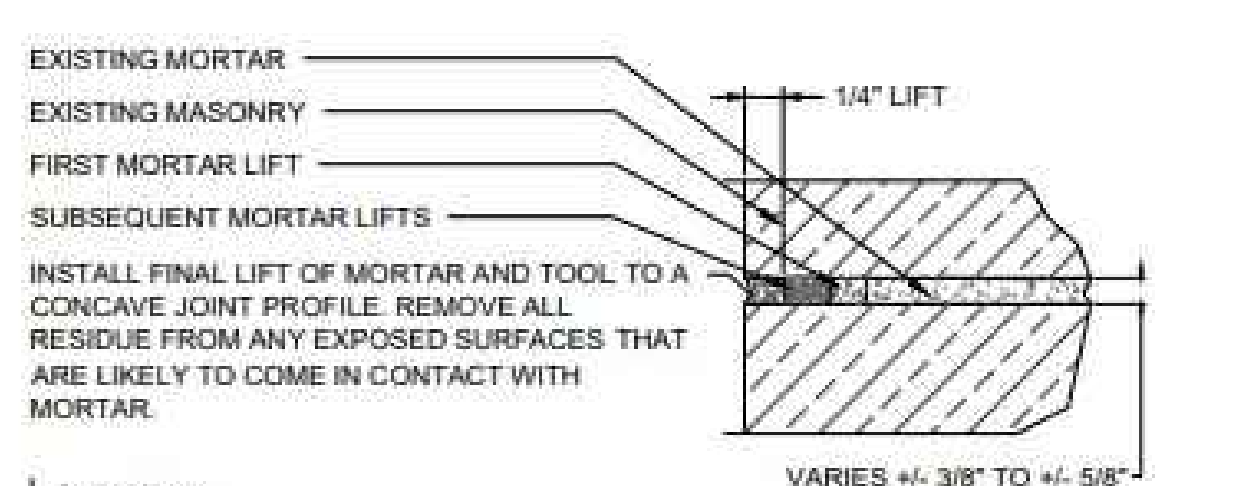
**STEP 2**



**STEP 3**

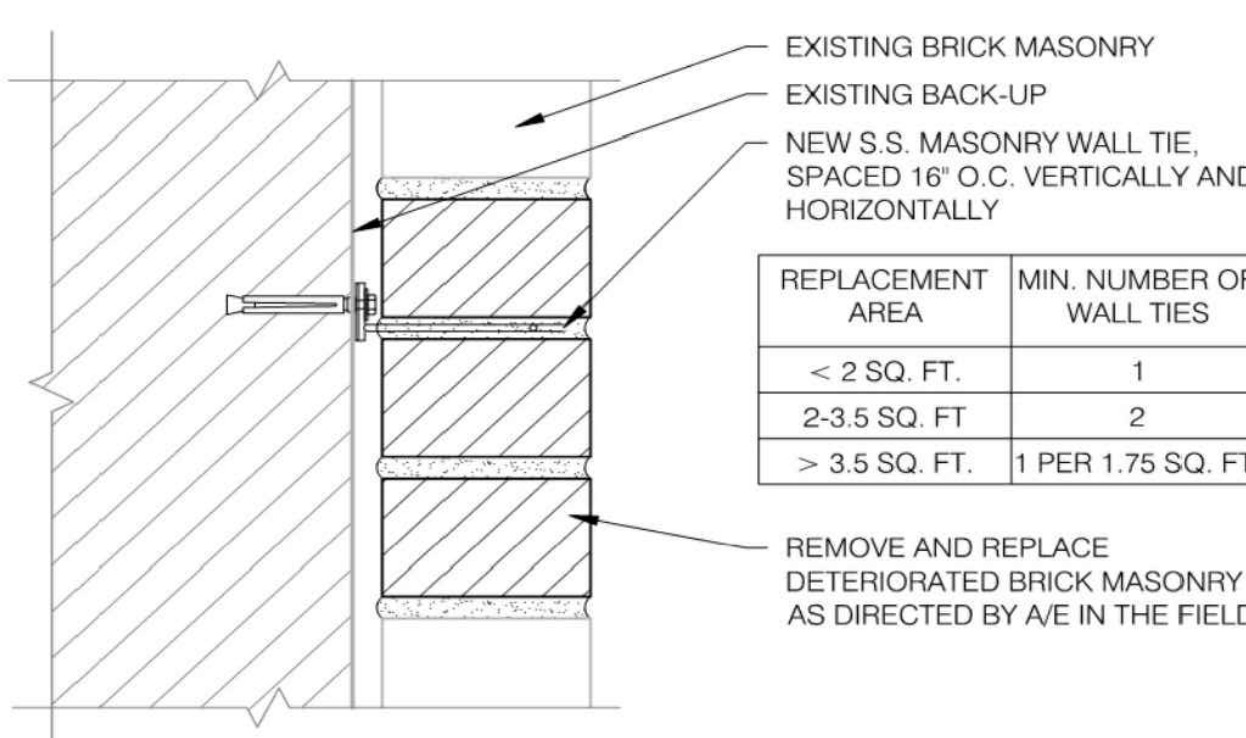


**STEP 4**

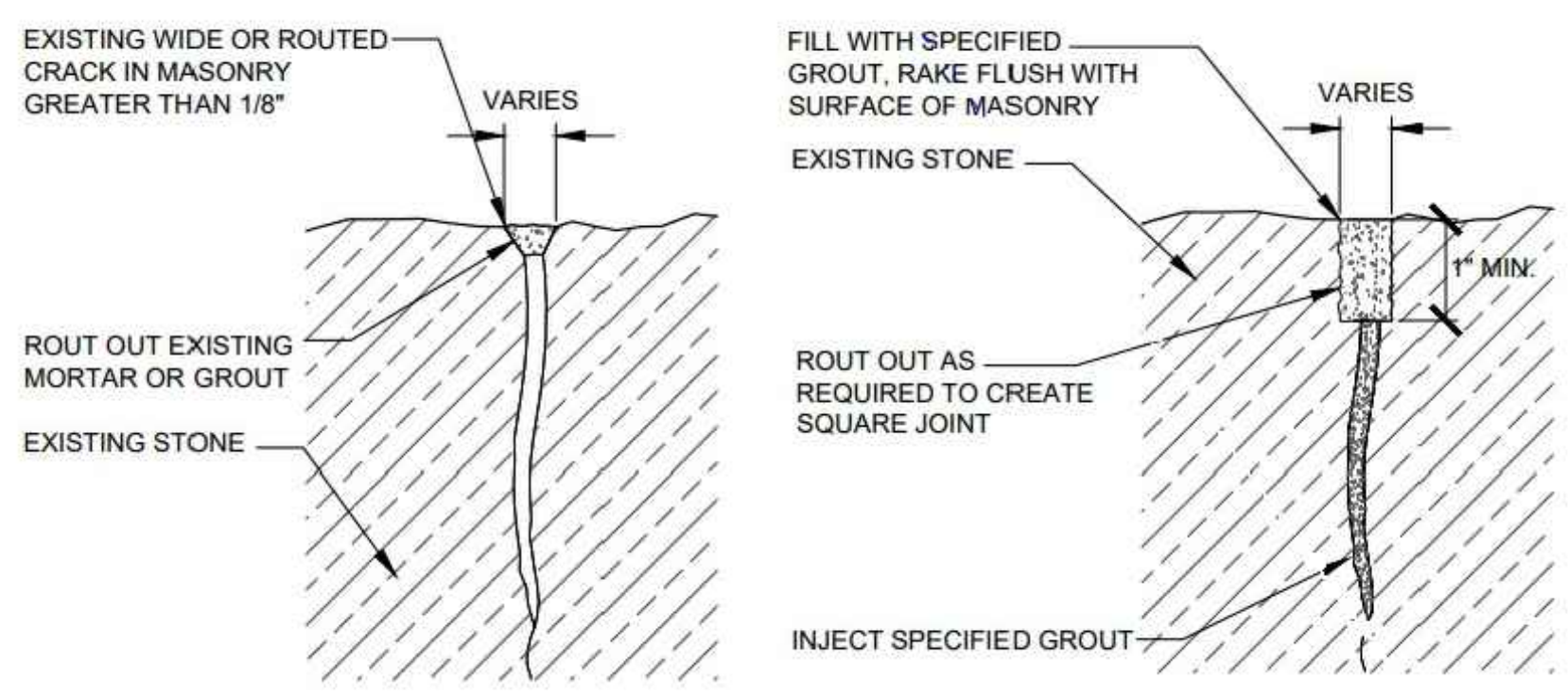


**STEP 5**

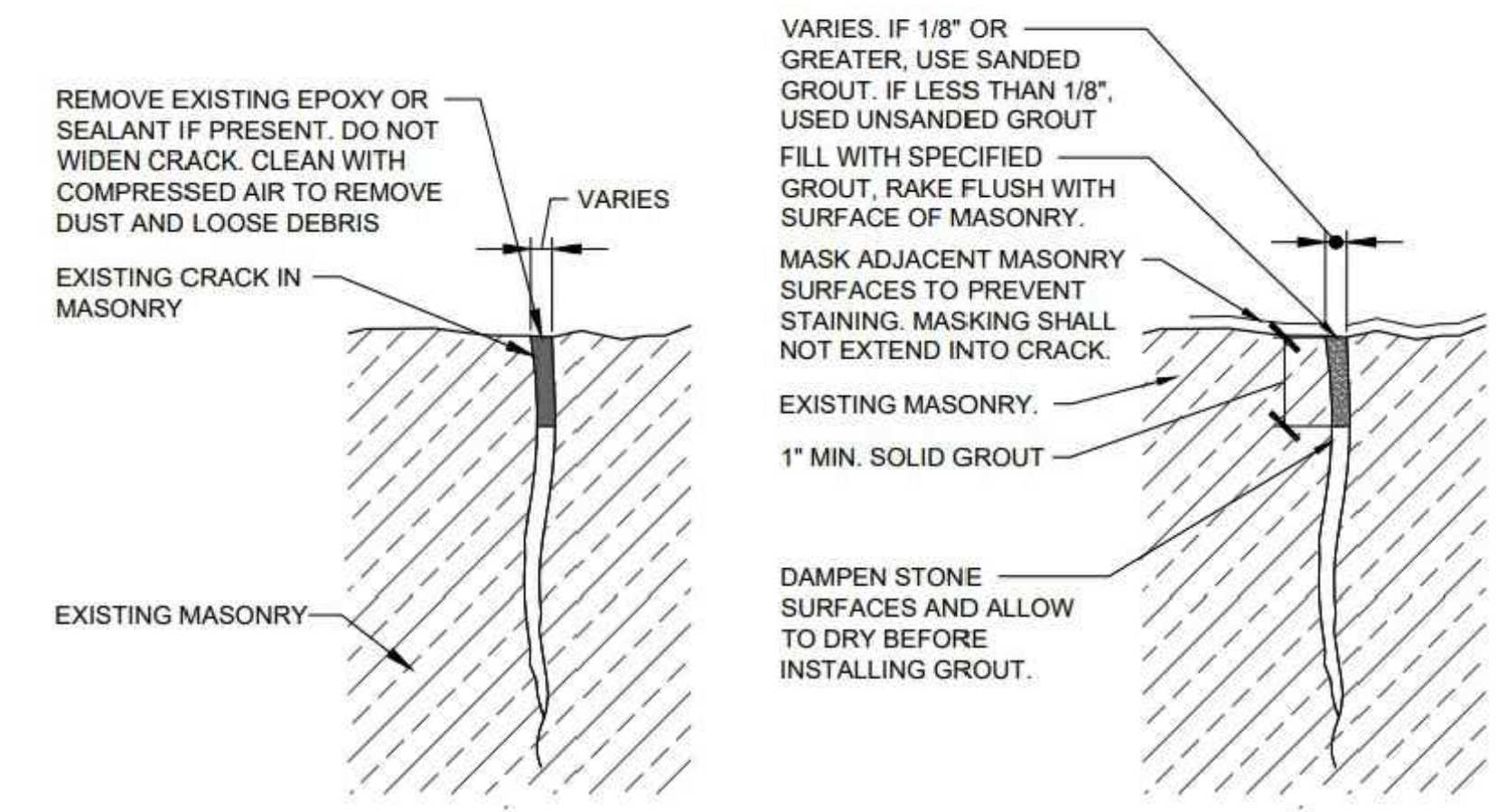
**1 S-402 MORTAR REPOINTING AT JOINT**  
SCALE: N.T.S.



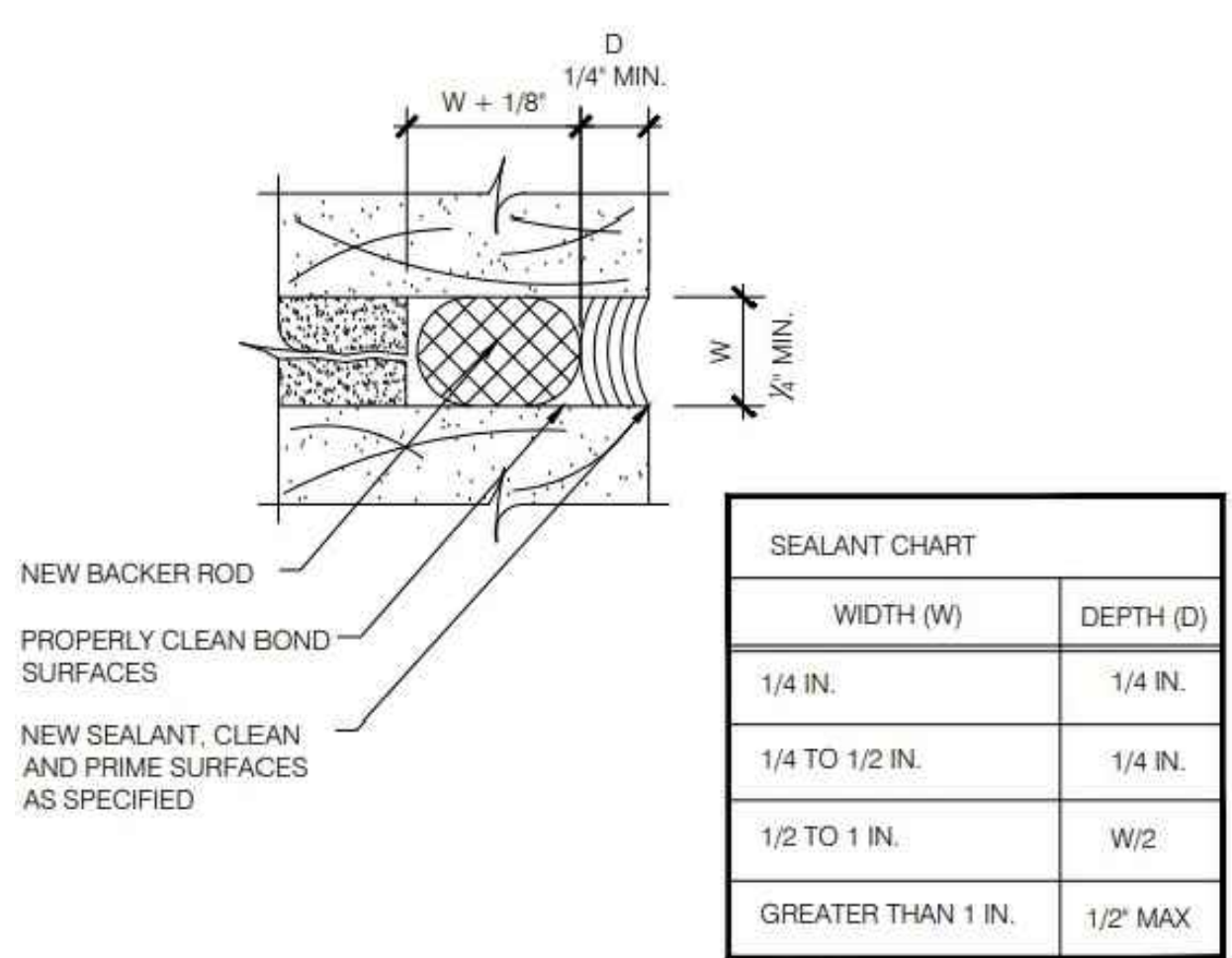
**7 S-402 ISOLATED BRICK MASONRY REBUILD**  
SCALE: N.T.S.



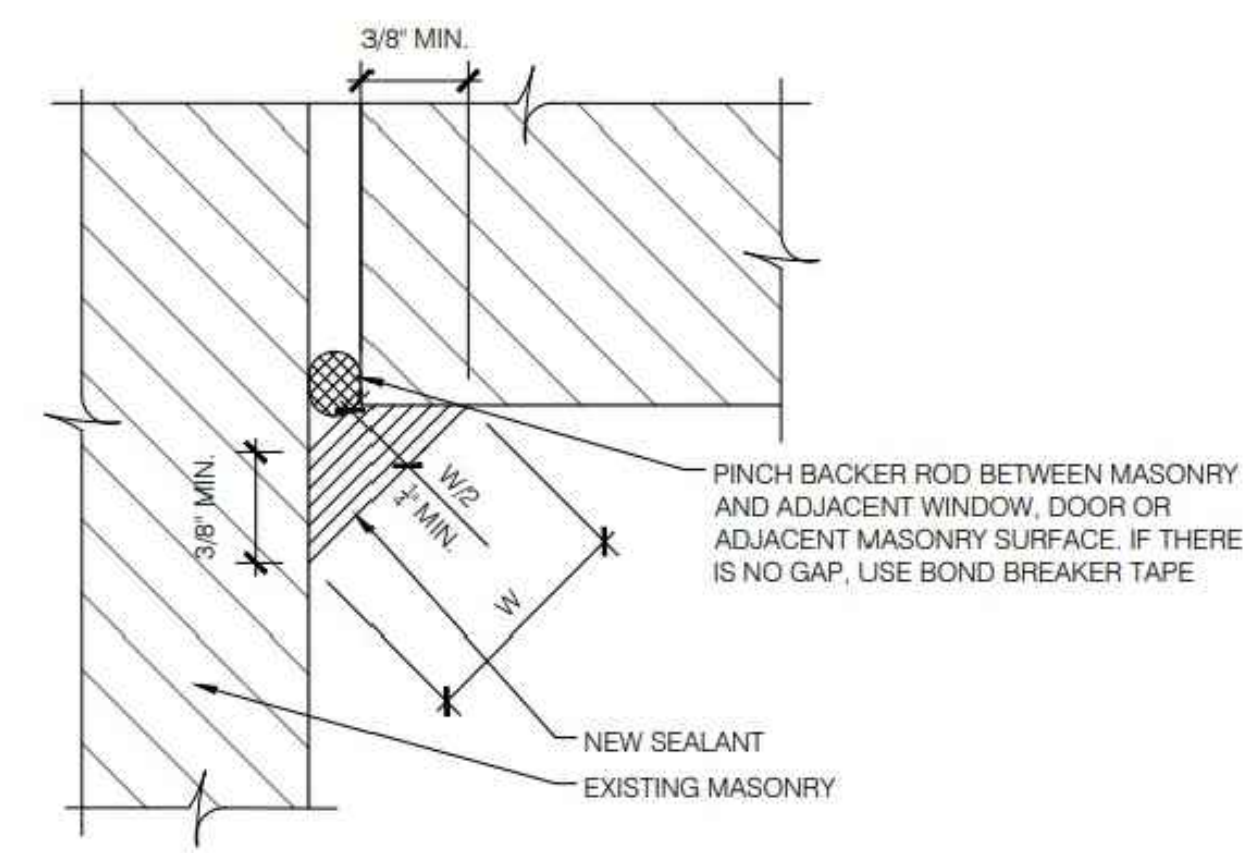
**2 S-402 CRACK REPAIR - ROUT AND GROUT**  
SCALE: N.T.S.



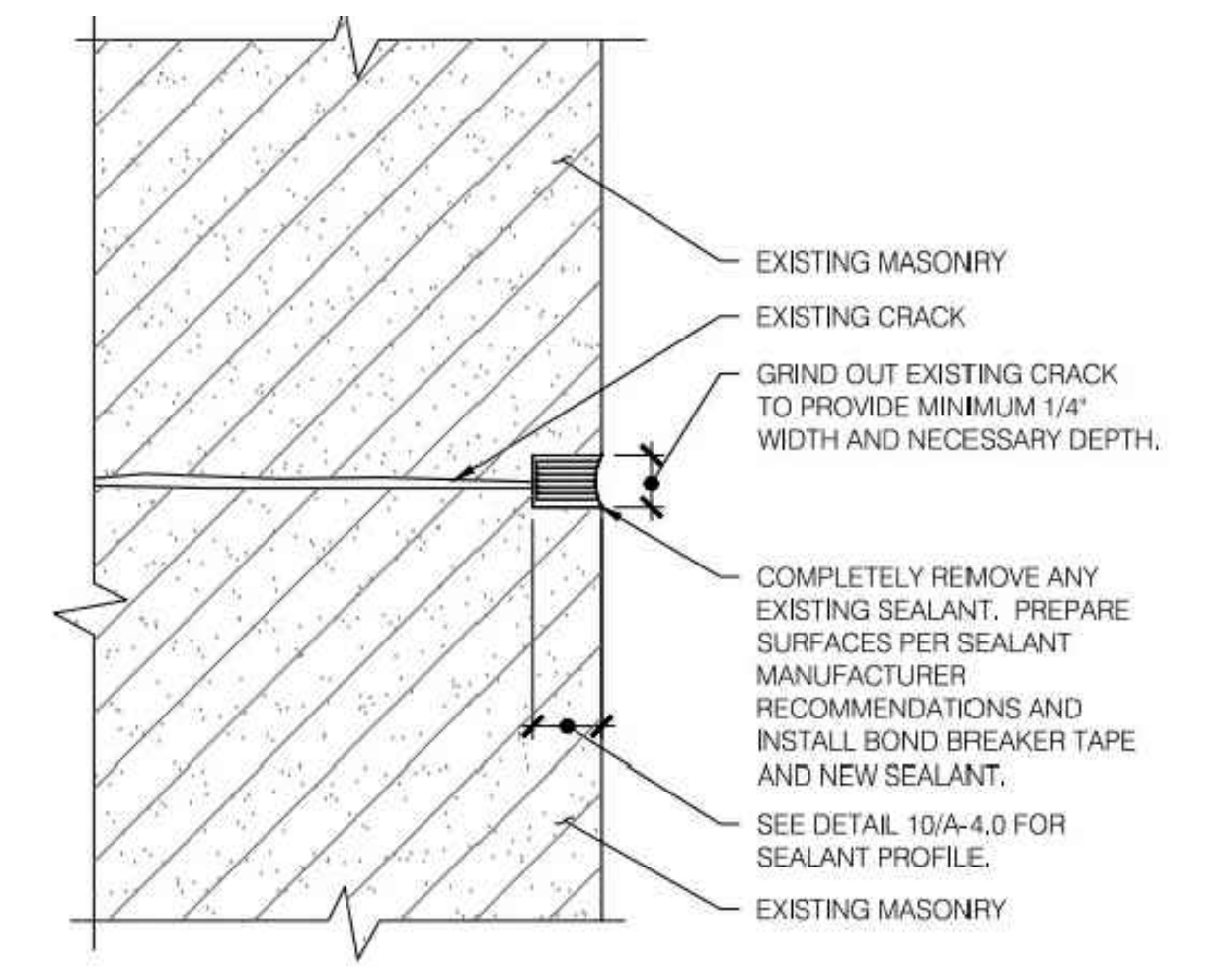
**3 S-402 CRACK REPAIR - INJECTION**  
SCALE: N.T.S.



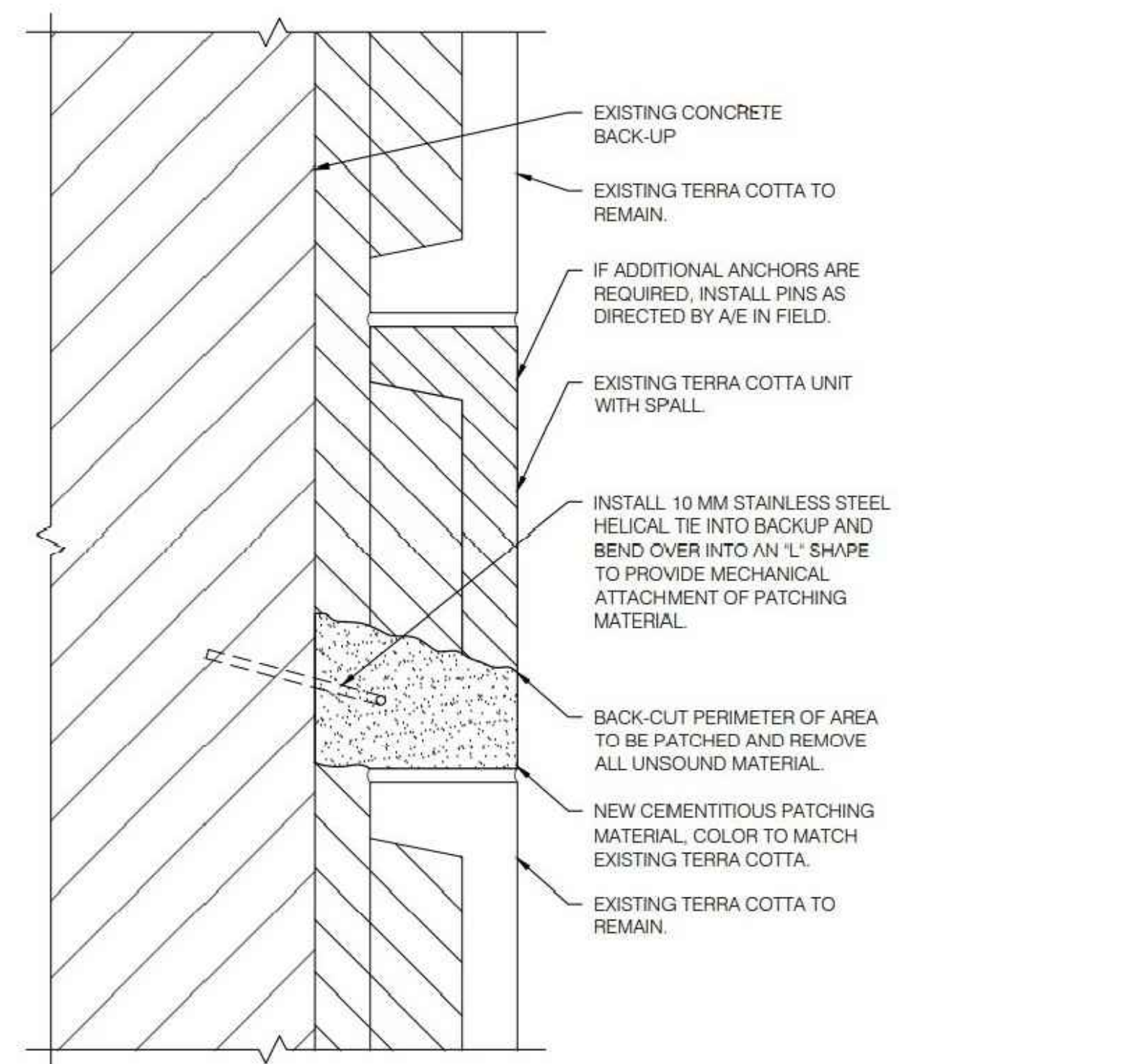
**4 S-402 SEALANT BUTT JOINT DETAIL**  
SCALE: N.T.S.



**5 S-402 SEALANT FILLET JOINT DETAIL**  
SCALE: N.T.S.



**6 S-402 SEALANT DETAIL AT CRACKS**  
SCALE: N.T.S.



**8 S-402 SECTION AT TYPICAL TERRA COTTA PATCH REPAIR**  
SCALE: N.T.S.

| REVISION | BY | CHK | DATE | DESCRIPTION |
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