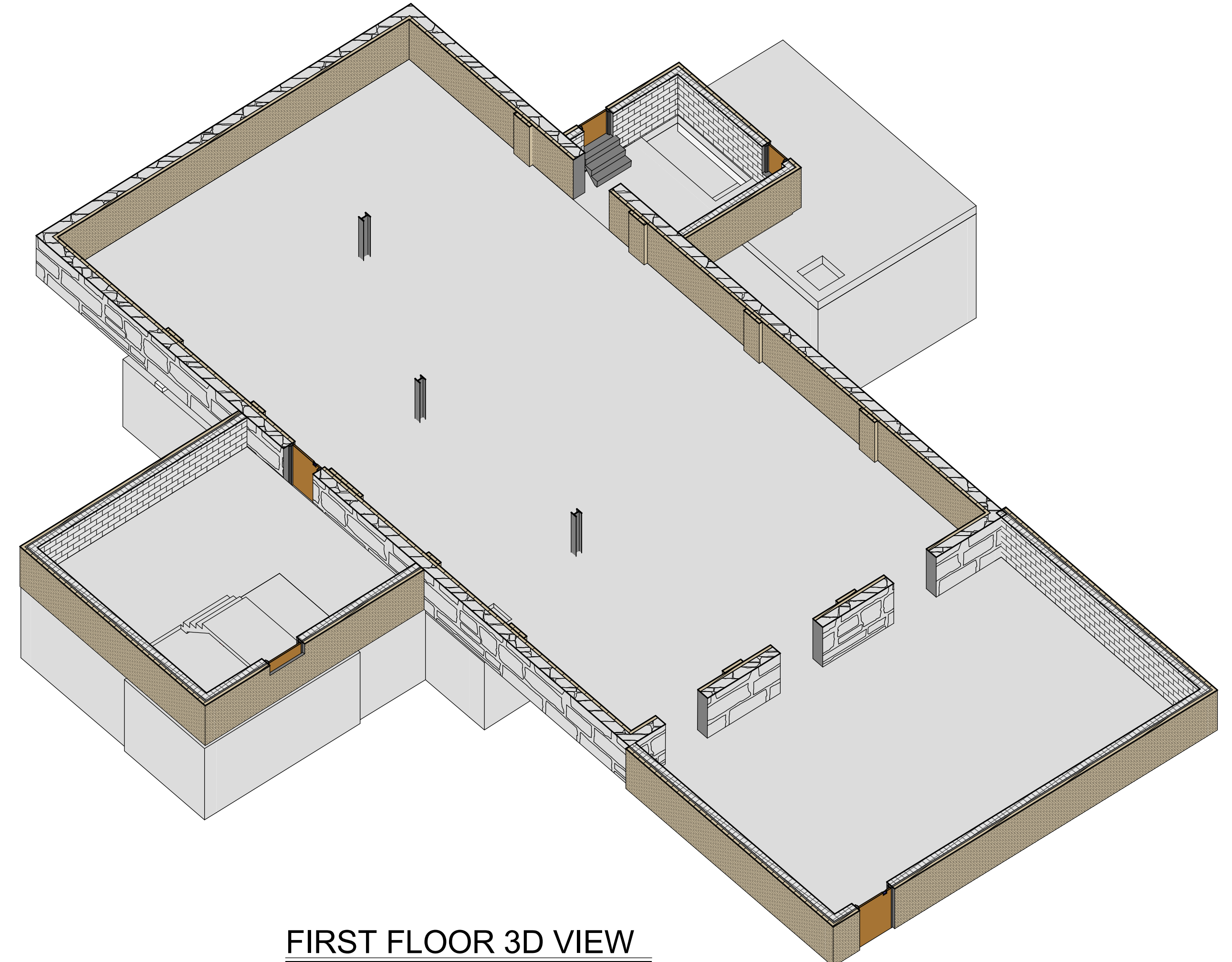


AREA B - SOUTH WING  
SEE S2.1

AREA A - NORTH WING  
SEE S2.0

OUTLINE OF  
STRUCTURE ABOVE

**BASEMENT 3D VIEW**  
N.T.S.



**FIRST FLOOR 3D VIEW**  
N.T.S.

**GENERAL SCOPE OF WORK**

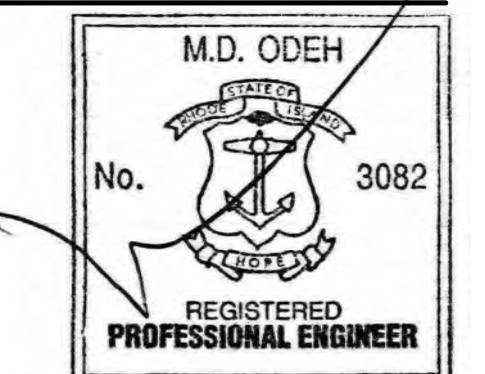
1. THE INTENT OF THESE DRAWINGS IS TO IDENTIFY AND REPAIR AREAS OF STRUCTURAL CONCRETE DETERIORATION.
2. MINOR AND NON-STRUCTURAL CRACKING EXISTS AT NUMEROUS LOCATIONS. HOWEVER, NO WORK IS REQUIRED AT THOSE LOCATIONS.
3. STRUCTURAL REPAIRS ARE REQUIRED AT AREA A & AREA B.
4. ALL WORK SHALL CONFORM TO RHODE ISLAND STATE BUILDING CODE REQUIREMENTS AS WELL AS ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.

**STRUCTURAL DRAWING LIST**

S0.0	3D VIEWS & GENERAL SCOPE OF WORK
S1.0	OVERALL BASEMENT LEVEL PLAN
S1.1	OVERALL FIRST FLOOR PLAN
S2.0	AREA A - NORTH WING DEFICIENCIES
S2.1	AREA B - SOUTH WING DEFICIENCIES
S3.0	TYPICAL CONCRETE REPAIR DETAILS

**GENERAL NOTES**

- A. GENERAL**
1. ALL WORK IN THE EXISTING STRUCTURE SHALL CONFORM TO THE RHODE ISLAND REHABILITATION AND FIRE CODE FOR EXISTING BUILDINGS AND STRUCTURES SRC-1 AND ITS APPLICABLE REFERENCED STANDARDS. ALL NEW WORK SHALL CONFORM TO THE RHODE ISLAND STATE BUILDING CODE SBC-1-2022 (INTERNATIONAL BUILDING CODE (IBC) 2018 WITH AMENDMENTS) AND ITS APPLICABLE REFERENCED STANDARDS (HEREIN REFERRED TO AS THE BUILDING CODE).
  2. ALL REFERENCES TO THE CONTRACTOR IN THIS SET OF DRAWINGS REFER TO THE GENERAL CONTRACTOR, CONSTRUCTION MANAGER, AND OTHER PARTY OR PARTIES RESPONSIBLE FOR THE EXECUTION OF THE PROJECT.
  3. ALL REFERENCES TO A PROFESSIONAL ENGINEER, STRUCTURAL ENGINEER, AND GEOTECHNICAL ENGINEER IN THIS SET OF DRAWINGS REFERS TO A PROFESSIONAL ENGINEER COMPETENT IN THE RESPECTIVE FIELD OF DESIGN WHO IS REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
  4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AS THEY RELATE TO NEW CONSTRUCTION. REPORT ALL OBSERVATIONS AND ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER OF RECORD AS A REQUEST FOR INFORMATION (RFI) BEFORE PROCEEDING WITH WORK.
  5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE FOR A SAFE AND EFFICIENT METHOD OF SHORING AND BRACING THE STRUCTURE DURING ALL CONSTRUCTION PHASES. ALL SHORING AND BRACING SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER. SUBMIT AN OUTLINE OF PROPOSED PROCEDURE AND ITS IMPACT ON THE BUILDING STRUCTURE FOR RECORD TO THE ENGINEER OF RECORD BEFORE PROCEEDING WITH WORK.
  6. THE EVALUATION OF THE STRUCTURE TO SAFELY SUPPORT ANY AND ALL CONSTRUCTION LOADING (E.G. EQUIPMENT LOADS, TEMPORARY LOADS FROM DEBRIS AND MATERIAL STORAGE) IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN TEAM HAS DESIGNED THE STRUCTURE FOR THE PERMANENT DEAD LOADS AND UNIFORM LIVE LOADS INDICATED ON THE STRUCTURAL DRAWINGS ACCORDING TO THE REQUIREMENTS OF THE BUILDING CODE. THE CONTRACTOR SHALL ENGAGE A STRUCTURAL ENGINEER TO EVALUATE PROPOSED CONSTRUCTION LOADING AND TO DESIGN ALL TEMPORARY BRACING AND SHORING SYSTEMS THAT MAY BE REQUIRED DUE TO THE CONTRACTOR'S MEANS AND SEQUENCE OF CONSTRUCTION.
  7. WHERE DETAILS FOR SPECIFIC CONDITIONS ARE NOT SHOWN ON THESE DRAWINGS, USE DETAILS FOR THE MOST NEARLY SIMILAR CONDITIONS SHOWN ON THE STRUCTURAL DRAWINGS AS DETERMINED BY THE STRUCTURAL ENGINEER OF RECORD. REPORT ANY COORDINATION ISSUES IMMEDIATELY AS AN RFI FOR REVIEW.
  8. STRUCTURAL MEMBERS SHALL NOT BE MODIFIED WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD. ANY ANTICIPATED MODIFICATIONS TO THE CONSTRUCTION DOCUMENTS MUST BE SUBMITTED TO THE ARCHITECT/ENGINEER OF RECORD AS AN RFI FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PREPARE A SKETCH AND CALCULATIONS, PREPARED BY A STRUCTURAL ENGINEER, DOCUMENTING THE PROPOSED CORRECTIVE ACTION AND SUBMIT IT TO THE ARCHITECT/ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO PERFORMING ANY CORRECTIVE WORK. ODEH ENGINEERS CANNOT CERTIFY ANY UNAUTHORIZED DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS.
  9. PRIOR TO REQUESTING A SITE VISIT BY ODEH ENGINEERS FOR OBSERVATION OF A COMPLETED STAGE OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A STATEMENT TO THE ARCHITECT/ENGINEER OF RECORD THAT ALL WORK HAS BEEN COMPLETED IN CONFORMANCE WITH THE STRUCTURAL CONTRACT DRAWINGS AND SHOP DRAWINGS WITHOUT EXCEPTION, OR HAS BEEN PERFORMED WITH FORMAL WRITTEN EXCEPTIONS ORIGINATING FROM OR AUTHORIZED BY ODEH ENGINEERS.
  10. PRIOR TO RELEASE OF THE FINAL PROJECT CERTIFICATION TO THE BUILDING OFFICIAL, ODEH ENGINEERS REQUIRES A LETTER FROM THE CONTRACTOR'S PROJECT EXECUTIVE IN RESPONSIBLE CHARGE STATING THAT ALL WORK INDICATED ON THE STRUCTURAL DRAWINGS HAS BEEN PERFORMED WITHOUT EXCEPTION OR WAS PERFORMED WITH FORMAL WRITTEN EXCEPTIONS ORIGINATING FROM OR AUTHORIZED BY ODEH ENGINEERS. IN ADDITION, ODEH ENGINEERS REQUIRES A LETTER FROM THE PRINCIPAL OF THE TESTING AND INSPECTIONS AGENCY CERTIFYING THAT ALL TESTING AND INSPECTIONS WORK HAS BEEN COMPLETED IN CONFORMANCE WITH THE PROJECT STATEMENT OF SPECIAL INSPECTIONS AND THAT ALL STRUCTURAL NONCONFORMANCE CONDITIONS FOUND HAVE BEEN BROUGHT INTO CONFORMANCE WITH THE PROJECT STRUCTURAL REQUIREMENTS PRIOR TO PROJECT COMPLETION.
  11. THE TRADE CONTRACTORS SHALL SUBMIT SHOP AND ERECTION DRAWINGS AS WELL AS PRODUCT DATA (COLLECTIVELY KNOWN HEREIN AS "SHOP DRAWINGS") FOR REVIEW PRIOR TO PROCEEDING WITH FABRICATION AND/OR CONSTRUCTION.
    - a. THE SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH THE LATEST EDITION OF THE CODE OF STANDARD PRACTICE FOR EACH RESPECTIVE TRADE IN CONJUNCTION WITH ADDITIONAL SHOP DRAWING REQUIREMENTS INDICATED ON THESE DRAWINGS.
    - b. ALL SHOP DRAWINGS SHALL BE FULLY DEVELOPED BY THE TRADE CONTRACTORS OR BY AGENTS OF THE CONTRACTORS. CAD FILES, PHOTOCOPIES, OR OTHER REPRODUCTIONS OF THE CONTRACT DRAWINGS IN WHOLE OR IN PART SHALL NOT BE USED BY THE TRADE CONTRACTORS OR THEIR AGENTS FOR THE PREPARATION AND DEVELOPMENT OF SHOP DRAWINGS WITHOUT THE EXPRESSED WRITTEN CONSENT OF ODEH ENGINEERS.
    - c. ALL SUBMITTALS SHALL BE IN UNLOCKED PDF FORMAT WITH SEARCHABLE TEXT.
  12. ALL 3D VIEWS INCLUDED ON THE STRUCTURAL DRAWINGS ARE FOR REFERENCE ONLY. THE 3D VIEWS ONLY SHOW BASIC STRUCTURAL ELEMENTS; THEY DO NOT INCLUDE DETAILS SUCH AS EXTERIOR RAMPS AND STAIRS, SLAB AND ROOF PITCHES, OR SPECIFIC STRUCTURAL DETAILS. REFER TO ALL PLANS, DETAIL SHEETS, AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. DO NOT SCALE OFF OF THESE DRAWINGS.
  13. DO NOT SCALE OFF OF THESE DRAWINGS.
  14. THIS CONSTRUCTION DOCUMENT SET OF DRAWINGS ARE TO BE USED FOR CONSTRUCTION AND BIDDING PURPOSES. WHILE THESE DRAWINGS CAN BE USED TO OBTAIN AN OF THE STRUCTURAL SYSTEMS INVOLVED, COORDINATION BETWEEN DIFFERENT MAY BE TRADES REQUIRED.
- B. SPECIAL INSPECTIONS**
1. UNLESS WAIVED BY THE BUILDING OFFICIAL, A SPECIAL INSPECTIONS PROGRAM SHALL BE ESTABLISHED BY THE OWNER AND COORDINATED WITH THE CONTRACTOR AS REQUIRED BY CHAPTER 17 OF THE BUILDING CODE. THE SPECIAL INSPECTIONS PROGRAM SHALL BE MANAGED BY A SPECIAL INSPECTIONS COORDINATOR (ALSO REFERRED TO AS THE SPECIAL INSPECTOR), WHO SHALL BE HIRED BY THE OWNER.
  2. THE SPECIAL INSPECTIONS PROGRAM SHALL NOT RELIEVE THE CONTRACTOR OF QUALITY ASSURANCE AND TESTING REQUIREMENTS OF THE BUILDING CODE AS WELL AS ADDITIONAL TESTING AND INSPECTION REQUIREMENTS IN THE CONTRACT DOCUMENTS, WHICH SHALL BE SUPPLEMENTARY TO THE SPECIAL INSPECTIONS PROGRAM.
  3. SPECIAL INSPECTIONS SHALL BE PERFORMED ONCE A WEEK MINIMUM FOR ALL NEW AND MODIFIED STRUCTURAL SYSTEMS.
  4. ALL WORK FOR WHICH SPECIAL INSPECTIONS IS REQUIRED SHALL REMAIN ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTIONS PURPOSES UNTIL COMPLETION OF THE REQUIRED SPECIAL INSPECTIONS PROGRAM. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE INSPECTIONS TO ALLOW FOR ALL TESTS AND INSPECTIONS TO TAKE PLACE AT THE FREQUENCY INDICATED IN THE STATEMENT OF SPECIAL INSPECTIONS.
  5. ALL NONCONFORMANCE ITEMS IDENTIFIED BY THE TESTING AND INSPECTION AGENCY AS PART OF THE SPECIAL INSPECTIONS PROGRAM MUST BE REINSPECTED ONCE THE REQUIRED REMEDIAL WORK IS COMPLETED IN ORDER TO CONFIRM THAT THE COMPLETED CONSTRUCTION CONFORMS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. REINSPECTION AND/OR RETESTING WORK MUST BE DOCUMENTED BY THE TESTING AND INSPECTION AGENCY IN A FIELD REPORT AND MUST BE SUBMITTED TO THE SPECIAL INSPECTIONS COORDINATOR AND DESIGN TEAM FOR RECORD. ALL SUPPLEMENTAL AND FOLLOW-UP REPORTS SUBMITTED BY THE TESTING AND INSPECTION AGENCY MUST CLEARLY CROSS-REFERENCE THE ORIGINAL REPORT FROM WHICH THE NONCONFORMANCE ITEM ORIGINATED.
  6. THE CONTRACTOR SHALL COORDINATE SCHEDULE OF CONSTRUCTION TO ALLOW FOR ALL TESTS AND INSPECTIONS TO TAKE PLACE.
  7. THE FOLLOWING QUALITY ASSURANCE TESTS AND INSPECTIONS SHALL BE PERFORMED FOR STRUCTURAL STEEL.
    - a. VERIFY BOLT SIZE AND GRADE. INSPECT INSTALLATION AND TIGHTENING OF HIGH STRENGTH BOLTS. PROVIDE CONTINUOUS INSPECTION OF BOLTS IN SLIP-CRITICAL CONNECTIONS. INSPECT PER SECTION 9 OF THE RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS".
    - b. FOR WELDING VISUALLY INSPECT ALL WELDS. INSPECT PRE-HEAT, POST-HEAT, AND SURFACE PREPARATION BETWEEN PASSES.
      1. SHOP FILLET WELDS: 25% VISUAL, 0% WITNESS
      2. COMPLETE JOINT PENETRATION: 100% VIA ULTRASONIC TESTING
      3. FIELD WELDS: 100% VISUAL, 15% WITNESS (SEE BELOW)
 PROVIDE CONTINUOUS INSPECTION OF ALL COMPLETE AND PARTIAL PENETRATION GROOVE WELDS, ALL MULTIPASS FILLET WELDS, ALL SINGLE PASS FILLET WELDS GREATER THAN 5/16", AND ALL PLUG AND SLOT WELDS.
  8. SIKA PRODUCT QUALITY ASSURANCE TESTING AND INSPECTIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS' GUIDELINES. SEE NOTES PROVIDED ON S3.0 FOR MORE INFORMATION & REQUIREMENTS.
- C. EXISTING CONDITIONS**
1. EXISTING CONDITIONS ON THESE DRAWINGS ARE ASSUMED BASED ON LIMITED VISUAL OBSERVATIONS OF THE EXISTING STRUCTURE AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO COMMENCING WITH WORK.
  2. LIMITED VISUAL OBSERVATIONS OF THE EXISTING STRUCTURE WERE PERFORMED IN THE FIELD; HOWEVER, MOST OF THE EXISTING FRAMING WAS CONCEALED AND COULD NOT BE VIEWED. THE CONTRACTOR MUST INCLUDE ADEQUATE CONTINGENCY FOR REPAIRS TO EXISTING DAMAGED OR INADEQUATE STRUCTURAL CONDITIONS DISCOVERED DURING CONSTRUCTION.
  3. IF THE CONTRACTOR DEEMS IT NECESSARY TO MODIFY OR REMOVE ANY PORTION OF THE EXISTING STRUCTURE IN ORDER TO PERFORM THE WORK DESCRIBED WITHIN THE CONTRACT DOCUMENTS, THEN SUCH PORTIONS OF THE STRUCTURE SHALL BE REPAIRED OR REPLACED WITH EQUAL MATERIALS AND DETAILS TO MATCH THE EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE OWNER. THIS WORK SHALL BE INCLUDED IN THE BASE PRICE OF THE CONTRACT.
  4. WHERE DISCREPANCIES BETWEEN THE DESIGN DRAWINGS AND FIELD CONDITIONS ARE FOUND, OR EXISTING STRUCTURAL MEMBERS AND CONNECTIONS ARE FOUND TO BE DAMAGED OR DETERIORATED TO A DIMINISHED CAPACITY AND ARE NOT SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL SUBMIT DETAILED SKETCHES OF THE EXISTING CONDITIONS TO THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO COMMENCING WITH WORK. MODIFICATIONS TO CURRENT DETAILS OR ADDITIONAL NEW DETAILS MAY BE REQUIRED BASED ON THE ACTUAL FIELD CONDITIONS.
  5. THE EVALUATION OF THE EXISTING STRUCTURE TO SAFELY SUPPORT ANY AND ALL CONSTRUCTION LOADING (E.G. EQUIPMENT LOADS, TEMPORARY LOADS FROM DEBRIS AND MATERIAL STORAGE) IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN TEAM HAS EVALUATED THE EXISTING STRUCTURE, AFTER IMPLEMENTATION OF THE STRUCTURAL ALTERATIONS SHOWN ON THE DRAWINGS, FOR THE PERMANENT DEAD LOADS AND UNIFORM LIVE LOADS INDICATED ON THE STRUCTURAL DRAWINGS ACCORDING TO THE REQUIREMENTS OF THE BUILDING CODE. THE CONTRACTOR SHALL OBTAIN COPIES OF THE ORIGINAL STRUCTURAL DRAWINGS FOR THE BUILDING AND ANY ADDITIONS AND ALTERATIONS (IF AVAILABLE), AND SHALL ENGAGE A LICENSED STRUCTURAL ENGINEER TO EVALUATE THE PROPOSED CONSTRUCTION LOADING ON THE EXISTING STRUCTURE AND TO DESIGN ALL TEMPORARY BRACING AND SHORING SYSTEMS THAT MAY BE REQUIRED DUE TO THE CONTRACTOR'S MEANS AND METHODS AND SEQUENCE OF CONSTRUCTION.
- D. STRUCTURAL STEEL**
1. ALL STEEL WORK SHALL BE IN CONFORMANCE WITH THE BUILDING CODE AS WELL AS WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATIONS AND ITS CODE OF STANDARD PRACTICE.
    - a. W, WT SHAPES ..... ASTM A992 (50 KSI)
    - b. S, M, C, MC SHAPES ..... ASTM A36
    - c. SQUARE AND RECTANGULAR HSS ..... ASTM A500, GRADE C (50 KSI)
    - d. ROUND HSS ..... ASTM A500, GRADE C (48 KSI)
    - e. L SHAPES, MISC. PLATES AND BARS ..... ASTM A36
    - f. THREADED RODS, THREADED FASTENERS ..... ASTM A36
    - g. BOLTS ..... ASTM F3125, GRADE A325/A400
    - h. TC BOLTS ..... ASTM F3125, GRADE F1852/F2280
    - i. ANCHOR RODS ..... ASTM F1554, GRADE 36 MIN.
    - j. SHEAR STUD CONNECTORS ..... ASTM A108
  2. ALL WELDING OPERATIONS SHALL BE PERFORMED BY AWS CERTIFIED WELDERS IN CONFORMANCE WITH ALL APPLICABLE REQUIREMENTS. USE E70XX WELDING ELECTRODES.
    - a. UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL CONNECTIONS SHALL BE DESIGNED BY A STRUCTURAL ENGINEER WORKING FOR THE STEEL FABRICATOR UTILIZING LOAD AND RESISTANCE FACTORED DESIGN (LRFD).
    - b. ALL BEAM SHEAR CONNECTIONS SHALL BE DESIGNED FOR THE CONNECTION FORCES INDICATED ON THE STRUCTURAL DRAWINGS.
    - c. BOLTED CONNECTIONS SHALL BE DESIGNED PER THE LATEST EDITION OF THE AISC STEEL CONSTRUCTION MANUAL (LRFD) AND THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING MINIMUM 3/4" DIAMETER BOLTS WITH GRADES AS SPECIFIED ABOVE.
  3. ALL NEW STRUCTURAL STEEL SHALL BE GIVEN ONE COAT OF AN APPROVED SHOP PRIMER APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, UNLESS NOTED OTHERWISE. AT A MINIMUM, SURFACE PREPARATION OF STEEL PRIOR TO SHOP PAINTING SHALL CONFORM TO SSPC SP-13. COORDINATE ALL SURFACE PREPARATION FOR PAINTED STEEL WITH THE PAINT MANUFACTURER'S REQUIREMENTS. TOUCH-UP ALL SHOP PRIMER COATS DAMAGED DURING TRANSPORTATION AND ERECTION AND PRIME ALL FIELD WELDS USING THE SAME PAINT USED FOR SHOP PRIMING.
  4. STRUCTURAL STEEL FRAME SHALL BE LEVEL AND PLUMB PRIOR TO COMPLETING CONNECTIONS.
  5. SUBMIT SHOP DRAWINGS AND CONNECTION DESIGN CALCULATIONS (SEE SECTION REGARDING ENGINEERING REQUIREMENTS FOR CONTRACTOR) FOR REVIEW.
- E. STRUCTURAL DEMOLITION**
1. ALL DEMOLITION WORK SHALL BE IN CONFORMANCE WITH THE BUILDING CODE AND ITS APPLICABLE REFERENCED STANDARDS.
  2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AS THEY RELATE TO DEMOLITION AND NEW CONSTRUCTION. WHERE DISCREPANCIES BETWEEN THE CONTRACT DRAWINGS AND FIELD CONDITIONS ARE ENCOUNTERED, DEMOLITION SHALL NOT PROCEED WITHOUT WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.
  3. ALL BIDDERS SHALL VISIT THE SITE TO BECOME FAMILIAR WITH THE EXISTING BUILDING, RELATED ACCESS LIMITATIONS FOR PERSONNEL AND EQUIPMENT, AND OTHER POTENTIAL CONSTRUCTION COORDINATION ISSUES, DISCREPANCIES, OMISSIONS, OR VARIATIONS FROM CONDITIONS NOTED ON THE STRUCTURAL DRAWINGS AND IN THE SPECIFICATIONS THAT ARE DISCOVERED DURING THE BIDDING PERIOD SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD AS A REQUEST FOR INFORMATION (RFI).
  4. IT IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE FOR A SAFE AND EFFICIENT METHOD OF SHORING AND/OR BRACING THE STRUCTURE DURING ALL DEMOLITION AND CONSTRUCTION PHASES.
  5. THE CONTRACTOR SHALL ENGAGE A STRUCTURAL ENGINEER TO PROVIDE STAMPED AND SIGNED STRUCTURAL CALCULATIONS AND ANALYSIS OF ANY TEMPORARY LOADS THAT THE CONTRACTOR CHOOSES TO IMPOSE UPON THE EXISTING STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL ADDITIONAL SHORING, FLOOR REINFORCEMENT, AND OTHER MEASURES AS REQUIRED TO SUPPORT SUCH TEMPORARY LOADS. ALL SHORING SHALL BE PLACED CONTINUOUS DOWN TO FOUNDATIONS. SUBMIT A DETAILED PLAN OF DEMOLITION AND SHORING TO THE SAME STRUCTURAL ENGINEER FOR RECORD.
  6. DEMOLITION WORK SHALL BE PERFORMED IN SUCH A MANNER AS TO PRESERVE THE INTEGRITY OF ALL ADJACENT STRUCTURAL AND NONSTRUCTURAL BUILDING ELEMENTS. WHERE NECESSARY, PRECUT CONNECTIONS TO STRUCTURAL ELEMENTS TO REMAIN IN ORDER TO AVOID DAMAGE DURING REMOVAL OF CONNECTED MEMBERS, ANY DAMAGE TO EXISTING ELEMENTS AND FINISHES TO REMAIN SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
- F. POST-INSTALLED ANCHOR SYSTEMS**
1. ALL POST-INSTALLED ANCHORS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS (INCLUDING, BUT NOT LIMITED TO, DRILL BIT SIZE, CLEANING OF HOLES, AND TEMPERATURE CONSTRAINTS).
  2. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC.
    - a. ANCHORAGE TO CONCRETE
      1. ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
        - A. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH THE HILTI HIT-200 PER ICC ESR-4868
        - B. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM SYSTEM WITH HAS-E THREADED ROD PER ICC ESR-4868
        - C. HILTI HIT-RE 500 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM WITH HAS-E THREADED ROD PER ICC ESR-3814
        - D. HILTI HIT-RE 500 V3 SAFE SET SYSTEM WITH HILTI ROUGHENING TOOL WITH HAS-E THREADED ROD PER ICC ESR-3814 FOR DIAMOND CORED HOLES.
      2. MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
        - A. HILTI KWIK BOLT-TZZ EXPANSION ANCHORS PER ICC ESR-4266
        - B. HILTI KWIK BOLT-TZZ EXPANSION ANCHORS (UNCRACKED CONCRETE ONLY) PER ICC ESR-2302
    3. ALL ANCHORS INTO CONCRETE SHALL BE INSTALLED AFTER THE CONCRETE HAS ACHIEVED ITS 28-DAY DESIGN STRENGTH, BUT NOT LESS THAN 21 DAYS AFTER CONCRETE PLACEMENT.
    4. ALL ADHESIVE ANCHORS INSTALLED IN THE HORIZONTAL UPWARD INCLINED, AND OVERHEAD ORIENTATIONS SHALL BE CONTINUOUSLY INSPECTED DURING INSTALLATION PER ACI OVERHEAD ADHESIVE ANCHORS SHALL BE INSTALLED USING THE HILTI PROFIT PISTON PLUG SYSTEM.
    5. THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ON-SITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE SPECIAL INSPECTOR RESPONSIBLE FOR INSPECTION OF THE ANCHOR INSTALLATIONS SHALL BE PRESENT FOR THIS TRAINING. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.
    6. ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
    7. EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW EXISTING STRUCTURAL DRAWINGS IF AVAILABLE AND SHALL LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS.
    8. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.



PROJECT TITLE  
**URI STEAM  
PLANT BOILER  
ROOM  
STRUCTURAL  
REPAIRS**

Kingston, RI 02881

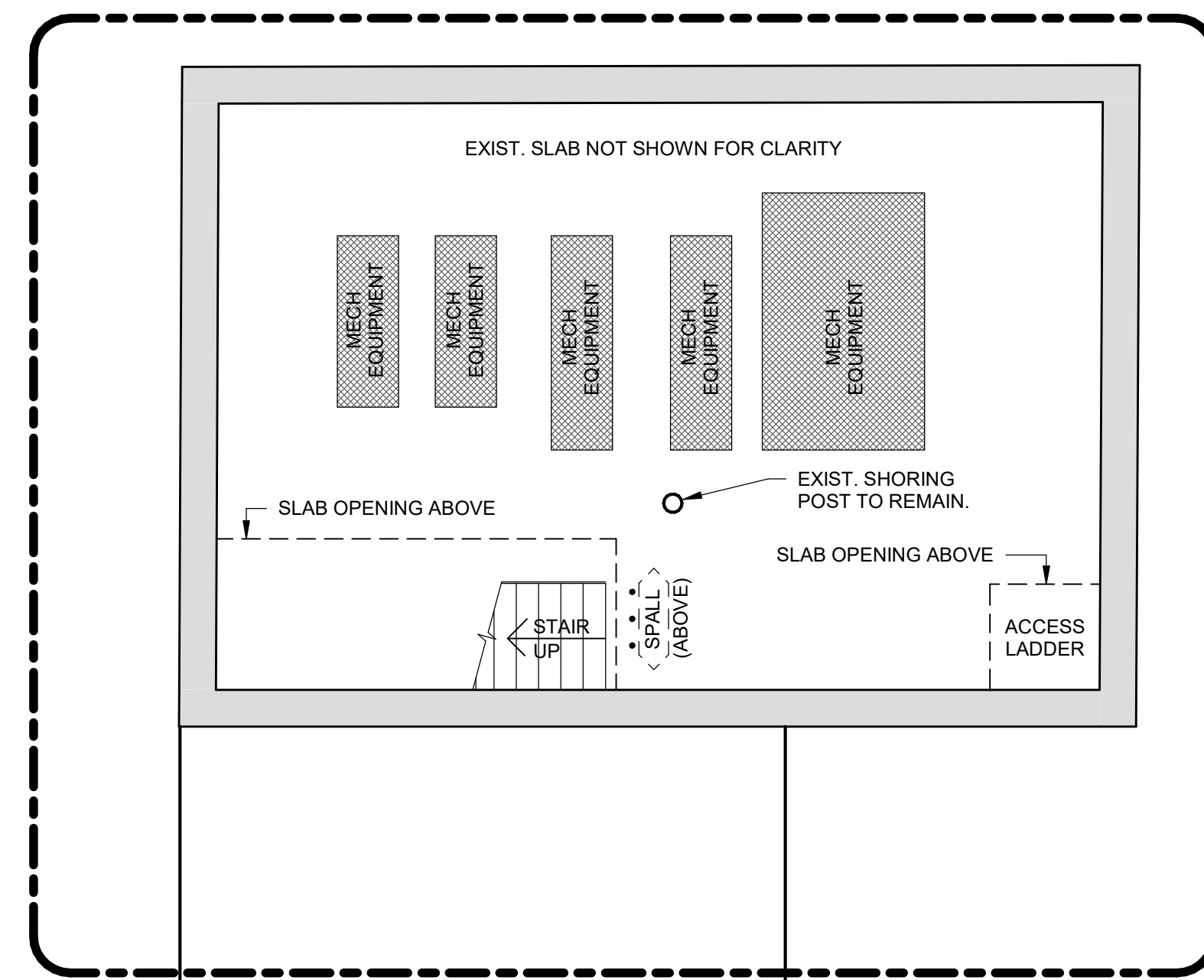
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**3D VIEWS &  
GENERAL  
SCOPE OF  
WORK**

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DRAWN BY	RWS
CHECKED BY	MDO
DATE	MAY 7, 2024
PROJECT NO.	2022-00173

DRAWING NO.  
**S0.0**

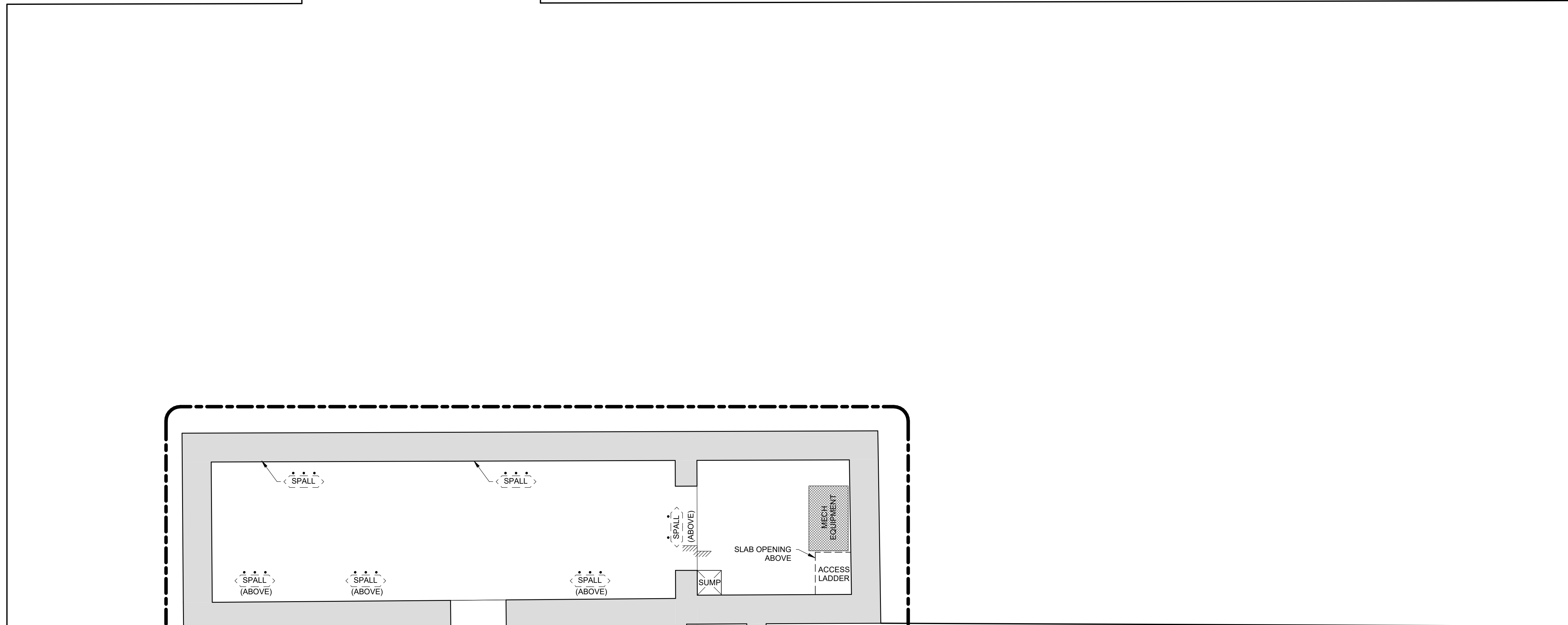
DEFICIENCY SCHEDULE	
STRUCTURAL MEMBER DEFICIENCIES	
MARK	DEFICIENCY DESCRIPTION
1 DOT	MINOR DEFICIENCY
2 DOT	MODERATE DEFICIENCY
3 DOT	SEVERE DEFICIENCY
CRCK	CONCRETE CRACKED
SPALL	CONCRETE SPALLED

NOTE:  
XX - LOCATION AND ORIENTATION WHERE PHOTOGRAPH WAS TAKEN

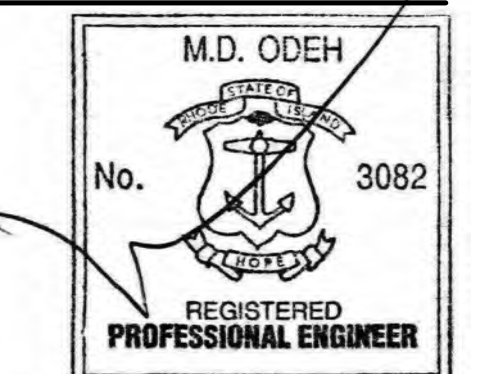


AREA A - NORTH WING  
SEE S2.0 FOR SCOPE OF WORK

APPROX. OUTLINE OF BUILDING ABOVE



AREA B - SOUTH WING  
SEE S2.1 FOR SCOPE OF WORK



PROJECT TITLE  
URI STEAM  
PLANT BOILER  
ROOM  
STRUCTURAL  
REPAIRS  
Kingston, RI 02881

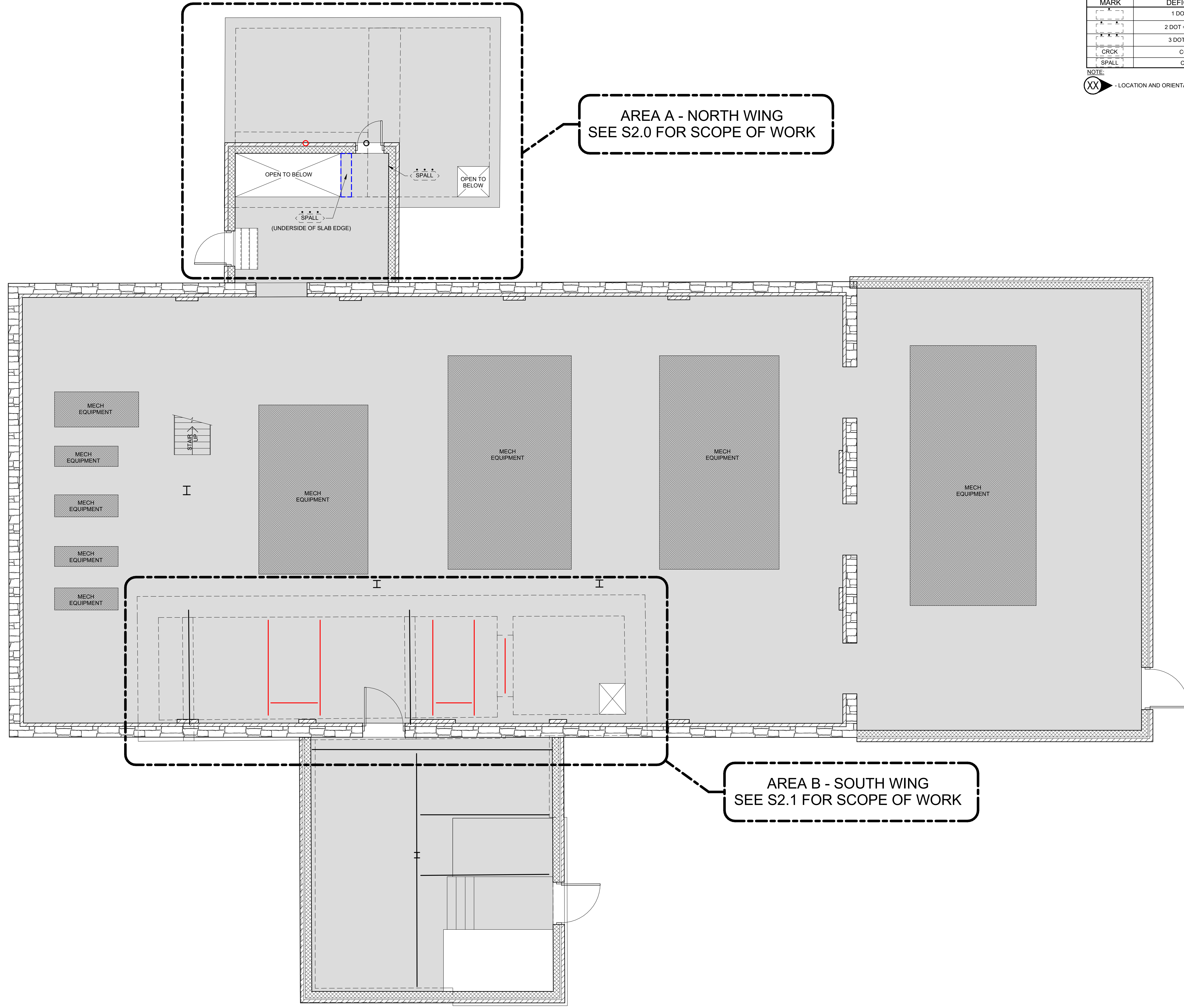
SHEET CONTENTS  
OVERALL  
BASEMENT  
LEVEL PLAN

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DRAWN BY	RWS
CHECKED BY	MDO
DATE	MAY 7, 2024
PROJECT NO.	2022-00173

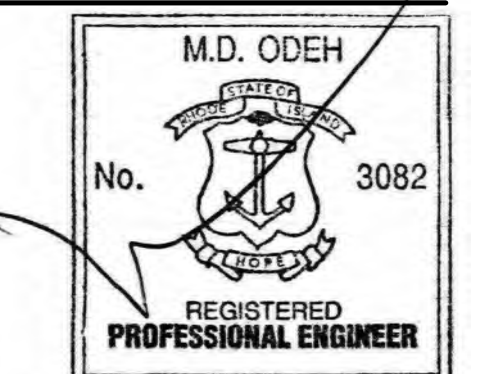
DRAWING NO.  
**S1.0**

DEFICIENCY SCHEDULE	
STRUCTURAL MEMBER DEFICIENCIES	
MARK	DEFICIENCY DESCRIPTION
1 DOT	MINOR DEFICIENCY
2 DOT	MODERATE DEFICIENCY
3 DOT	SEVERE DEFICIENCY
CRCK	CONCRETE CRACKED
SPALL	CONCRETE SPALLED

NOTE:  
XX - LOCATION AND ORIENTATION WHERE PHOTOGRAPH WAS TAKEN



**1 FIRST FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

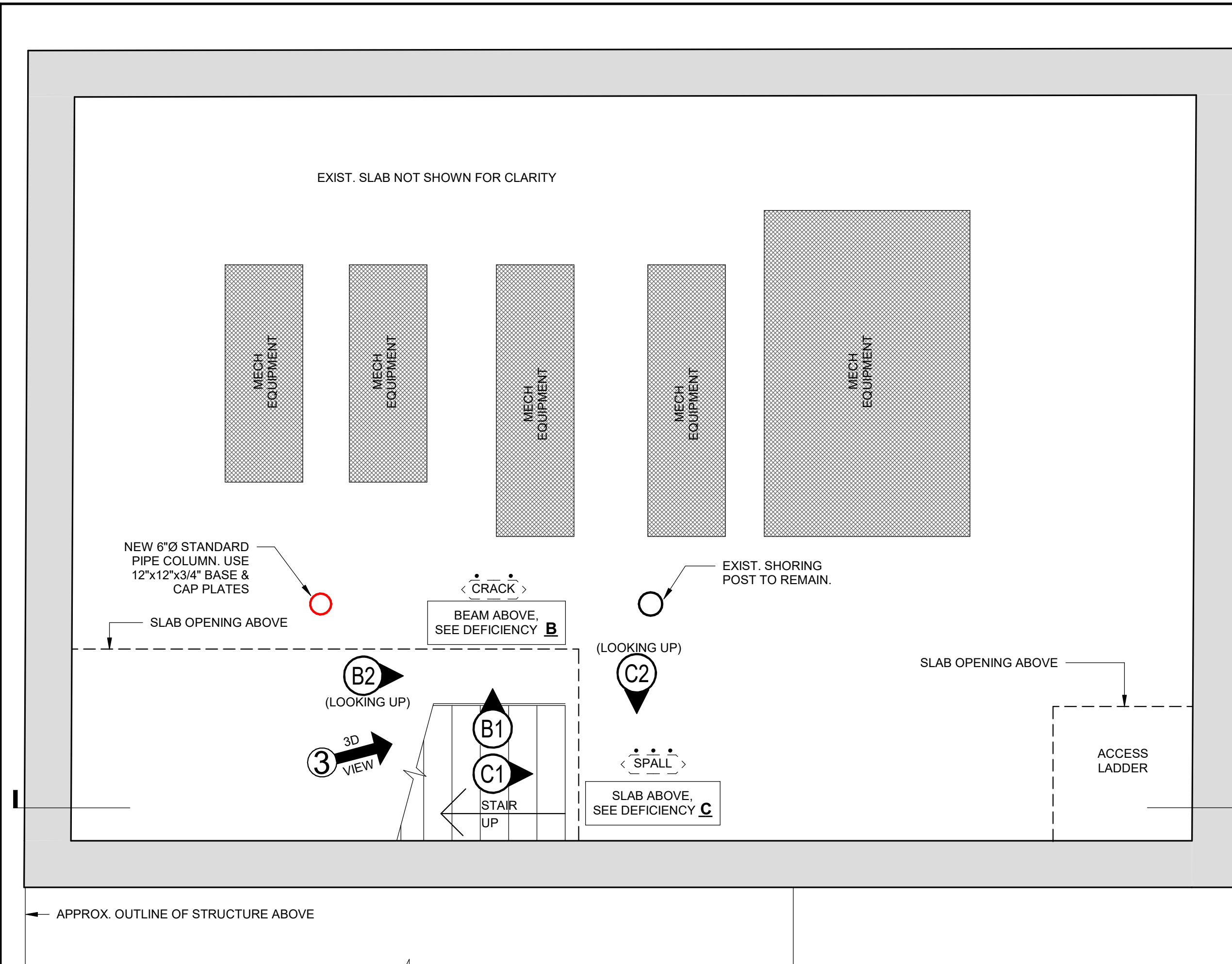


PROJECT TITLE  
**URI STEAM  
PLANT BOILER  
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Kingston, RI 02881

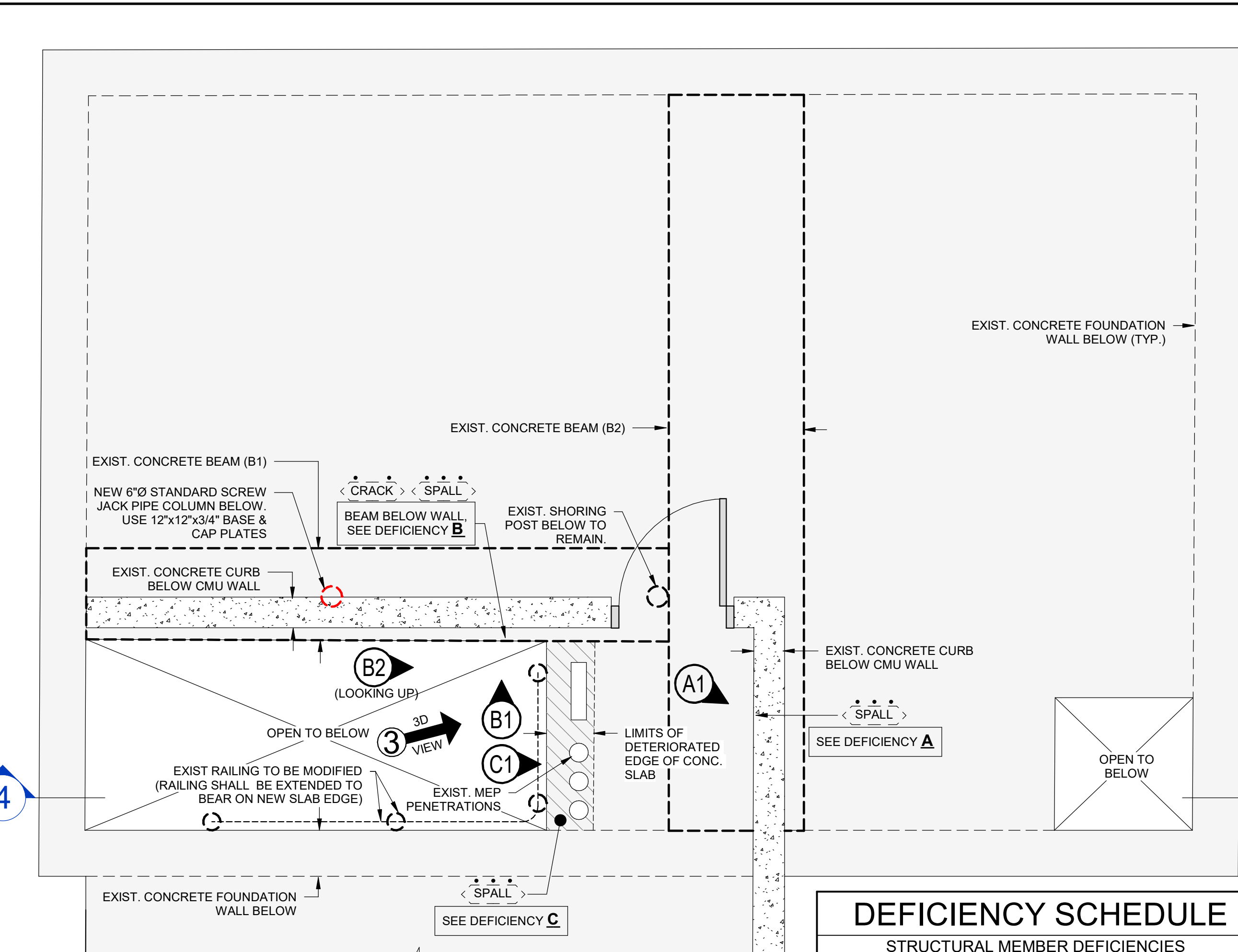
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**OVERALL FIRST  
FLOOR PLAN**

SCALE	As indicated
DRAWN BY	RWS
CHECKED BY	MDO
DATE	MAY 7, 2024
PROJECT NO.	2022-00173

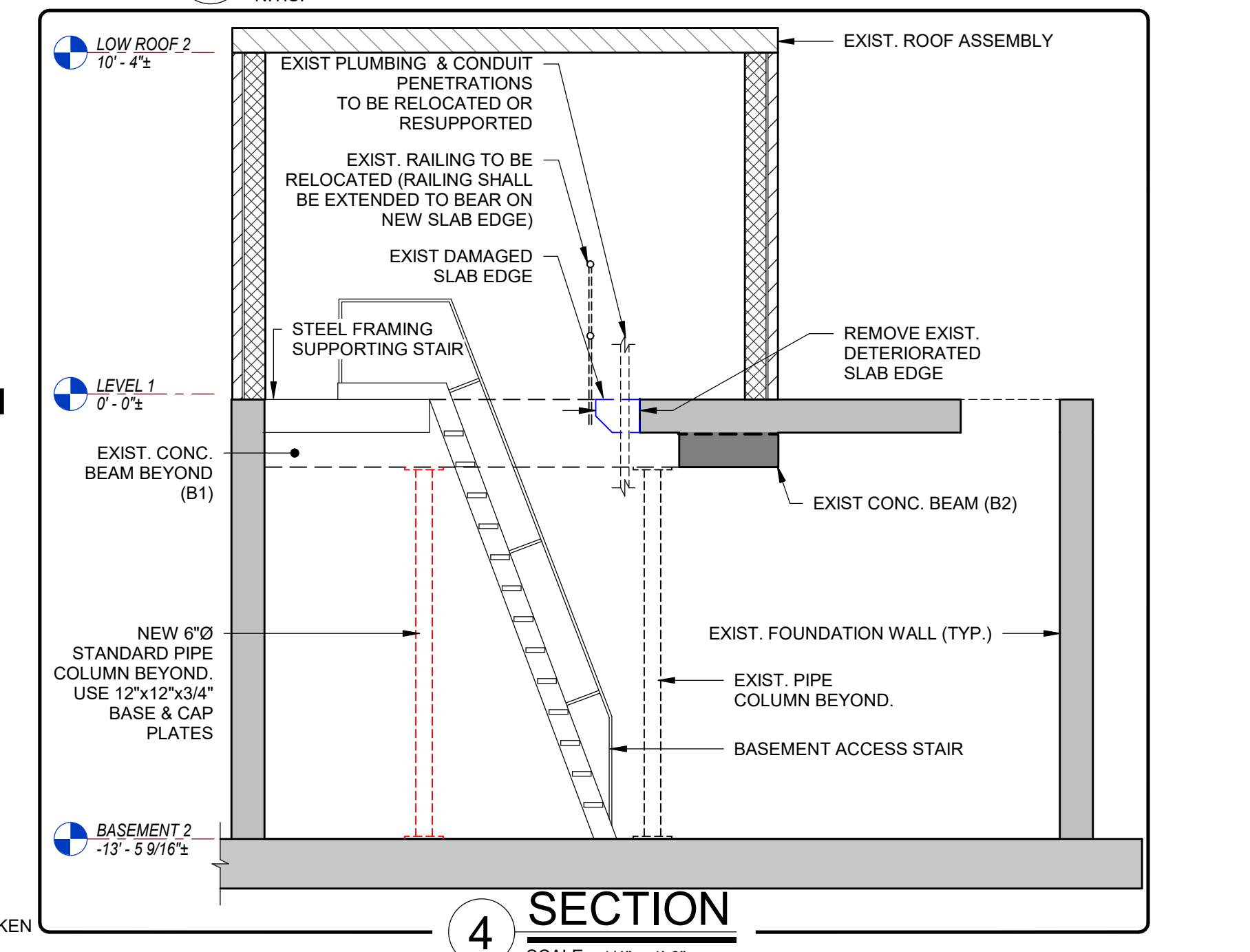
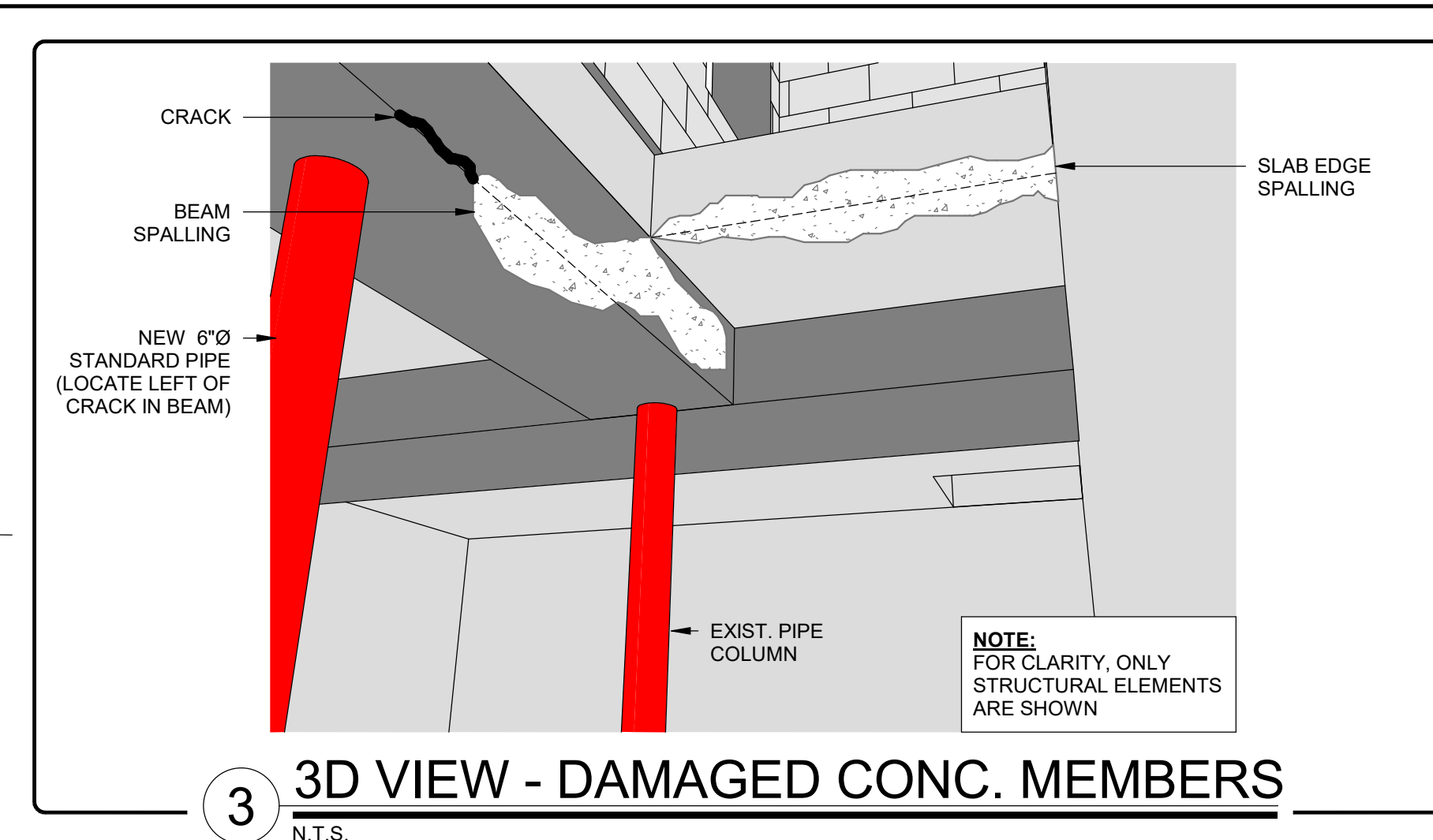
DRAWING NO.  
**S1.1**



**1 AREA A - NORTH PARTIAL PLAN (BASEMENT)**  
SCALE: 1/2" = 1'-0"



**2 AREA A - NORTH PARTIAL PLAN (FIRST FLOOR)**  
SCALE: 1/2" = 1'-0"



**DEFICIENCY SCHEDULE**

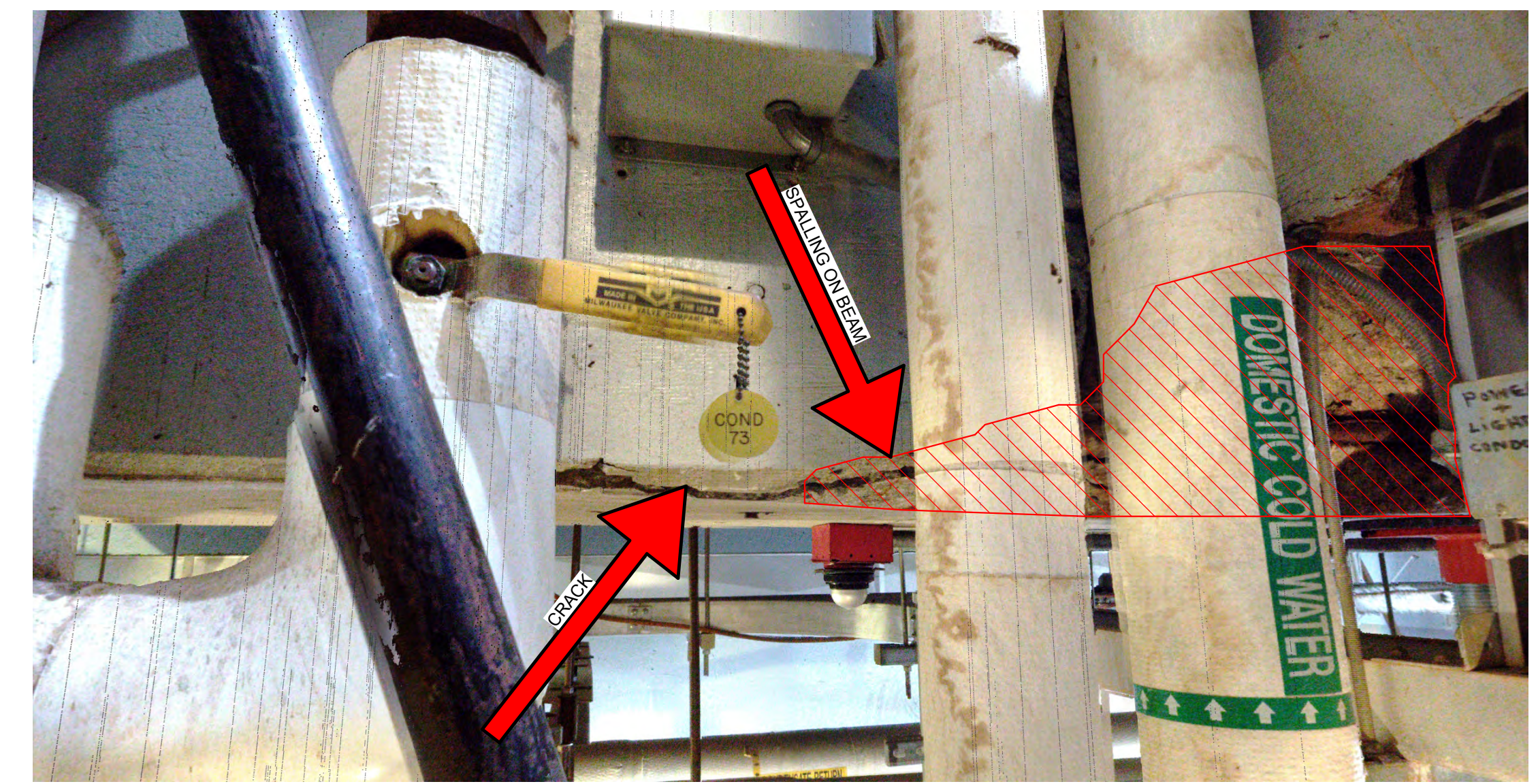
STRUCTURAL MEMBER DEFICIENCIES

MARK	DEFICIENCY DESCRIPTION
1 DOT	MINOR DEFICIENCY
2 DOT	MODERATE DEFICIENCY
3 DOT	SEVERE DEFICIENCY
CRCK	CONCRETE CRACKED
SPALL	CONCRETE SPALLED

NOTE: XX - LOCATION AND ORIENTATION WHERE PHOTOGRAPH WAS TAKEN



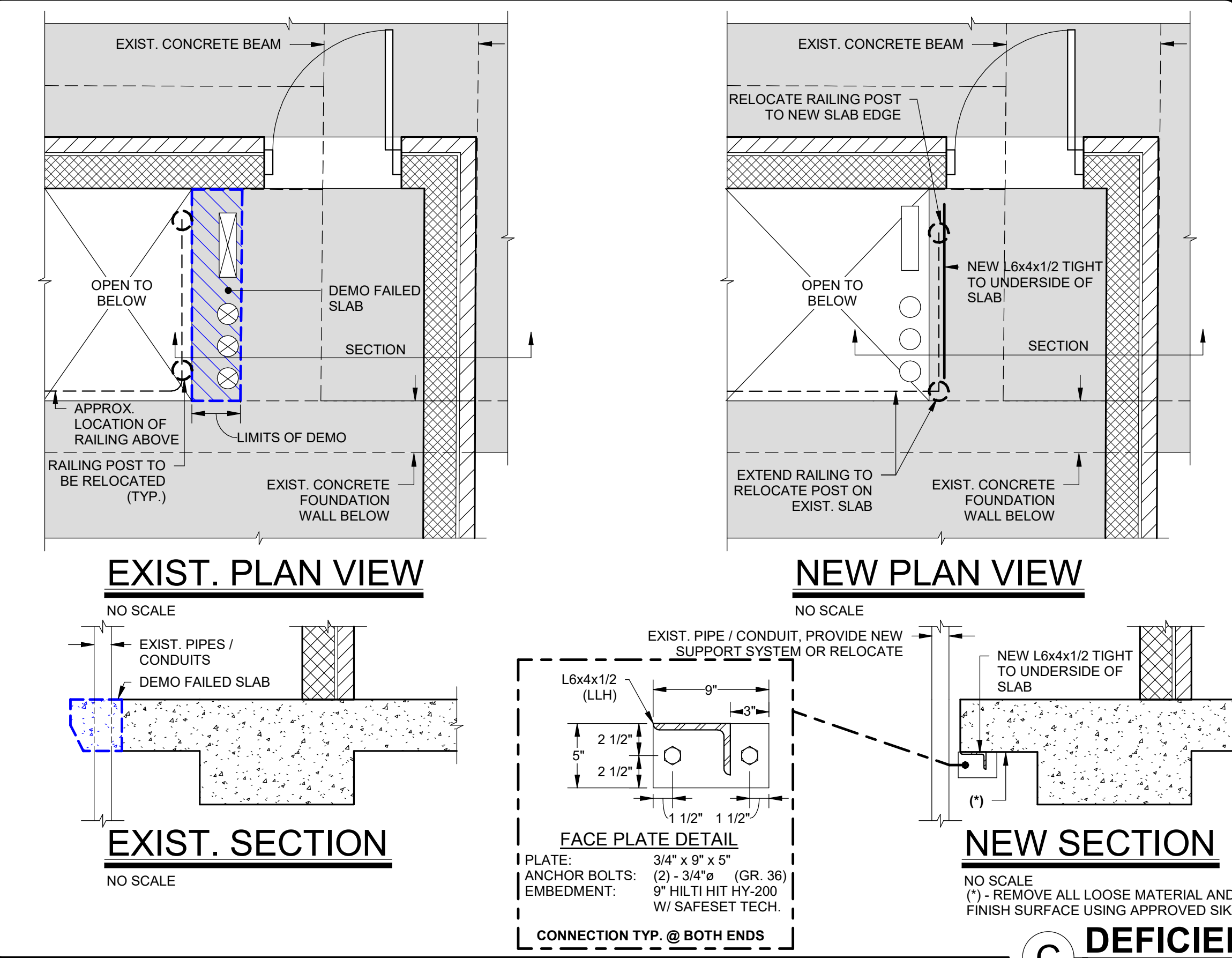
**A1 PHOTOGRAPH OF DEFICIENCY - DETERIORATED FACE OF CONC. WALL**  
**A DEFICIENCY A - FIRST FLOOR WALL SPALLING**  
NO SCALE



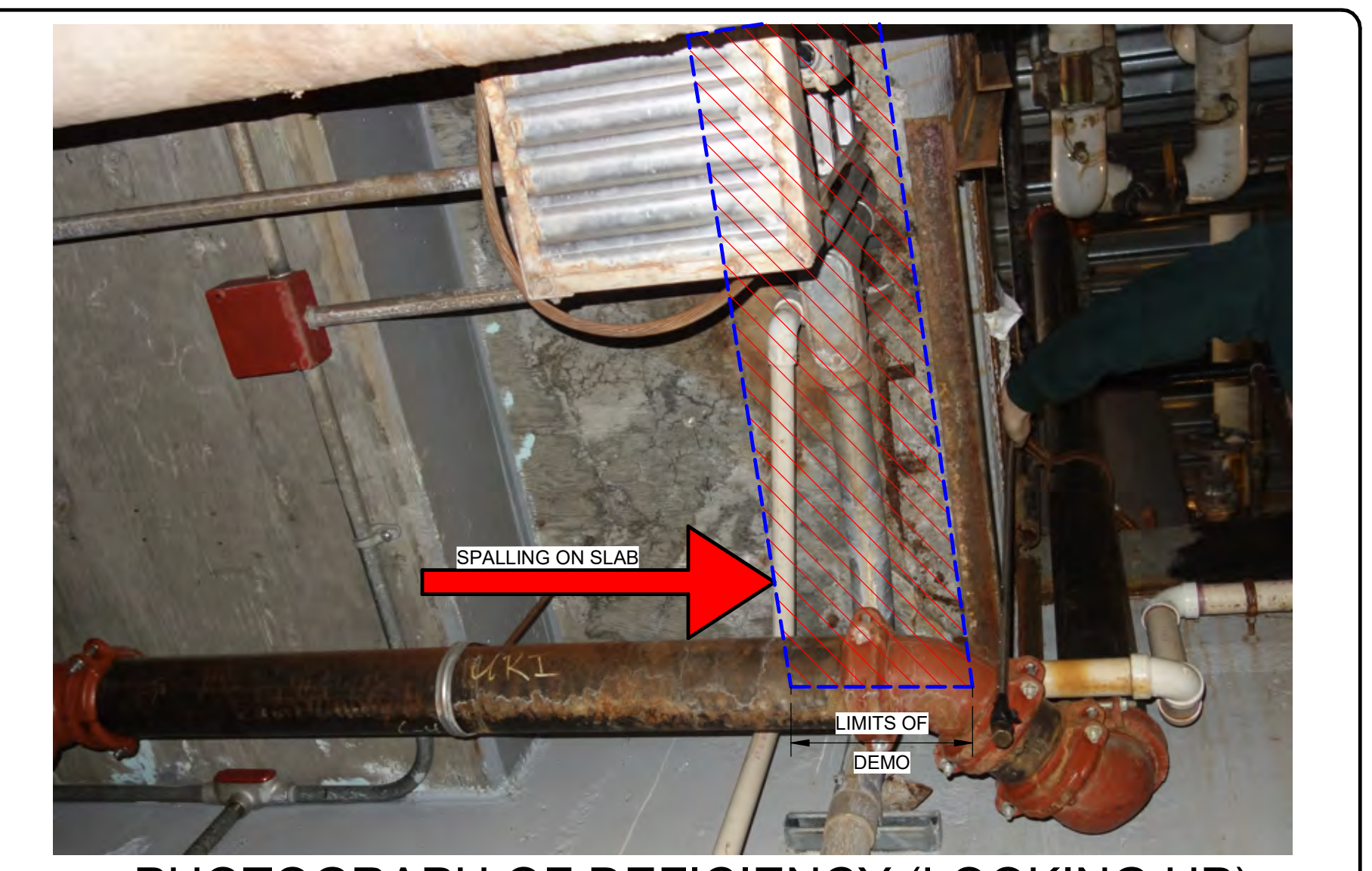
**B1 PHOTOGRAPH OF DEFICIENCY (LOOKING UP) - DETERIORATED CONC. BEAM CORNER AND VERT. FACE**  
**B DEFICIENCY B - BEAM CRACK & SPALLING**  
NO SCALE



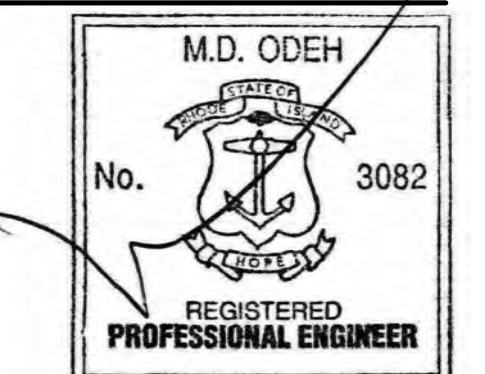
**B2 PHOTOGRAPH OF DEFICIENCY (LOOKING UP) - DETERIORATED CONC. BEAM CORNER AND VERT. FACE**  
**B DEFICIENCY B - BEAM CRACK & SPALLING**  
NO SCALE



**C1 PHOTOGRAPH OF DEFICIENCY (LOOKING UP) - DETERIORATED DECK EDGE**  
**C DEFICIENCY C - FAILED SLAB DEMOLITION**  
NO SCALE



**C2 PHOTOGRAPH OF DEFICIENCY (LOOKING UP) - DETERIORATED DECK EDGE**  
**C DEFICIENCY C - FAILED SLAB DEMOLITION**  
NO SCALE



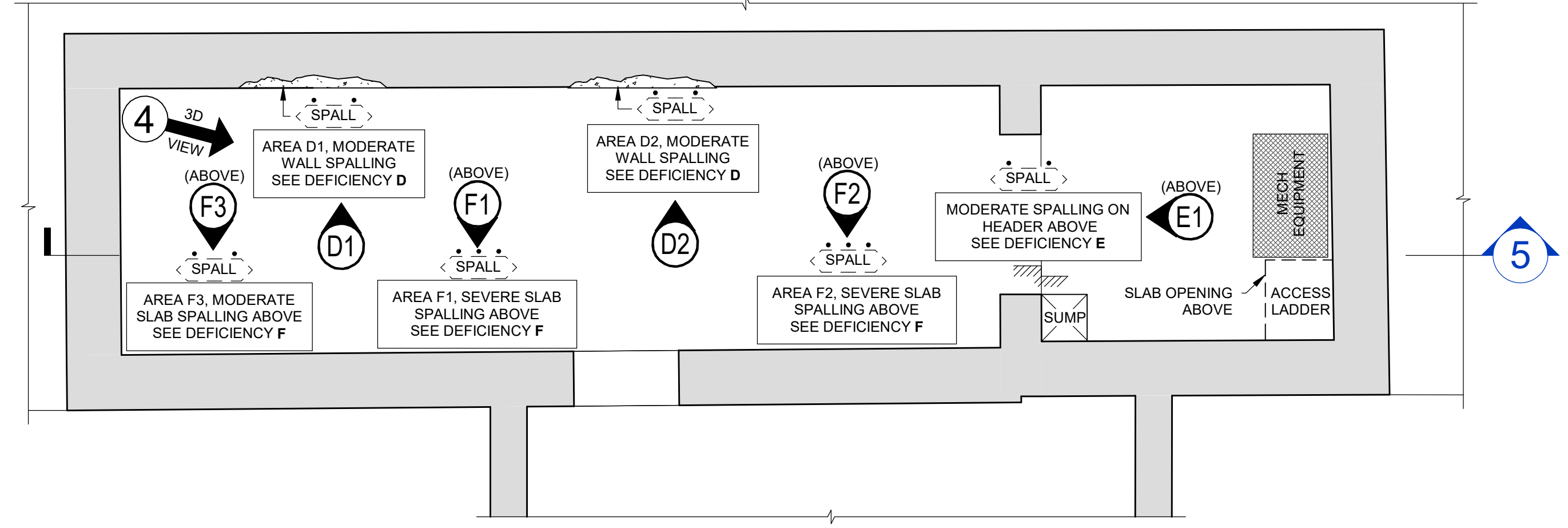
PROJECT TITLE  
**URI STEAM PLANT BOILER ROOM STRUCTURAL REPAIRS**

Kingston, RI 02881

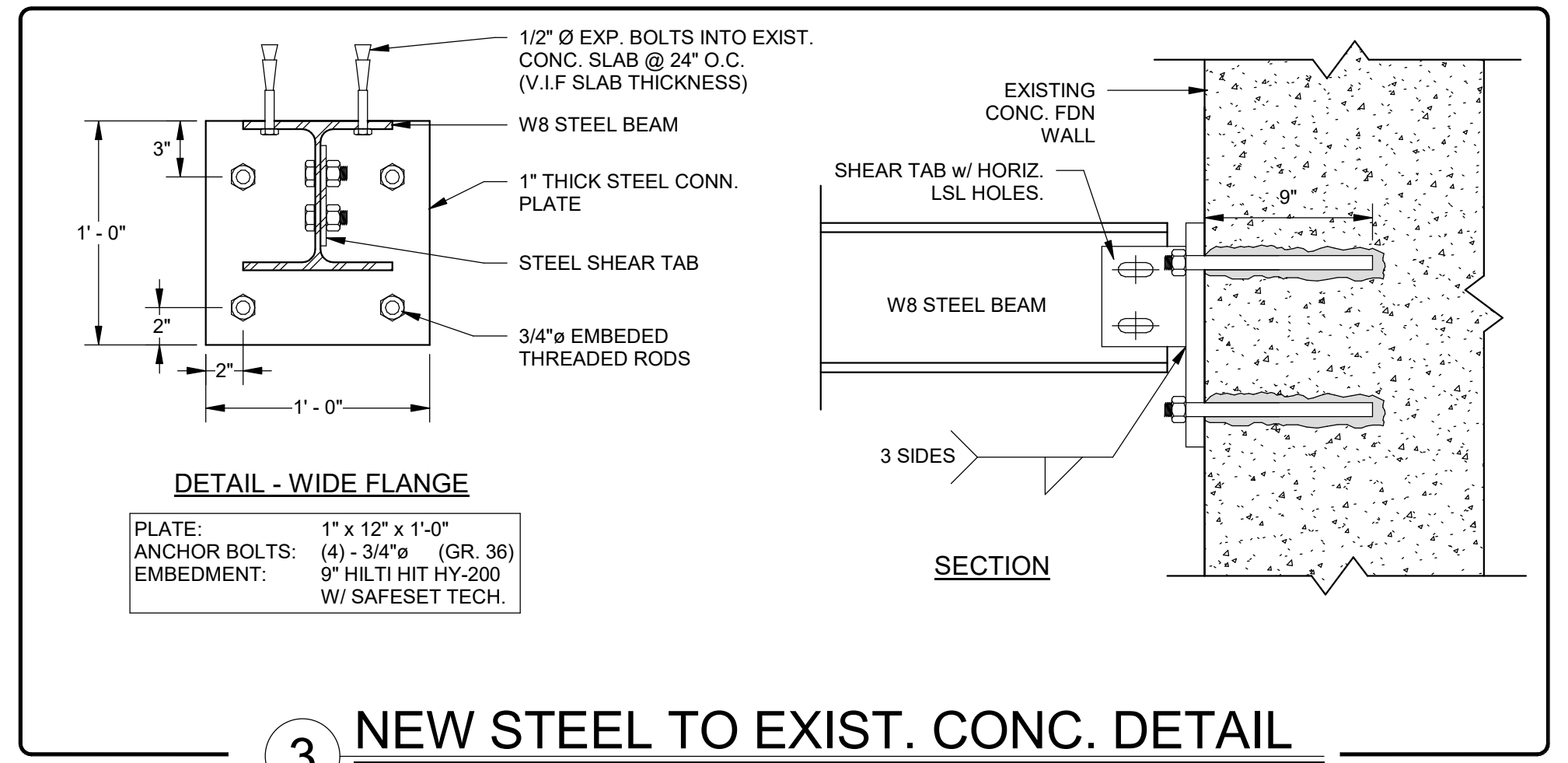
SHEET CONTENTS  
**AREA A - NORTH WING DEFICIENCIES**

SCALE	As indicated
DRAWN BY	RWS
CHECKED BY	MDO
DATE	MAY 7, 2024
PROJECT NO.	2022-00173

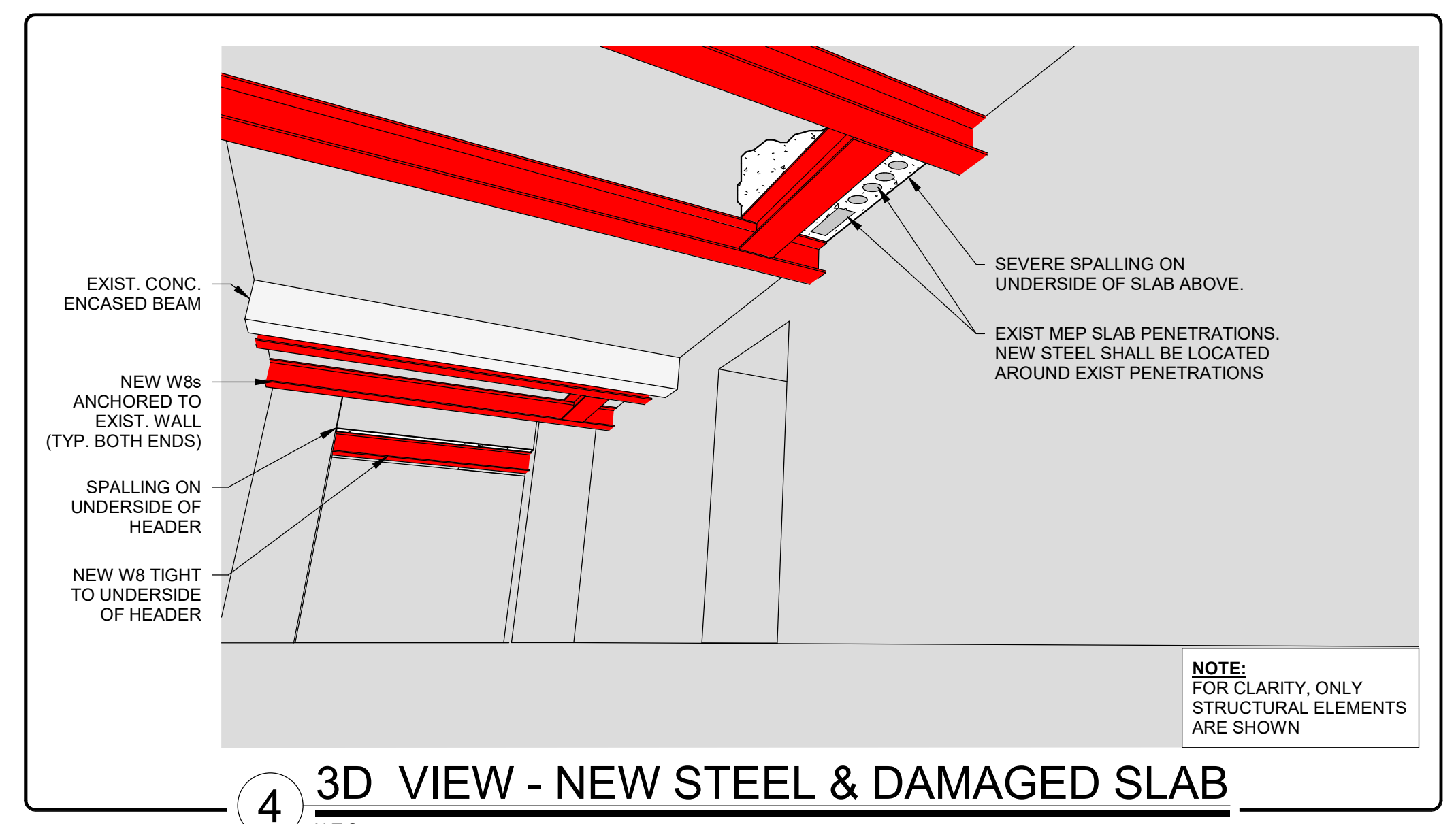
DRAWING NO.  
**S2.0**



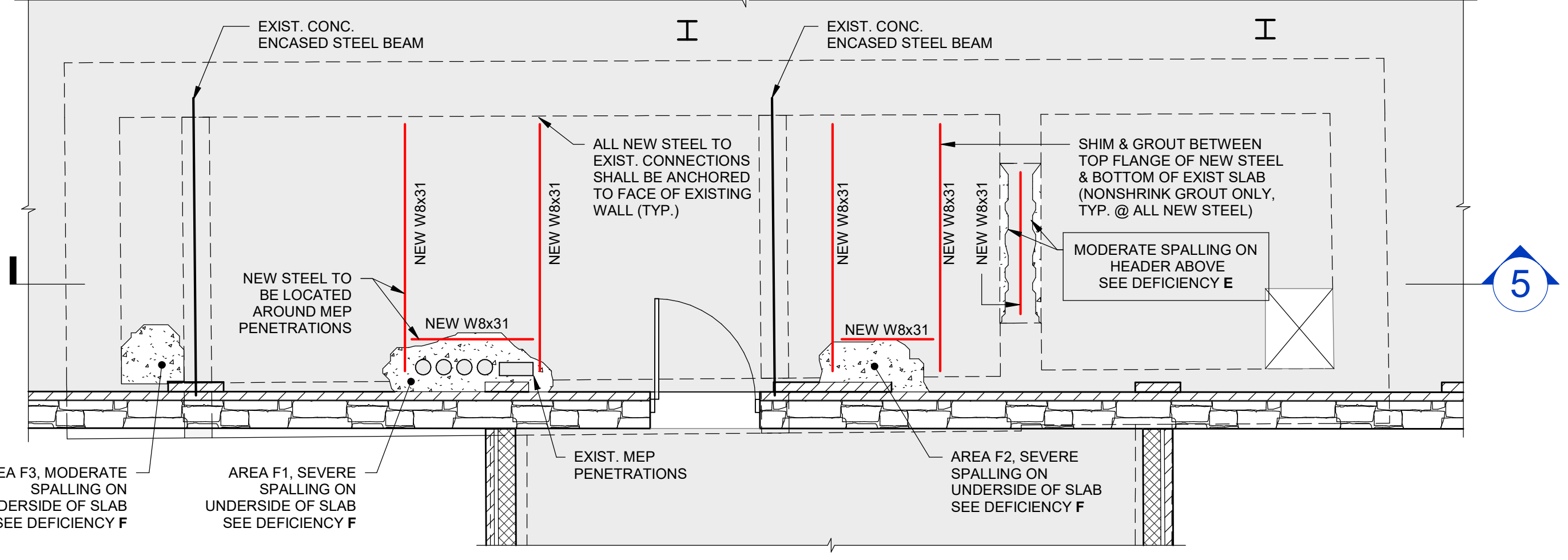
**1 AREA B - SOUTH PARTIAL PLAN (BASEMENT)**  
SCALE: 1/4" = 1'-0"



**3 NEW STEEL TO EXIST. CONC. DETAIL**  
N.T.S.



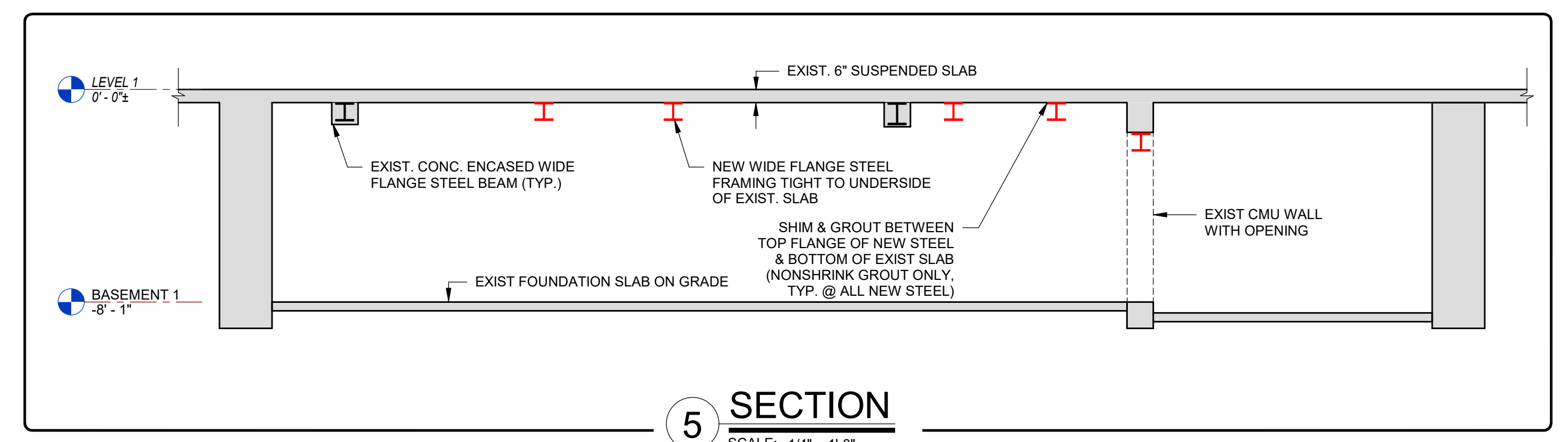
**4 3D VIEW - NEW STEEL & DAMAGED SLAB**  
N.T.S.



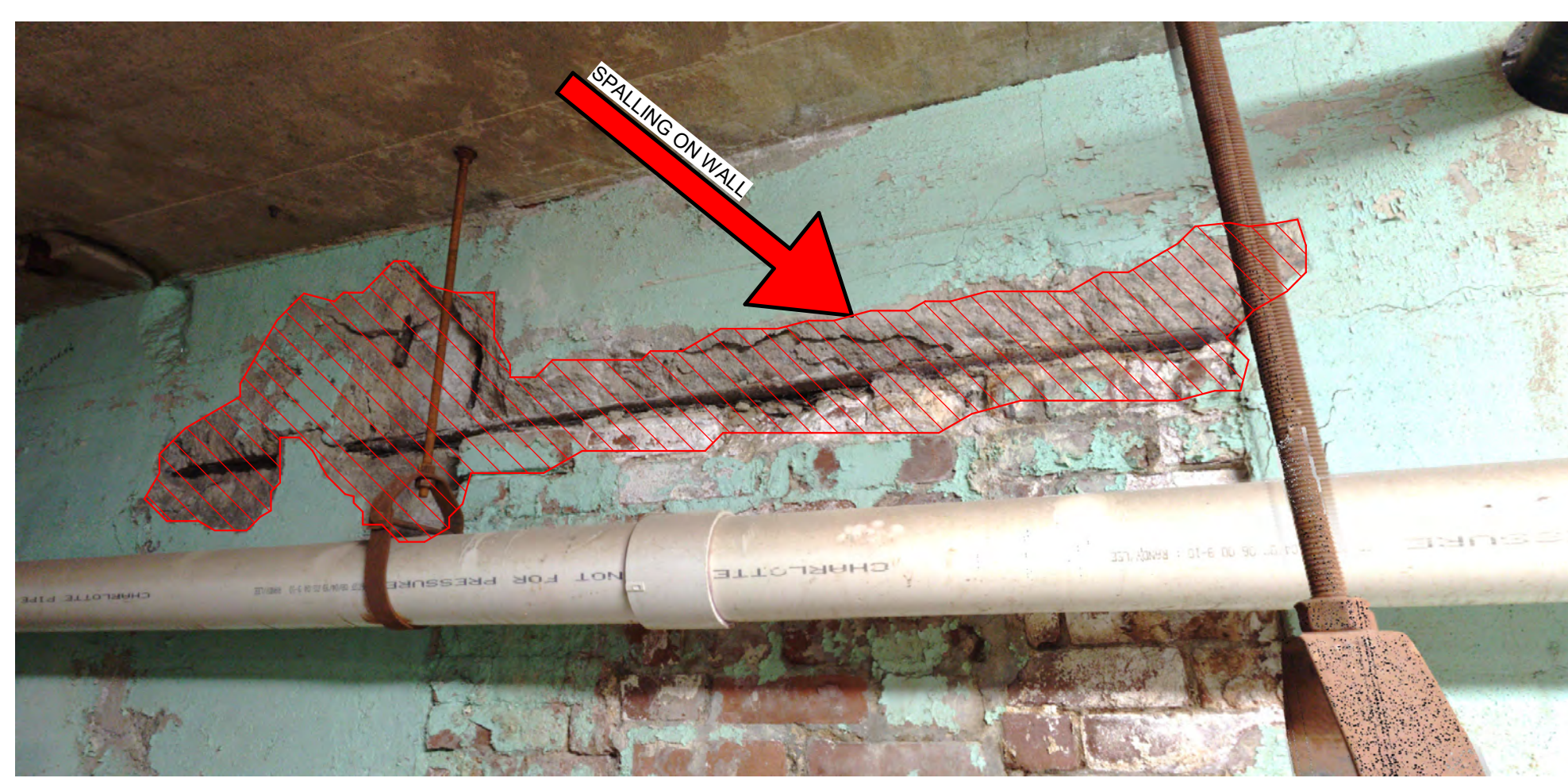
**2 AREA B - SOUTH PARTIAL PLAN (FIRST FLOOR)**  
SCALE: 1/4" = 1'-0"  
NOTE: PROVIDE 1/2" Ø EXP. BOLTS INTO EXIST. CONC. SLAB @ 24" O.C. (W8 TOP FLANGE TO CONC. SLAB, SEE 3/S2.1 FOR MORE INFO)

DEFICIENCY SCHEDULE	
STRUCTURAL MEMBER DEFICIENCIES	
MARK	DEFICIENCY DESCRIPTION
1 DOT	MINOR DEFICIENCY
2 DOT	MODERATE DEFICIENCY
3 DOT	SEVERE DEFICIENCY
CRCK	CONCRETE CRACKED
SPALL	CONCRETE SPALLED

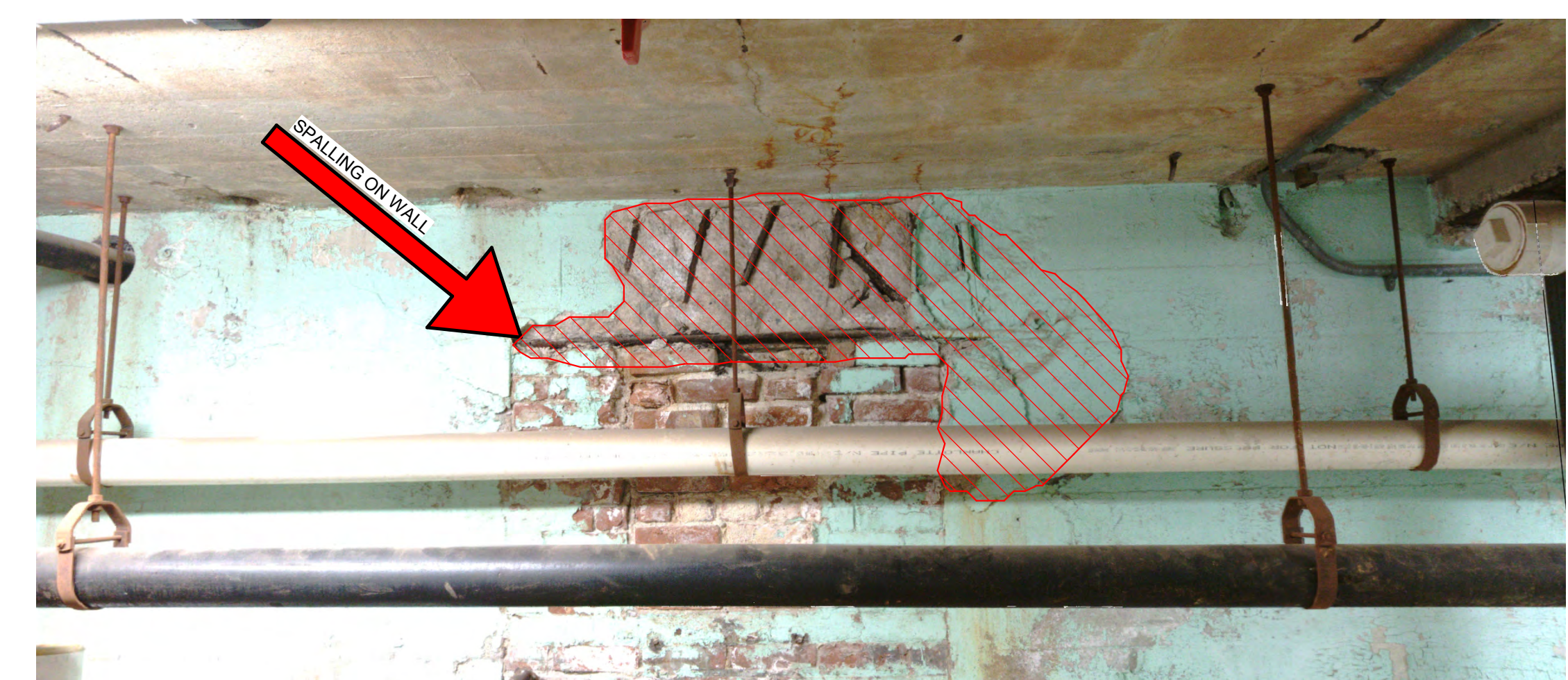
NOTE:  
XX LOCATION AND ORIENTATION WHERE PHOTOGRAPH WAS TAKEN



**5 SECTION**  
SCALE: 1/4" = 1'-0"



**AREA D1 - PHOTOGRAPH OF DEFICIENCY: CONCRETE WALL SPALLING**



**AREA D2 - PHOTOGRAPH OF DEFICIENCY: CONCRETE WALL SPALLING**

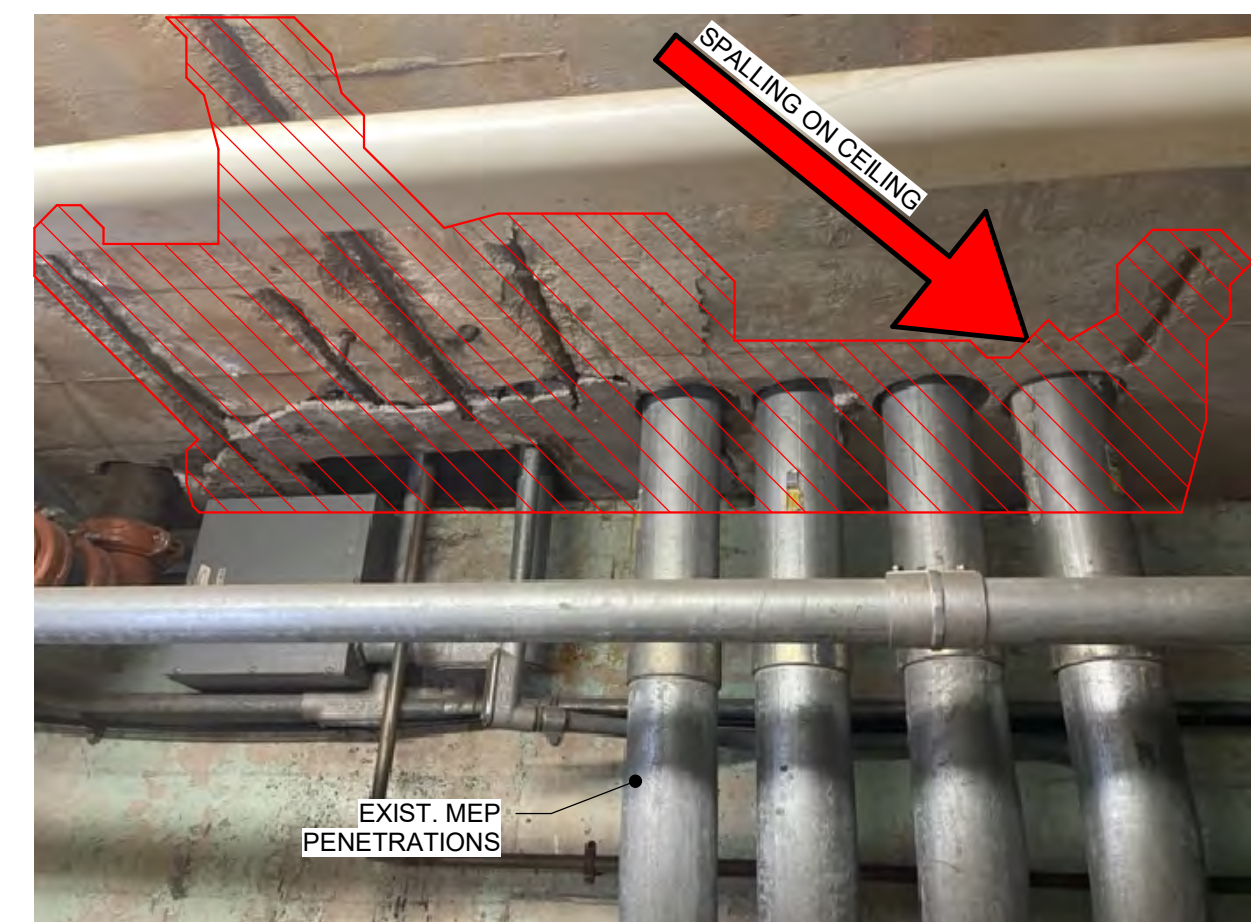
SEE TYPICAL DETAILS ON S3.0 FOR REPAIRS



**PHOTOGRAPH OF DEFICIENCY**

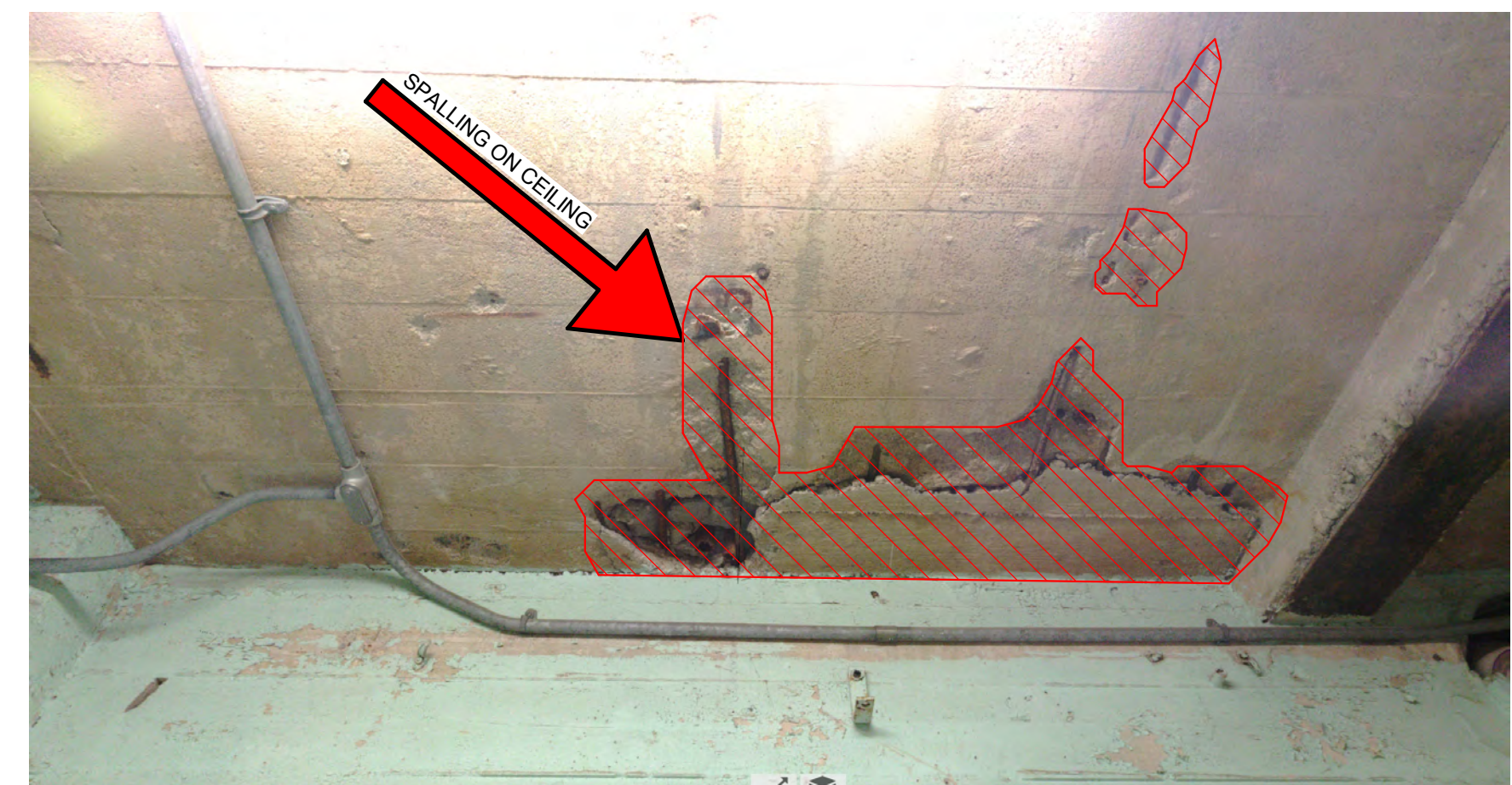
- REPAIR NOTES FOR AREA:**
- REPAIR SPALLING PER TYPICAL DETAILS ON S4.0 & S3.1
  - PROVIDE NEW W8x31 TIGHT TO UNDERSIDE OF HEADER.
  - PROVIDE L6x6x1/2 x 12" LONG SEAT L'S @ BOTH ENDS. ANCHOR SEAT L'S USING (3) - 3/4" Ø THREADED RODS EMBEDDED 9" INTO OPENING JAMB.
  - EMBEDMENT SHALL UTILIZE HILTI HIT HY-200 EPOXY W/ SAFESSET TECHNOLOGY (OR APPROVED EQUAL)

**E DEFICIENCY E - BASEMENT HEADER SPALLING**  
NO SCALE



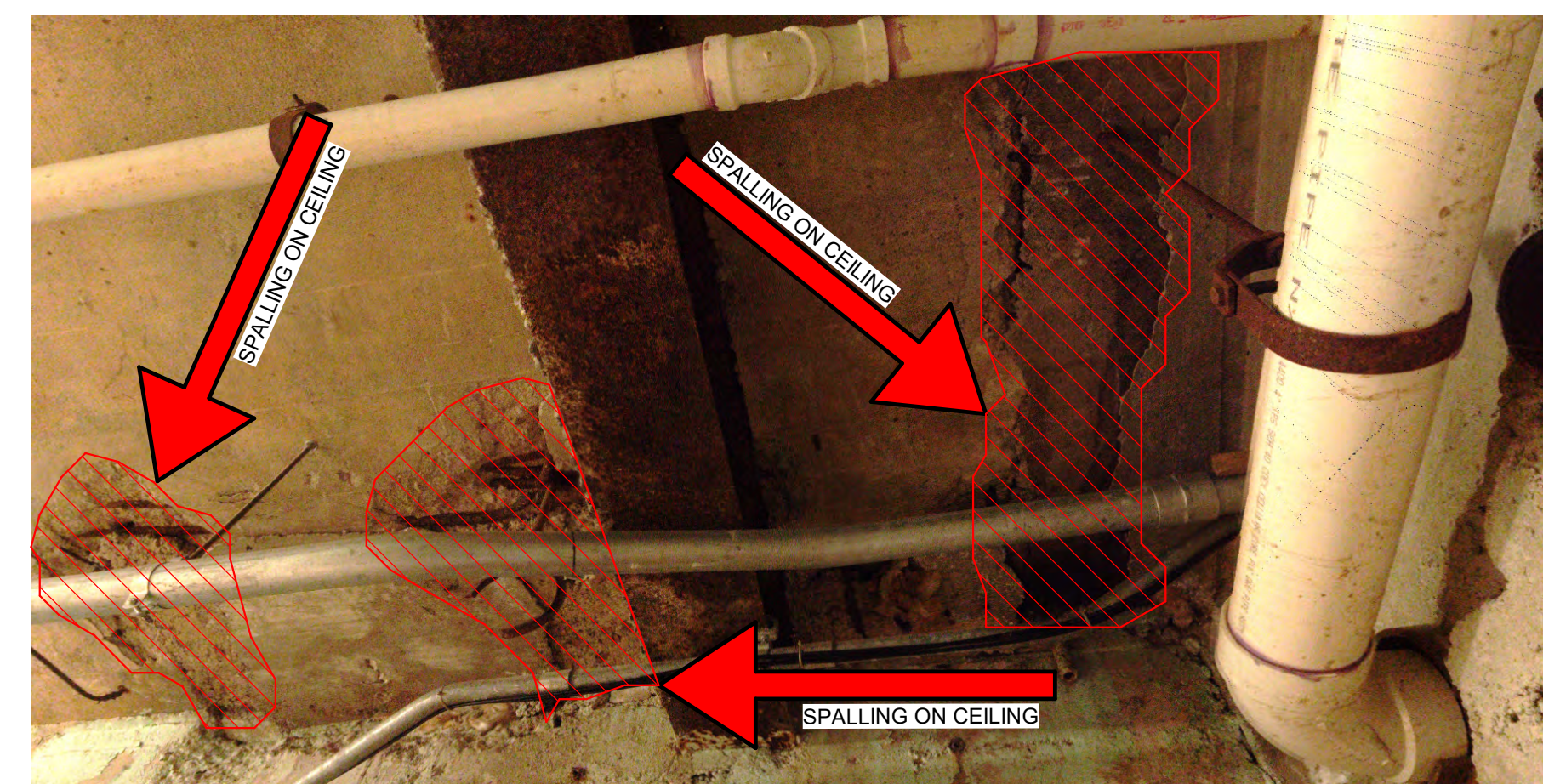
**AREA F1 - PHOTOGRAPH OF DEFICIENCY: SEVERE UNDERSLAB SPALLING**

- REPAIR NOTES FOR AREA:**
- REPAIR SPALLING PER TYPICAL DETAILS ON S4.0 & S3.1
  - PROVIDE NEW W8x31 TIGHT TO UNDERSIDE SLAB PER 2/S2.1



**AREA F2 - PHOTOGRAPH OF DEFICIENCY: SEVERE UNDERSLAB SPALLING**

- REPAIR NOTES FOR AREA:**
- REPAIR SPALLING PER TYPICAL DETAILS ON S4.0 & S3.1
  - PROVIDE NEW W8x31 TIGHT TO UNDERSIDE SLAB PER 2/S2.1

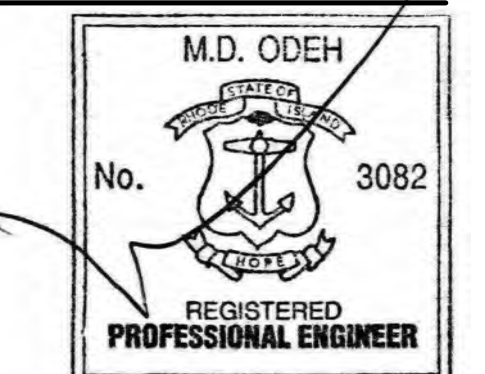


**AREA F3 - PHOTOGRAPH OF DEFICIENCY: SEVERE UNDERSLAB SPALLING**

- REPAIR NOTES FOR AREA:**
- REPAIR SPALLING PER TYPICAL DETAILS ON S4.0 & S3.1

**NOTE: ONLY AREAS WITH SIGNIFICANT REPAIRS ARE SHOWN. CONTRACTOR SHALL HOLD A CONTINGENCY FOR ADDITIONAL LOCATIONS WHERE MINOR REPAIRS ARE REQUIRED. (THIS AREA ONLY)**

**F DEFICIENCY F - SPALLING ON UNDERSIDE OF FIRST FLOOR SLAB**  
NO SCALE



PROJECT TITLE  
**URI STEAM PLANT BOILER ROOM STRUCTURAL REPAIRS**

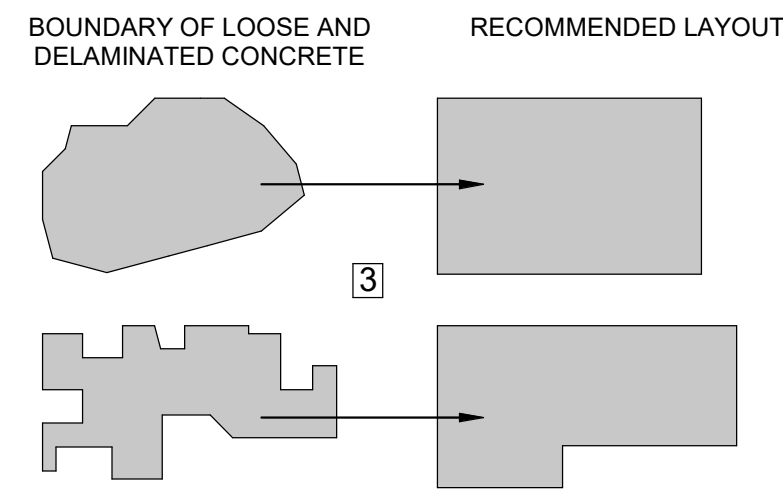
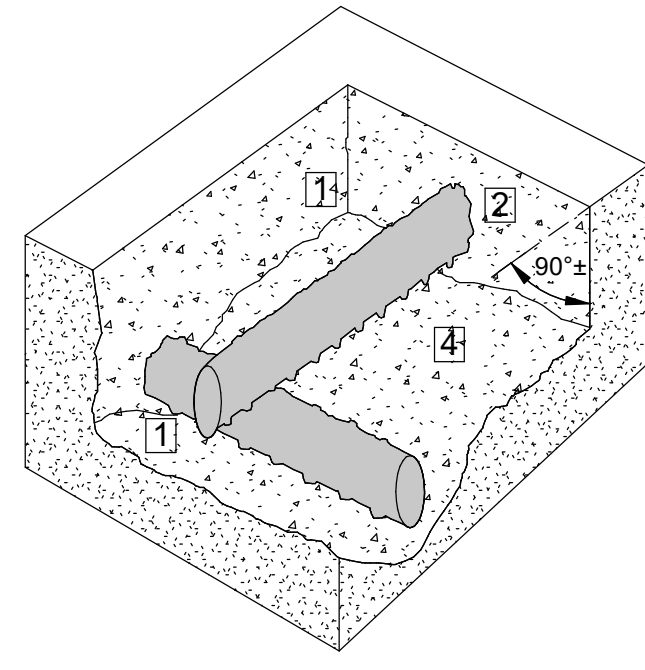
Kingston, RI 02881

SHEET CONTENTS  
**AREA B - SOUTH WING DEFICIENCIES**

SCALE	As indicated
DRAWN BY	RWS
CHECKED BY	MDO
DATE	MAY 7, 2024
PROJECT NO.	2022-00173

DRAWING NO.  
**S2.1**

- 1 REMOVE DELAMINATED CONCRETE, UNDERCUT REINFORCING STEEL (SEE "TYPICAL EXPOSING AND UNDERCUTTING OF REINFORCING STEEL PROCEDURE" #SXX), REMOVE ADDITIONAL CONCRETE AS REQUIRED TO PROVIDE MINIMUM REQUIRED THICKNESS OF REPAIR MATERIAL.
- 2 AT EDGE LOCATION, PROVIDE RIGHT ANGLE CUTS TO THE CONCRETE SURFACE WITH EITHER OF THE FOLLOWING METHODS:
  - I. SAWCUT 1/2" OR LESS AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.
  - II. USE POWER EQUIPMENT SUCH AS HYDRODEMOLITION OR IMPACT BREAKERS. AVOID FEATHER EDGES.
- 3 REPAIR CONFIGURATIONS SHOULD BE KEPT AS SIMPLE AS POSSIBLE, PREFERABLY WITH SQUARED CORNERS.
- 4 AFTER REMOVALS AND EDGE CONDITIONING ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, CONCRETE SLURRY, LOOSELY BONDED AGGREGATES) BY ABRASIVE BLASTING OR HIGH PRESSURE WATERBLASTING WITH OR WITHOUT ABRASIVE. CHECK THE CONCRETE SURFACES AFTER CLEANING TO INSURE THAT SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE, OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.

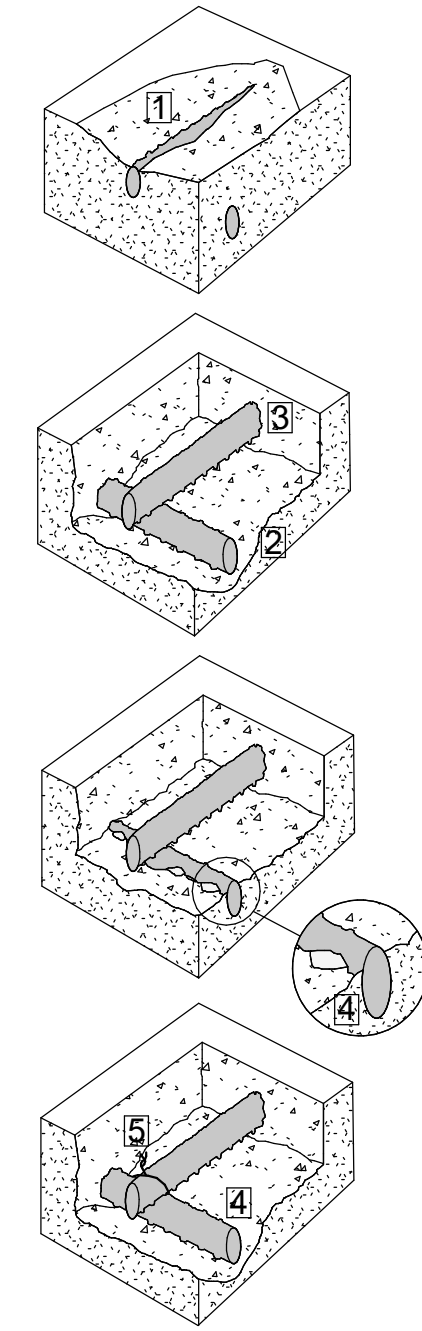


NOTE:  
THESE DETAILS ARE APPLICABLE TO HORIZONTAL, VERTICAL AND OVERHEAD LOCATIONS. THEY ARE ALSO APPLICABLE TO REMOVAL BY HYDRO-DEMOLITION, HYDRO-MILLING, AND ELECTRONIC, PNEUMATIC, OR HYDRAULIC IMPACT BREAKERS

### TYPICAL EDGE AND SURFACE CONDITIONING OF CONCRETE PROCEDURE

1 NO SCALE

- 1 REMOVE LOOSE OR DELAMINATED CONCRETE ABOVE CORRODED REINFORCING STEEL.
- 2 ONCE INITIAL REMOVALS ARE MADE, PROCEED WITH THE UNDERCUTTING OF ALL EXPOSED CORRODED BARS. UNDERCUTTING WILL PROVIDE CLEARANCE FOR UNDER BAR CLEANING AND FULL BAR CIRCUMFERENCE BONDING TO SURROUNDING CONCRETE, AND WILL SECURE THE REPAIR STRUCTURALLY. PROVIDE MINIMUM 3/4 INCH CLEARANCE BETWEEN EXPOSED REBARS AND SURROUNDING CONCRETE OR 1/4 INCH LARGER THAN LARGEST AGGREGATE IN REPAIR MATERIAL, WHICHEVER IS GREATER.
- 3 CONCRETE REMOVALS SHALL EXTEND ALONG THE BARS TO LOCATIONS ALONG THE BAR FREE OF BOND INHIBITING CORROSION, AND WHERE THE BAR IS WELL BONDED TO SURROUNDING CONCRETE.
- 4 IF NON-CORRODED REINFORCING STEEL IS EXPOSED DURING THE UNDERCUTTING PROCESS, CARE SHALL BE TAKEN NOT TO DAMAGE THE BAR'S BOND TO SURROUNDING CONCRETE. IF BOND BETWEEN BAR AND CONCRETE IS BROKEN, UNDERCUTTING OF THE BAR SHALL BE REQUIRED.
- 5 ANY REINFORCEMENT WHICH IS LOOSE SHALL BE SECURED IN PLACE BY TYING TO OTHER SECURED BARS OR BY OTHER APPROVED METHODS.
- 6 ALL HEAVY CORROSION AND SCALE SHOULD BE REMOVED FROM THE BAR AS NECESSARY TO PROMOTE MAXIMUM BOND OF REPLACEMENT MATERIAL. OIL FREE ABRASIVE BLAST IS THE PREFERRED METHOD. A TIGHTLY BONDED LIGHT RUST BUILD-UP ON THE SURFACE IS USUALLY NOT DETRIMENTAL TO BOND, UNLESS A PROTECTIVE COATING IS BEING APPLIED TO THE BAR SURFACE, IN WHICH CASE THE COATING MANUFACTURER'S RECOMMENDATIONS FOR SURFACE PREPARATION SHOULD BE FOLLOWED.



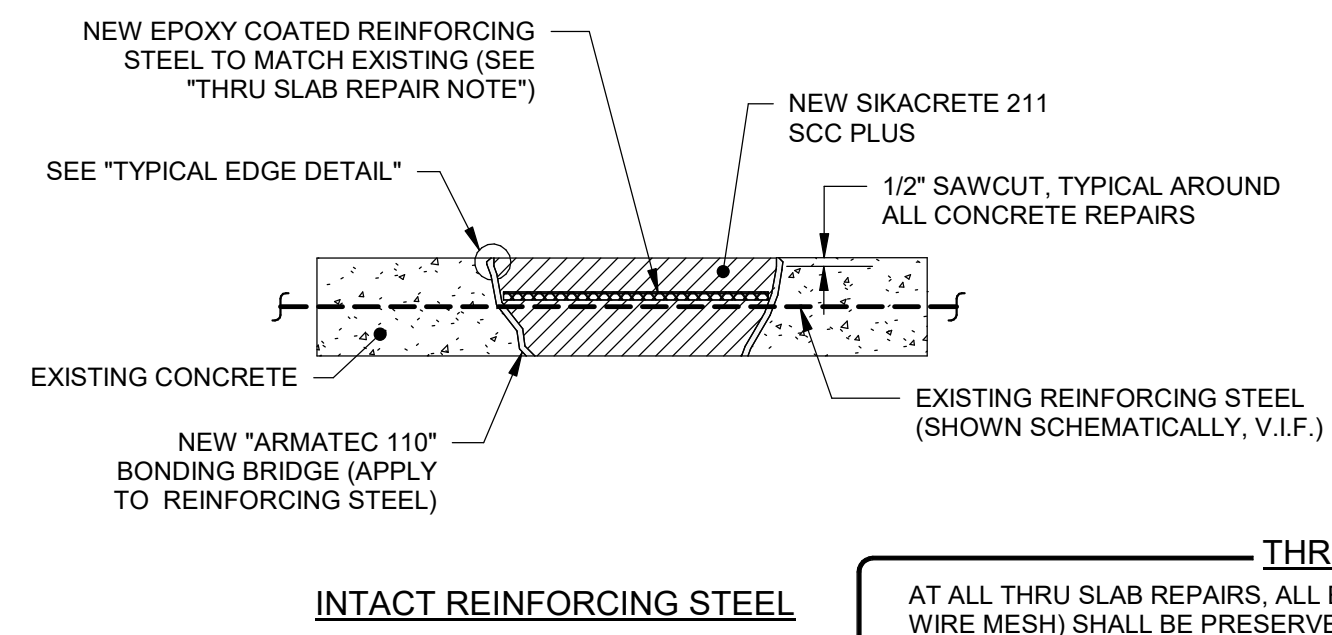
NOTE:  
THESE DETAILS ARE APPLICABLE TO HORIZONTAL, VERTICAL AND OVERHEAD LOCATIONS. THEY ARE ALSO APPLICABLE TO REMOVAL BY HYDRO-DEMOLITION, HYDRO-MILLING, AND ELECTRONIC, PNEUMATIC, OR HYDRAULIC IMPACT BREAKERS

### TYPICAL EXPOSING AND UNDERCUTTING OF REINFORCING STEEL PROCEDURE

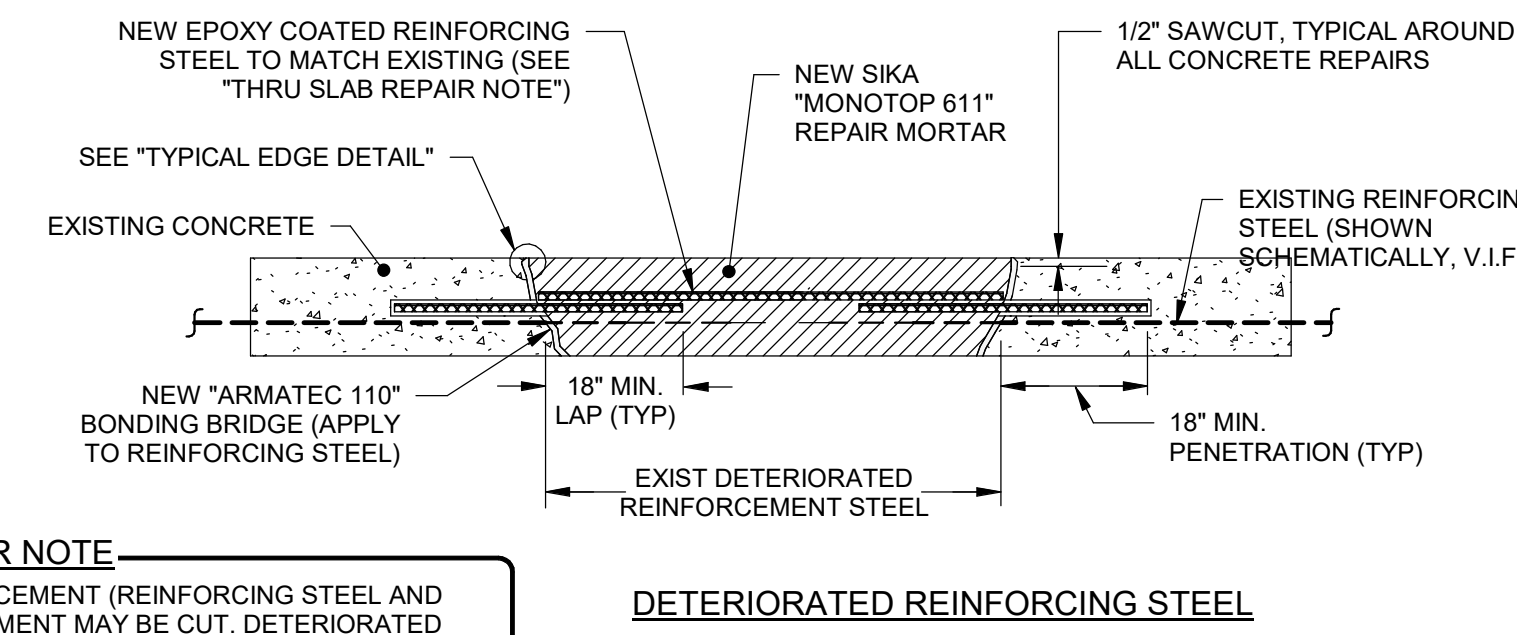
2 NO SCALE

### NOTES REGARDING THE REPAIRS OF EXISTING CONCRETE STRUCTURES

- 1 THESE DRAWINGS ADDRESS THE MAJOR CONCRETE STRUCTURE DETERIORATIONS
- 2 OTHER MINOR DETERIORATIONS SHALL BE REPAIRED WITH SIMILAR REPAIR DETAILS INDICATED ON THIS DRAWING
- 3 CONTRACTOR SHALL PROVIDE COST PER SQUARE FOOT OF SURFACE, VERTICAL & HORIZONTAL REPAIRS.
- 4 CONCRETE REPAIRS SHALL BE PERFORMED USING "SIKA" PRODUCTS AS MANUFACTURED BY SIKA CONCRETE RESTORATION SYSTEMS OF LYNDHURST, N.J. (OR AN APPROVED EQUAL). STRUCT ADHERENCE TO THE MANUFACTURER'S INSTALLATION AND SURFACE PREPARATION IS REQUIRED. A REPRESENTATIVE OF THE PRODUCTS INDICATED SHALL BE PRESENT AT THE SITE DURING THE APPLICATION OF SUCH PRODUCTS TO ASSURE CONFORMANCE TO THE MANUFACTURER'S SPECIFICATIONS AND SURFACE PREPARATION REQUIREMENTS.



INTACT REINFORCING STEEL

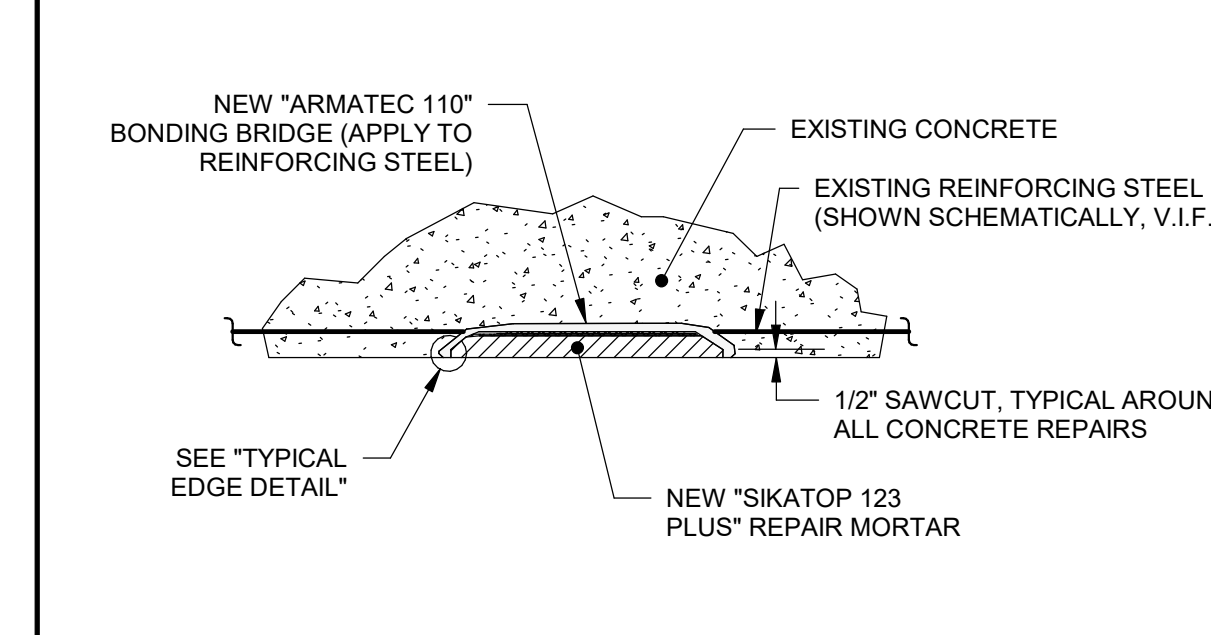


DETERIORATED REINFORCING STEEL

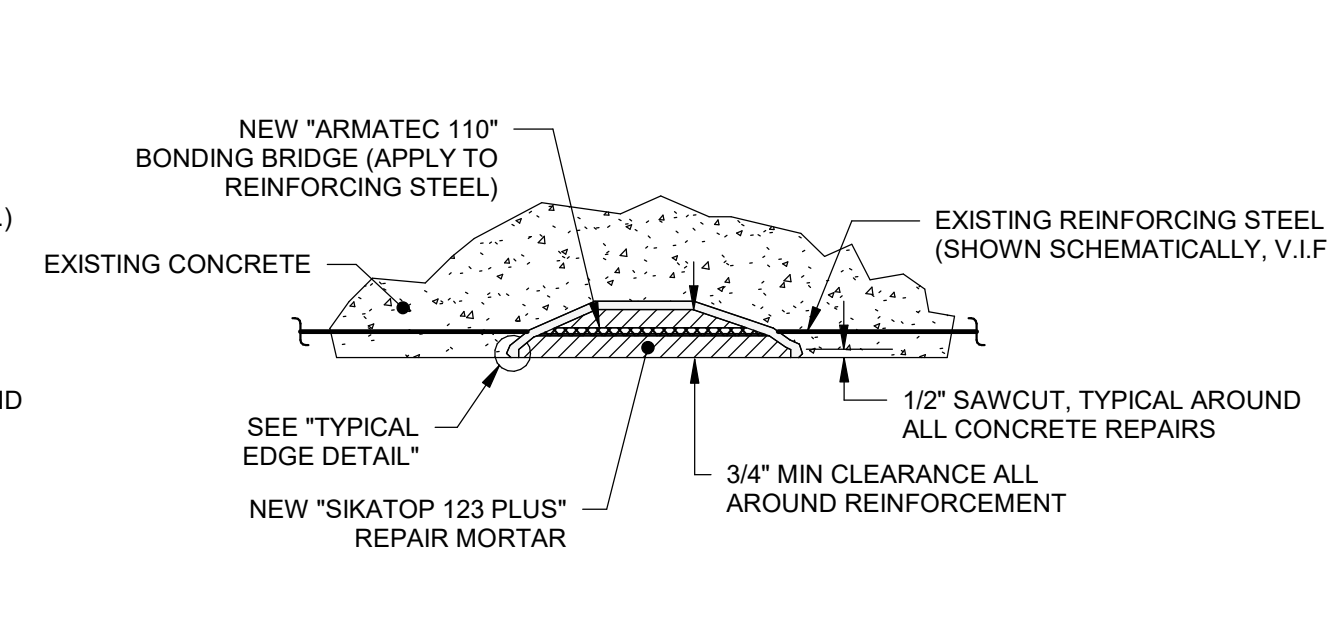
**THRU SLAB REPAIR NOTE**  
AT ALL THRU SLAB REPAIRS, ALL EXISTING REINFORCEMENT (REINFORCING STEEL AND WIRE MESH) SHALL BE PRESERVED. NO REINFORCEMENT MAY BE CUT. DETERIORATED REINFORCEMENT SHALL BE INSPECTED AND ADDITIONAL EPOXY COATED REINFORCEMENT SHALL BE ADDED AT THE DIRECTION OF THE ENGINEER. DEMO PERIMETER OF THRU SLAB REPAIR SLOPING SUCH THAT THE NEW REPAIR WILL FORM A WEDGE SHAPED REPAIR.

### 3 TYPICAL THRU SLAB REPAIR

NO SCALE



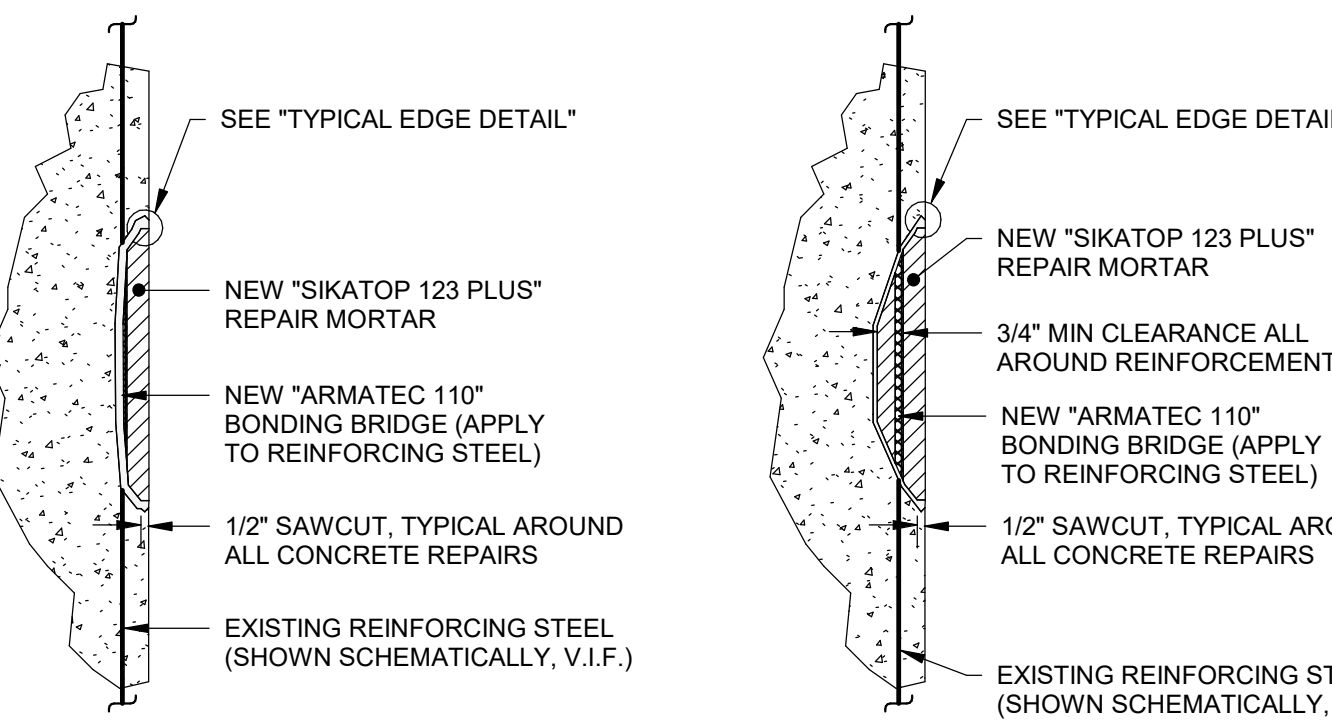
TYPICAL SHALLOW OVERHEAD SPALL REPAIR DETAIL



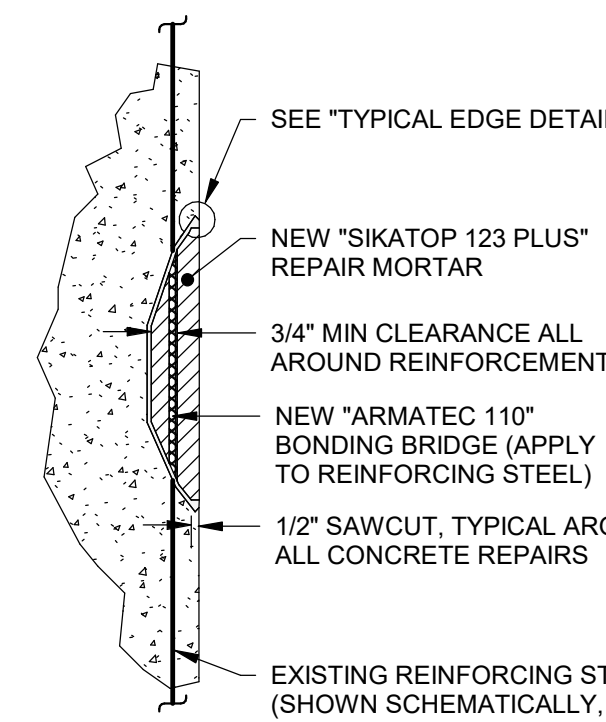
TYPICAL DEEP OVERHEAD SPALL REPAIR DETAIL

### 4 TYPICAL OVERHEAD REPAIR

NO SCALE



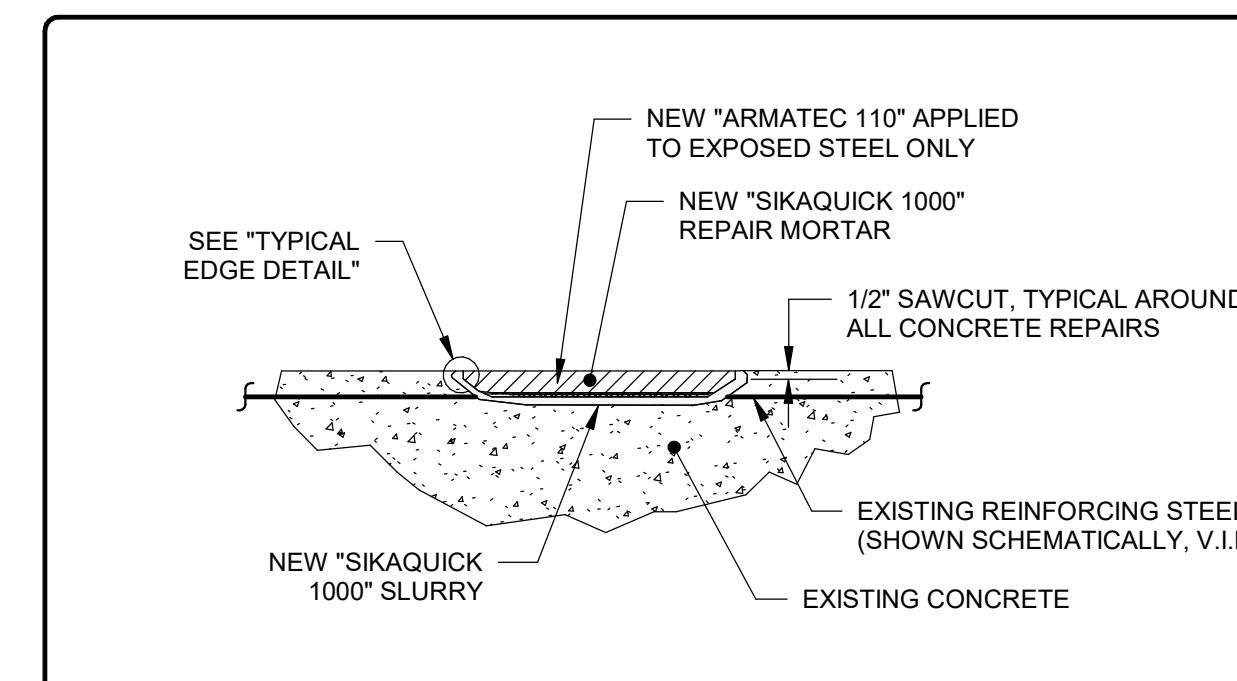
TYPICAL SHALLOW VERTICAL SPALL REPAIR DETAIL



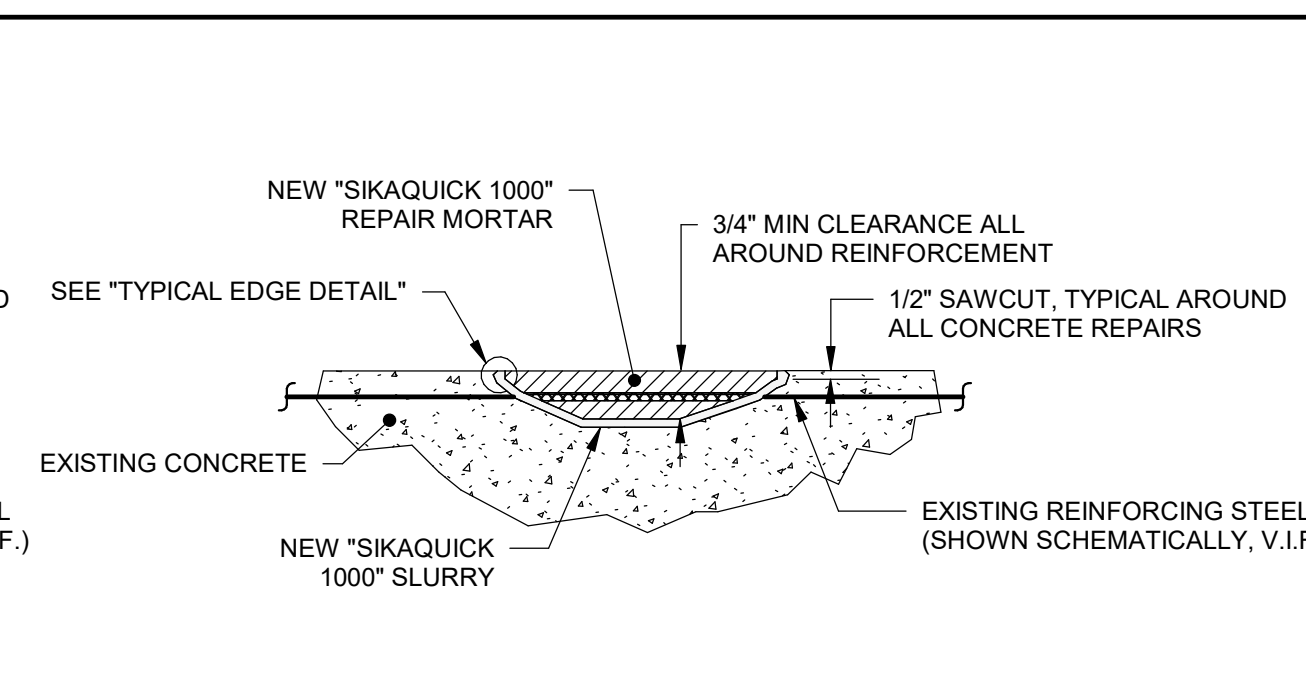
TYPICAL DEEP VERTICAL SPALL REPAIR DETAIL

### 5 TYPICAL VERTICAL REPAIR

NO SCALE



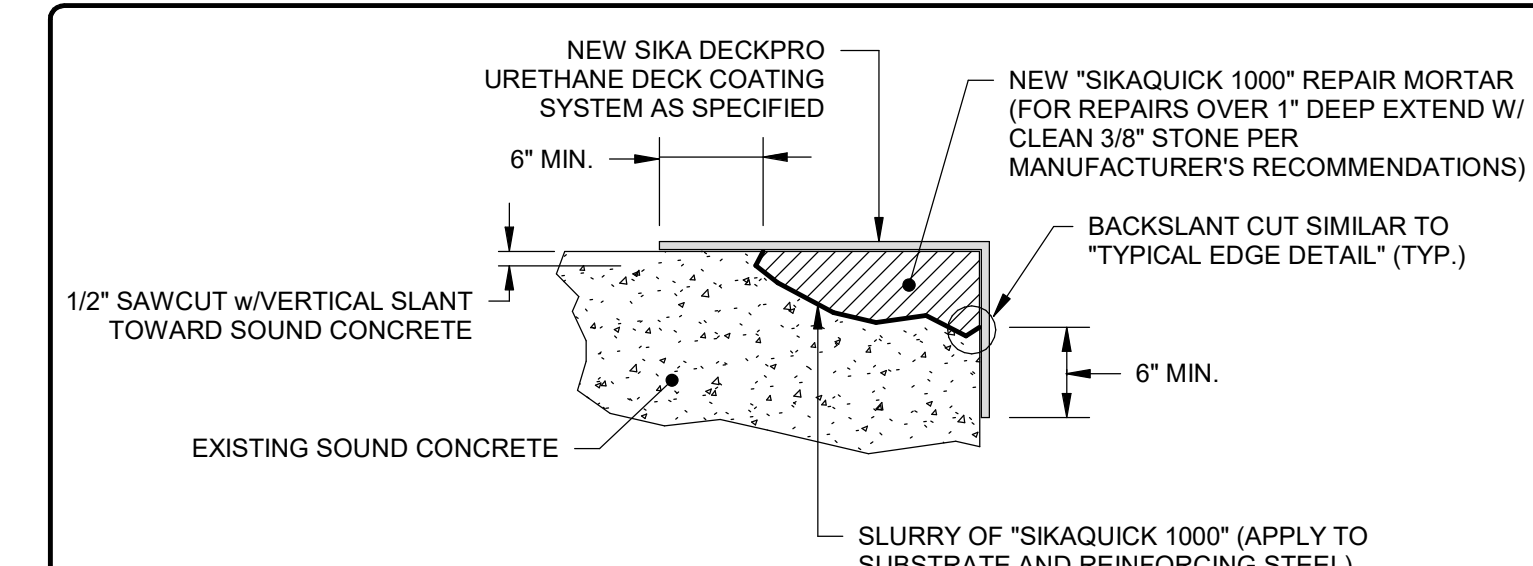
TYPICAL SHALLOW HORIZONTAL REPAIR DETAIL



TYPICAL DEEP HORIZONTAL REPAIR DETAIL

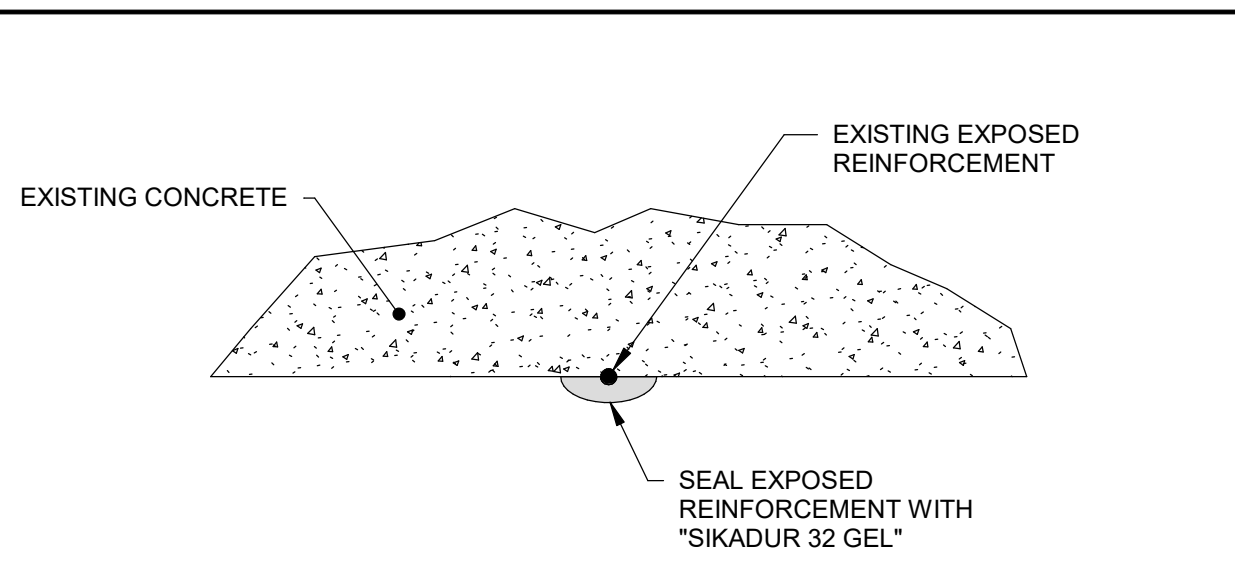
### 6 TYPICAL HORIZONTAL REPAIR

NO SCALE



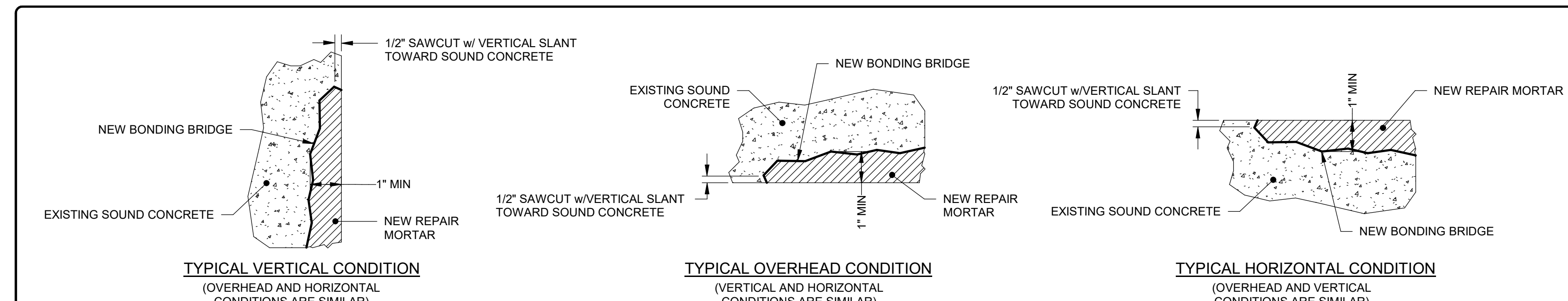
### 7 TYPICAL HORIZONTAL EDGE DETAIL

NO SCALE



### 8 TYPICAL EXPOSED REINFORCING STEEL REPAIR

NO SCALE



TYPICAL VERTICAL CONDITION  
(OVERHEAD AND HORIZONTAL CONDITIONS ARE SIMILAR)

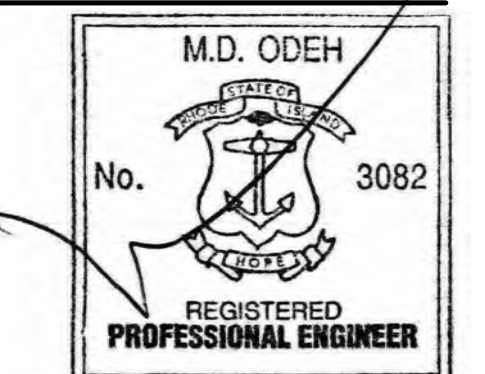
TYPICAL OVERHEAD CONDITION  
(VERTICAL AND HORIZONTAL CONDITIONS ARE SIMILAR)

TYPICAL HORIZONTAL CONDITION  
(OVERHEAD AND VERTICAL CONDITIONS ARE SIMILAR)

### 9 TYPICAL EDGE DETAIL

NO SCALE

SELECT ORIENTATION (VERTICAL, OVERHEAD OR HORIZONTAL) THAT IS MOST APPLICABLE TO THE SPECIFIC JOB, REMOVE OTHERS AND THIS NOTE



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Kingston, RI 02881

SHEET CONTENTS  
**TYPICAL CONCRETE REPAIR DETAILS**

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CHECKED BY	MDO
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DRAWING NO.  
**S3.0**