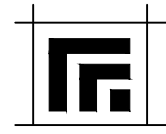


# STAIR & CONCRETE REPLACEMENT

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## LIST OF DRAWINGS

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DETAILS

## PROJECT LOCATION MAP



CLIENT  
TURTLE MOUNTAIN  
COMMUNITY COLLEGE

PROJECT DESCRIPTION  
STAIR AND CONCRETE  
REPLACEMENT

CITY BELCOURT  
STATE NORTH DAKOTA

ISSUE DATES

CD	CONSTRUCTION DOCUMENTS	09/08/2023
MARK	DESCRIPTION	DATE

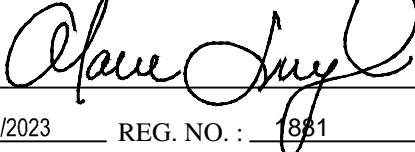
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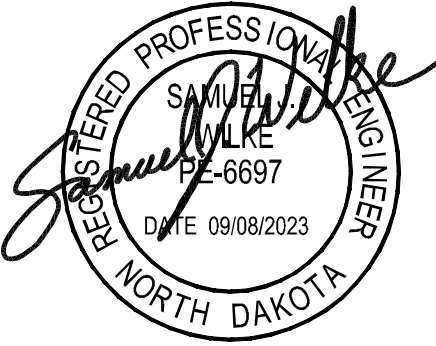
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## STAMPS

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the laws of the State of North Dakota.

Signature: 

Date: 09/08/2023 REG. NO. : 1981



DRAWING TITLE  
COVER SHEET

G001



DESIGN CODES - ALL CODES LATEST EDITION UON:

AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AWS	AMERICAN WELDING SOCIETY STANDARDS FOR WELDING AS MODIFIED BY AISC SPEC.
IBC	INTERNATIONAL BUILDING CODE
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
ACI	AMERICAN CONCRETE INSTITUTE
CRSI	CONCRETE REINFORCING STEEL INSTITUTE MANUAL OF STANDARD PRACTICE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE

NOTE: CODES ARE AMENDED AS REQUIRED BY THE STATE BUILDING CODE WITH JURISDICTION GOVERNING THE PROJECT LOCATION.

MATERIAL SPECIFICATIONS:

SEE SPECIFICATIONS FOR COMPLETE SPECIFICATIONS

STRUCTURAL STEEL:

W-FLANGE/W-TEE SHAPES	ASTM A992 (Fy=50 KSI)
HSS SQUARE/RECTANGULAR SECTIONS	ASTM A500 GRADE C (Fy=50 KSI)
HSS ROUND SECTIONS	ASTM A500 GRADE B (Fy=42 KSI)
PLATES/ANGLES/CHANNELS	ASTM A36 (Fy=36 KSI)
MISCELLANEOUS SHAPES	ASTM A36 (Fy=36 KSI)
HIGH STRENGTH BOLTS	ASTM A325 TYPE N, UON
WELDING ELECTRODES	E70XX
ANCHOR RODS	ASTM F1554 GR 36, (SEE COLUMN SCHEDULE)
HEADED STUDS	ASTM A108 TYPE B (Fu=65 KSI)
PIPE, SCH 40 UON	ASTM A53, GRADE B, Fy=35 KSI

CONCRETE:

REINFORCING BARS	ASTM A615 GR 60, DEFORMED, FABRICATE TO CRSI STANDARDS
WELDED WIRE REINFORCING (W.W.R.)	ASTM A185

CONCRETE (28 DAY COMPRESSIVE STRENGTH):

SLABS/WALL/FOOTINGS	= 4,000 PSI
GROUT (NON-SHRINK/NON-METALLIC)	= 5,000 PSI

LIGHT GAUGE STEEL:

SHEET STEEL	ASTM A1003 STRUCTURAL GRADE, TYPE H, METALLI COATED G60 MIN
SHEET STEEL FOR CLIPS	ASTM A653, STRUCTURAL STEEL ZINC COATED C60 MIN, GRADE 50

GENERAL REQUIREMENTS:

- GENERAL CONTRACTOR TO PROVIDE AN AS-BUILT SET OF DRAWINGS FOR EACH SHEET TO EAPC AT THE COMPLETION OF THE PROJECT WITH ALL CHANGES MADE IN THE FIELD CLEARLY MARKED ON IT.
- CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL STRUCTURAL SYSTEMS WITH ARCHITECTURAL FINISHES, DETAILS, ETC. CONTRACTOR SHALL COORDINATE MECHANICAL AND ELECTRICAL SYSTEMS TO AVOID CUTTING OR ALTERING STRUCTURAL MEMBERS IN ANY MANNER. DO NOT FIELD CUT ANY STRUCTURAL STEEL BEAM, COLUMN, JOIST, ETC. WITHOUT WRITTEN APPROVAL FROM ENGINEER OF RECORD.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PRIOR TO FABRICATING ANY STRUCTURAL MEMBER. FIELD MODIFICATIONS ARE NOT ALLOWED WITHOUT WRITTEN APPROVAL FROM ENGINEER OF RECORD.
- THE DESIGN IS BASED ONLY ON THE STRUCTURE IN ITS COMPLETED STATE. CONTRACTOR SHALL TAKE WHATEVER PRECAUTIONS ARE NECESSARY TO WITHSTAND ALL HORIZONTAL AND VERTICAL LOADINGS THAT MAY BE ENCOUNTERED DURING THE CONSTRUCTION PRIOR TO COMPLETION OF THE STRUCTURE.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. PROVIDE CONSTRUCTION SHORING AND BRACING AS NECESSARY TO COMPLETE THE INSTALLATION OF ALL STRUCTURAL MEMBERS/FOOTINGS/ETC.
- NO OPENINGS OR SLEEVES (EXCEPT AS DETAILED) SHALL BE CUT OR PROVIDED IN FOOTINGS, WALLS OR STRUCTURAL FLOOR CONSTRUCTION WITHOUT APPROVAL.
- REFER TO ARCHITECTURAL PLANS FOR DETAILS OF CONCRETE, REVEALS, NOTCHES, REGLETS, DRIPS, BLOCKOUTS AT DOORWAYS, AND WATERPROOFING/DRAINAGE BOARD.
- CONTRACTOR SHALL EMPLOY AND PAY FOR SERVICES OF AN INDEPENDENT TESTING AGENCY TO PERFORM SPECIFIED TESTING AND SPECIAL INSPECTION AS REQUIRED PER THE TECHNICAL SPECIFICATIONS OR AS SPECIFICALLY NOTED.
- CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY AND COORDINATE INDEPENDENT TESTING AGENCY WORK DURING CONSTRUCTION. EMPLOYMENT OF AGENCY IN NO WAY RELIEVES CONTRACTOR OF OBLIGATION TO PERFORM WORK IN ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS.
- TESTING AGENCIES SHALL PROMPTLY SUBMIT COPIES OF SPECIAL INSPECTION AND TESTING REPORT TO ENGINEER OF RECORD UON.

GENERAL PROJECT NOTES:

- REMOVE, SALVAGE, AND REINSTALL ALL EXISTING SIGNAGE.
- ALL EXTERIOR STOOPS AND SLABS SHALL SLOPE A MINIMUM OF 2% TO THE EAST.
- JOINTS AT VERTICAL SURFACES SHALL RECEIVE MASTERSEAL NP 2 SEALANT. JOINTS AT HORIZONTAL SURFACES SHALL RECEIVE MASTERSEAL SL 2 SEALANT.

CAST-IN-PLACE CONCRETE:

- CONCRETE SHALL BE A RED-MIXED PRODUCT (PLANT MIXED) ACCORDING TO APPROVED CONCRETE MIX DESIGN SUBMITTALS. CONTRACTOR SHALL PROVIDE CONCRETE MIX DESIGN SUBMITTAL TO ENGINEER OF RECORD. CONCRETE PLACEMENT SHALL NOT COMMENCE WITHOUT APPROVED CONCRETE MIX DESIGN SUBMITTALS. CONCRETE SHALL NOT BE MIXED ON SITE EXCEPT FOR SMALL PATCHING. DO NOT ADD WATER TO RED-MIXED CONCRETE AT THE SITE EXCEPT TO REPLACE WATER LOST DURING TRANSPORTATION OF THE CONCRETE FROM THE RED-MIX PLANT TO THE SITE.
- CONCRETE MIX DESIGN SHALL BE PREPARED WITH ONE OF THE FOLLOWING TWO OPTIONS:
  - CONCRETE RED-MIX PLANT SHALL PROVIDE A HISTORY FOR EACH MIX DESIGN. THE HISTORY SHALL SHOW TESTED CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS FOR A MINIMUM OF 30 CONSECUTIVE TESTS OR TWO GROUPS OF CONSECUTIVE TESTS TOTALING AT LEAST 30 TESTS.
  - AN INDEPENDENT LABORATORY SHALL PREPARE EACH MIX DESIGN. THE MIX DESIGN SUBMITTAL SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
- THE COST TO PREPARE THE MIX DESIGN SUBMITTAL AND ANY ASSOCIATED COSTS FOR TESTING TO PROVIDE A HISTORY SHALL BE PAID BY THE CONTRACTOR.
- CONCRETE CURING ACCELERATORS SUCH AS CALCIUM CHLORIDE ARE NOT ALLOWED WITHOUT WRITTEN APPROVAL FROM THE ENGINEER OF RECORD.
- FOOTING STEPS SHALL BE GENERALLY LOCATED WHERE INDICATED ON THE FOOTING AND FOUNDATION PLAN.
- ALL CONTINUOUS FOOTINGS SHALL BE CENTERED BELOW WALLS UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL SPREAD FOOTINGS SHALL BE CENTERED BELOW WALLS/PIERS/COLUMNS UNLESS OTHERWISE NOTED ON THE PLANS.
- PROVIDE A ROUGH FINISH SURFACE AT THE TOP OF ALL FOOTINGS, ROUGHENED AT JOINTS TO PIERS OR WALLS.
- DOWEL VERTICAL WALL REINFORCING TO FOOTING OR THICKENED SLAB WITH BARS OF THE SAME SIZE AND SPACING AS THE VERTICAL WALL REINFORCING UNLESS OTHERWISE NOTED. PROVIDE A STANDARD HOOK AT THE BOTTOM OF THE DOWEL AND EMBED INTO THE FOOTING. PROVIDE A CLASS "B" LAP WITH THE WALL VERTICAL REINFORCING.
- PERIMETER FOUNDATION WALL CONSTRUCTION JOINTS SHALL BE SPACED AT NOT MORE THAN 50 FEET ON CENTER.
- VERIFY WITH ARCHITECT ALL FLOOR SLAB DEPRESSIONS AND DETAILS RELATED TO ARCHITECTURAL FINISHES. VERIFY WITH MECHANICAL DRAWINGS ALL HOUSEKEEPING PAD LOCATIONS AND SIZES. FLOOR SLAB DEPRESSIONS AND MECHANICAL HOUSEKEEPING PADS ARE NOT TYPICALLY SHOWN ON THE STRUCTURAL DRAWINGS.
- PROVIDE KEVED CONSTRUCTION JOINTS (KCJ) AT CONCRETE SLAB ON GRADE FLOORS AT LOCATIONS SHOWN ON ALL PLANS. JOINTS SHALL BE DOWELED TOGETHER USING SMOOTH STEEL DOWEL BARS INSERTED INTO PLASTIC SLEEVES (GREENSTREAK SPEED DOWELS OR EQUAL) AS SHOWN ON THE KCJ DETAIL.
- PROVIDE SAW CUT CONTROL JOINTS (CJ) AT CONCRETE SLAB ON GRADE FLOORS AT LOCATIONS SHOWN ON PLANS WITHIN 18 HOURS OF CONCRETE PLACEMENT.
- AT DROPPED SLABS ON COMPACTED SAND BASE, MAINTAIN CONCRETE THICKNESS AND WWF REINFORCING. LIMITS OF DROPPED AND DEPRESSED FLOOR AREAS TO BE LOCATED FROM ARCHITECTURAL PLANS.
- CONCRETE MIX DESIGN PARAMETERS: NORMAL WEIGHT; FLY ASH LIMITED TO 25%; BY MASS; MAXIMUM W/C RATIO 4" (+/- 1"); MAXIMUM AGGREGATE = 1 INCH; ADMIXTURES AS PER APPROVED MIX DESIGN

CONCRETE:

- CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT EXISTING SOILS FROM FREEZING OR REMOVE THEM PRIOR TO CONSTRUCTION.
- CONCRETE SHALL NOT BE CAST AGAINST FROZEN SOILS. FROZEN SOILS SHALL BE REMOVED PRIOR TO CASTING FOOTINGS. REPLACE FROZEN SOILS WITH COMPACTED ENGINEER FILL.
- INSULATED PROTECTIVE BLANKETS OR OTHER SUPPLEMENTAL HEAT SHALL BE USED TO PROVIDE SUFFICIENT PROTECTION TO MAINTAIN DESIGNED CURING TEMPERATURES. CONCRETE THAT FREEZES OR CRACKS DUE TO FREEZING SHALL BE REPLACED BY THE CONTRACTOR WITH NO EXPENSE TO THE OWNER.
- PROVIDE A MINIMUM 6" THICK DRAINAGE COURSE BELOW ALL INTERIOR FLOOR SLABS ON GRADE UNLESS NOTED OTHERWISE ON PLANS OR SPECIFICATIONS (DRAINAGE COURSE SHALL BE ASTM C33 FINE AGGREGATE OR SIZE #8 COARSE AGGREGATE BETWEEN DRAINAGE COURSE AND FINAL GRADE.
- CONCRETE FOOTINGS, WALLS, AND OTHER CONCRETE COMPONENTS SHALL BE PROTECTED FROM FREEZING FOR A MINIMUM OF 7 DAYS CURING TIME AS FOLLOWS:

REQUIRED CONCRETE TEMPERATURES		
AIR TEMPERATURE	SECTION SIZE, MINIMUM DIMENSION	
	< 12"	12"-36"
MINIMUM CONCRETE TEMPERATURE AS PLACED AND MAINTAINED		
	55° F	50° F
MINIMUM CONCRETE TEMPERATURE AS MIXED FOR INDICATED WEATHER		
ABOVE 30° F	60° F	55° F
0° F TO 30° F	65° F	60° F
BELOW 0° F	70° F	65° F

CONCRETE REINFORCING:

- ALL REINFORCING BAR LAPS SHALL BE CLASS "B", UNLESS NOTED OTHERWISE, PLUS 6" AT NON-CONTACT SPLICES. SEE MASONRY/CONCRETE NOTES FOR BAR LAP SPLICE LENGTHS.
- PROVIDE CONCRETE COVER AT REINFORCING PER THE FOLLOWING:

CONCRETE COVER AT STEEL REINFORCING	
REINFORCING LOCATION	MINIMUM COVER
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER (#6 THROUGH #18 BAR)	2"
CONCRETE EXPOSED TO EARTH OR WEATHER (#5 BAR OR SMALLER)	0'-1 1/2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS OR JOISTS #14 AND #18 BARS #11 BARS AND SMALLER BEAMS, COLUMNS PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS	1 1/2" 3/4" 1 1/2"

- REINFORCE FOOTINGS BELOW ALL FOUNDATION WALLS WITH A MINIMUM OF TWO #5 BARS CONTINUOUS LONGITUDINAL UNLESS NOTED OTHERWISE.
- REINFORCING IN WALLS AND FOOTINGS TO BEND 2'-6" AROUND ALL CORNERS OR USE 5'-0" CORNER BARS.
- CONTRACTOR SHALL SUBMIT STEEL REINFORCEMENT SHOP DRAWINGS (INCLUDING BAR SCHEDULES, SHAPES OF BENT BARS, SPACING OF BARS AND LOCATION OF SPLICES) TO ENGINEER OF RECORD.
- PLACEMENT OF STEEL REINFORCING SHALL BE IN ACCORDANCE WITH CRSI MANUAL OF STANDARD PRACTICE. POSITION, SUPPORT AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. DO NOT DEViate FROM REQUIRED POSITION.
- REINFORCEMENT SHALL BE INSPECTED BY THE SPECIAL INSPECTION AGENCY ACCORDING TO THE SPECIAL INSPECTIONS AND TESTING SCHEDULE. CONTRACTOR SHALL NOTIFY SPECIAL INSPECTION AGENCY 24 HOURS PRIOR TO REQUESTED INSPECTION.
- DO NOT WELD REINFORCING UNLESS SPECIFICALLY SHOWN ON PLANS OR WITH WRITTEN PERMISSION FROM ENGINEER OF RECORD.

STRUCTURAL STEEL:

- TOP OF STEEL FRAMING IS INDICATED ON PLAN BY ( ) WHICH INDICATES THE ELEVATION OF THE TOP OF THE MEMBER.
- USE 3/4"Ø A325-N HIGH STRENGTH BOLTS AT ALL CONNECTIONS UNLESS LARGER DIA. OR HIGHER STRENGTH BOLTS ARE REQUIRED BY DESIGN. INDEPENDENT AGENCY TO VISUALLY INSPECT INSTALLED BOLTS.
- COLUMN AND BEAM LEVELING PLATES SHALL NOT BE USED.
- COLUMN CAP PLATES ARE 1/2" THICK UNLESS NOTED. SLOPE TO MATCH BEAM SLOPE.
- BEAM TO BEAM AND BEAM TO COLUMN SHEAR CONNECTIONS SHALL BE DESIGNED BY STEEL FABRICATOR FOR LOADS SHOWN ON PLANS AND DETAILS. WHERE NO LOADS ARE SHOWN, DESIGN CONNECTIONS FOR 50% OF TOTAL ALLOWABLE UNIFORM LOAD PER AISC BEAM TABLES BASED ON SIZE AND SPAN OF CONNECTED BEAM (TYP.)
- STEEL FABRICATOR SHALL PROVIDE STRUCTURAL STEEL SHOP DRAWINGS INDICATING MEMBER SIZE, LAYOUT PLAN, WELDED CONNECTIONS, MATERIAL STRENGTHS, WELD SIZES, BOLTED CONNECTIONS, ANCHOR BOLT SIZES/LOCATIONS, AND FINISH.
- DO NOT FIELD CUT, WELD OR MODIFY STRUCTURAL STEEL MEMBERS UNLESS SPECIFICALLY INDICATED ON APPROVED SHOP DRAWING WITHOUT WRITTEN APPROVAL FROM ENGINEER OF RECORD.
- ALL STEEL FABRICATION SHALL COMPLY W/ OSHA ERECTION STANDARDS SUBPART R, 29 CFR SUBPART R 1926.750 THROUGH 761.

COLD-FORMED METAL FRAMING:

- ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS, OR AS REQUIRED FOR AN ANGULAR FIT AGAINST ABUTTING MEMBERS.
- PROVIDE INSULATION EQUAL TO THAT SPECIFIED ELSEWHERE IN ALL MULTIPLY-MEMBER JAMB STUDS AND MULTIPLY-MEMBER HEADERS WHICH WILL NOT BE ACCESSIBLE TO THE INSULATION CONTRACTOR.
- CLEAN ALL SURFACES THAT WILL BE IN CONTACT WITH LIGHT GAUGE FRAMING PRIOR TO ASSEMBLY.
- POSITION ALL MEMBERS PLUMB OR LEVEL AND SQUARE WITH PERPENDICULAR ADJOINING MEMBERS.
- ALL FRAMING TO BE HELD FIRMLY IN POSITION UNTIL PERMANENTLY FASTENED.
- FULLY SEAT STUDS IN TRACK THE FULL DEPTH OF THE TRACK UNLESS NOTED OTHERWISE ON PLANS.
- DO NOT SPLICE STUDS.
- TRACK SHALL BE SECURELY ANCHORED TO THE SUPPORTING STRUCTURE. SPLICES IN TRACKS SHALL BE SECURELY ANCHORED TO A COMMON STRUCTURAL ELEMENT OR SHALL BE BUTT-WELDED TOGETHER.
- JACK STUDS OR CRIPPLES SHALL BE INSTALLED BELOW WINDOW SILLS, ABOVE WINDOW AND DOOR HEADS AND SHALL BE SECURELY FASTENED TO SUPPORTING MEMBERS.
- WALL STUD BRIDGING SHALL BE ATTACHED TO PREVENT STUD ROTATION. BRIDGING ROWS SHALL BE SPACED VERTICALLY AT 48 INCHES ON CENTER.
- FRAMED WALL OPENINGS SHALL INCLUDE HEADERS AND SUPPORTING STUDS.
- CONSTRUCT CORNERS USING A MINIMUM OF THREE STUDS. DOUBLE OR TRIPLE STUDS AT DOOR AND WINDOW OPENINGS AS SHOWN ON THE DRAWINGS. SECURELY FASTEN MULTIPLE STUDS TOGETHER AS SHOWN ON THE DRAWINGS.
- LATERAL DEFLECTION OF STUDS SHALL BE LIMITED TO:
  - EXTERIOR STUDS @ BRICK: L/600
  - EXTERIOR STUDS @ METAL PANEL: L/240
- UON LIGHT GAUGE CONTRACTOR SHALL DESIGN AND PROVIDE BOXED HEADERS CONSISTING OF (2) TRACK SECTIONS AND (2) STUD SECTIONS AT ALL FRAMED OPENINGS. SEE ARCHITECTURAL PLANS FOR OPENING SIZES AND LOCATIONS.
- PROVIDE A MIN. OF (2) FULL HEIGHT STUDS AT JAMBS OF FRAMED OPENINGS.
- ALL EXTERIOR STUDS SHALL BE A MINIMUM OF 33 MIL THICKNESS. FINAL DESIGN BY LIGHT GAUGE SUPPLIER.
- CONTRACTOR SHALL PROVIDE DELEGATED DESIGN SERVICES AS STATED IN PART 1 OF SPECIFICATIONS 05 4000.
- ANY STUD, JOIST OR OTHER INDICATED WITH INCOMPLETE DESIGNATION (E.G. "6" MTL STUDS) AND NOT A COMPLETE DESIGNATION (E.G. 6005162-43) SHALL BE INTERPRETED AS A COMPONENT FOR WHICH DELEGATED DESIGN OF THE MISSING INFORMATION IS REQUIRED.

EARTHWORK:

- NOTIFY ENGINEER OF RECORD IMMEDIATELY IF ANY QUESTIONABLE SOIL CONDITIONS ARE ENCOUNTERED DURING EXCAVATION. FOOTING ELEVATIONS AND SUBGRADE PREPARATION ARE SUBJECT TO CHANGE DEPENDING ON CONDITIONS ENCOUNTERED DURING EXCAVATION.
- GEOTECHNICAL ENGINEER SHALL TEST AND/OR INSPECT SUBGRADE BELOW ALL FOOTING EXCAVATIONS PRIOR TO PROCEEDING WITH PLACEMENT OF FOOTINGS. NO FILL SHALL BE PLACED UNTIL EXCAVATION BOTTOM HAS BEEN INSPECTED AND TESTING IS COMPLETE. CONTRACTOR SHALL NOTIFY TESTING AGENCY 24 HOURS MINIMUM PRIOR TO INSPECTION.
- ENGINEERED FILL BELOW FOOTINGS AND SLAB WHERE REQUIRED SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR UNLESS NOTED OTHERWISE ON PLANS OR SPECIFICATIONS.
- ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATURAL SOIL OR ENGINEERED FILL CAPABLE OF SAFELY SUPPORTING A UNIFORM LOAD EQUAL TO THE ALLOWABLE SOIL BEARING PRESSURE STATED IN THE DESIGN NOTES.
- MATERIAL FOR BACKFILL SHALL BE CLEAN, FREE OF WOOD SCRAPS OR OTHER DELETERIOUS SUBSTANCES, PLACED IN 8" COMPACTED LIFTS.
- BACKFILLING AGAINST THE FOUNDATION WALLS SHALL BE DONE CAREFULLY TO AVOID DAMAGE TO THE FOUNDATION WALLS, FOOTINGS, PIPES, CONDUITS, ETC. IN LAYERS NOT EXCEEDING 12" THICK AND PROPERLY COMPACTED. EXTEND BACKFILL UP EVENLY ON EACH SIDE OF THE WALL. BASEMENT FOUNDATION WALLS OR OTHER WALLS WITH DIFFERENTIAL SOIL ELEVATIONS DESIGNED TO RETAIN EARTH NEED NOT BE BRACED PRIOR TO BACKFILLING.
- THE EXISTING ON-SITE SOIL IS SUITABLE MATERIAL, PROVIDED THAT IT CAN BE CONDITIONED AND PLACED DURING THE PREVAILING WEATHER CONDITIONS EXPECTED DURING THE BACKFILL OPERATIONS.
- CONTRACTOR MAY ASSUME THE USE OF THE ON-SITE MATERIALS EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, AND THEN ONLY IF IT CAN BE PLACED TO THE SPECIFIED WATER CONTENT AND RELATIVE COMPACTION REQUIREMENTS.
- WHERE THE EXISTING ON-SITE SOIL CANNOT BE ADEQUATELY PLACED DUE TO WEATHER OR OTHER SITE CONDITIONS, THE CONTRACTOR SHALL USE GRANULAR ENGINEERED FILL.

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CLIENT

TURTLE MOUNTAIN  
COMMUNITY COLLEGE

PROJECT DESCRIPTION

STAIR AND CONCRETE  
REPLACEMENT

CITYBELCOURT

STATENORTH DAKOTA

ISSUE DATES

CD	CONSTRUCTION DOCUMENTS	09/08/2023
MARK	DESCRIPTION	DATE

PROJECT NO:20232950

DRAWN BY:RLH

CHECKED BY:JWD

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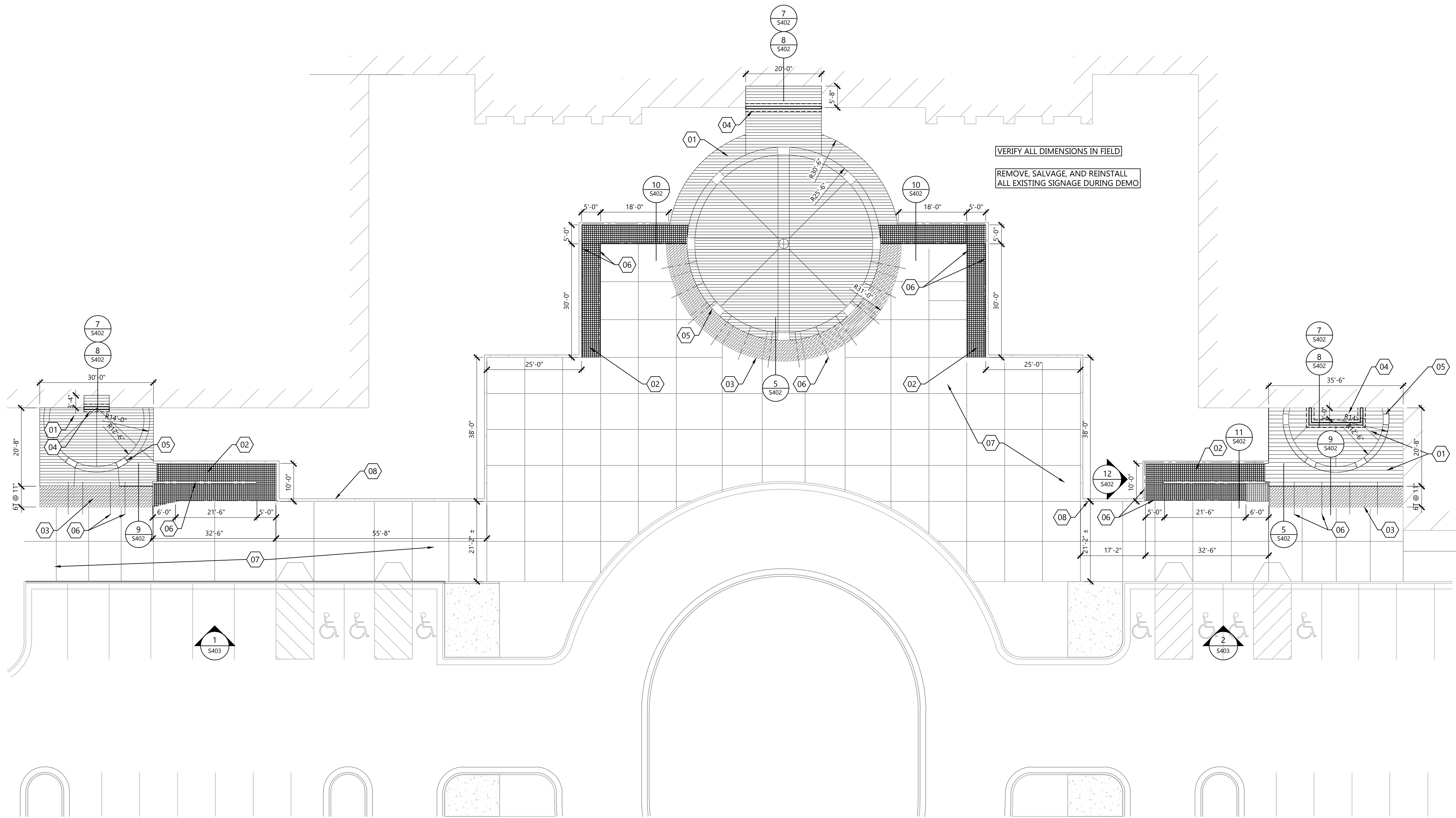
STAMP



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STRUCTURAL NOTES

File Location\\N\\2023\\20232950 - BLCT TMCC Stair-Ramp Repair\\Drawings\\20232950-S201.dwg  
Plot Date: 8-Sep-23



KEYNOTE LEGEND:

#>

< < < INDICATES KEYNOTE ON PLAN

01

REMOVE AND REPLACE EXISTING CONCRETE SIDEWALK W/ 4" (MIN) THICK CONC OVER 6" DRAINAGE COURSE W/ REINFORCED W/ #4 @ 18" O/C EA WAY. MATCH CURRENT COLOR AND FINISH. SHOWN BY

02

REMOVE AND REPLACE EXISTING CONCRETE RAMP SURFACE W/ 4" (MIN) THICK CONC OVER 6" DRAINAGE COURSE REINFORCED W/ #4 @ 18" O/C EA WAY. MATCH EXISTING SLOPE AND ELEVATIONS. SHOWN BY WHERE RAMP SLAB SITS ON TOP OF EXISTING FOUNDATION WALL. SAWCUT TOP OF FOUNDATION WALL FOR CLEAN TOOLED JOINT LINE AT FACE OF WALL. SEE 3/S402 CONTINUE AS NEEDED WHERE WALL IS SPALLED AT RAILING ANCHORAGE. PROTECT ALL AREAS NOT INCLUDED IN REPLACEMENT DURING DEMO

03

REMOVE AND REPLACE EXISTING STAIRS AS NEEDED. MATCH EXISTING STAIR RISE AND RUN. SHOWN BY

04

INSTALL NEW STRUCTURAL FOOTING AND FOUNDATION WALL FOR STOOP

05

EX COLUMN TO REMAIN, TYP -PROTECT DURING CONSTRUCTION

06

REMOVE AND INSTALL NEW HAND AND GUARD RAILS PAINT FINISH, COLOR TO MATCH EXISTING -SEE ARCH. SEE BID ALTERNATE #1 FOR ALL STAINLESS STEEL RAILS

07

PROVIDE UNIT COST TO REMOVE AND REPLACE EXISTING CONCRETE SIDEWALK WITH 4" (MIN) THICK CONC REINFORCED OVER 6" DRAINAGE COURSE W/ #4 @ 18". EACH WAY AT PARKING LOT LEVEL (TO BE DETERMINED ONSITE DURING CONSTRUCTION) BY OWNER. MAINTAIN SLOPE TOWARD DRAIN IN ALL AREAS

08

UNIT COST No. 2: STEM WALLS  
1. DESCRIPTION: AT THE EXTERIOR FACE OF THE STEM WALLS, PROVIDE UNIT COST TO ROUTE AND SEAL CRACKS. ROUTE A WIDENED GROOVE AT CRACK SURFACE WITH SAW OR GRINDER, AND FILL GROOVE WITH MASTERSEAL NP 2 SEALANT  
2. UNIT OF MEASUREMENT: LINEAR FOOT

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CLIENT

TURTLE MOUNTAIN  
COMMUNITY COLLEGE

PROJECT DESCRIPTION

STAIR AND CONCRETE  
REPLACEMENT

CITY BELCOURT

STATE NORTH DAKOTA

ISSUE DATES

CD	CONSTRUCTION DOCUMENTS	09/08/2023
MARK	DESCRIPTION	DATE

PROJECT NO: 20232950

DRAWN BY: WLM

CHECKED BY: JWD

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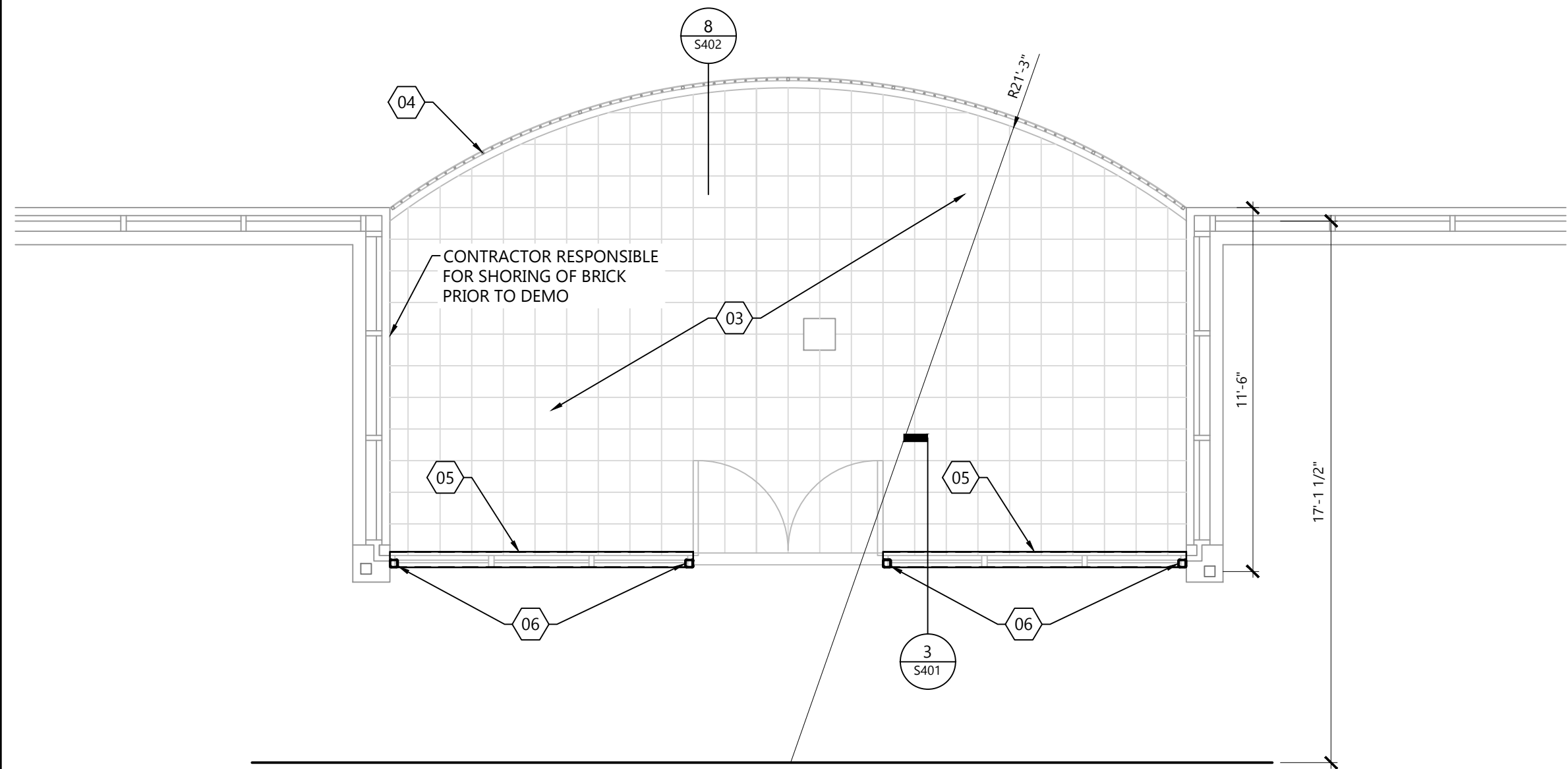
REGISTERED PROFESSIONAL ENGINEER  
SPENCER W. WULKE  
2-6697  
DATE 09/08/2023  
NORTH DAKOTA

DRAWING TITLE

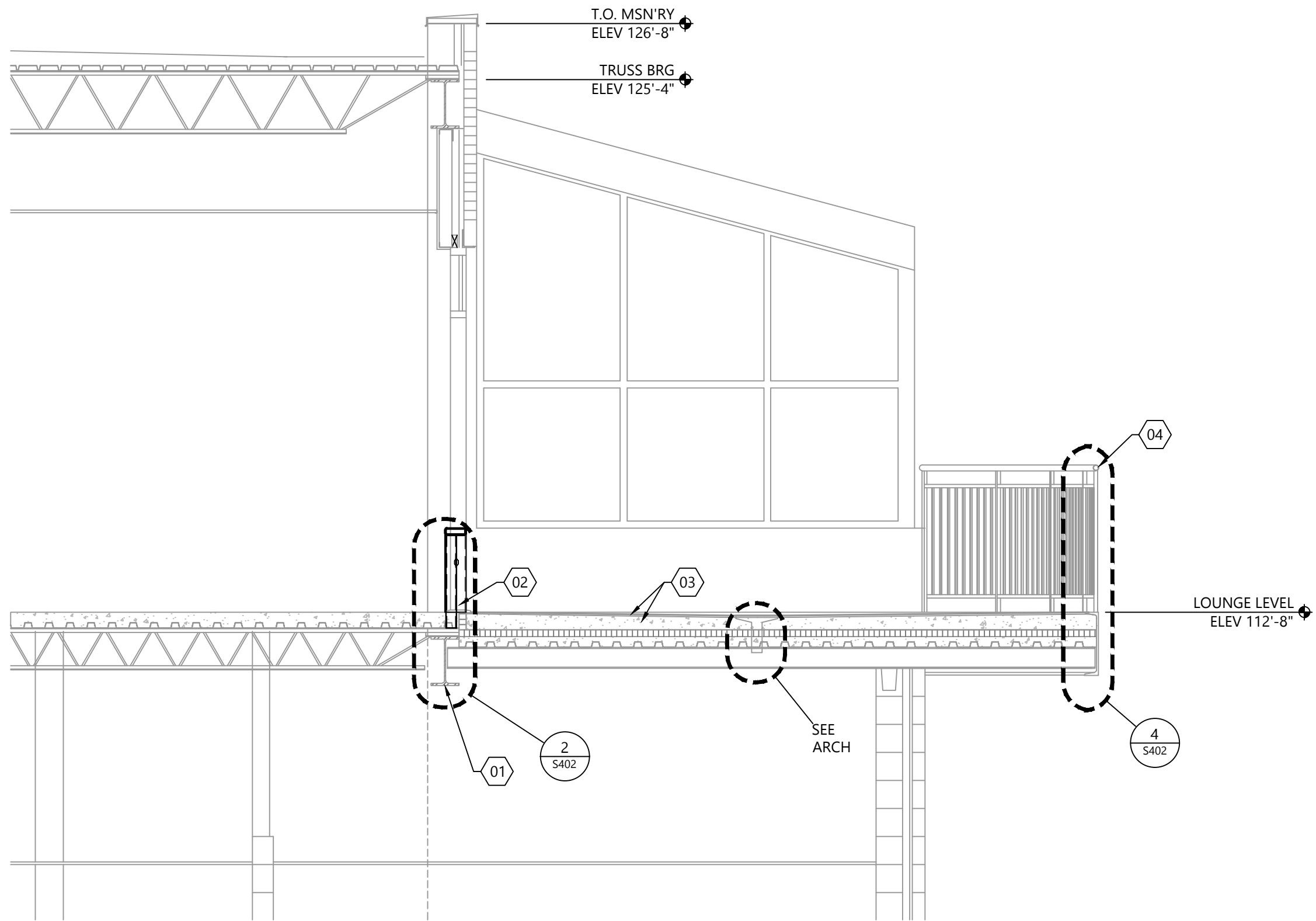
OVERALL PLAN

S201

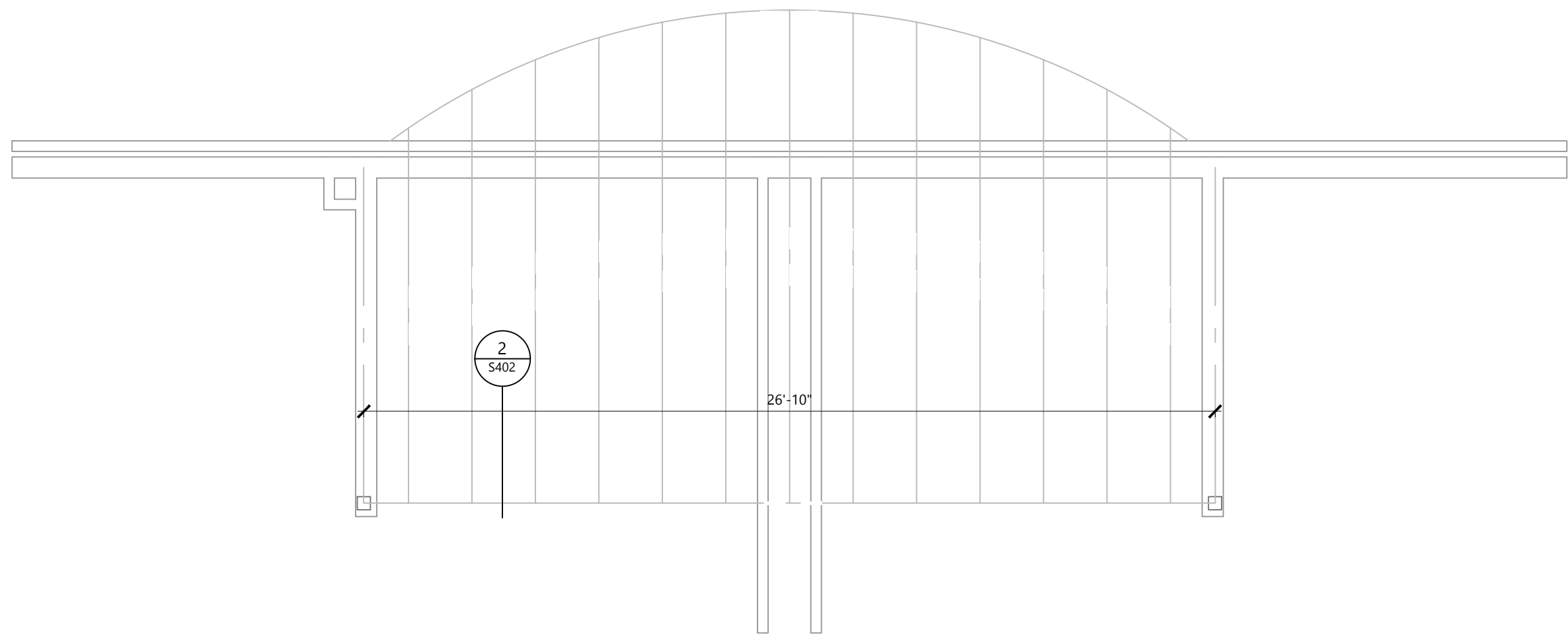
File Location\\N\\2023\\20232950 - BLCT TMCC Stair-Ramp Repair\\Drawings\\20232950-S401.dwg  
Plot Date: 8-Sep-23



2  
S401  
SLAB PLAN - LOUNGE DECK  
1/4" = 1'-0"



3  
S401  
SECTION @ LOUNGE DECK  
3/8" = 1'-0"



1  
S401  
FRAMING PLAN - LOUNGE DECK  
1/4" = 1'-0"

#### KEYNOTE LEGEND:

## < < < INDICATES KEYNOTE ON PLAN

- 01 REMOVE CORROSION AT EXISTING BEAM AND CONNECTIONS OF FRAMING AT DECK OVERHEAD WITH WIRE WHEEL OR SANDBLASTING AND REPORT SECTION LOSS TO ENGINEER
- 02 INSTALL NEW KNEE WALL AND STOREFRONT, SEE ARCH
- 03 REMOVE PORCELAIN TILE, REMOVE NON-STRUCTURAL CONCRETE TOPPING AND WATER PROOFING LAYER, NEW WATERPROOFING AND TOPPING SLAB REINFORCED WITH 6x6-W1.4xW1.4 WWM OVER WP MEMBRANE AND INSULATION. SLOPE TO DRAIN. COORDINATE WITH ARCH
- 04 REMOVE EXISTING GUARD RAIL AND FABRICATE AND INSTALL NEW GUARD RAIL ONTO EXISTING CURVED STEEL PLATE WITH 3/16" FILLET WELD AROUND SQUARE TUBE POSTS. FINISH WITH PAINT, COLOR TO MATCH EXISTING - SEE ARCH. SEE BID ALTERNATIVE #1 FOR STAINLESS RAIL ASSEMBLY
- HSS6x2x1/4" CONT FILLET WELD ALL AROUND TO TOP OF HSS3x3x1/4 POST
- HSS3x3x1/4" POST CORE DRILL THROUGH EXISTING SLAB FILLET WELD ALL AROUND TO TOP FLANGE OF EXISTING BEAM



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TURTLE MOUNTAIN  
COMMUNITY COLLEGE

PROJECT DESCRIPTION  
STAIR AND CONCRETE  
REPLACEMENT

CITY BELCOURT  
STATE NORTH DAKOTA

ISSUE DATES

CD	CONSTRUCTION DOCUMENTS	09/08/2023
MARK	DESCRIPTION	DATE

PROJECT NO: 20232950  
DRAWN BY: RLH/WLM  
CHECKED BY: JWD

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DRAWING TITLE  
PLANS AND SECTIONS  
- LOUNGE DECK

S401

VERIFY ALL DIMENSIONS IN FIELD

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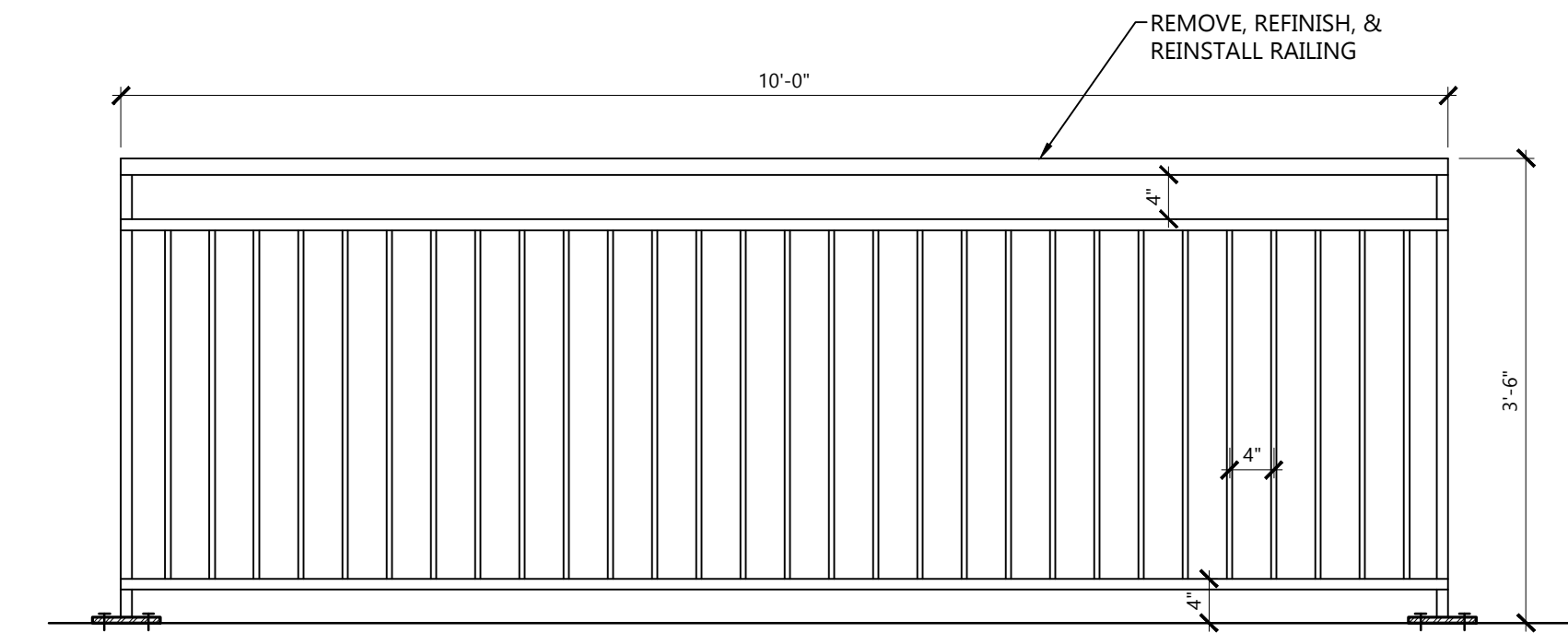
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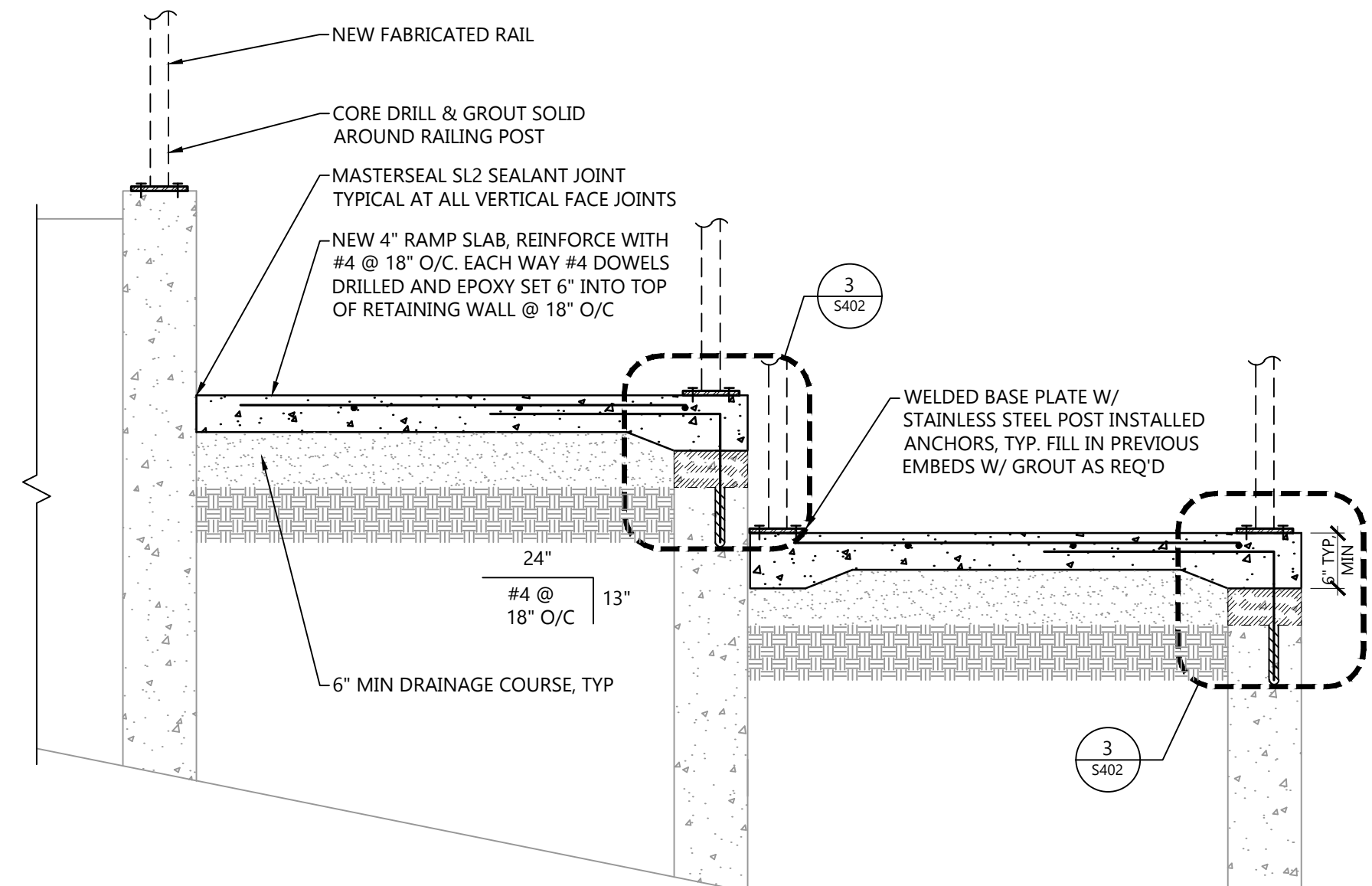
DRAWING TITLE  
DETAILS - LOUNGE  
DECK

S402



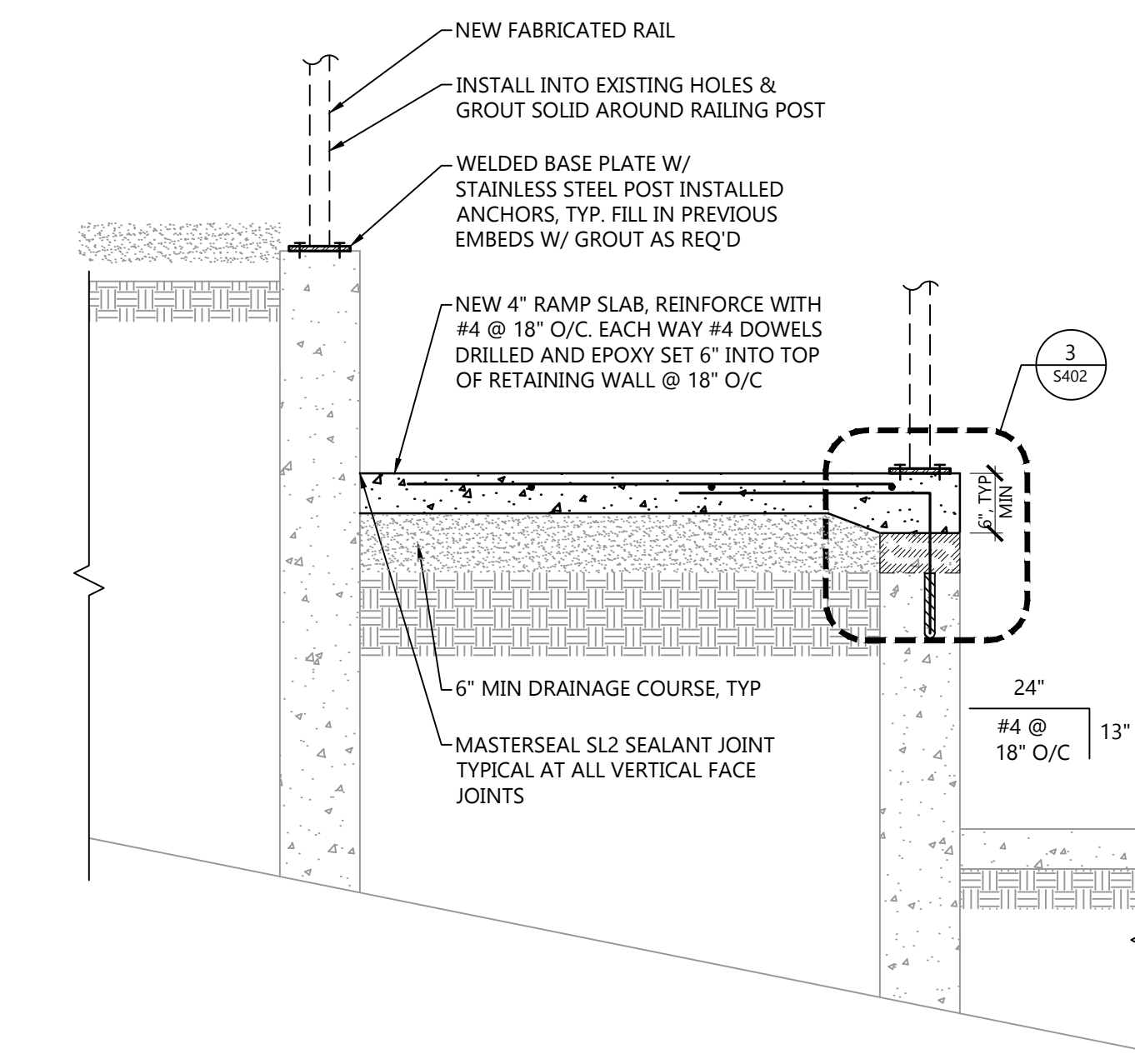
12 TYPICAL RAMP END GUARD

S402 3/4" = 1'-0"



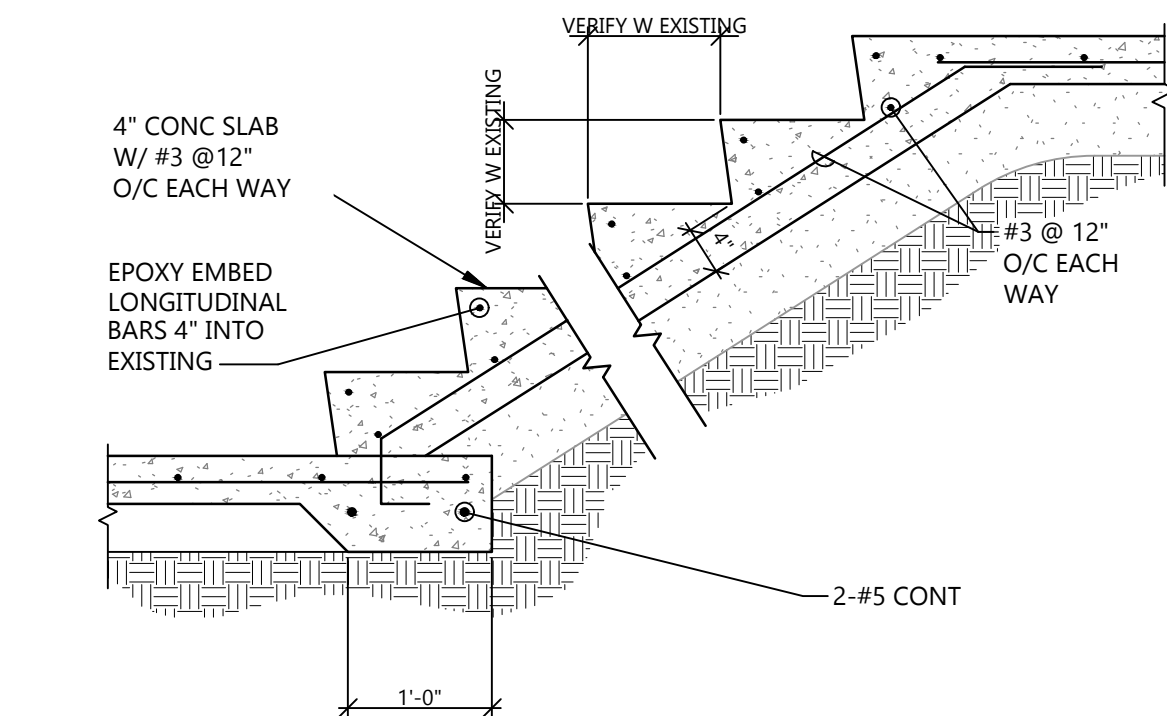
11 SECTION AT RAMP

S402 3/4" = 1'-0"



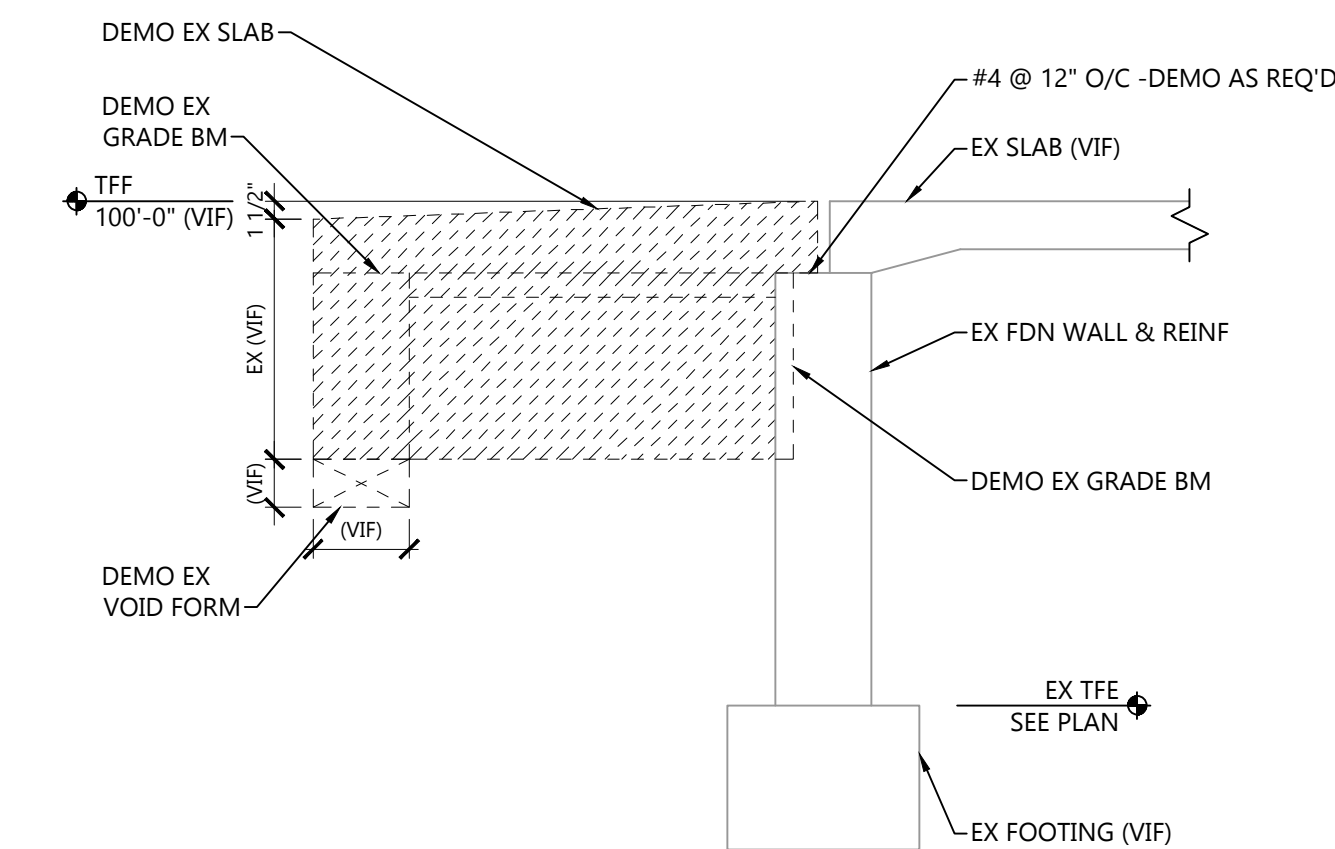
10 SECTION @ RAMP

S402 3/4" = 1'-0"



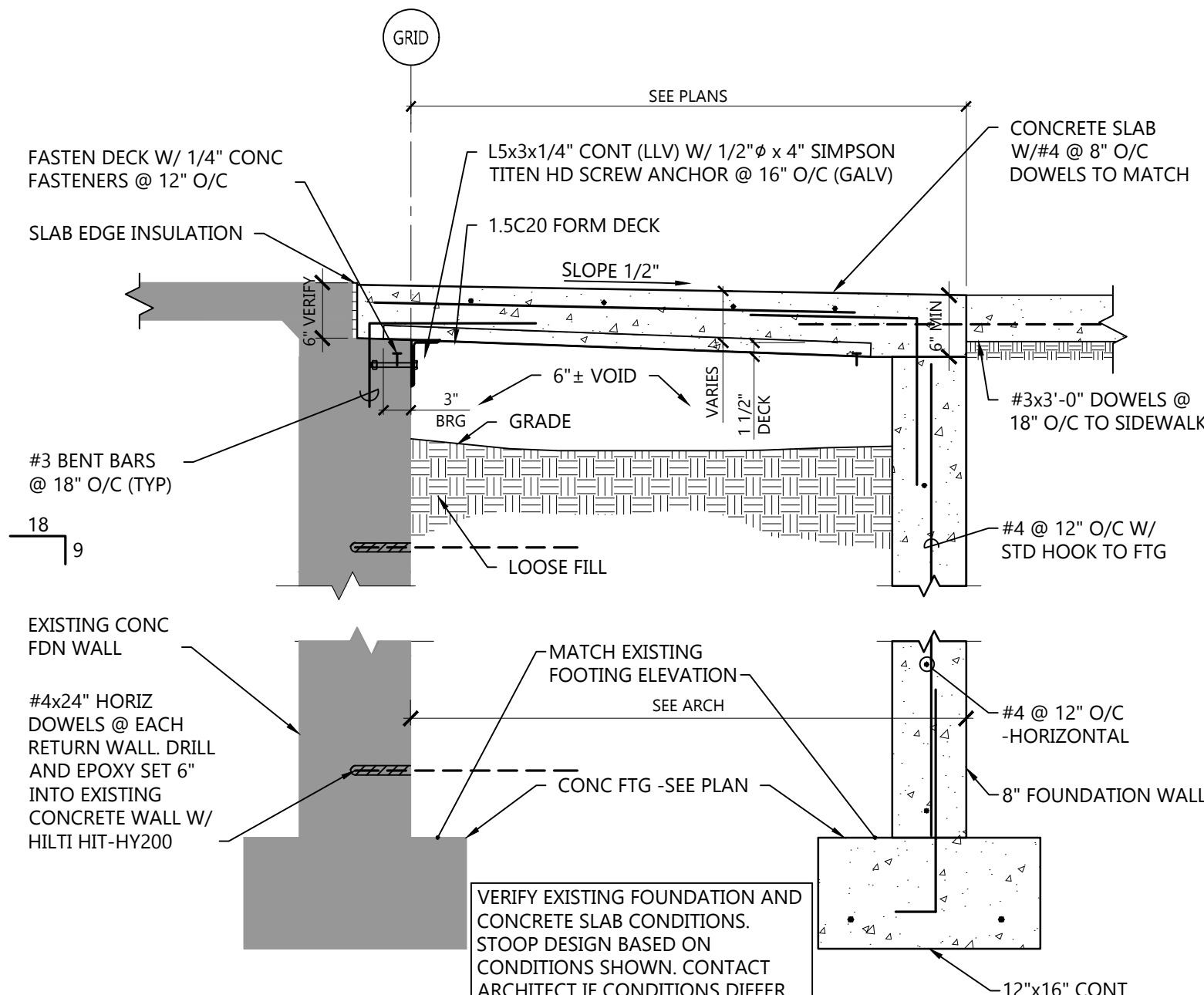
9 CONCRETE STAIR SECTION

S402 3/4" = 1'-0"



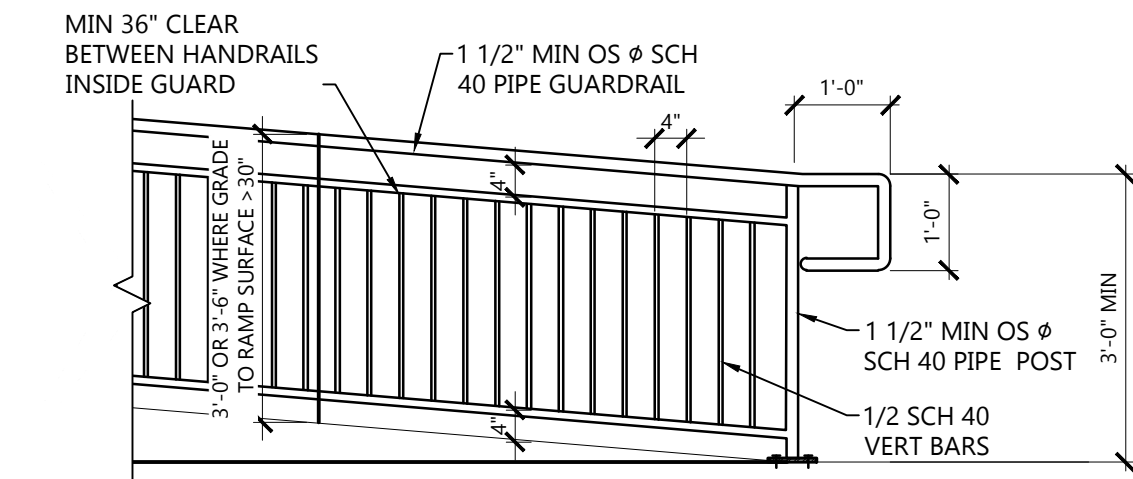
8 EXISTING STOOP DEMO

S402 3/4" = 1'-0"



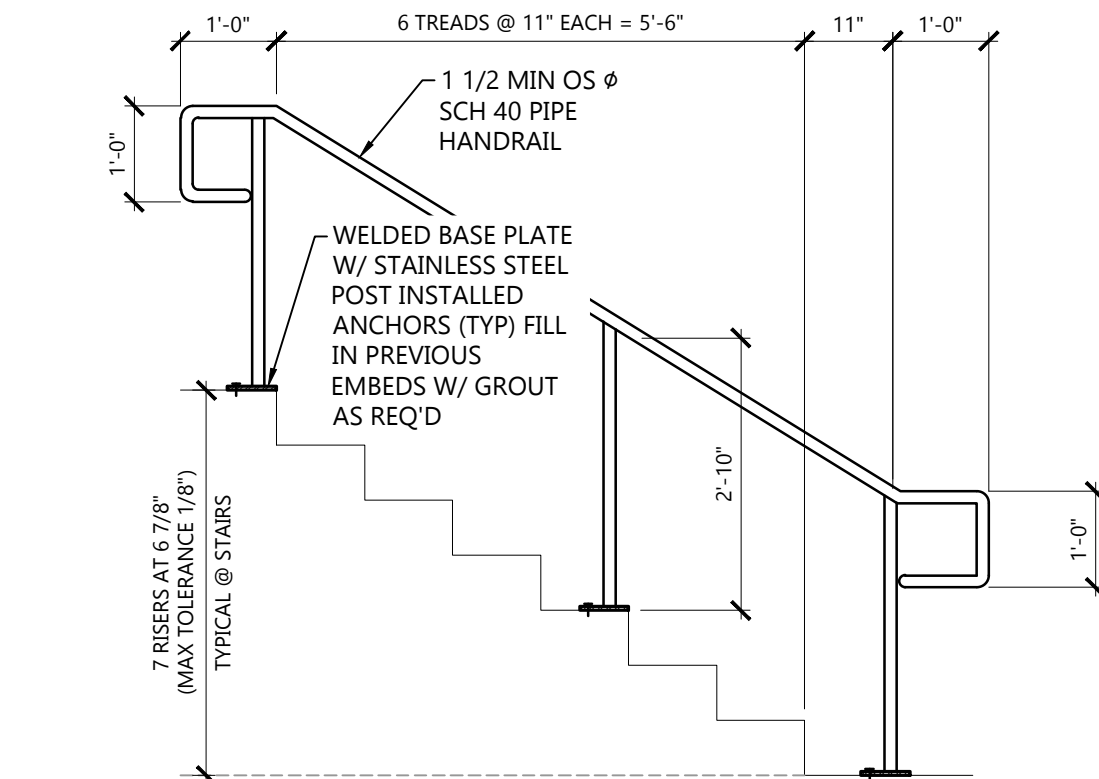
7 TYPICAL STOOP DETAIL

S402 3/4" = 1'-0"



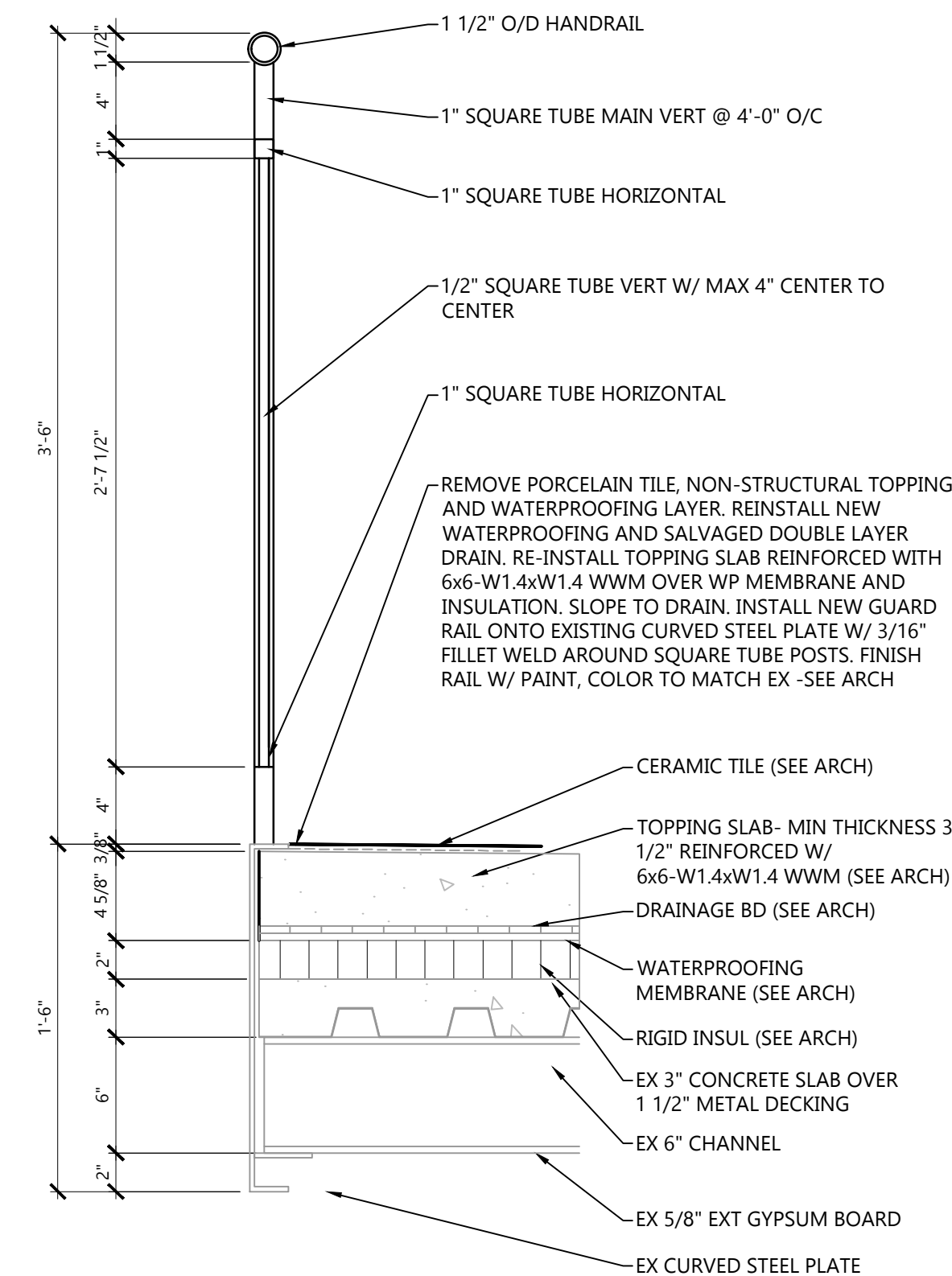
6 TYP GUARDRAIL AT RAMP

S402 1/2" = 1'-0"



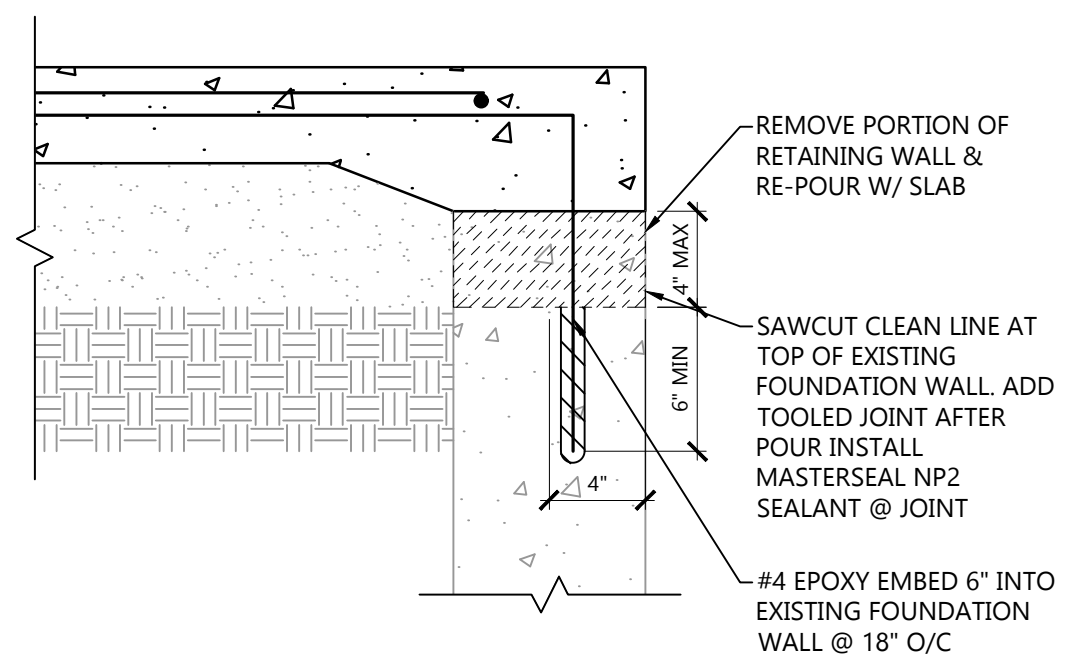
5 TYP HANDRAIL

S402 1/2" = 1'-0"



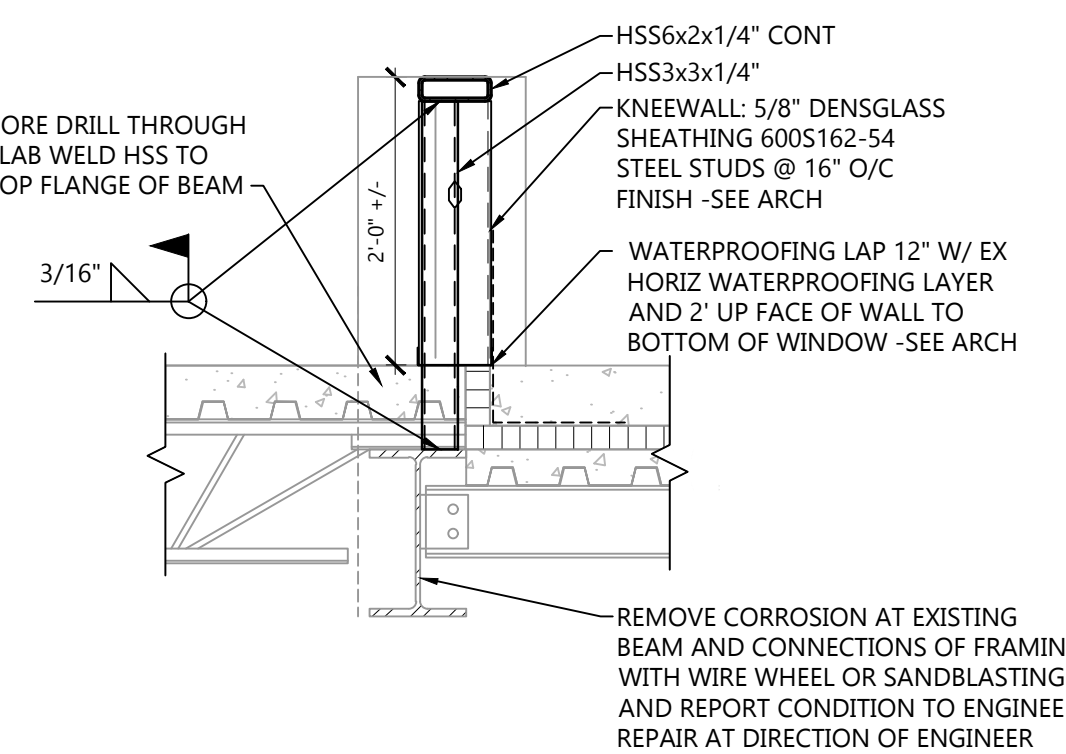
4 EX SLAB EDGE DECK W/ NEW GUARDRAIL

S402 1 1/2" = 1'-0"



3 RAMP SLAB AT WALL DETAIL

S402 1 1/2" = 1'-0"



2 BEAM/KNEEWALL SECTION

S402 3/4" = 1'-0"

1 NOT USED

S402



File Location\\N\\2023\\20232950 - BLCT TMCC Stair-Ramp Repair\\Drawings\\20232950-S403.dwg  
Plot Date: 8-Sep-23

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REPLACEMENT

CITY BELCOURT  
STATE NORTH DAKOTA

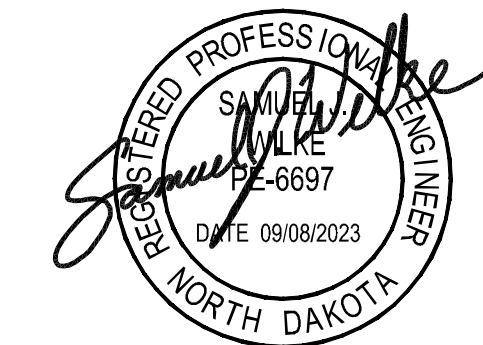
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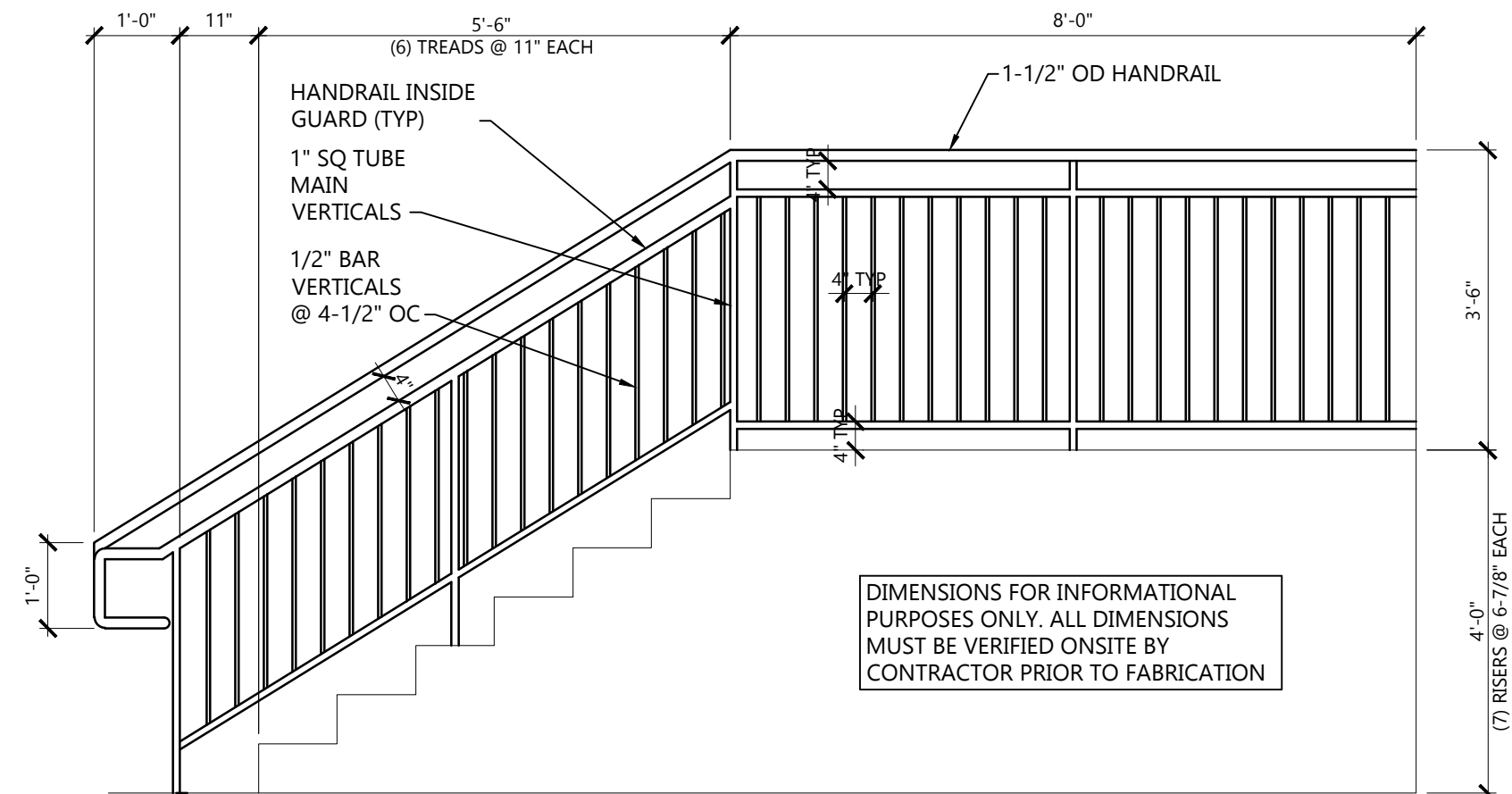
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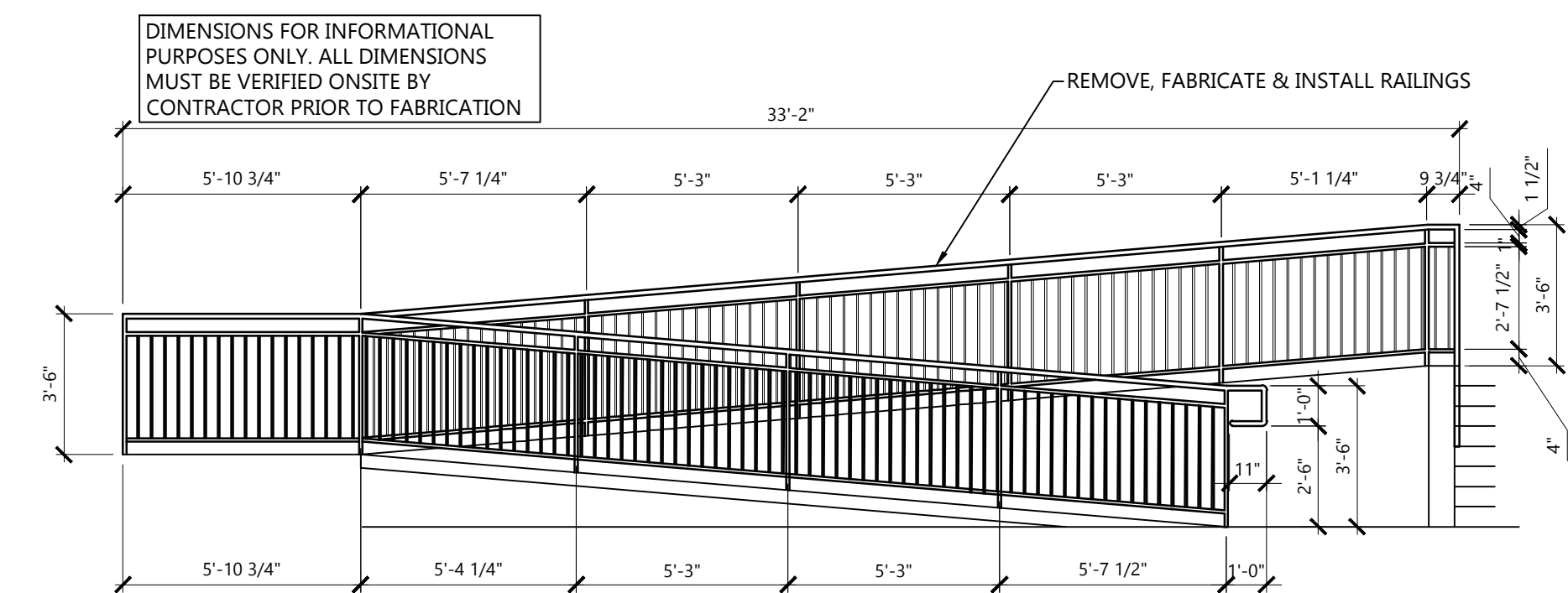


DRAWING TITLE  
DETAILS - LOUNGE  
DECK

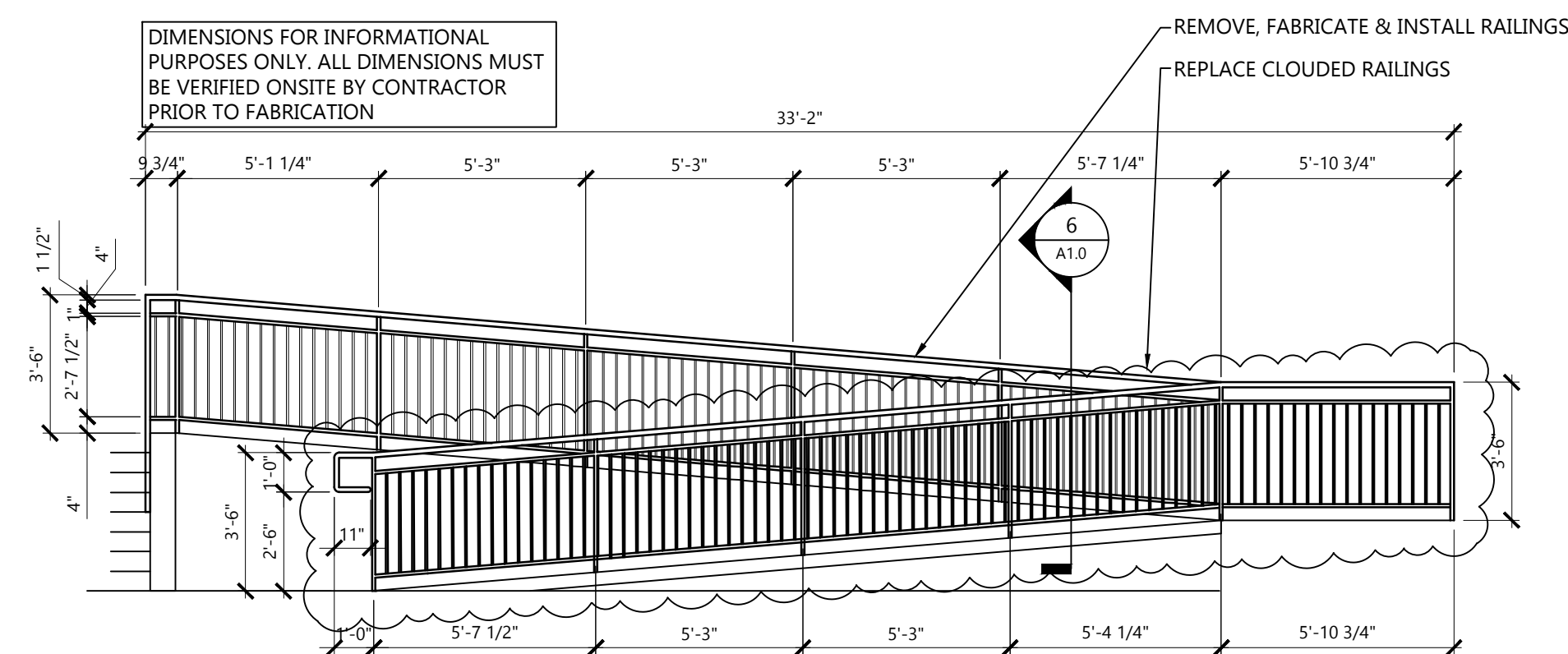
S403



3 EXTERIOR STAIR  
S403 1/2" = 1'-0"

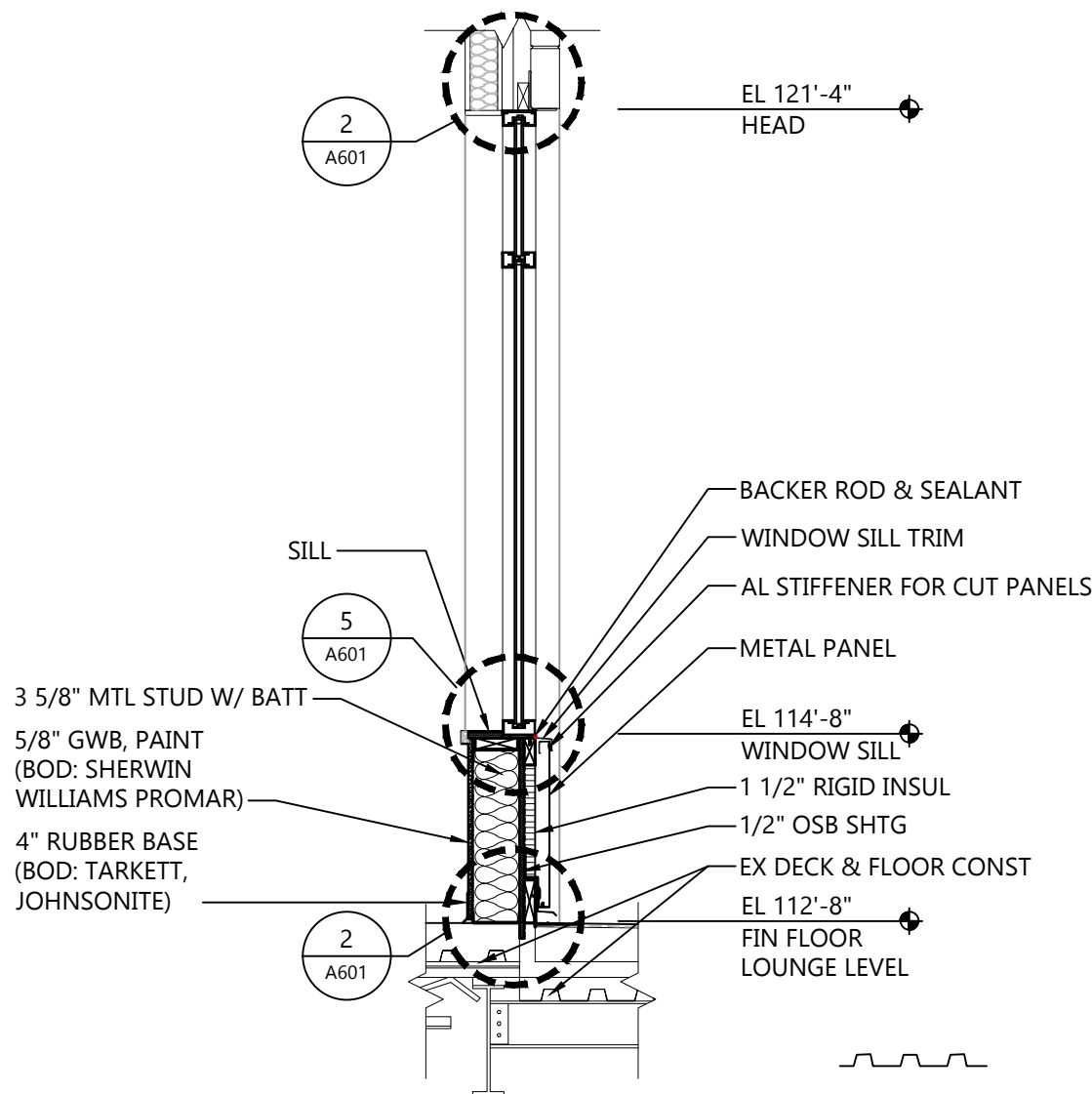


2 EAST (NORTH SET)  
S403 1/4" = 1'-0"

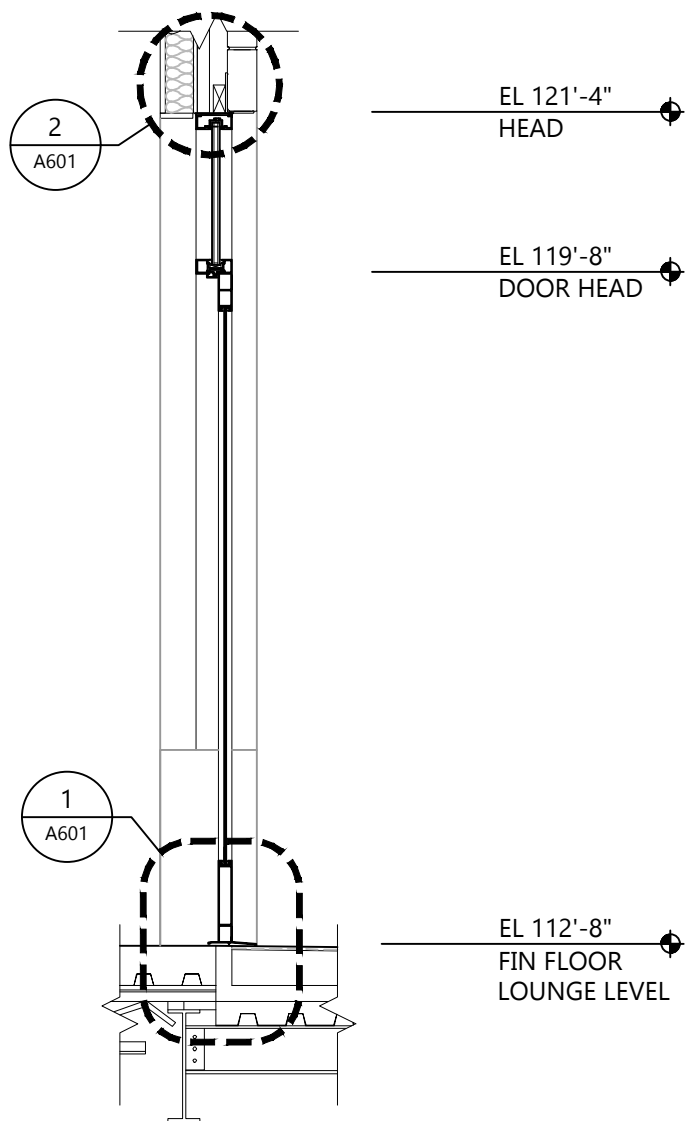


1 EAST (SOUTH SET)  
S403 1/4" = 1'-0"

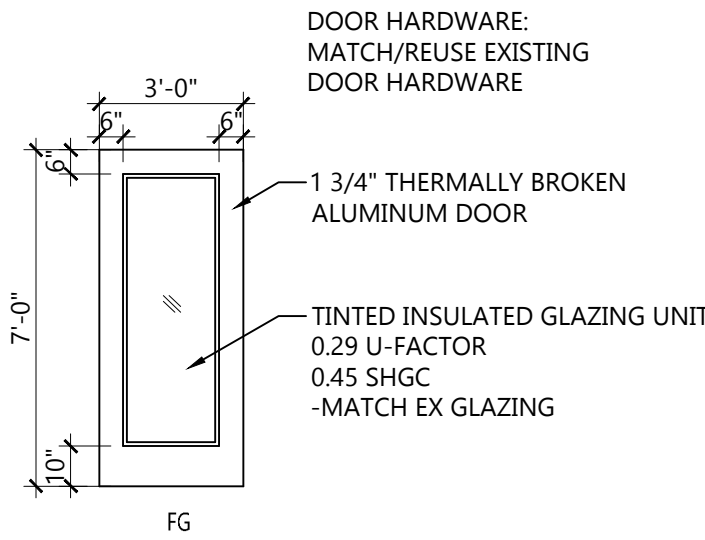
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Plot Date: 8-Sep-23



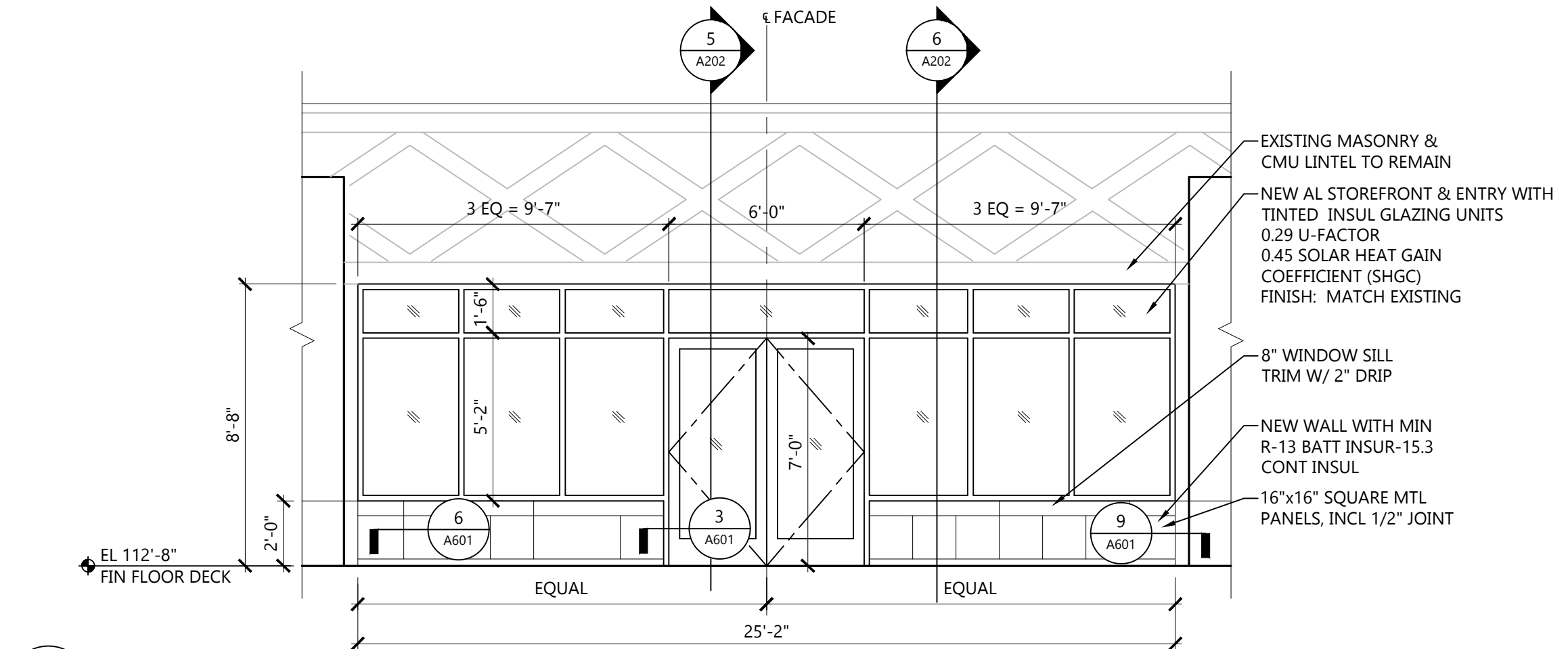
6 WALL SECTION @ KNEE WALL  
A202 1/2" = 1'-0"



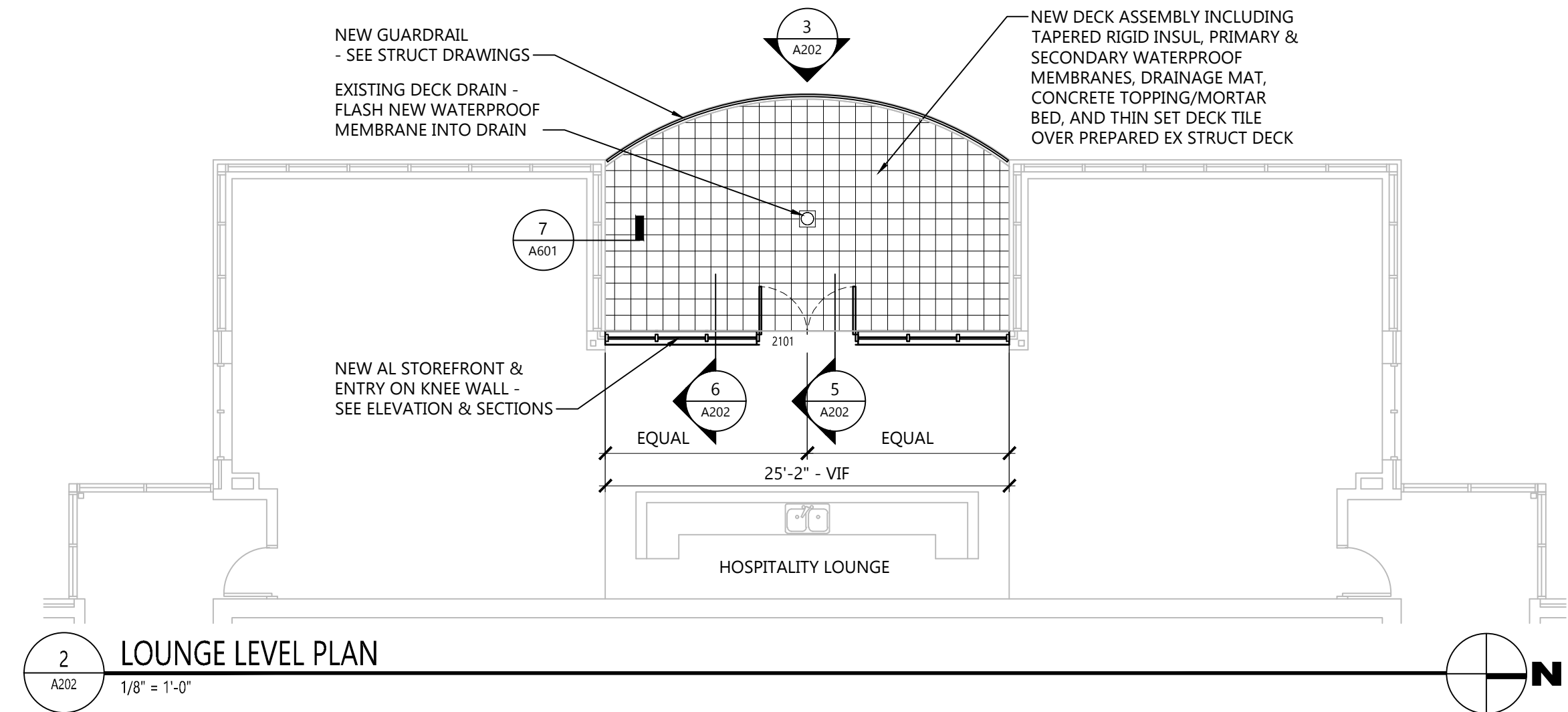
5 WALL SECTION @ DOOR  
A202 1/2" = 1'-0"



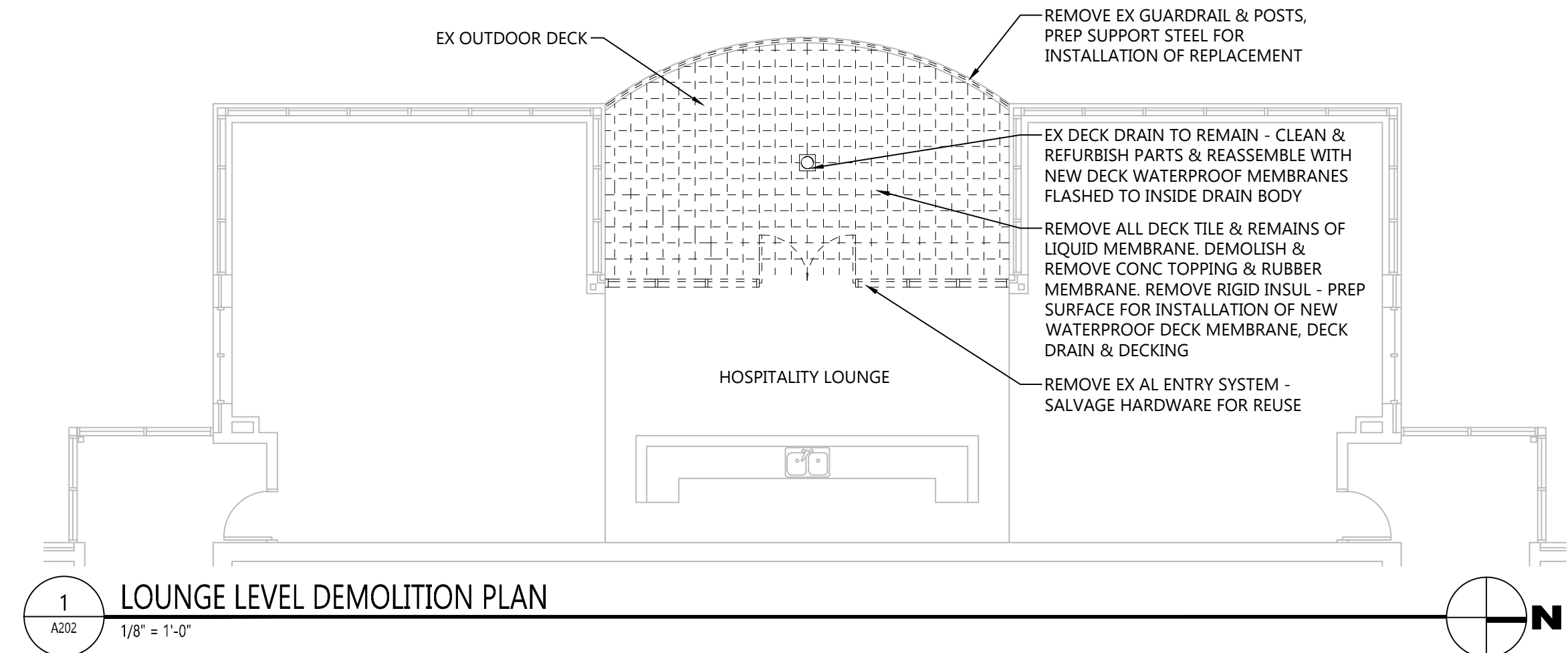
4 DOOR PANEL ELEVATIONS  
A202 1/4" = 1'-0"



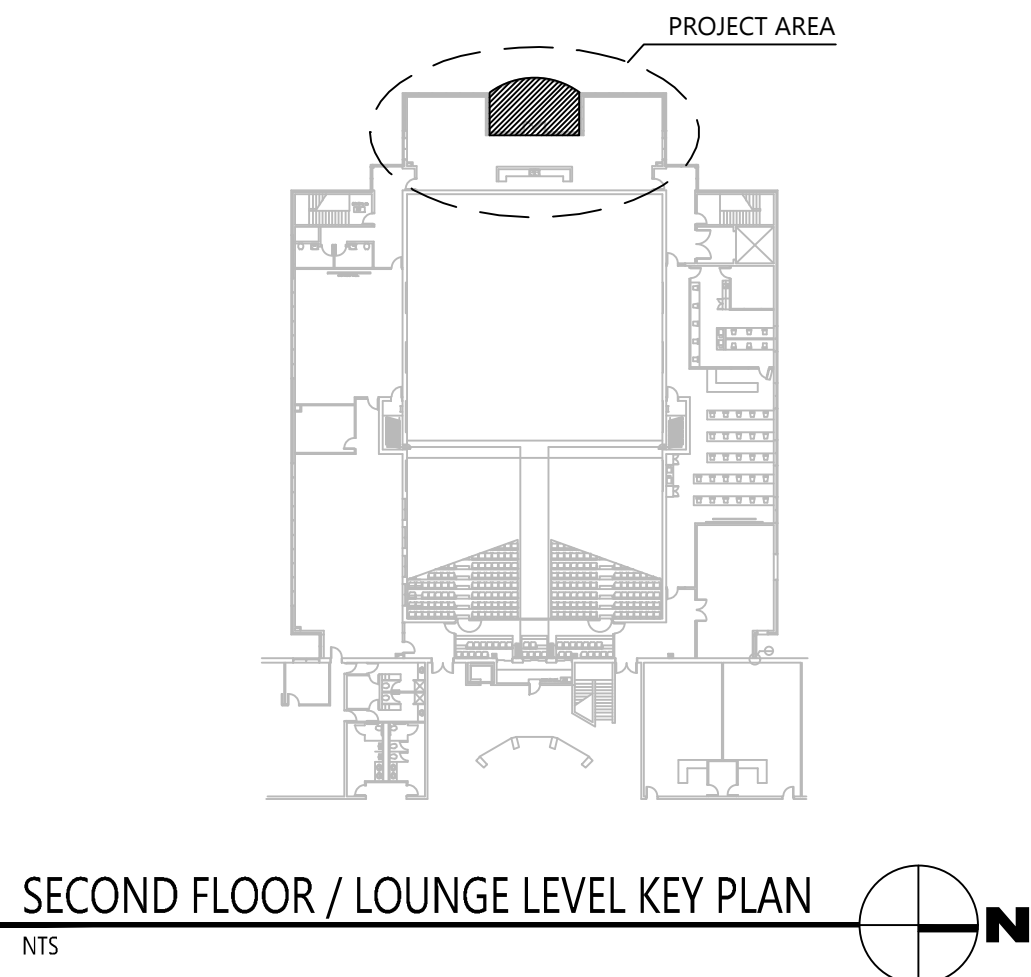
3 EXTERIOR ELEVATION  
A202 1/4" = 1'-0"



2 LOUNGE LEVEL PLAN  
A202 1/8" = 1'-0"



1 LOUNGE LEVEL DEMOLITION PLAN  
A202 1/8" = 1'-0"



SECOND FLOOR / LOUNGE LEVEL KEY PLAN  
NTS

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PROJECT DESCRIPTION  
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REPLACEMENT

CITY BELCOURT  
STATE NORTH DAKOTA

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the laws of the State of North Dakota.

Signature: *Alane J. J. J.*  
Date: 09/08/2023 REG. NO.: 1581

DRAWING TITLE  
LOUNGE LEVEL PLANS  
& DETAILS

A202

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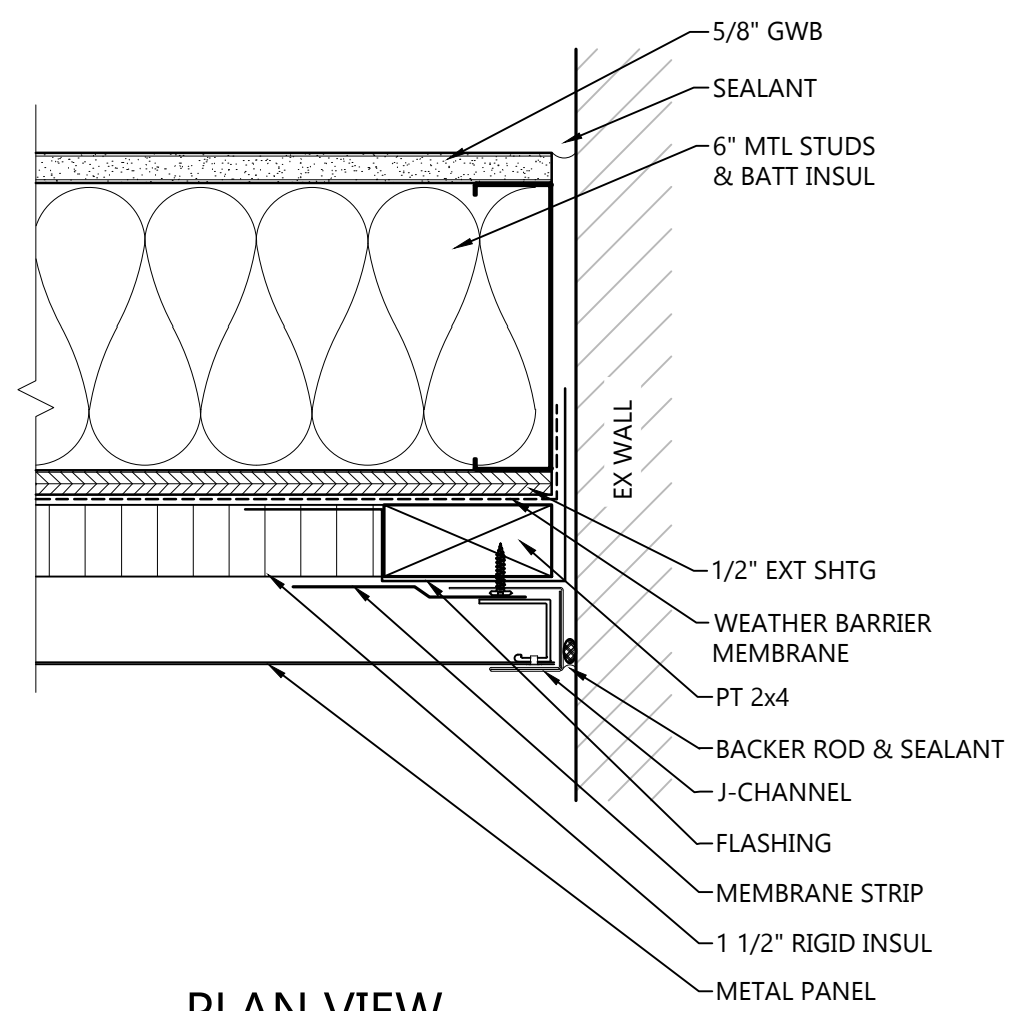
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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the laws of the State of North Dakota.

Signature: *Alane Juy*  
Date: 09/08/2023 REG. NO.: 1581

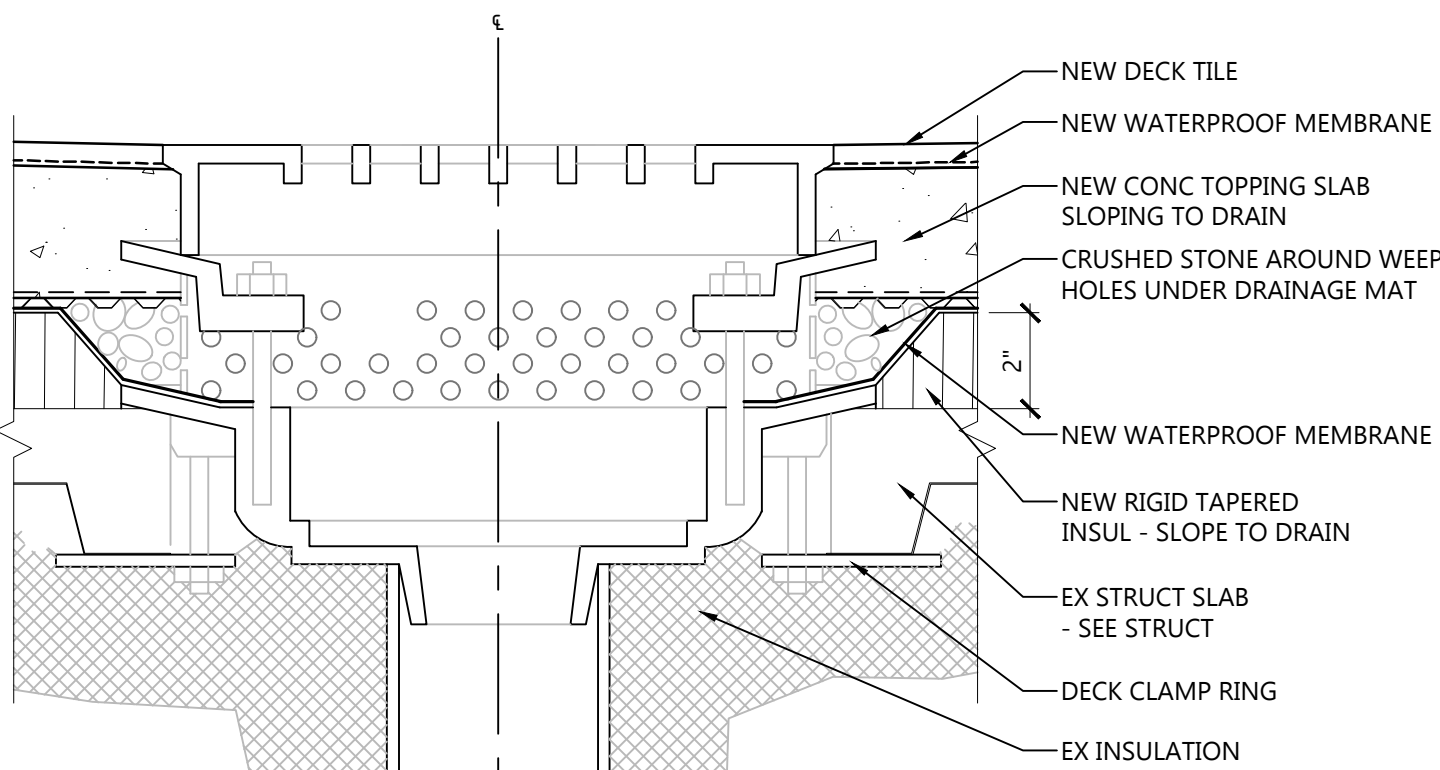
DRAWING TITLE  
DETAILS

A601



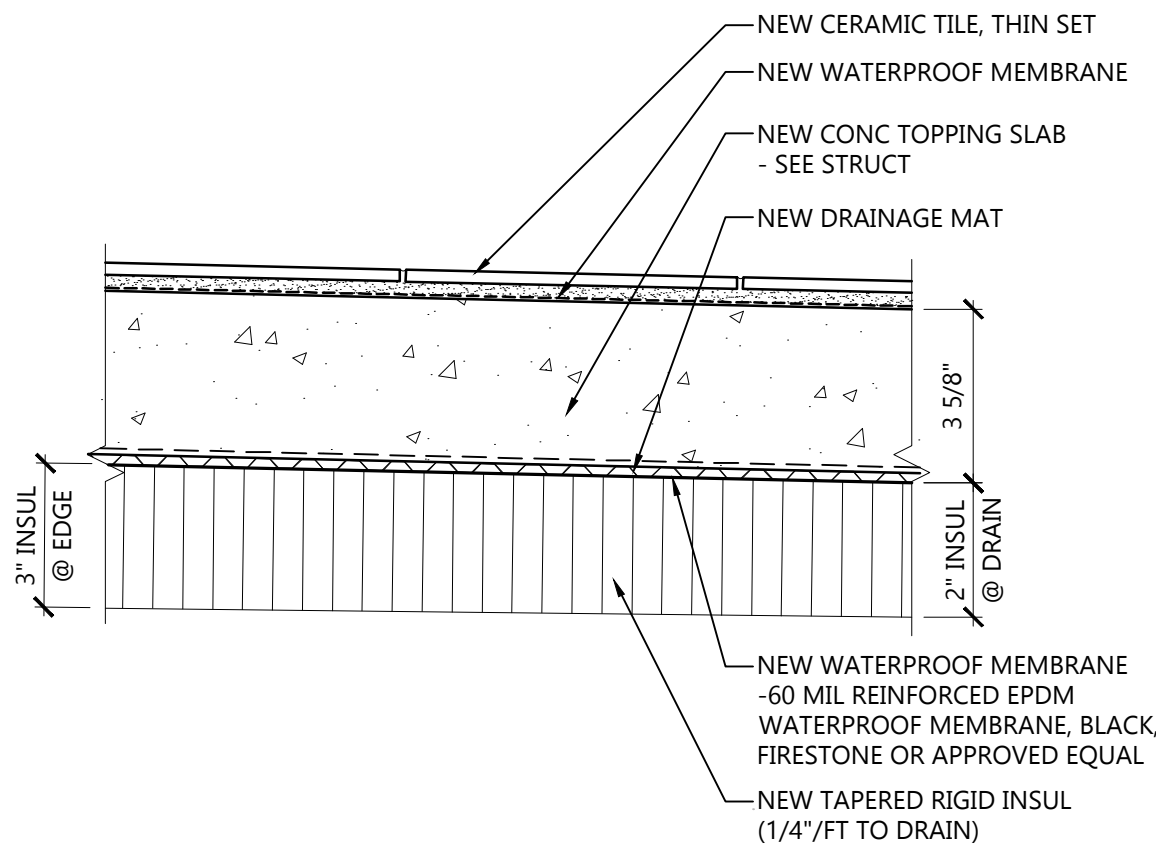
PLAN VIEW

9  
A601  
3" = 1'-0"



SYMMETRICAL  
ABOUT CENTERLINE

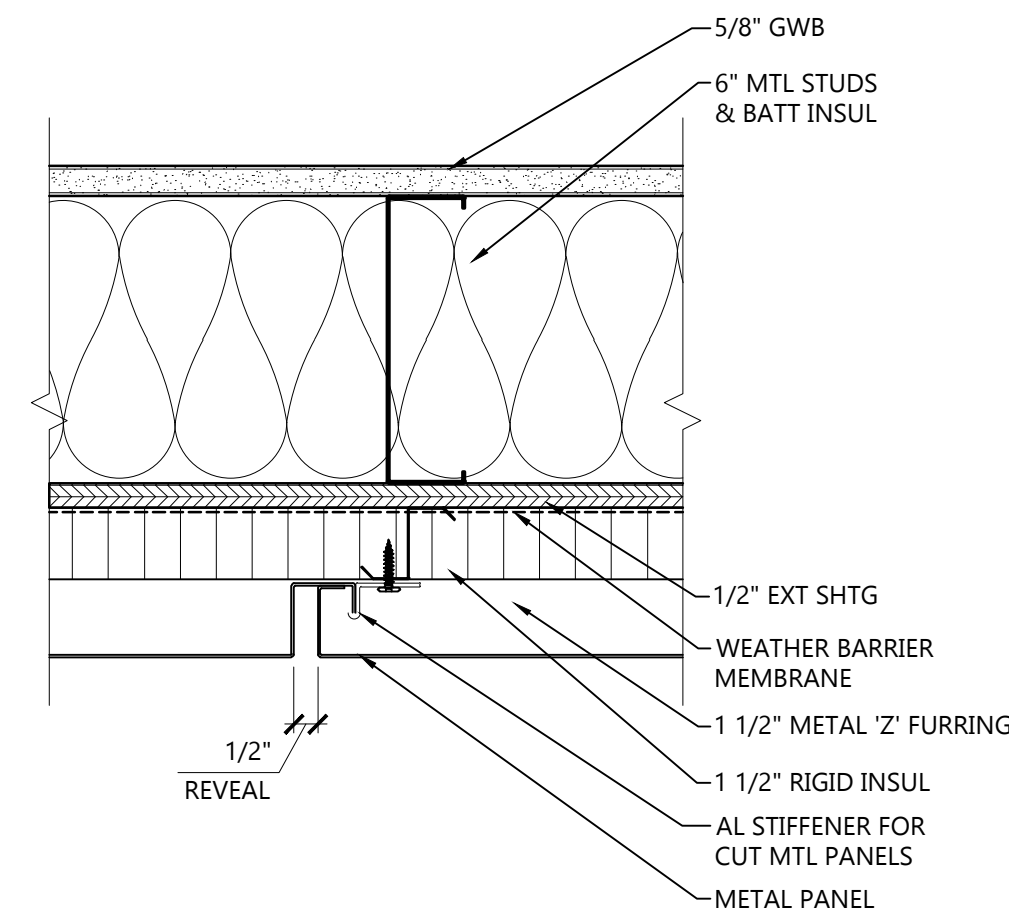
8  
A601  
3" = 1'-0"



SIM TO TCNA ASSEMBLY F103-B

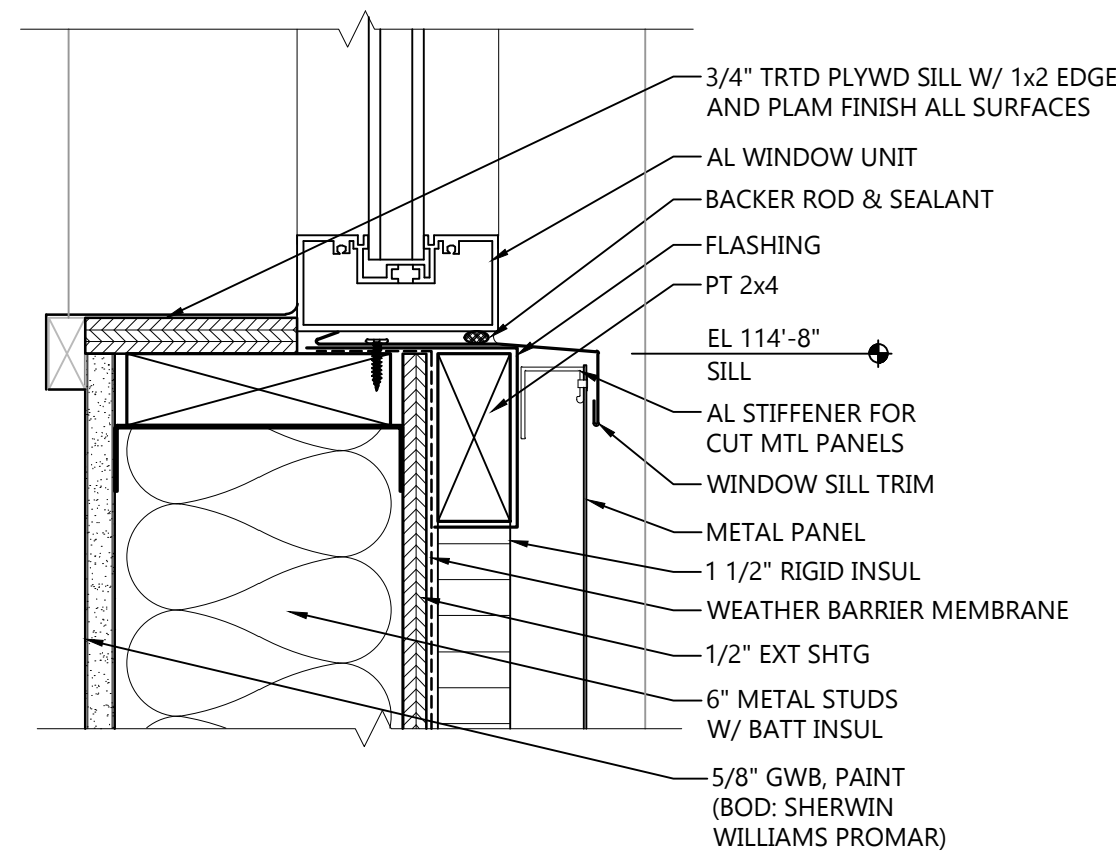
10  
A601  
3" = 1'-0"

7  
A601  
3" = 1'-0"

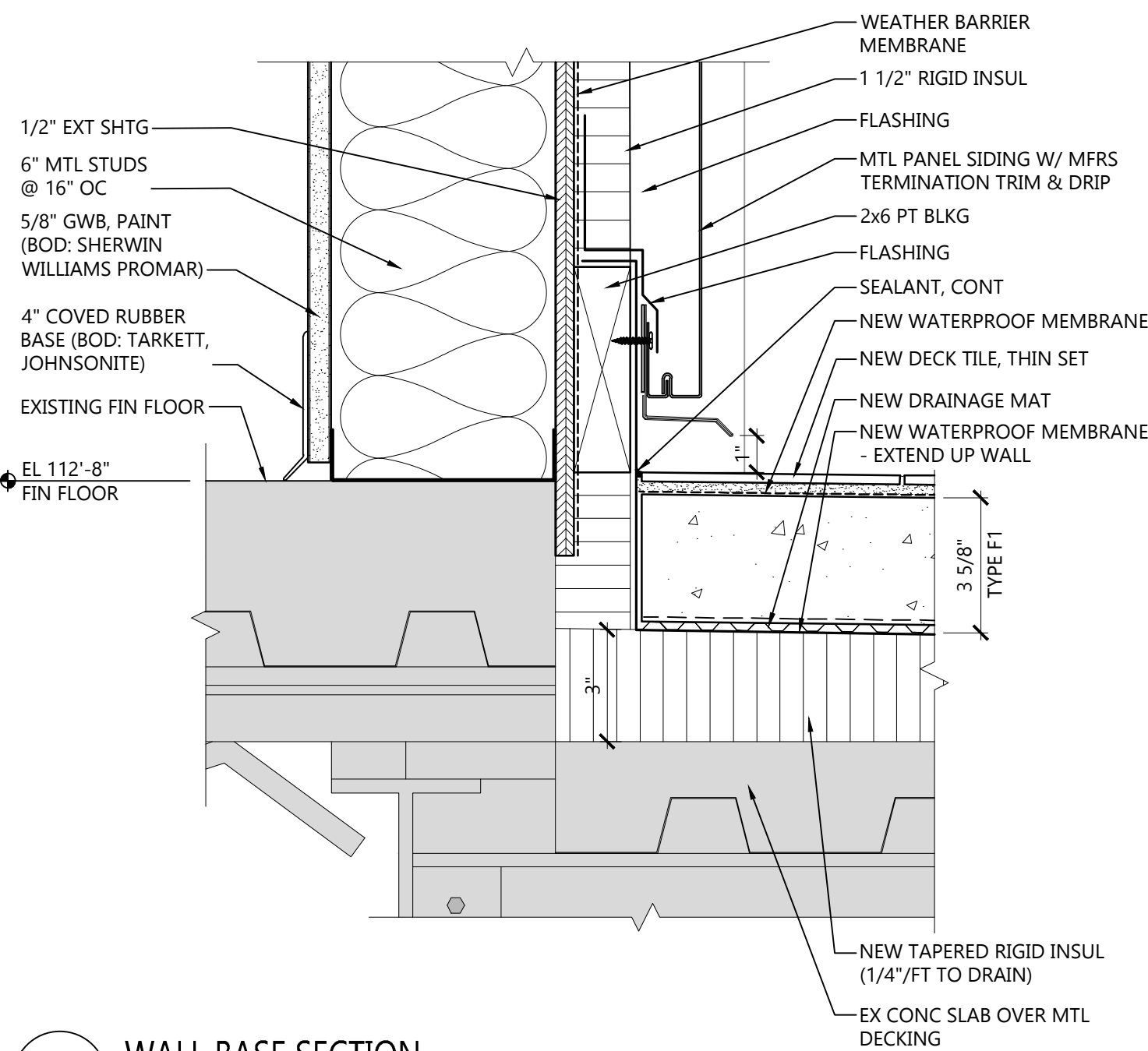


PLAN VIEW

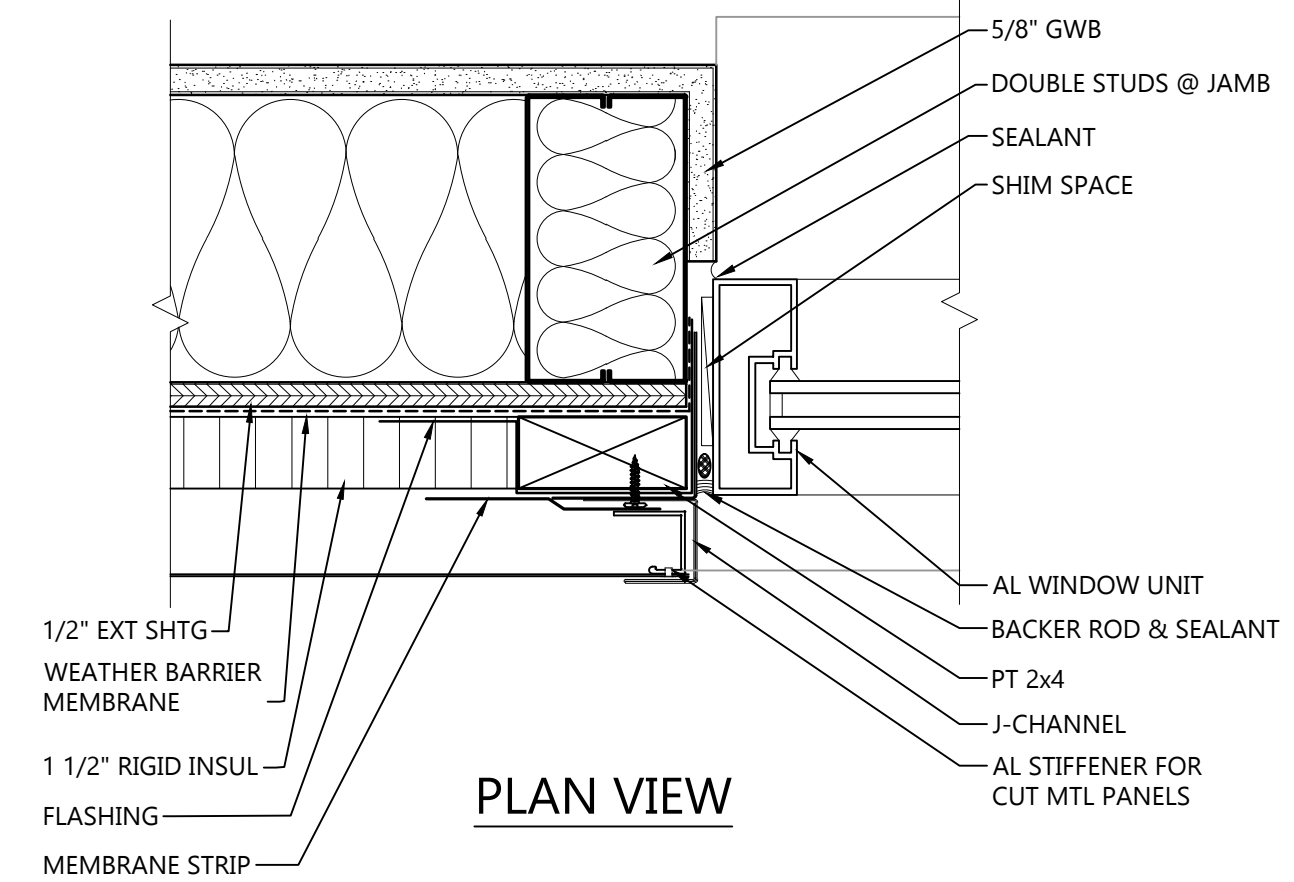
6  
A601  
3" = 1'-0"



5  
A601  
3" = 1'-0"

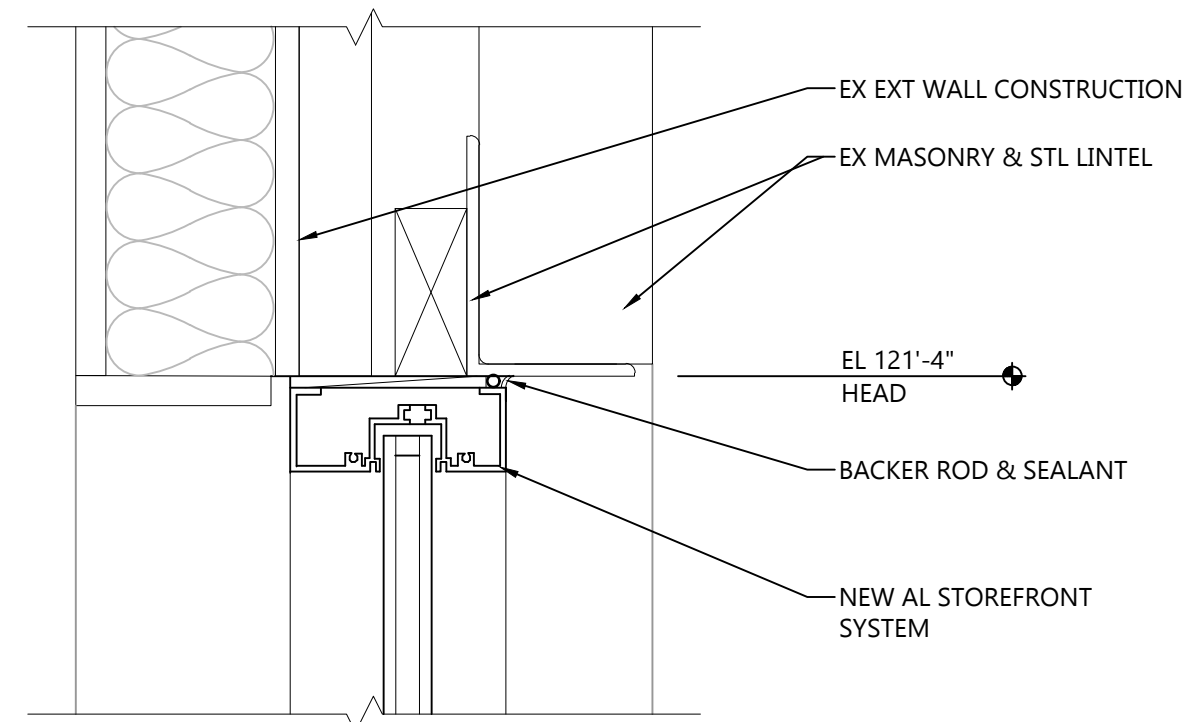


4  
A601  
3" = 1'-0"

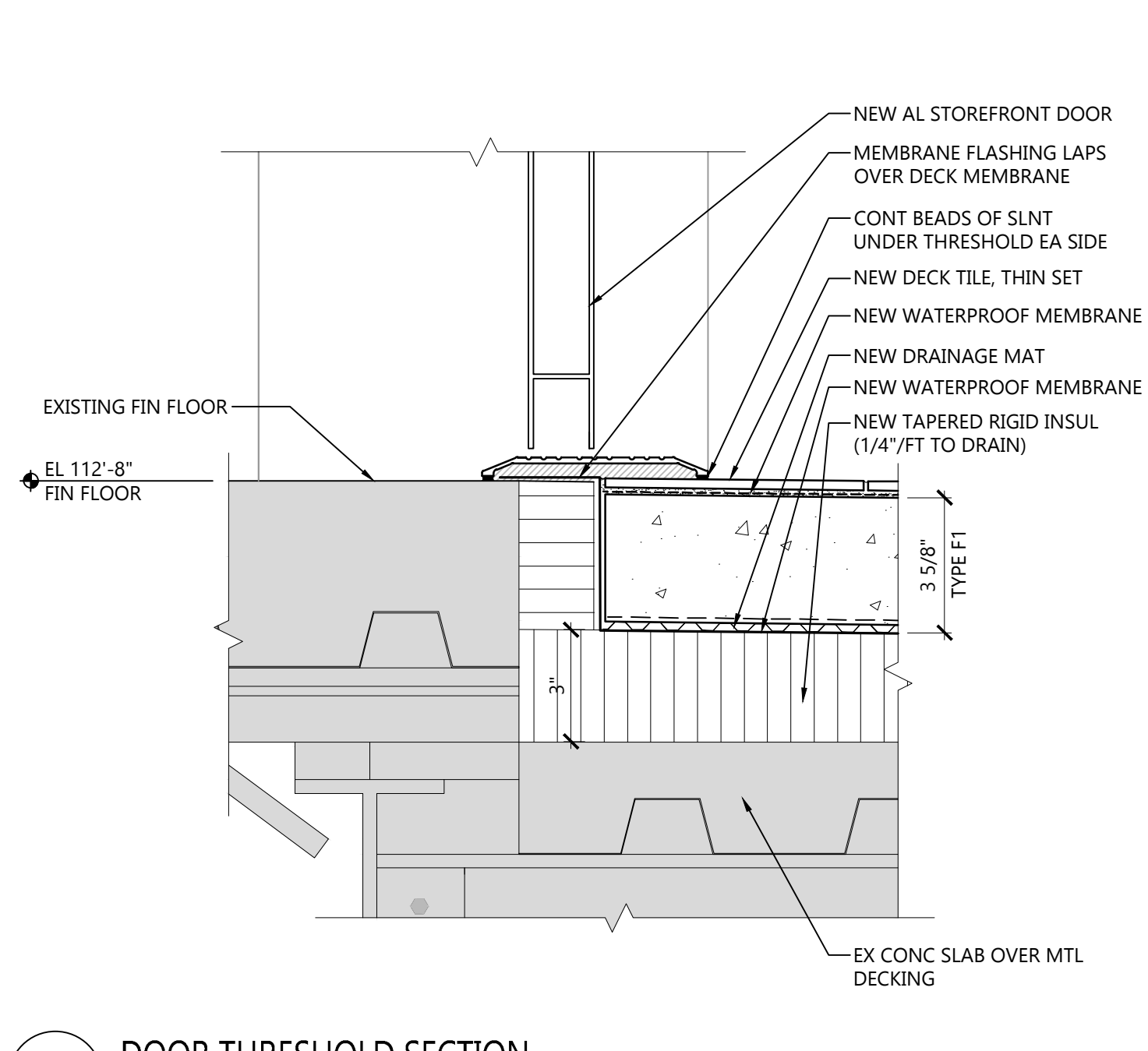


PLAN VIEW

3  
A601  
3" = 1'-0"



2  
A601  
3" = 1'-0"



1  
A601  
3" = 1'-0"