

NEW RESTROOMS

ORCHARD FARM HIGH SCHOOL

SAINT CHARLES, MISSOURI

PROJECT NO.: 25-09D

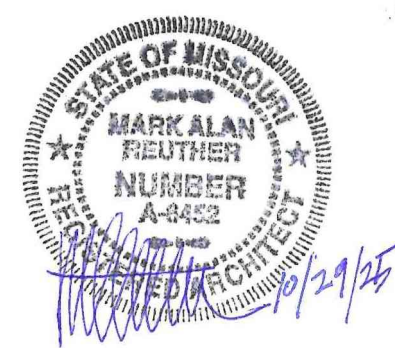
DATE ISSUED

10-29-2025

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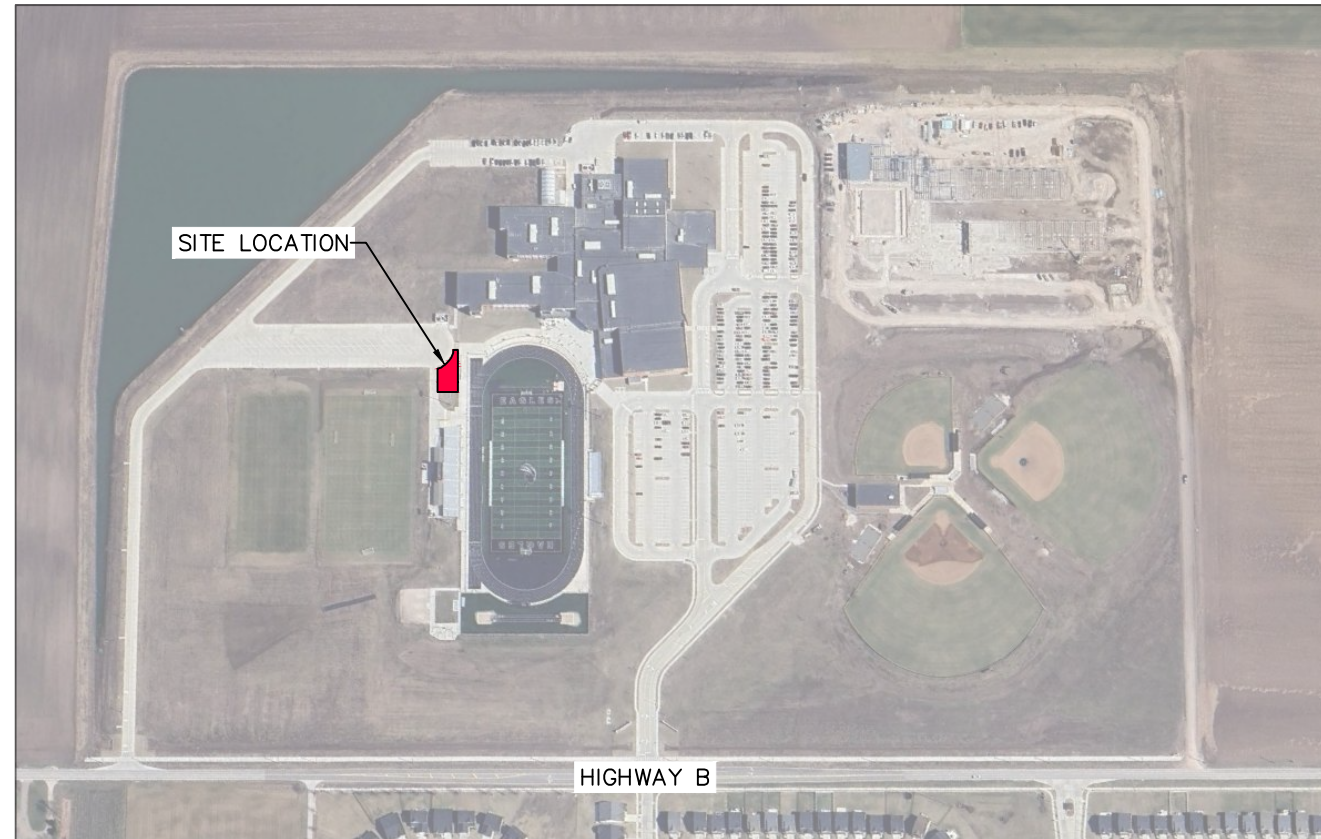
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LOCATION MAP
NOT TO SCALE

BUILDING CODE INFORMATION	
PROJECT NAME:	NEW RESTROOMS
PROJECT LOCATION:	ORCHARD FARM HIGH SCHOOL 2555 HIGHWAY B ST. CHARLES, MO 63301
PROJECT DESCRIPTION:	NEW RESTROOM BUILDING AT EXISTING ATHLETIC FIELD
BUILDING CODES IN EFFECT:	2021 INTERNATIONAL BUILDING CODE 2021 INTERNATIONAL PLUMBING CODE 2021 INTERNATIONAL MECHANICAL CODE 2020 NATIONAL ELECTRICAL CODE
BUILDING AREA:	MAIN LEVEL: 755 SQ FT
TYPE OF CONSTRUCTION:	TYPE II-B (NON-COMBUSTIBLE)
USE GROUP:	E

Set No.:



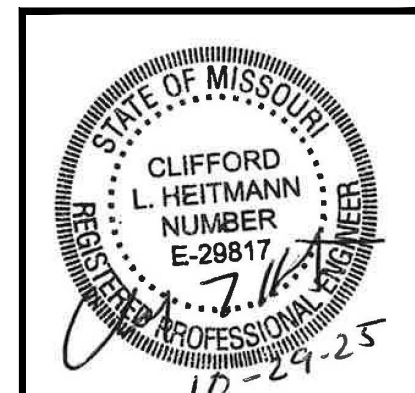
LOCATION MAP

A SITE BUILDING PACKAGE FOR NEW RESTROOM ADDITION AT ORCHARD FARM HIGH SCHOOL

A TRACT OF LAND BEING
PART OF U.S. SURVEYS 238, 239, 240, 241,
242, 243, 244 AND 246
OF ST. CHARLES COMMON FIELD
TOWNSHIP 47 NORTH, RANGE 5 EAST
ST. CHARLES COUNTY, MISSOURI

SHEET INDEX:

C1.0	COVER SHEET
C2.0	DEMOLITION PLAN
C3.0	SITE PLAN
C3.1	SITE PLAN
C4.0	GRADING PLAN
C5.0	SITE DETAILS



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CITY OF ST. CHARLES GENERAL NOTES

- ALL IMPROVEMENTS CONSTRUCTED HEREIN SHALL COMPLY WITH THE CODE OF ORDINANCES OF THE CITY OF ST. CHARLES.
- IF PROPERTY IS GREATER THAN 1 ACRE, A LAND DISTURBANCE PERMIT FROM THE MISSOURI DEPARTMENT OF NATURAL RESOURCES IS REQUIRED PRIOR TO COMMENCING ANY DEMOLITION, CLEARING OR CONSTRUCTION ON-SITE. PROVIDE COPY OF APPROVAL FROM THE DEPARTMENT OF NATURAL RESOURCES TO THE ENGINEERING DEPARTMENT. (PERMIT #MORA26889).
- SILTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE SWPPP PLAN. ADDITIONAL SILTATION CONTROL MAY BE REQUIRED AS DIRECTED BY THE CITY ENGINEER. (CODE SECTION 510.090.A.2.)
- WHEN GRADING OPERATIONS ARE COMPLETED OR SUSPENDED FOR MORE THAN 30 DAYS, PERMANENT GRASS MUST BE ESTABLISHED TO CONTROL EROSION. (CODE SECTION 510.090.A.4.A)
- ALL MUD AND DEBRIS FROM CONSTRUCTION SITE TO BE KEPT OFF OF CITY MAINTAINED STREETS. STREETS SHALL BE SWEEPED TWICE DAILY. (CODE SECTION 510.090.A.5)
- ADA ACCESSIBLE SPACES CANNOT HAVE A GRADE IN EXCESS OF 2% IN ANY DIRECTION. (CODE SECTION 350.397.B.4)
- ADA ACCESSIBLE ROUTES AND RAMPS CANNOT HAVE A CROSS SLOPE IN EXCESS OF 2% (CODE SECTION 350.397.B.4)
- ALL WATER MAIN CONSTRUCTION INCLUDING VALVES, SLEEVES, METERS, HYDRANTS AND FITTINGS MUST CONFORM TO CITY OF ST. CHARLES WATER SPECIFICATIONS.
- THE MINIMUM WATER MAIN SIZE IS EIGHT INCHES. (CODE SECTION 205.070.A.23.)
- EACH WATER SERVICE CONNECTION SHALL BE INDIVIDUALLY METERED. (MINIMUM DESIGN STANDARDS FOR MISSOURI COMMUNITY WATER SYSTEMS)
- MINIMUM SANITARY SEWER LATERAL SIZE IS SIX INCHES. (MSD RULES AND REGULATION AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY SEWER AND STORMWATER DRAINAGE FACILITIES)
- SANITARY SEWER LATERALS SHALL NOT CROSS A PROPERTY LINE AND MUST BE CONNECTED TO THE PUBLIC SANITARY SEWER SYSTEM IN CITY EASEMENT OR PUBLIC RIGHT-OF-WAY. (CODE SECTION 705.110.A.1.(2))
- ALL NEW SEWER LATERALS MUST HAVE CONDUCTIVE TYPE PIPE LOCATOR/TRACER WIRE SHALL BE INSTALLED TO LOCATE ALL SEWER LATERALS. THE COVER OF THE TRACER WIRE SHALL BE GREEN. ALL WORK SHALL CONFORM TO CITY STANDARDS. (MISSOURI STATE STATUTE 319.033)
- WHEN A SANITARY SEWER LATERAL CROSSES OVER A WATER LINE, A MINIMUM VERTICAL CLEARANCE OF 18" SHALL BE PROVIDED. IF THIS CLEARANCE IS NOT POSSIBLE, THEN EITHER THE WATER LINE OR THE SEWER LINE SHALL BE PROTECTED BY MECHANICAL JOINT PIPE OR CASED IN CONTINUOUS CASING UNTIL THERE IS A 10' HORIZONTAL CLEARANCE BETWEEN THE TWO LINES.
- ALL SANITARY SEWER CONSTRUCTION MUST CONFORM TO THE LATEST VERSION OF THE METROPOLITAN ST. LOUIS SEWER DISTRICTS' STANDARDS AND SPECIFICATIONS.
- ALL STREETS SHALL BE A MINIMUM SEVEN (7) INCH (NON-REINFORCED) ON FIVE (5) INCHES MODIFIED TYPE 5 AGGREGATE BASE ON PREPARED SUBGRADE. (CODE SECTION 405.240.A.3)
- SIDEWALKS, NOT PART OF AN APPROACH, SHALL BE FIVE (5) FEET WIDE, FOUR (4) INCHES CONCRETE (NON-REINFORCED) ON FOUR (4) INCHES MODIFIED TYPE 5 AGGREGATE BASE ON PREPARED SUBGRADE. (CODE SECTION 505.280, ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION DRAWING C08.43)
- FLOWABLE FILL BACKFILL SHALL BE USED FOR ALL BACKFILL ON SEWER TRENCHES THAT ARE UNDER CITY STREETS, FROM THE TOP OF THE BEDDING MATERIAL (6 INCHES ABOVE THE PIPE) TO THE SURFACE, OR TO WITHIN ONE FOOT OF GRADE IN LANDSCAPED AREAS. (CODE SECTION 510.280.A.11)
- GRANULAR BACKFILL SHALL BE USED FOR BACKFILL ON SEWER TRENCHES UNDER PROPOSED PAVED AREAS AND TWO FEET OUTSIDE PROPOSED PAVED AREAS, FROM THE TOP OF THE BEDDING MATERIAL (SIX INCHES ABOVE THE PIPE) TO THE SURFACE OR WITHIN ONE FOOT OF GRADE IN LANDSCAPED AREAS. (CODE SECTION 510.280.A.4.B.(3))
- FLOWABLE FILL IS REQUIRED FOR ALL BACKFILL WITHIN WATER LINE TRENCH UNDER PAVED AREAS.
- EARTH BACKFILL (MEETING MSD STANDARDS) MAY BE USED OUTSIDE OF PAVED AREAS, FROM THE TOP OF THE BEDDING MATERIAL TO THE SURFACE. EARTH BACKFILL SHOULD BE PLACED IN A MAXIMUM 8-INCH LIFTS AND SHALL BE MECHANICALLY COMPACTED TO A MINIMUM DENSITY OF 85% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 90% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99.
- ALL STORM SEWER DESIGN IS TO CONFORM TO THE CITY OF ST. CHARLES DESIGN REQUIREMENTS. (CODE SECTION 510.290)
- ALL STORM SEWER CONSTRUCTION IS TO BE PER THE LATEST EDITION OF THE METROPOLITAN ST. LOUIS SEWER DISTRICT (MSD) STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWERS AND DRAINAGE FACILITIES. (CODE SECTION 510.280)
- FOR NEW SUBDIVISIONS ONLY, ALL JETTING SHALL BE PERFORMED WITH A PROBE ROUTE ON NOT GREATER THAN 7.5-FOOT CENTERS WITH THE JETTING PROBE CENTERED OVER AND PARALLEL WITH THE DIRECTION OF THE PIPE. TRENCH WIDTHS GREATER THAN 10 FEET WILL REQUIRE MULTIPLE PROBES EVERY 7.5- FOOT CENTERS. TRENCH BACKFILL DEPTHS LESS THAN 8 FEET IN DEPTH SHALL BE PROBED TO A DEPTH EXTENDING TO HALF OF THE TRENCH BACKFILL, BUT NOT LESS THAN 3 FEET. TRENCH BACKFILL GREATER THAN 8 FEET IN DEPTH SHALL BE PROBED TO HALF THE DEPTH OF THE TRENCH BACKFILL BUT NOT GREATER THAN 8 FEET. JETTING SHALL BE PERFORMED FROM THE LOW SURFACE TOPOGRAPHIC POINT AND PROCEED TOWARD THE HIGH POINT, AND FROM THE BOTTOM OF THE TRENCH BACKFILL TOWARDS THE SURFACE. THE FLOODING OF EACH JETTING PROBE SHALL BE STARTED SLOWLY ALLOWING SLOW SATURATION OF THE SOIL. WATER IS NOT TO BE ALLOWED TO FLOW AWAY FROM THE DITCH WITHOUT FIRST SATURATING THE TRENCH. CONTRACTOR SHALL IDENTIFY THE LOCATIONS OF SURFACE BRIDGING (THE TENDENCY FOR THE UPPER BACKFILL CRUST TO ARCH OVER THE TRENCH RATHER THAN COLLAPSE AND CONSOLIDATE DURING THE JETTING PROCESS). THE CONTRACTOR SHALL BREAK DOWN THE BRIDGED AREAS USING AN APPROPRIATE METHOD SUCH AS THE WHEELS OR BUCKET OF A BACKHOE. WHEN THE SURFACE CRUST IS COLLAPSED, THE VOID SHALL BE BACKFILLED WITH THE SAME MATERIAL WITHIN THE SUNKEN/JETTED AREA SHALL BE COMPACTED SUCH THAT NO FURTHER SURFACE SUBSIDENCE OCCURS. (CODE SECTION 510.280)
- ALL SANITARY AND STORM PIPE JOINTS AND JOINTS ON NEW STRUCTURES SHALL USE CITY APPROVED RUBBER COMPRESSION TYPE JOINTS. WATER STOPS ARE REQUIRED AT ALL POINTS OF CONNECTION NOT USING RUBBER COMPRESSION TYPE JOINTS SUCH AS CONNECTIONS TO EXISTING STRUCTURES. (CODE SECTION 510.280.6)
- ALL SANITARY AND STORMWATER SEWER STRUCTURE JOINTS WILL BE WRAPPED WITH CRETEX MANHOLE JOINT WRAP. MANHOLE JOINT WRAP OR APPROVED EQUAL.
- CONCRETE COVERS ON STRUCTURES WILL NOT BE ALLOWED. ONLY CAST IRON COVERS ARE PERMITTED. (CODE SECTION 510.280.5)
- BRICK STORM AND SANITARY STRUCTURES WILL NOT BE ALLOWED.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER TO PROVIDE TRAFFIC CONTROL PER THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ALL UTILITIES SHALL BE LOCATED UNDERGROUND.
- ALL FILLED PLACES UNDER PROPOSED STORM AND SANITARY SEWER AND/OR PAVED AREAS SHALL BE COMPACTED TO 90% OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99.
- ALL FILLED PLACES IN PROPOSED ROADS SHALL BE COMPACTED FROM THE BOTTOM OF THE FILL UP TO 90% MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED AASHTO T-180 COMPACTION TEST OR 95% OF MAXIMUM DENSITY AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-99. ALL TESTS SHALL BE VERIFIED BY A SOILS ENGINEER CONCURRENT WITH GRADING AND BACKFILLING OPERATIONS.
- GRADES CANNOT EXCEED A 3:1 SLOPE. (CODE SECTION 510.090.A.1)
- ALL COMMERCIAL PROPERTIES ARE TO HAVE IRRIGATION SYSTEMS OR SUBMIT A LANDSCAPE PLAN SIGNED AND SEALED BY A MISSOURI-REGISTERED LANDSCAPE ARCHITECT OR CERTIFIED ARBORIST THAT THE LANDSCAPE IS DROUGHT-TOLERANT. (CODE SECTION 400.965)

CITY OF ST. CHARLES GENERAL NOTES

- CONSTRUCTION ACTIVITIES SHALL ABIDE BY THE NOISE RESTRICTIONS AS OUTLINED IN CODE CHAPTER 230.
- FOR ALL SANITARY SEWERS WITHIN THE RIGHT OF WAY, A CLEAN OUT SHALL BE PROVIDED, IN THE RIGHT OF WAY, WITHIN ONE (1) FOOT OF THE PROPERTY SERVED, AND IN ADDITION TO ANY REQUIRED FOR ADHERENCE TO THE PLUMBING CODE. ALL WORK TO CONFORM TO CITY STANDARDS.
- LIGHTING SHALL PROVIDE 0.25 FOOT-CANDLES IN PARKING LOTS AND 0.50 FOOT-CANDLES AT ENTRANCES AND APPROACHES. (CODE SECTION 400.700.F.2.)
- THE MINIMUM REQUIREMENT FOR STREET LIGHTING FACILITIES SHALL BE ONE (1) LIGHT EMITTING DIODES LIGHT AT EACH STREET INTERSECTION, BUT NOT FURTHER APART THAN ONE HUNDRED FORTY-FIVE (145) FEET WITHIN OR ABUTTING THE SUBDIVISION TO MAINTAIN A MINIMUM OF FOUR TENTHS (0.4) FOOT-CANDLE LIGHTING PATTERN THROUGHOUT. (CODE SECTION 405.240.E.)
- STREET LIGHTS, SIGN POSTS, ETC. SHALL BE LOCATED AT LEAST FIVE FEET FROM DRIVEWAYS AND TEN FEET FROM FIRE HYDRANTS.
- WHENEVER POSSIBLE, "NO PARKING" ZONES ARE TO BE LOCATED ON THE SAME SIDE OF THE ROADWAY AS FIRE HYDRANTS.

GRADING/SEDIMENT & EROSION CONTROL NOTES

- ALL TRASH AND DEBRIS ON-SITE, EITHER EXISTING OR FROM CONSTRUCTION, MUST BE REMOVED AND PROPERLY DISPOSED OF OFF-SITE.
- UPON COMPLETION OF STORM SEWERS, SILTATION CONTROL SHALL BE PROVIDED AROUND ALL OPEN SEWER INLETS AND SHALL REMAIN UNTIL THE DISTURBED DRAINAGE AREAS HAVE BEEN PROPERLY STABILIZED.
- CONTRACTOR TO SUPPLY CITY OF ST. CHARLES INSPECTOR WITH COPIES OF THE COMPACTION TEST REPORTS.
- THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL EROSION AND SILTATION INCLUDING, BUT NOT LIMITED TO, STAKED STRAW BALES AND/OR SILTATION FABRIC FENCES (POSSIBLE METHODS OF CONTROL ARE DETAILED IN THE PLAN). EROSION CONTROL SHALL COMMENCE WITH GRADING AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR THE CITY OF ST. CHARLES. THE CONTRACTOR'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER AND/OR CITY OF ST. CHARLES MAY, AT THEIR OPTION, DIRECT THE CONTRACTOR IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS, ANY DEPOSITING OF SILTS OR MUD ONTO NEW OR EXISTING PAVEMENT OR IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED AREAS CLEANED TO THE SATISFACTION OF THE OWNER AND/OR THE CITY OF ST. CHARLES.
- INSPECTION OF SILTATION CONTROL DEVICES SHALL TAKE PLACE ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS OF ANY ONE QUARTER (1/4) INCH PER 24 HOUR RAIN EVENT.
- ANY SILTATION CONTROL IN NEED OF REPAIR SHALL BE FIXED IMMEDIATELY.
- SILT FENCES SHALL BE INSTALLED IMMEDIATELY AROUND EACH STORM SEWER STRUCTURE ONCE FINAL CONSTRUCTION OF EACH INDIVIDUAL STRUCTURE IS COMPLETE.
- ALL SILTATION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

SCHEDULE IMPLEMENTATION

- CONSTRUCTION ENTRANCE IS SHOWN. ACTUAL FIELD LOCATION TO BE USED AND MAINTAINED AS REQUIRED FOR ACCESS.
- THE CONTRACTOR SHALL:
 - INSTALL ALL PERIMETER SILTATION CONTROL.
 - STRIP TOPSOIL AND STOCKPILE FOR FINAL GRADING.
 - REMOVE ANY UNSUITABLE SOILS AS DETERMINED BY THE GEOTECHNICAL ENGINEER. RECOMPACT SOILS AS REQUIRED UNDER THEIR DIRECTION.
 - PLACE COMPACTED BASE MATERIAL FOR STORM SEWERS/SANITARY.
 - INSTALL STORM SEWERS/SANITARY AND GRANULAR BACKFILL WHERE REQUIRED.
 - GRADE SITE AND PLACE ANY TEMPORARY DRAINAGE SWALES AS REQUIRED.
- SILTATION CONTROL DEVICE MAINTENANCE
 - SILT CONTROL MEASURES SHALL BE INSPECTED IMMEDIATELY AFTER EACH 1/4" RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
 - CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILTATION CONTROL.
 - NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF SUCH SHALL BE ACCOMPLISHED PROMPTLY.
 - SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL.
 - REFER TO THE VEGETATIVE ESTABLISHMENT TABLE BELOW ON SEEDING RATES.

VEGETATIVE ESTABLISHMENT For Urban Development Sites APPENDIX A	
Seeding Rates:	
Tall Fescue	30 lbs./ac.
Smooth Brome	20 lbs./ac.
Combined Fescue	15 lbs./ac. and Brome @ 10 lbs./ac.
Temporary:	
Wheat or Rye	150 lbs./ac.
Oats	120 lbs./ac.
Seeding Periods:	
Fescue or Brome	March 1 to June 1
Wheat or Rye	August 1 to October 1
Oats	March 15 to November 15
Mulch Rates:	100 lbs. per 1,000 sq. feet (4,356 lbs. per acre)
Fertilizer Rates:	
Nitrogen	30 lbs./ac.
Phosphate	30 lbs./ac.
Potassium	30 lbs./ac.
Lime	600 lbs./ac. ENM*
* ENM = effective neutralizing material as per State evaluation of quarried rock.	

STORM WATER POLLUTION PREVENTION PLAN

- PURPOSE:
THE PURPOSE OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS TO INFORM THE DEVELOPER/CONTRACTOR OF THE FOLLOWING OBJECTIVES THEY ARE REQUIRED TO MEET:
 - PREVENT EROSION WHERE CONSTRUCTION ACTIVITIES SHALL OCCUR.
 - PREVENT POLLUTANTS FROM MIXING WITH STORM WATER.
 - PREVENT POLLUTANTS FROM BEING DISCHARGED BY TRAPPING THEM ON-SITE, BEFORE THEY CAN AFFECT THE RECEIVING WATERS.
 - ALL REGULATIONS OF MISSOURI DEPARTMENT OF NATURAL RESOURCES ARE MET.
 - ALL REGULATIONS OF THE ENVIRONMENTAL PROTECTION AGENCY ARE MET.
 - ALL REGULATIONS OF THE LOCAL MUNICIPALITY ARE MET.
- PROJECT DESCRIPTION:
THE PROJECT IS LOCATED IN BOTH THE MISSOURI RIVER AND MISSISSIPPI RIVER TRIBUTARY WATERSHED IN ST. CHARLES COUNTY, MISSOURI. THE PROJECT DISTURBS APPROXIMATELY 0.09 ACRES OF THE 96.906 ACRE CAMPUS.
THE PROJECT ACTIVITIES CONSIST OF A CONSTRUCTION FOR A NEW RESTROOM BUILDING. THE SITE WILL BE PROTECTED BY THE VARIOUS EROSION PROTECTION MEASURES LISTED BELOW.
 - SILT SOXK: THE ENTIRE PERIMETER OF THE PROJECT THAT ALLOWS STORM WATER TO EXIT WILL HAVE SILT SOXK INSTALLED. DETAILS OF THESE DEVICES ARE DEPICTED ON THE DETAIL PLANS PREPARED BY BAX ENGINEERING COMPANY, INC..
 - REVEGETATION: THE SITE WILL CONSIST OF VARYING GROUND SLOPES. UPON COMPLETION OF THE GRADING ACTIVITIES THE SLOPE PRONE TO EROSION SHALL BE SEEDED AND STRAWED TO STABILIZE THE SLOPE AND PREVENT EROSION.
- MAINTENANCE AND INSPECTION:
REGULAR MAINTENANCE, WEEKLY INSPECTIONS OF THE PROJECT WILL INCLUDE: (A) THE REPAIR OF ANY SEDIMENT (SILT) FENCE AND/OR SILT SOXK BARRIERS DAMAGED OR OUT OF PLACE; (B) THE REMOVAL OF ANY ACCUMULATED TRASH AND/OR DEBRIS; AND (C) THE REMOVE OF ANY EXTERNALLY DEPOSITED WASTE MATERIALS.
PERIODIC INSPECTIONS: FOLLOWING EACH RAIN OF MORE THAN 0.25 INCH IN 24 HOURS, THE SITE WILL BE INSPECTED, AND ANY NECESSARY MAINTENANCE WILL BE PROVIDED FOR A PERIOD OF ONE YEAR FOLLOWING THE COMPLETION OF THE ABOVE REMEDIATION MEASURES. SUMMARIES OF THE MAINTENANCE AND THE INSPECTIONS WILL BE MAINTAINED AND SHALL BE KEPT AVAILABLE FROM THE OWNER. AN INSPECTION REPORT SHALL BE FILED AND KEPT ON SITE FOR EVERY INSPECTION. THE REPORT SHALL DETAIL THE FINDINGS OF THE INSPECTION AND IF ANY ACTION WAS REQUIRED. THE INSPECTION FORM NEEDS TO INCLUDE, NAME OF THE SITE, NAME OF THE INSPECTOR, PERMIT NUMBER, DATE OF INSPECTION, MAJOR OBSERVATIONS AND ACTIONS TAKEN TO CORRECT PROBLEMS AND THE SIGNATURE OF THE INSPECTOR. THE INSPECTION REPORTS NEED TO BE KEPT ON FILE BY THE PERMITTEE FOR THREE YEARS AFTER THE PROJECT IS COMPLETED.
THE FIELD INSPECTIONS WILL BE CONDUCTED IN A SYSTEMATIC MANNER TO MINIMIZE THE POSSIBILITY OF ANY SIGNIFICANT FEATURE BEING OVERLOOKED. A DETAILED CHECKLIST WILL BE DEVELOPED AND FOLLOWED FOR THE EXAMINATION. PARTICULAR ATTENTION WILL BE GIVEN TO DETECTING EVIDENCE OF EROSION, SLOPE INSTABILITY, UNDUE SETTLEMENT, DISPLACEMENT, AND TILTING. PHOTOGRAPHS AND DRAWINGS WILL BE USED FREELY TO RECORD CONDITIONS IN ORDER TO MINIMIZE DESCRIPTIONS. THE FIELD INSPECTION WILL INCLUDE APPROPRIATE FEATURES AND ITEMS, INCLUDING POTENTIAL HAZARDS TO HUMAN LIFE OR PROPERTY.
THE CONDITION OF THE SLOPES AND VEGETATIVE COVER WILL BE EVALUATED AND EXAMINED FOR EROSION.
MEASURES WILL BE TAKEN TO PROMOTE THE GROWTH OF VEGETATION AND REPAIR OF DAMAGE CAUSED BY EROSION AND SEDIMENTATION. THE INSPECTION WILL ALSO PROVIDE RECOMMENDATIONS FOR MEASURES THAT NEED TO BE UNDERTAKEN IMMEDIATELY, BASED ON THE EXPERIENCE AND JUDGMENT OF THE INSPECTOR. NECESSARY FOLLOW UP INSPECTIONS WILL BE MADE AS NECESSARY TO VERIFY THAT ANY MAINTENANCE, ALTERATION, OR REPAIR MEASURES ARE ACCOMPLISHED BY METHODS ACCEPTABLE BY STANDARD ENGINEERING PRACTICE.

CURRENT PERMITS

SITE HAS AN ISSUED DNR PERMIT MORA19749 WITH AN EFFECTIVE DATE OF 02-09-2022 WHICH IS STILL VALID FOR DISTURBANCE ON THIS SITE. PERMIT TO EXPIRE 2-7-2027.

ENGINEERING DESIGN STANDARDS:

- GENERAL:
 - ARTICLE III. OF CHAPTER 405 IN TITLE IV OF THE ST. CHARLES CITY CODE
 - CHAPTERS 505 AND 510 OF THE ST. CHARLES CITY CODE
 - TITLE VII OF THE ST. CHARLES CITY CODE
 - OTHER CITY CODES THAT MAY GOVERN ENGINEERING DESIGN
 - CITY OF ST. CHARLES PUBLIC WORKS DEPARTMENT FINAL DESIGN CHECKLIST
- TRANSPORTATION:
 - ST. LOUIS COUNTY HIGHWAY DEPARTMENT DESIGN CRITERIA MANUAL 2011
 - AASHTO POLICY ON GEOMETRIC DESIGN 2011
 - AASHTO ROADSIDE DESIGN GUIDE 2011
 - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 2003
 - ADA STANDARDS FOR TRANSPORTATION FACILITIES 2006
- STORM WATER:
 - MSD PLAN PREPARATION GUIDELINES 2013
 - MSD STANDARD CONSTRUCTION SPECIFICATIONS 2023
 - CITY OF ST. CHARLES PUMP STATION DESIGN STANDARDS 2018
- SANITARY
 - MISSOURI DNR WASTEWATER DESIGN GUIDES 10CSR-20-8
 - OTEN STATES STANDARDS 2007
 - CITY OF ST. CHARLES PUMP STATION DESIGN STANDARDS 2018
- WATER
 - CITY OF ST. CHARLES STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC WATER MAINS 2014
 - MISSOURI DNR MINIMUM DESIGN STANDARDS FOR MISSOURI COMMUNITY WATER SYSTEMS 2013
 - OTEN STATES STANDARDS 2007
 - AWWA MANUALS OF WATER SUPPLY PRACTICES 2012

FEMA FLOOD NOTES:

WE HAVE DETERMINED THE HORIZONTAL LOCATION OF THIS TRACT OF LAND IN ST. CHARLES COUNTY, MISSOURI, BY SCALING THE REFERENCE TO THE "FLOOD INSURANCE RATE MAP (FIRM), ST. CHARLES COUNTY, MISSOURI", PANEL 280 OF 525, MAP NUMBER 29183C0280 G (COMMUNITY PANEL NUMBER, ST. CHARLES COUNTY 290315 0280 G, WITH AN EFFECTIVE DATE OF JANUARY 20, 2016), BY EXPRESS REFERENCE TO THIS MAP AND ITS LEGEND, THIS TRACT IS INDICATED TO BE WITHIN THE FOLLOWING ZONES: ZONE X OTHER FLOOD AREAS.

ZONE X OTHER FLOOD AREA IS DEFINED AS AREAS OF 0.2% CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE, AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

THE EVALUATION PROVIDED IN THIS NOTE IS RESTRICTED TO SIMPLY INDICATING THE APPARENT PHYSICAL, HORIZONTAL LOCATION OF THE PROPERTY WITH RESPECT TO THE FEATURES DISPLAYED ON THE MAP. NO FIELD STUDY OF THE DRAINAGE CHARACTERISTICS TO CORRECT PROBLEMS AND THE SIGNATURE OF THE INSPECTOR. THE INSPECTION REPORTS NEED TO BE KEPT ON FILE BY THE PERMITTEE FOR THREE YEARS AFTER THE PROJECT IS COMPLETED.

GENERAL NOTES

- UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.
- ALL GRADES SHALL BE WITHIN 0.1 FEET OF THOSE SHOWN ON THE GRADING PLAN.
- ALL CONSTRUCTION AND MATERIALS USED SHALL CONFORM TO CURRENT CITY OF ST. CHARLES STANDARDS.
- ALL CONSTRUCTION METHODS AND PRACTICES SHALL CONFORM WITH CURRENT O.S.H.A. STANDARDS.
- ALL SIGNS ON THE SITE OR ANY STRUCTURE MUST HAVE SIGN PERMITS APPROVED BY THE CITY OF ST. CHARLES.
- ALL NECESSARY UTILITIES (PUBLIC AND PRIVATE) WILL BE AVAILABLE, FUNCTIONING, AND USABLE AT THE TIME ANY STAGE OF THE PROJECT OR THE TOTAL PROJECT IS READY FOR OCCUPANCY.
- DEVELOPER MUST SUPPLY THE CITY CONSTRUCTION INSPECTORS WITH SOIL REPORTS PRIOR TO OR DURING SITE SOIL TESTING.
- ALL STORM SEWER PIPES SHALL BE GASKET O-RING TYPE.
- FORTY-EIGHT (48) HOURS NOTICE SHALL BE GIVEN TO THE CITY OF ST. CHARLES CITY ENGINEER BEFORE ANY GRADING OPERATIONS ARE TO BEGIN TO ALLOW SCHEDULING OF REQUIRED INSPECTIONS.
- FORTY-EIGHT (48) HOURS NOTICE SHALL BE GIVEN TO THE CITY OF ST. CHARLES CITY ENGINEER BEFORE ANY STORM SEWER CONSTRUCTION IS TO BEGIN TO ALLOW SCHEDULING OF REQUIRED INSPECTIONS.

DEVELOPMENT NOTES:

- EXISTING CAMPUS AREA OF TRACT: 96.906 ACRES
(PROPOSED RESTROOM BUILDING DISTURBED AREA 0.09 ACRES)
- EXISTING ZONING: R-1C - SINGLE FAMILY (CITY OF ST. CHARLES)
- PROPOSED USE: NEW RESTROOM BUILDING
AREA OF BUILDING FOOTPRINT: 755 SQ.FT.
- REQUIRED BUILDING & PARKING SETBACKS FOR R-1C ZONING:
FRONT YARD 30 FEET
SIDE YARD 10 FEET
REAR YARD 25 FEET
BUILDING HEIGHT MAX = 2-1/2 STORIES OR 35 FEET
- THIS PROPERTY IS SERVED BY THE FOLLOWING UTILITIES:
ELECTRIC COMPANY AMERENUE 636-925-3215
TELEPHONE COMPANY SOUTHWESTERN BELL 314-949-1315
SPIRE 314-535-9414
SEWER DISTRICT CITY OF ST. CHARLES 636-949-3366
WATER DISTRICT CITY OF ST. CHARLES 636-949-3366
FIRE PROTECTION DISTRICT CITY OF ST. CHARLES 636-949-3250
- PROPERTY OWNER: ORCHARD FARM R-V SCHOOL DISTRICT
3489 BOSCHERTOWN ROAD
ST. CHARLES, MO 63301
636-925-5400
- ANY PROPOSED SIGNS TO BE APPROVED BY SEPARATE PERMIT.
- ONLY ABOVE GROUND UTILITIES WHICH HAVE BEEN LOCATED ARE SHOWN ON THIS PLAN.
- DETENTION AND WATER QUALITY ARE ADDRESSED BY A LAKE ONSITE.
- SITE HAS AN ISSUED DNR PERMIT MORA19749 WITH AN EFFECTIVE DATE OF 02-09-2022 WHICH IS STILL VALID FOR DISTURBANCE ON THIS SITE. PERMIT TO EXPIRE 2-7-2027.
- ALL STORM AND SANITARY WILL BE PRIVATE AND MAINTAINED BY THE SCHOOL DISTRICT.

BENCHMARK INFO:

PROJECT ELEVATIONS UTILIZE THE NAVD 88 VERTICAL DATUM AND ARE REFERENCED TO NGS MONUMENT "CSC 25" WITH A PID OF D7523. SAID MONUMENT HAS A PUBLISHED ELEVATION 464.40.

REFERENCE BENCHMARK CSC 25 IS DESCRIBED AS FOLLOWS: TO REACH THE STATION FROM THE JUNCTION OF THE SR-370 BRIDGE OVER SR-94 GO NORTH 0.3 MI ON SR-94 TO THE INTERSECTION OF SR-94 WITH TWILLMAN DRIVE. TURN LEFT AND GO WEST 0.25 MI ON TWILLMAN DRIVE TO THE INTERSECTION OF TWILLMAN DRIVE WITH MANGO DRIVE. TURN RIGHT AND GO NORTH 0.2 MI ON MANGO DRIVE TO THE INTERSECTION OF MANGO DRIVE WITH CARRIAGE CROSSING DRIVE. TURN LEFT AND GO WEST 0.03 MI ON CARRIAGE CROSSING DRIVE TO THE INTERSECTION OF CARRIAGE CROSSING DRIVE WITH TRAILRIDGE COURT. TURN RIGHT AND GO NORTH ON TRAILRIDGE COURT TO THE STATION ON THE LEFT IN THE LAWN EAST OF 3316 CARRIAGE CROSSING DRIVE.

THE STATION IS A BRONZE CITY OF ST. CHARLES SURVEY MARKER DISK STAMPED "CSC 25 2003" SET INTO THE TOP OF A 12-INCH DIAMETER 5/8 INCH DEEP CONCRETE MONUMENT AND SET FLUSH WITH THE GROUND.
THE STATION IS 17.3 FT WEST OF THE CENTERLINE OF TRAILRIDGE COURT, 49.9 FT SOUTHWEST OF THE SOUTHEAST CORNER OF THE HOUSE AT 3316 CARRIAGE CROSSING DRIVE, 37 FT NORTHWEST OF A LIGHTPOLE AND 18.1 FT NORTHEAST OF THE CENTERLINE OF A MANHOLE.

SITE BENCHMARK: ELEVATION 448.91 (NAV88) "X" CUT IN SQUARE ON TOP OF AN EXISTING CURB INLET IN THE LEFT OF THE SITE.

SITE COVERAGE CALCULATIONS:

INCLUDES HIGH SCHOOL CAMPUS
LOT SIZE = 96.906 ACRES = 4,221,225.36 SQUARE FEET
BUILDING SIZE = 286,620 S.F. ~ 6.79%
PAVEMENT = 824,555 S.F. ~ 19.53%
GREENSPACE = 3,110,050.36 S.F. ~ 73.68%

GRADING QUANTITIES:

417 C.Y. CUT (INCLUDES SUBGRADES)
167 C.Y. FILL (INCLUDES 8% SHRINKAGE)
250 C.Y. CUT HEAVY

THE ABOVE GRADING QUANTITY IS APPROXIMATE ONLY, NOT FOR BIDDING PURPOSES. CONTRACTOR SHALL VERIFY QUANTITIES PRIOR TO CONSTRUCTION.

ALL EXCESS EARTHWORK/MATERIALS SHALL BE HAULED OFFSITE

PROJ. NO. 25-09D

DATE ISSUED

10-29-2025

DATE REVISION

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CHECKED BY CLH

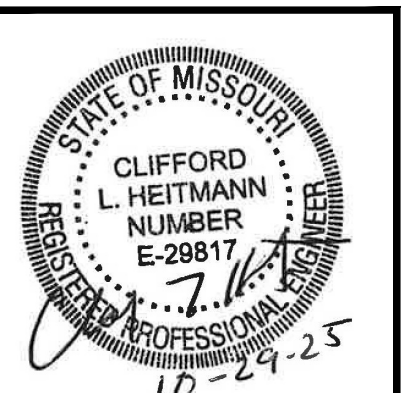
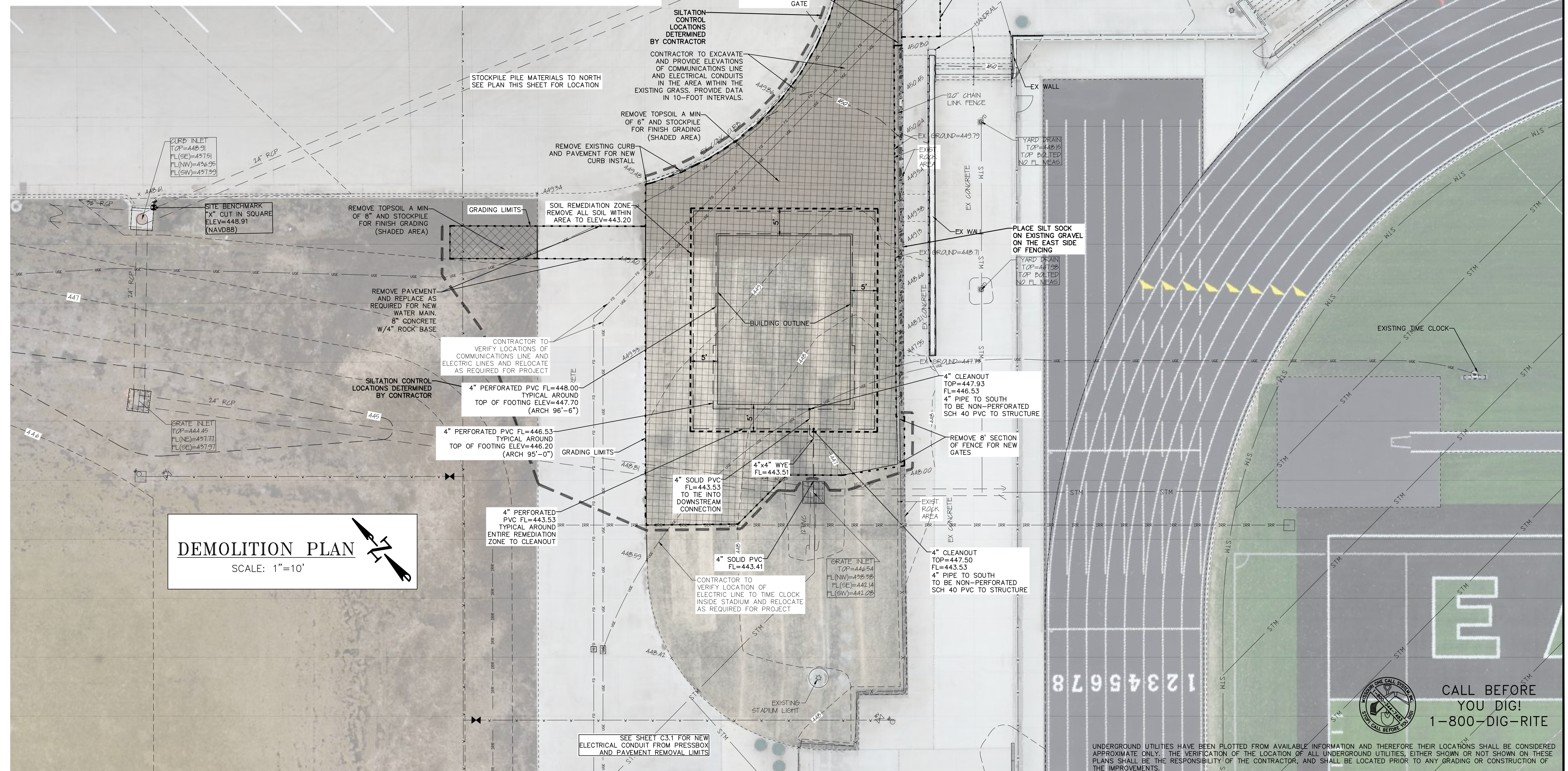
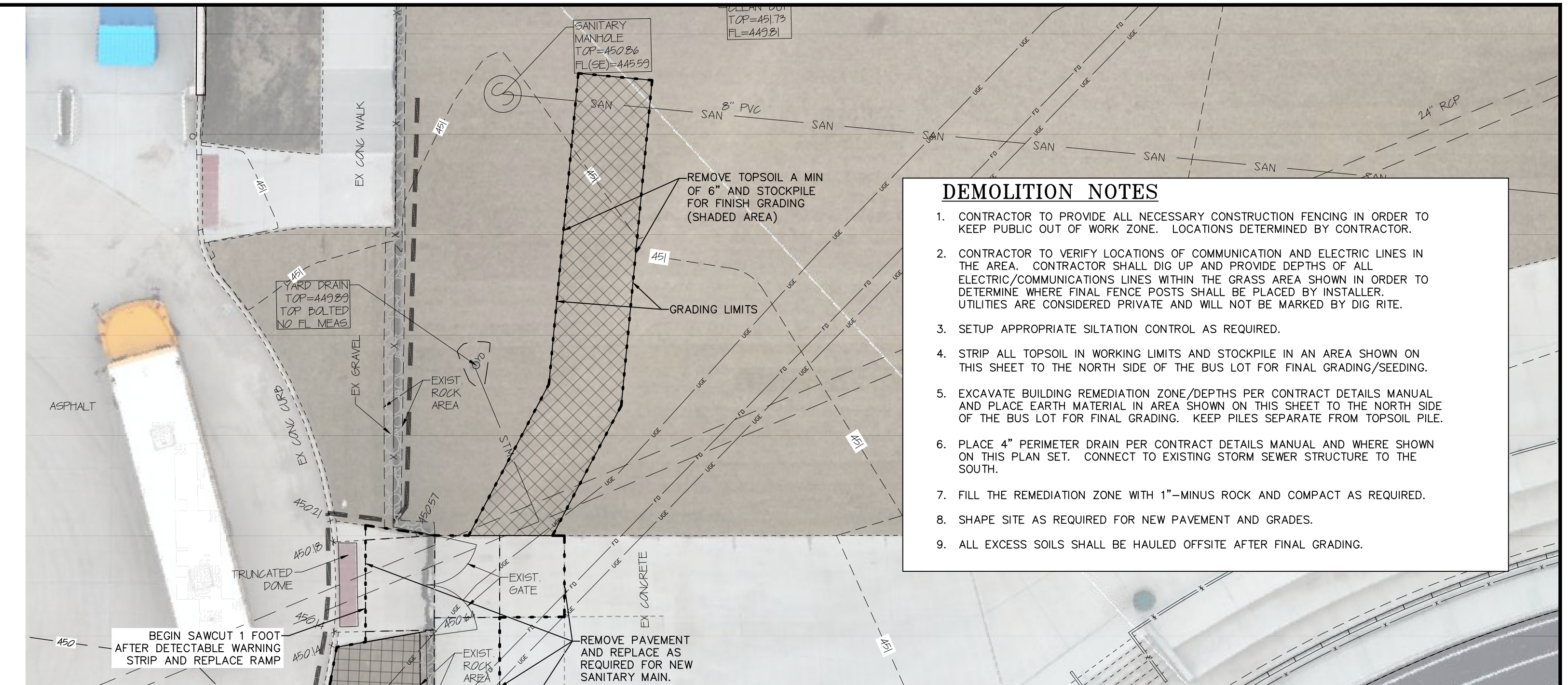
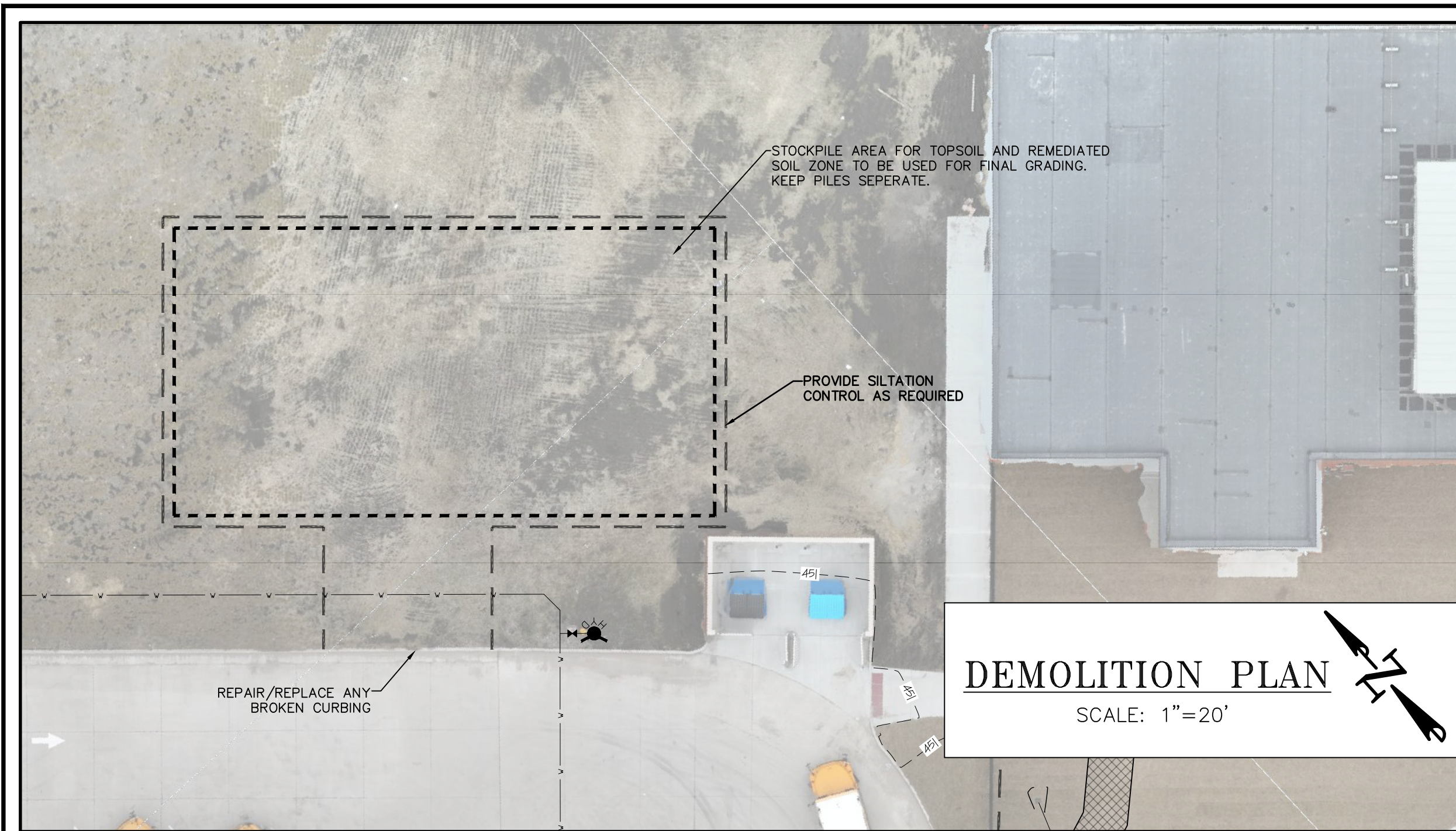
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CALL BEFORE
YOU DIG!
1-800-DIG-RITE

C1.0

COVER SHEET



CLIFFORD L. HEITMANN
LICENSE #E-29817
ENGINEERING CORP.
NO. 000655

SAINT CHARLES, MISSOURI
CONSULTING ENGINEERS
MEP Engineer
ABG, LLC
McCLURE ENGINEERING

NEW RESTROOMS
ORCHARD FARM HIGH SCHOOL

ORCHARD FARM SCHOOL DISTRICT
HOENER ARCHITECTS, LLC
6707 PLAINVIEW AVENUE
ST. LOUIS, MISSOURI 63109
OFFICE: 314.781.9855 HoenerArchitects.com

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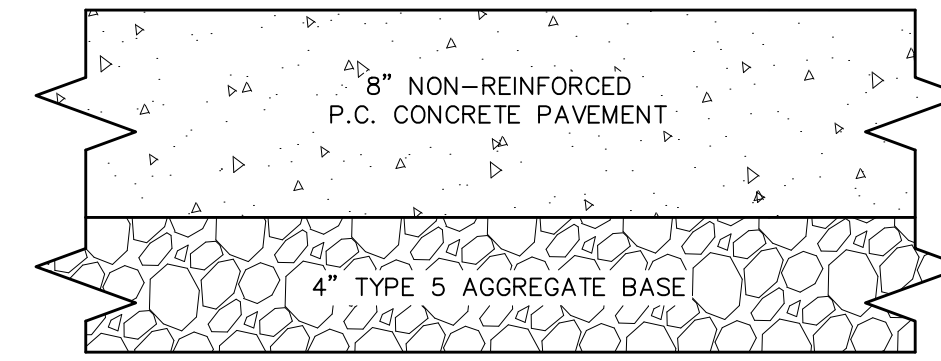
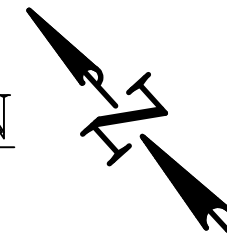
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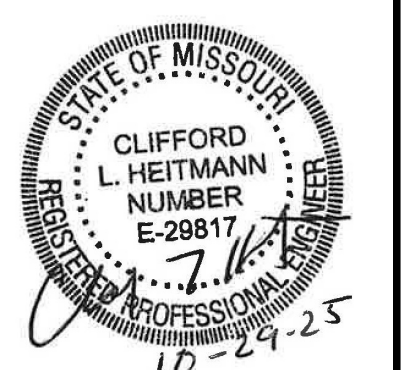
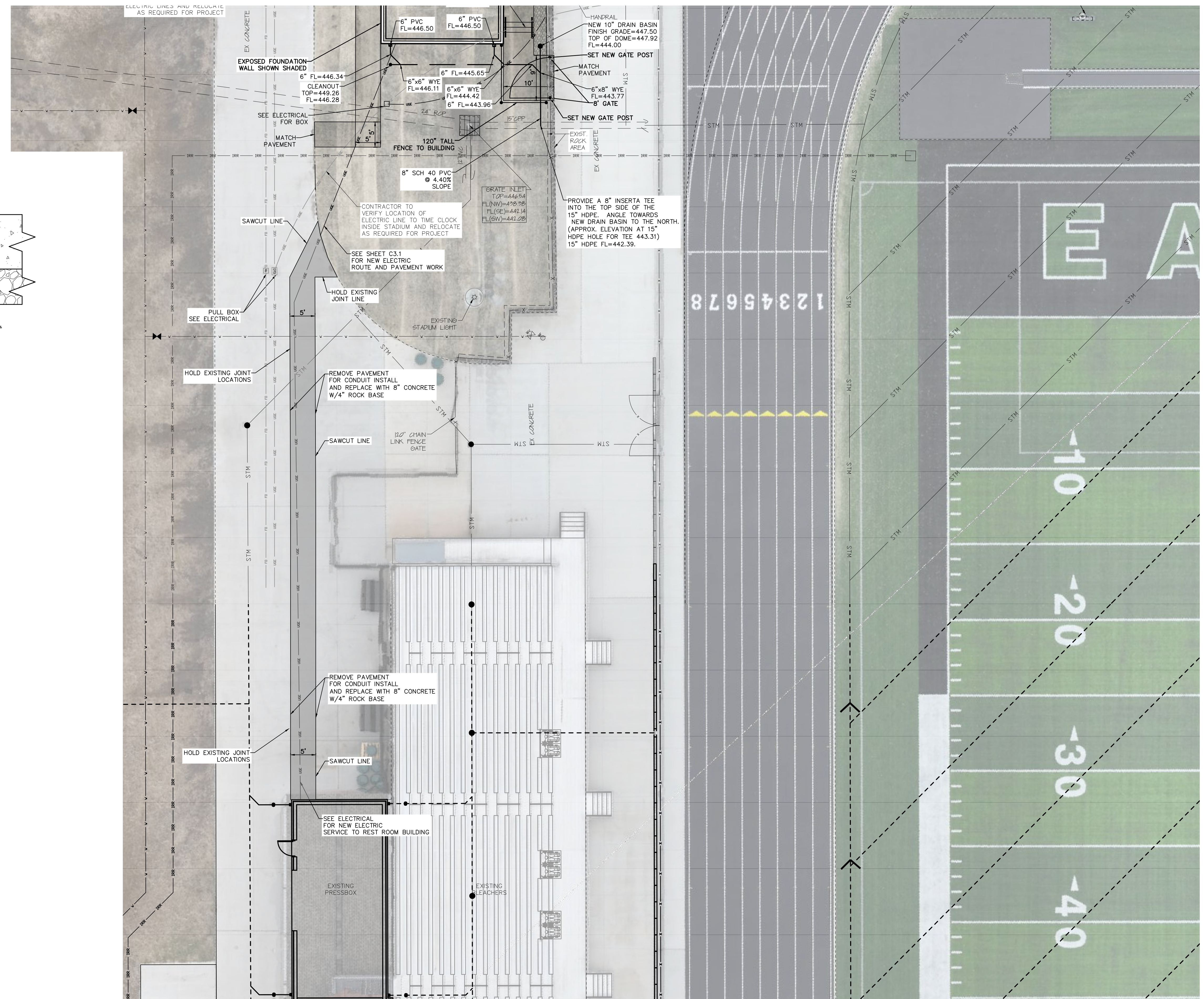
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SITE PLAN

SCALE: 1"=10'



HEAVY DUTY PAVEMENT DETAIL
NOT TO SCALE



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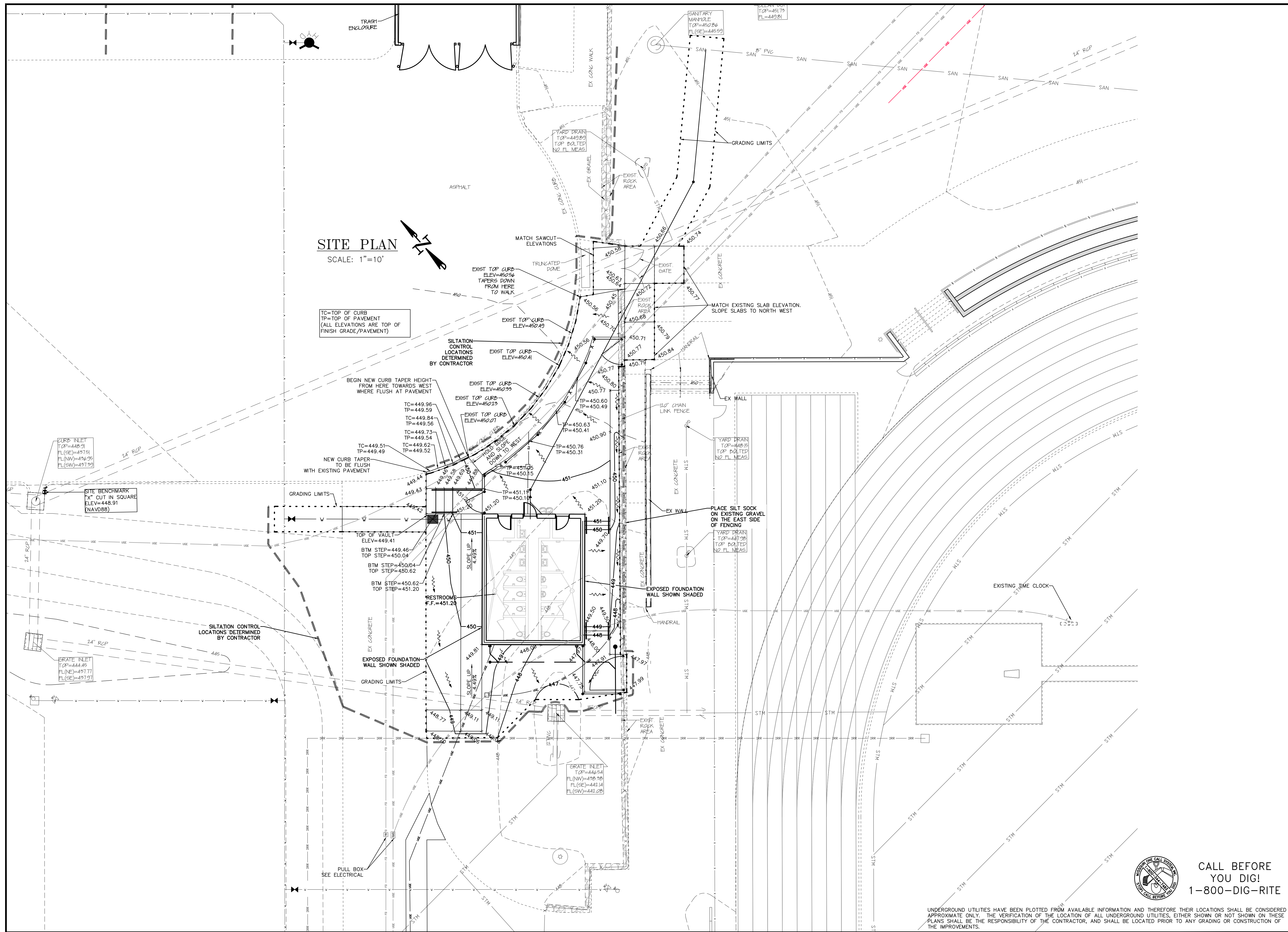
C3.1

SITE PLAN



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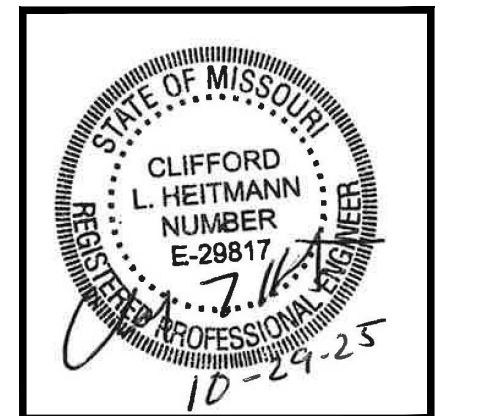


SITE PLAN
SCALE: 1"=10'

TC= TOP OF CURB
TP= TOP OF PAVEMENT
(ALL ELEVATIONS ARE TOP OF FINISH GRADE/PAVEMENT)

CALL BEFORE YOU DIG!
1-800-DIG-RITE

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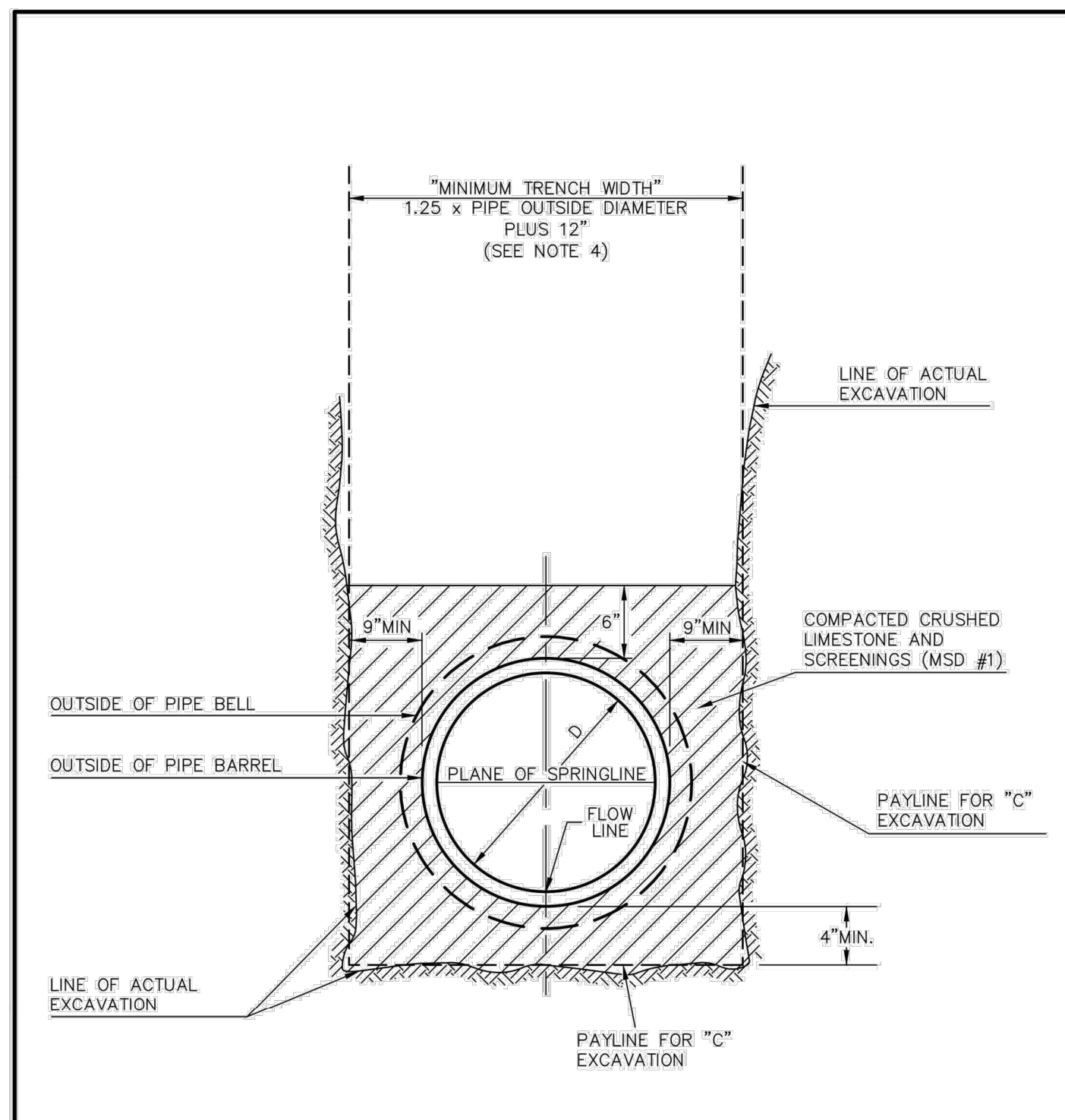
C4.0

GRADING PLAN

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"W" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT. CONCRETE ENCASEMENT	INSIDE DIMENSIONS OF PIPE (INCHES)	"W" PAYLINE WIDTH OF TRENCH (INCHES)	"W" PAYLINE WIDTH OF TRENCH (FEET)	PAY-VOLUMES CU. FT. PER FT. CONCRETE ENCASEMENT
4	30	2.50	3.28				
6	30	2.50	3.59				
8	30	2.50	3.87				
10	30	2.50	4.09				
12	30	2.50	4.25				
15	36	3.00	5.55				
18	36	3.00	5.77	14 x 23	41	3.42	5.94
21	39	3.25	6.61				
24	42	3.50	7.39	19 x 30	49	4.08	7.68
27	45	3.75	8.18	22 x 34	53	4.42	8.61
30	49	4.08	9.30	24 x 38	58	4.83	9.70
33	53	4.42	10.53	27 x 42	62	5.17	10.71
36	56	4.67	11.43	29 x 45	66	5.50	11.72
39	DISCONTINUED			32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.05
48	70	5.83	15.67	38 x 60	83	6.92	16.18
54	77	6.42	18.15	43 x 68	92	7.67	18.81
60	84	7.00	20.73	48 x 76	101	8.42	21.59
66	91	7.58	23.45	53 x 83	109	9.08	24.35
72	98	8.17	26.37	58 x 91	118	9.83	27.45
78	105	8.75	29.39	63 x 98	126	10.50	30.50
84	112	9.33	32.57	68 x 106	135	11.25	33.91
90	119	9.92	35.90	72 x 113	143	11.92	36.99
96	126	10.50	39.37	77 x 121	152	12.67	40.69
102	133	11.08	42.99	82 x 128	160	13.33	44.45
108	140	11.67	46.75	87 x 136	168	14.00	47.79
114	147	12.25	50.66	92 x 143	176	14.67	51.70
120	154	12.83	54.72	97 x 151	185	15.42	56.01
126	161	13.42	58.92				
132	168	14.00	63.27	106 x 166	202	16.83	64.48
144	182	15.17	72.40	116 x 180	218	18.17	73.59

TABLE 1
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE

METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction		Dr. B.E.B. Ch. J.C.K.	2009	SHEET 1
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- NOTES:
- CHECK GRADE OF PIPE AFTER COMPACTION TO INSURE THE DESIRED FLOWLINE HAS NOT CHANGED.
 - DURING JETTING PROCESS, NOZZLE SHALL NOT BE INSERTED CLOSER THAN TWO FEET FROM TOP OF PIPE.
 - FOR INSTALLATIONS IN HIGHLY ORGANIC OR OPENLY FLOWING SOILS, THE ENTIRE PERIMETER OF THE PIPE BEDDING SHALL BE WRAPPED WITH AN APPROVED FILTER FABRIC.
 - MINIMUM TRENCH WIDTH SIDE DIMENSION SHALL CONFORM TO THIS DETAIL, NOT LESS THAN THE GREATER OF: OD+16" OR OD*1.25+12" OR TO MANUFACTURER'S RECOMMENDATIONS.
 - EXCAVATION PAID PER PAYLINE WIDTH, SEE TABLE 1.

PIPE BEDDING CLASS "C"
(FOR ALL FLEXIBLE 6" TO 60" PIPE)

METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction		Dr. R.G.W. Ch. J.J.S.	2015	SHEET 3
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INSERTA TEE® MULTIFIT FOR IPS / SCH40 LATERAL CONNECTIONS

What is the Inserta Tee MultiFit™?
Inserta Tee MultiFits are made for a specific lateral pipe type and size, and fit a size range of a specific mainline type.

PART #	PART NAME
1	PVC HUB
2	INTERNAL GASKET
3	S.S. BAND
4	RUBBER SLEEVE
4A	UPPER SEGMENT
4B	LOWER SEGMENT
4C	MAINLINE WALL THICKNESS - REFER TO STD 1103
5	OVERALL LENGTH
6	EXTERIOR LENGTH

IPS / SCH40 PVC into N12	IPS / SCH40 PVC into Concrete/Clay	IPS / SCH40 PVC into SDR35 PVC
Lateral	Mainline	Mainline
2"	6" - 12"	Use Traditional STD - 1107
3"	6" - 12"	Use Traditional STD - 1107
4"	6" - 8"	Use Traditional STD - 1108
4"	10" - 12"	Use OneFit STD-1111
6"	6" - 8"	Use Traditional STD - 1108
6"	10" - 12"	Use OneFit STD-1111
8"	12" - 15"	Use OneFit STD-1111
10"	18" - 24"	Use Traditional STD - 1108
12"	18" - 24"	Use Traditional STD - 1108

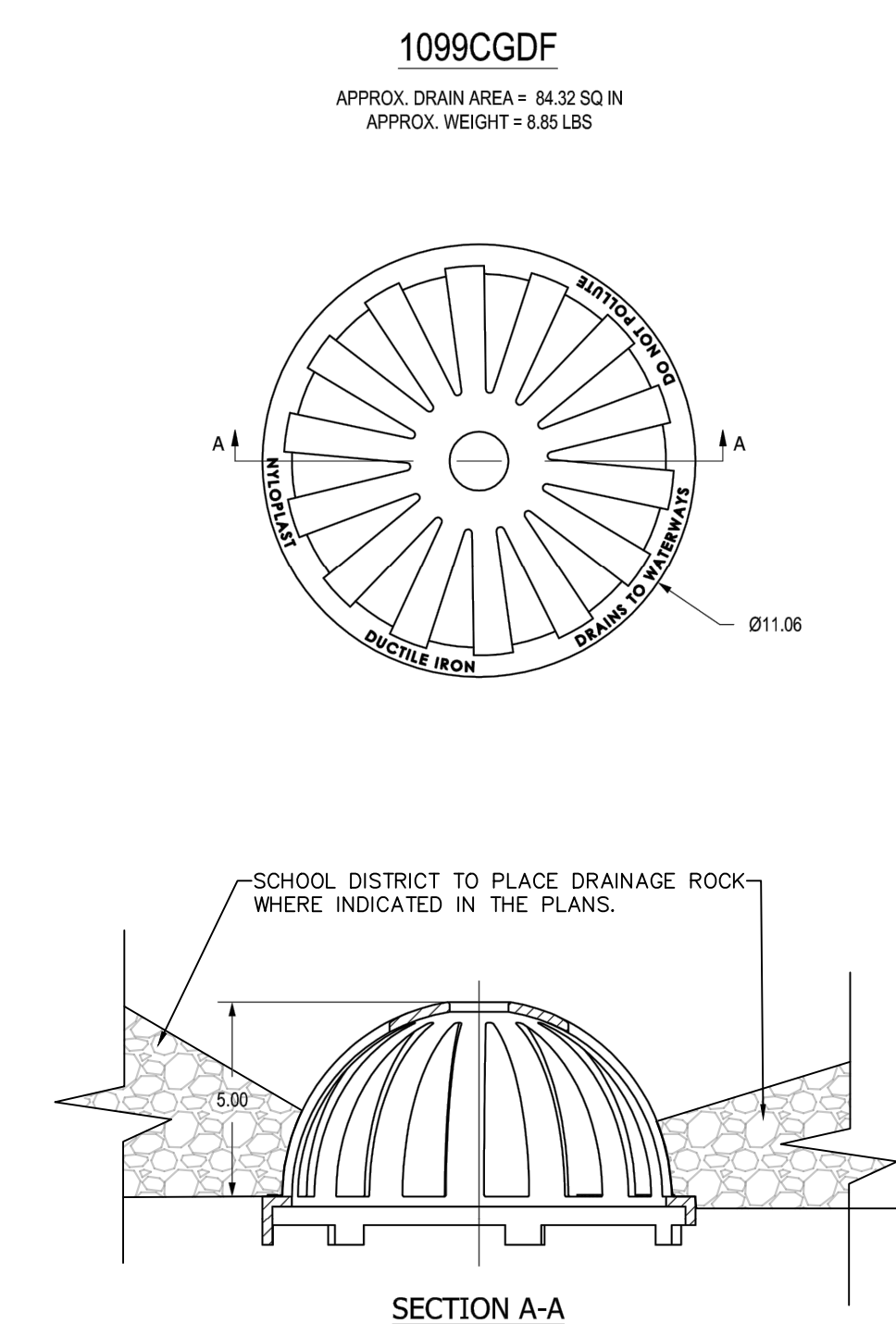
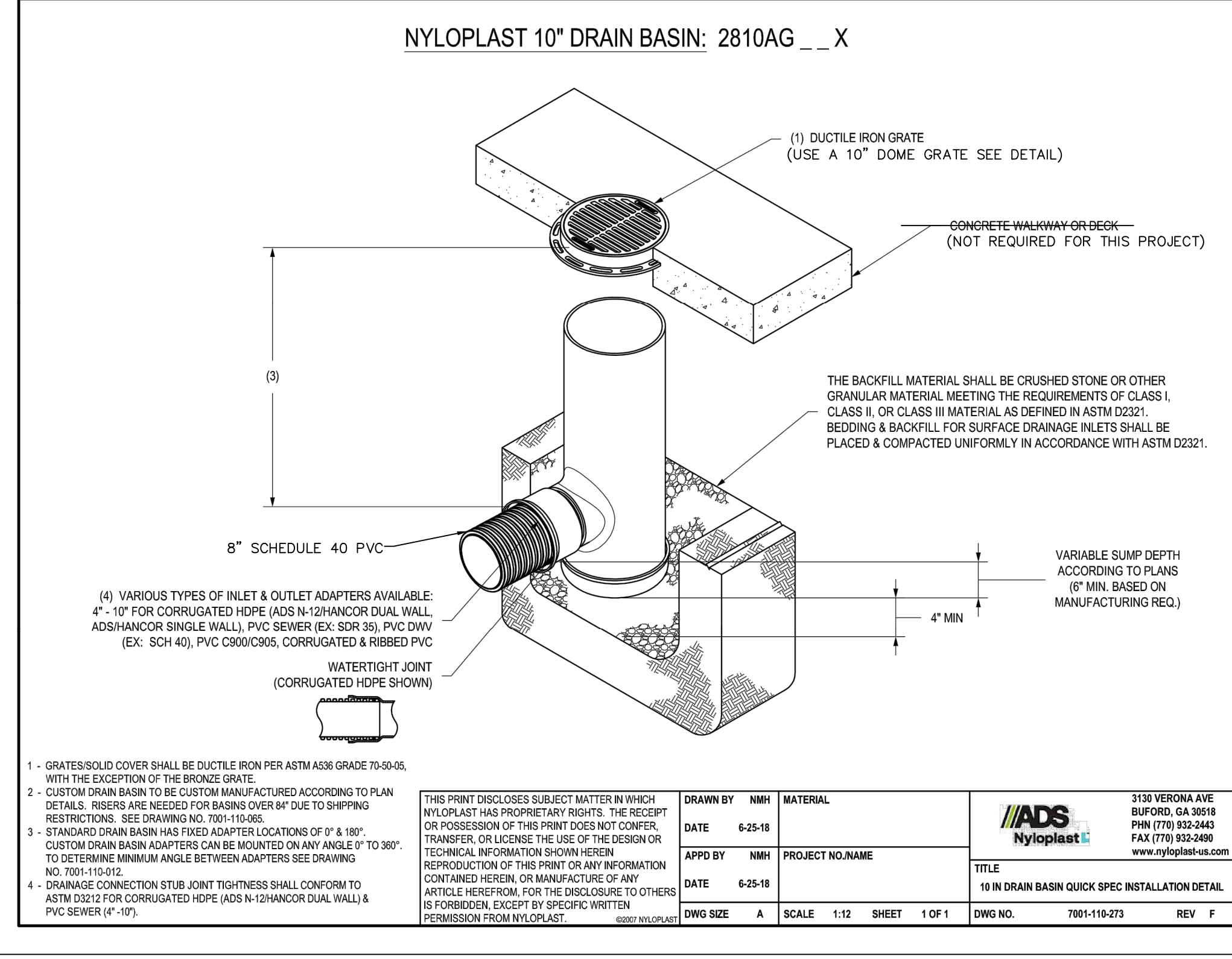
NOTE: FOR INSTALLATION INSTRUCTIONS, REFER TO DETAIL STD-1100. FOR PROTRUSION INFORMATION, REFER TO DETAIL STD-1101. FOR HOLE SAW INFORMATION, REFER TO DETAIL STD-1102.

INSERTA TEE MULTIFIT FOR IPS / SCH40 LATERAL CONNECTIONS

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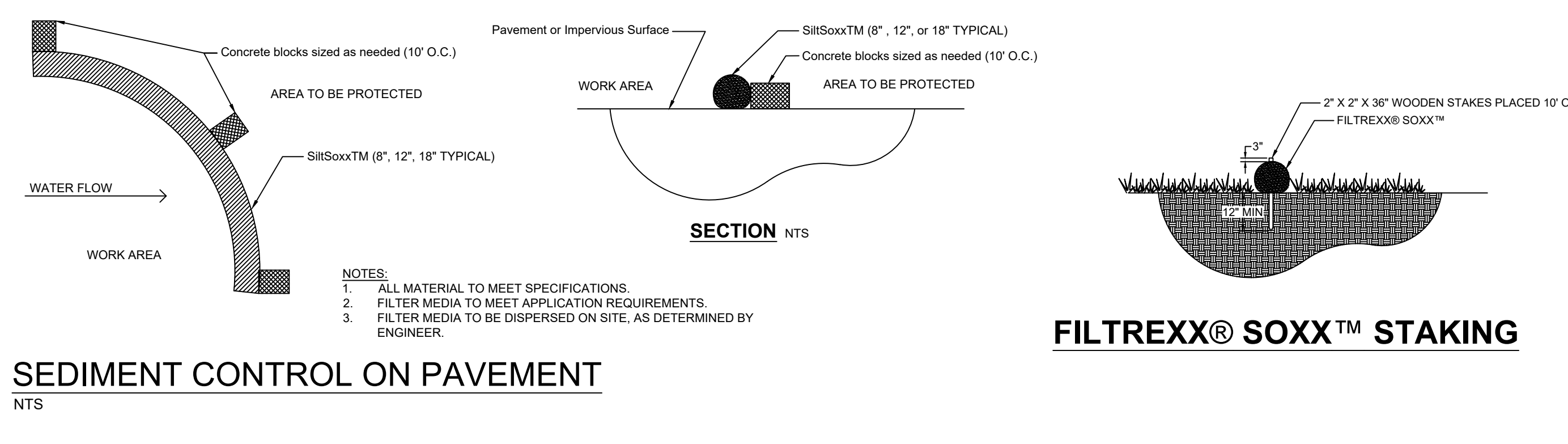
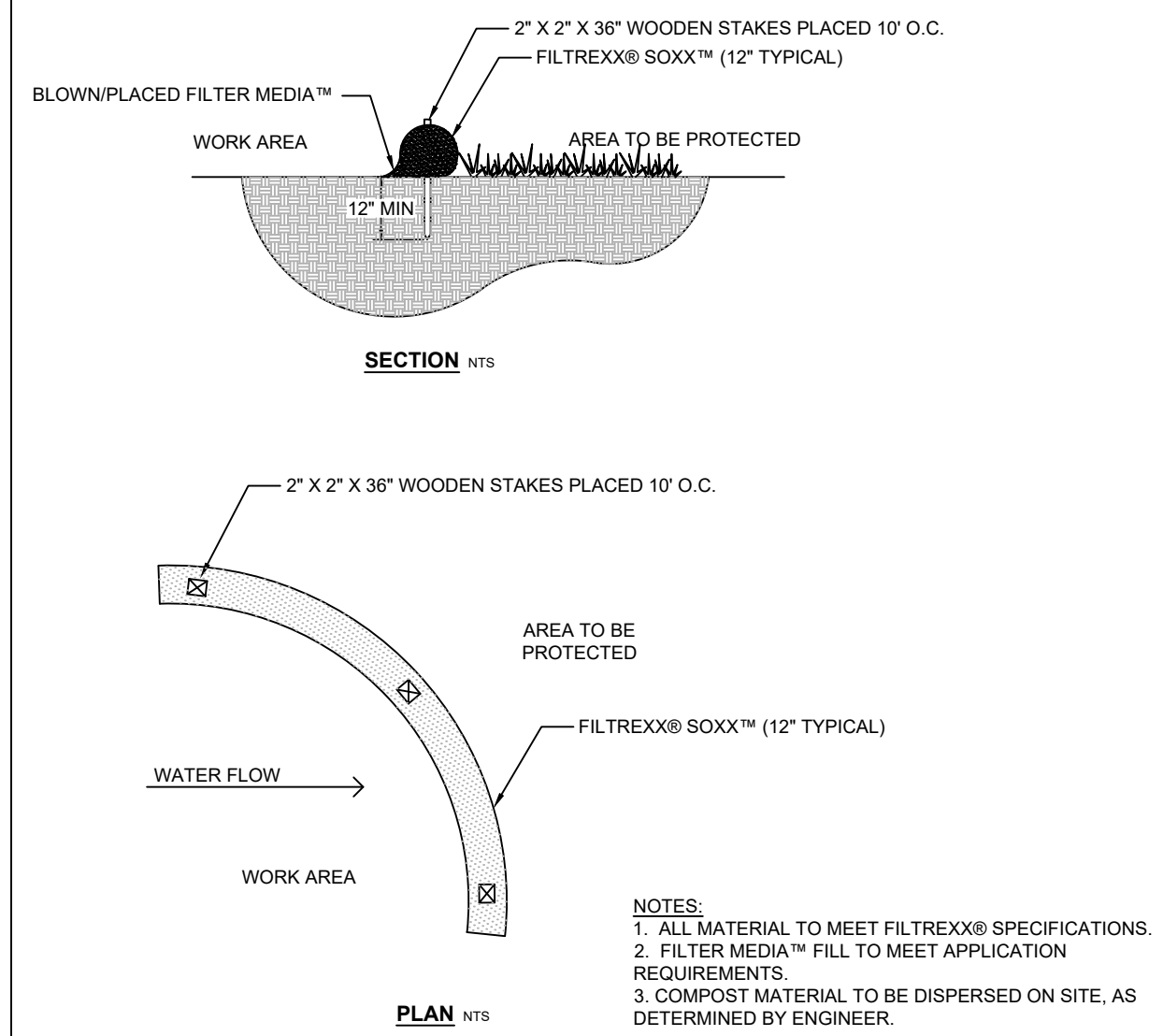
DRAWING NUMBER: STD-1112D

USE AT 8" SCHEDULE 40 PVC DOWNSPOUT CONNECTION INTO THE EXISTING 15" HDPE PIPING. CONTRACTOR TO VERIFY SIZING FOR CORRECT TEE.



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST

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REVISOR BY: NMI DATE: 6-25-18	PROJECT NO./NAME: 10 IN DOME GRATE ASSEMBLY - TYPE B	TITLE: 10 IN DOME GRATE ASSEMBLY - TYPE B
DWG SIZE: A SCALE: NTS SHEET: 1 OF 1 DWG NO.: 7001-110-542 REV: A		



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LICENSE #E-29817

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NO. 000655

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NEW RESTROOMS

ORCHARD FARM HIGH SCHOOL

ORCHARD FARM SCHOOL DISTRICT

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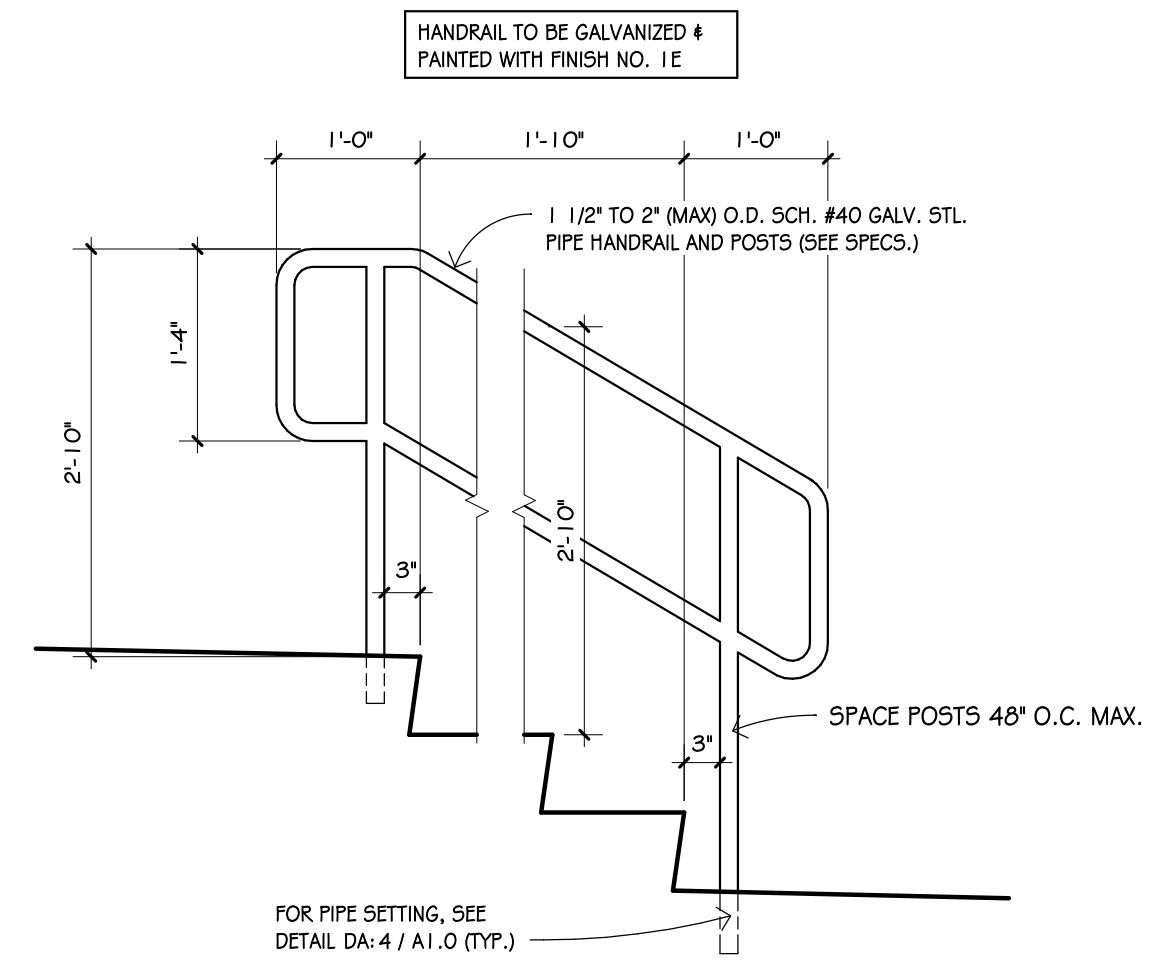
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SHEET NO.

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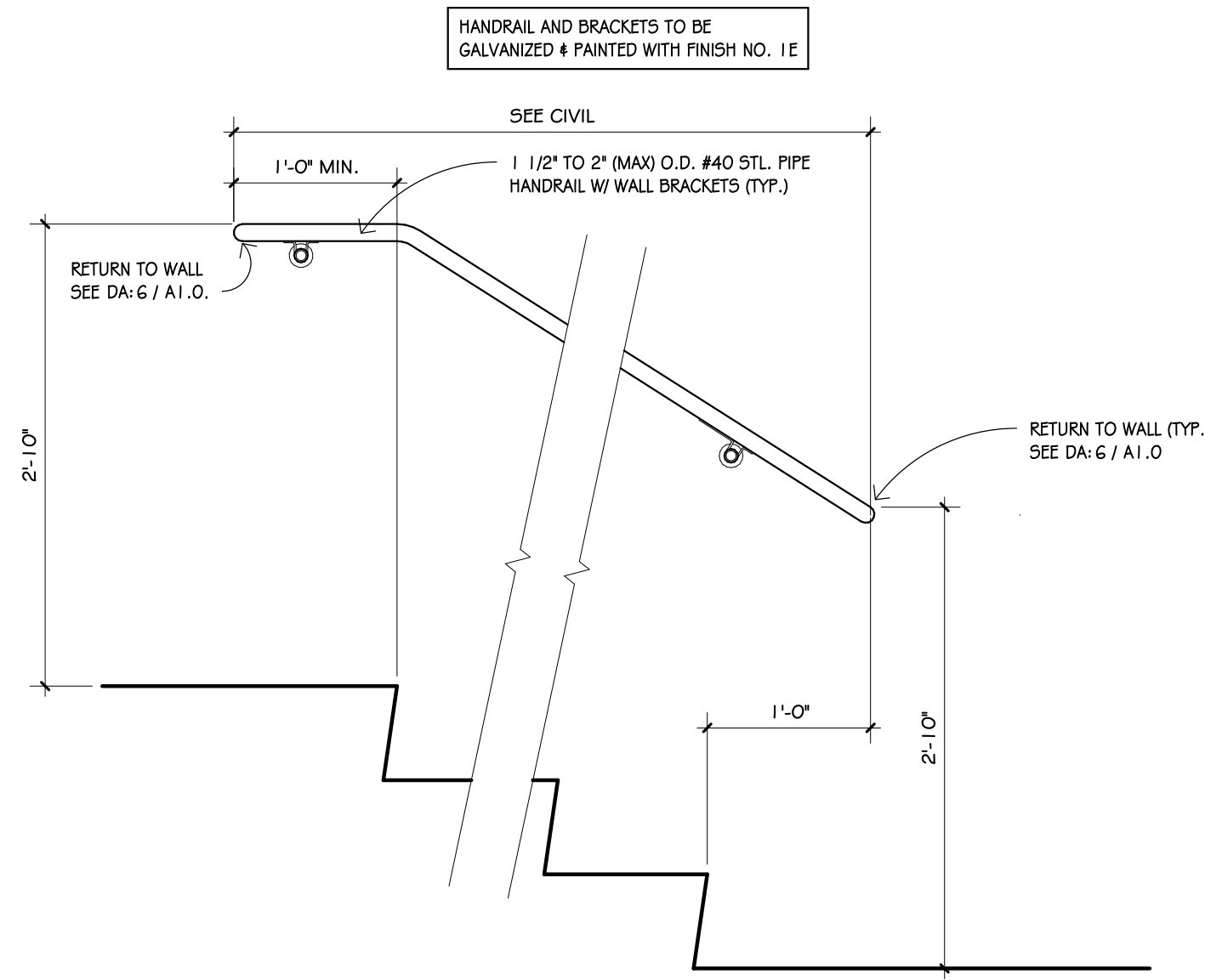
SITE DETAILS



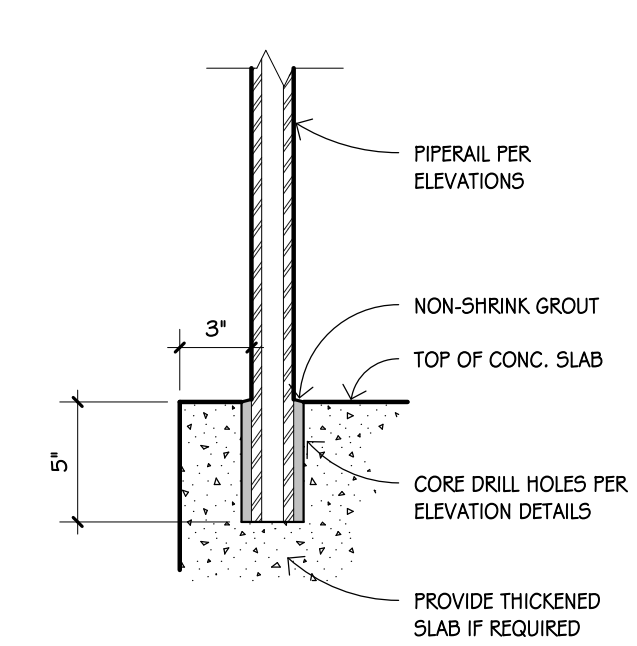
1 1/2" = 1'-0" **4** TYPICAL STEEL PIPERAIL
A1.0 (SETTING DETAIL)



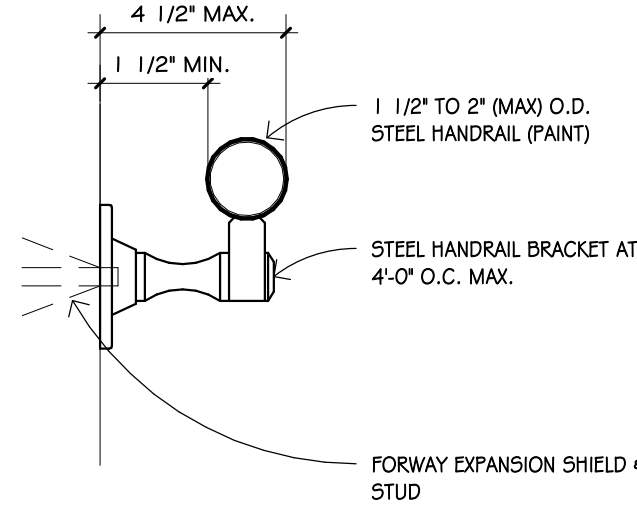
3/4" = 1'-0" **7** POST MOUNTED HANDRAIL
A1.0 TYPICAL



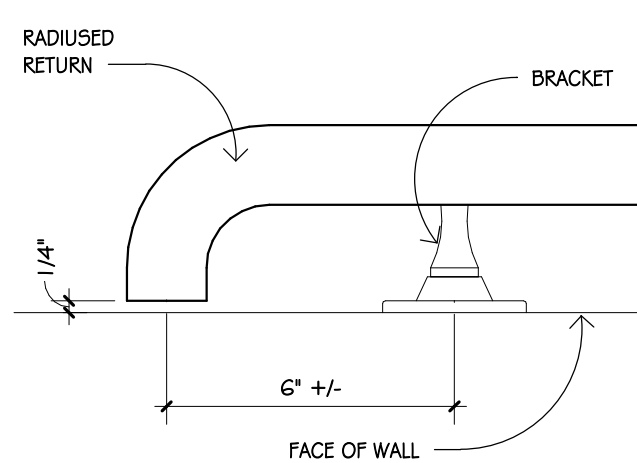
1" = 1'-0" **8** WALL MOUNTED HANDRAIL DETAIL
A1.0



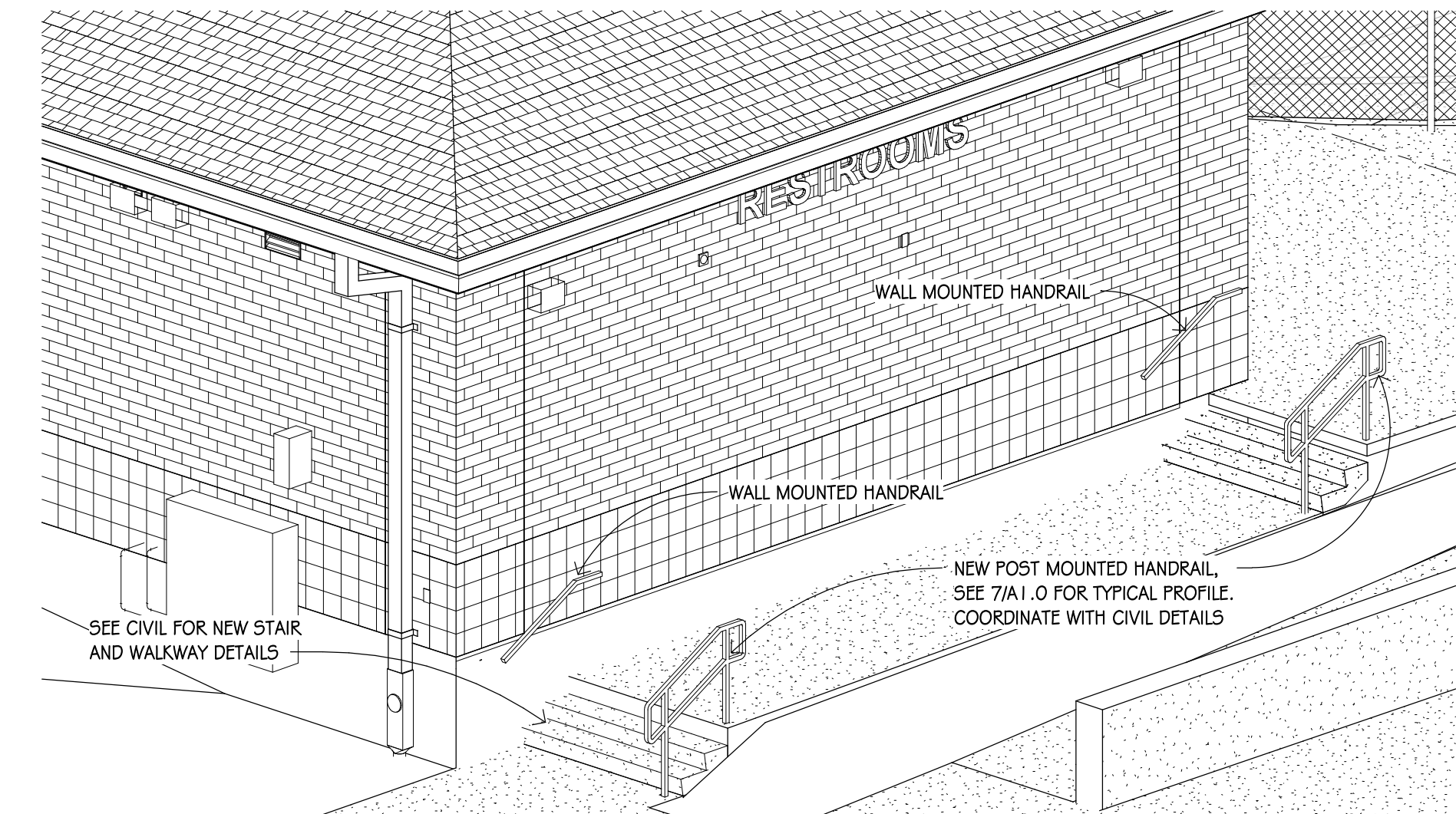
1 1/2" = 1'-0" **4** TYPICAL STEEL PIPERAIL
A1.0 (SETTING DETAIL)



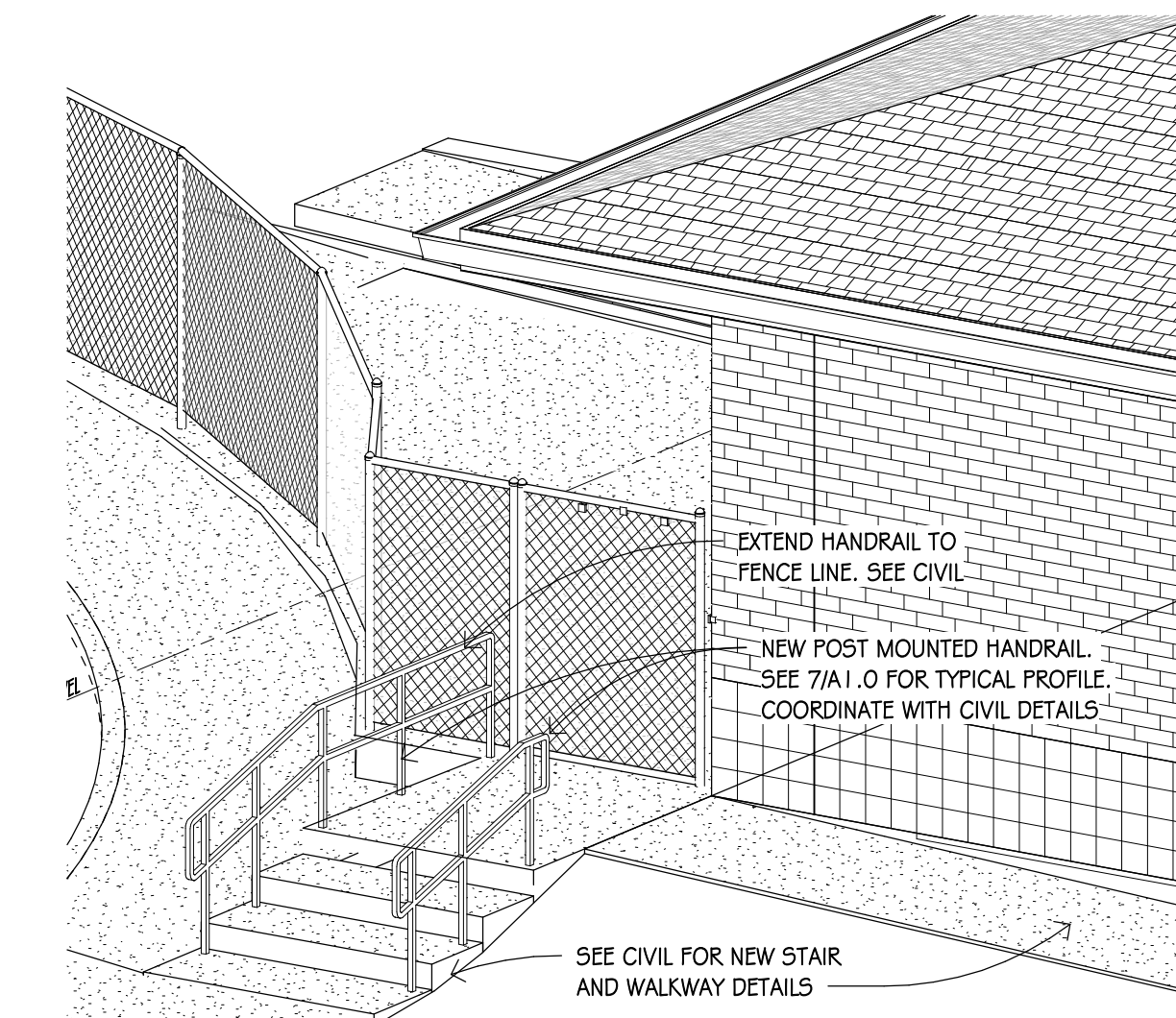
3" = 1'-0" **5** HANDRAIL BRACKET
A1.0 AT CONC., C.M.U. & BRICK WALLS



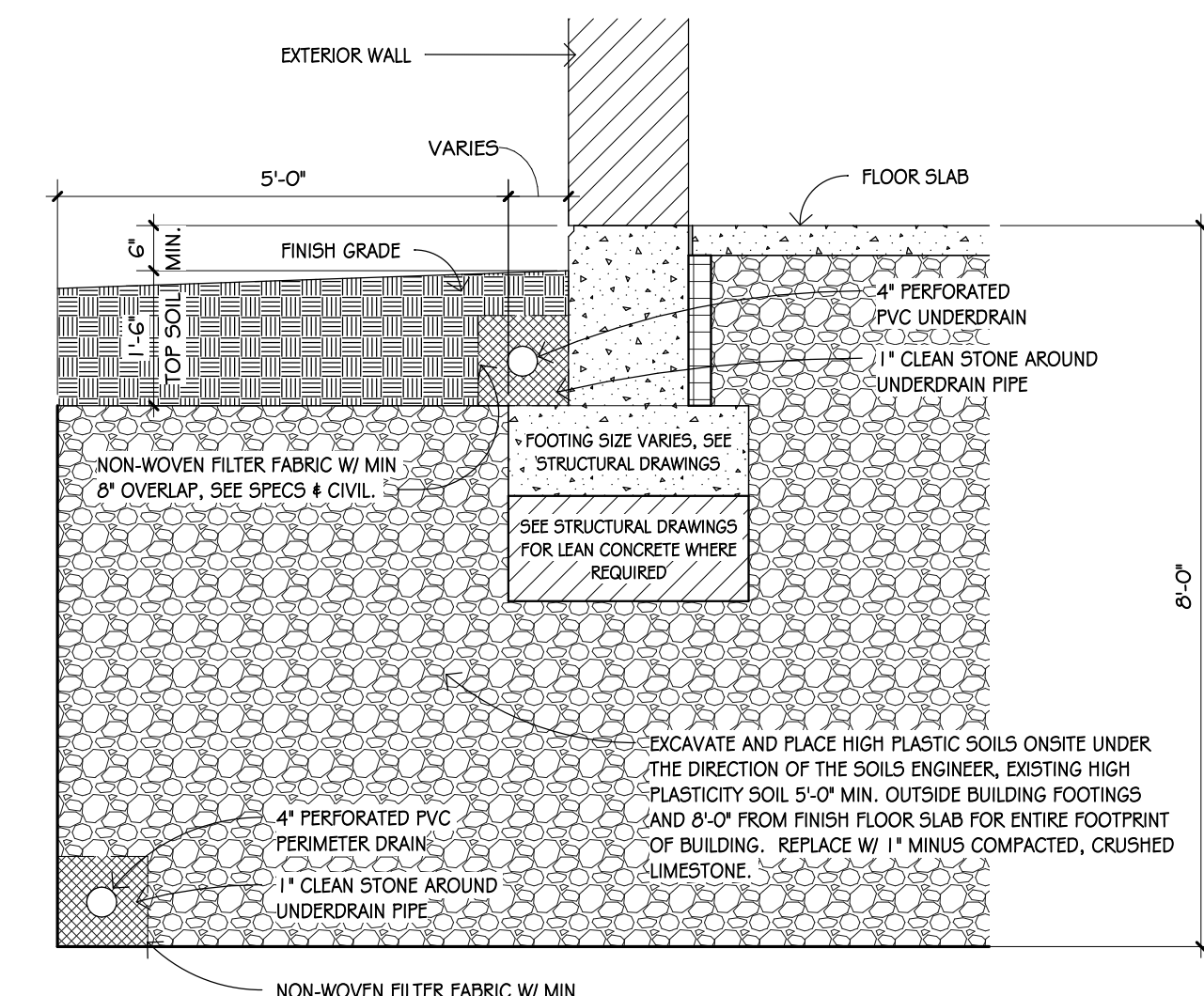
3" = 1'-0" **6** HANDRAIL TERMINATION
A1.0 TYPICAL AT WALL



1 HANDRAILS - EAST STAIRS
A1.0



2 HANDRAILS - WEST RAMP
A1.0



1/2" = 1'-0" **3** SOIL REMEDIATION
A1.0



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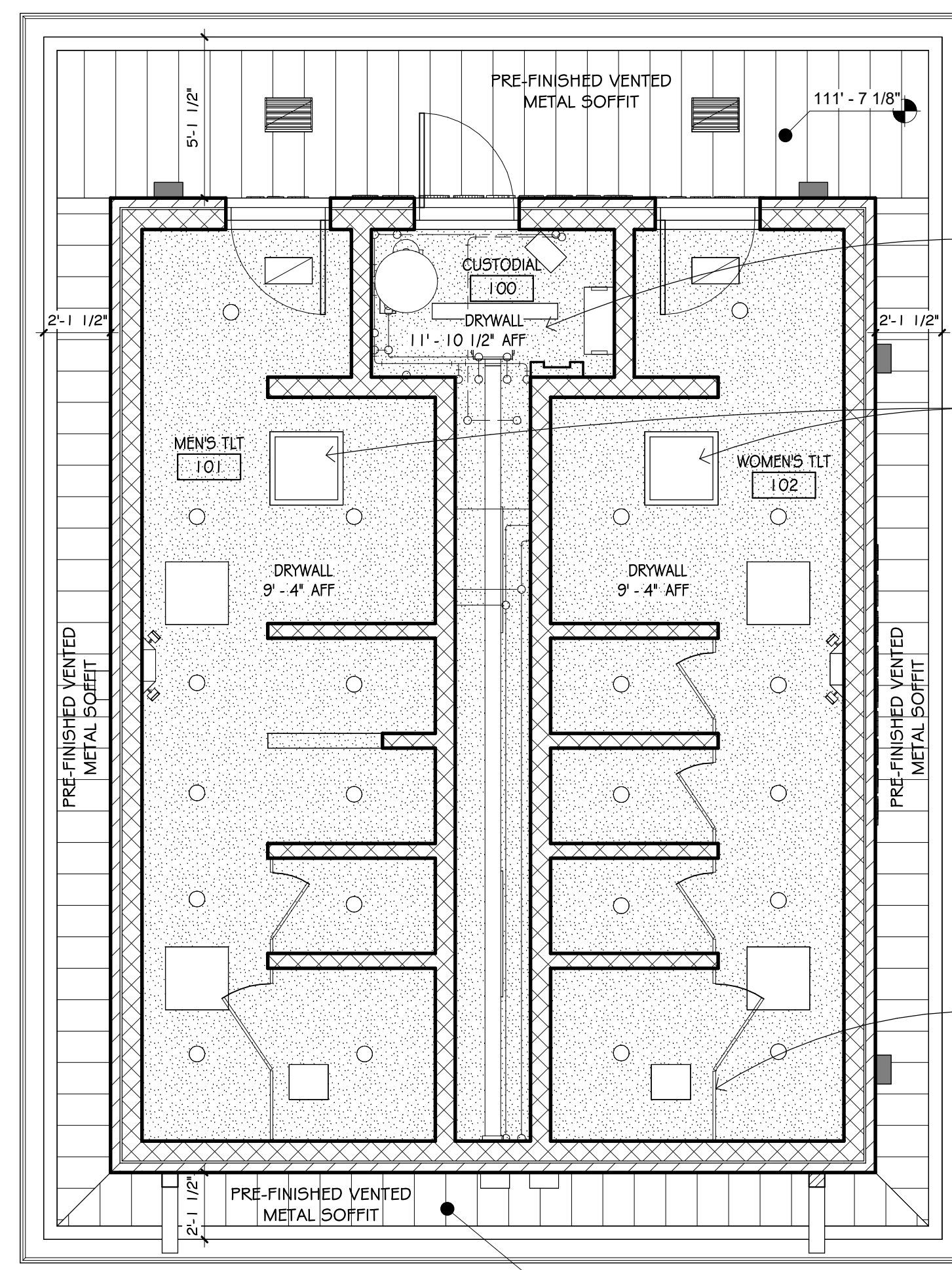
DATE REVISION

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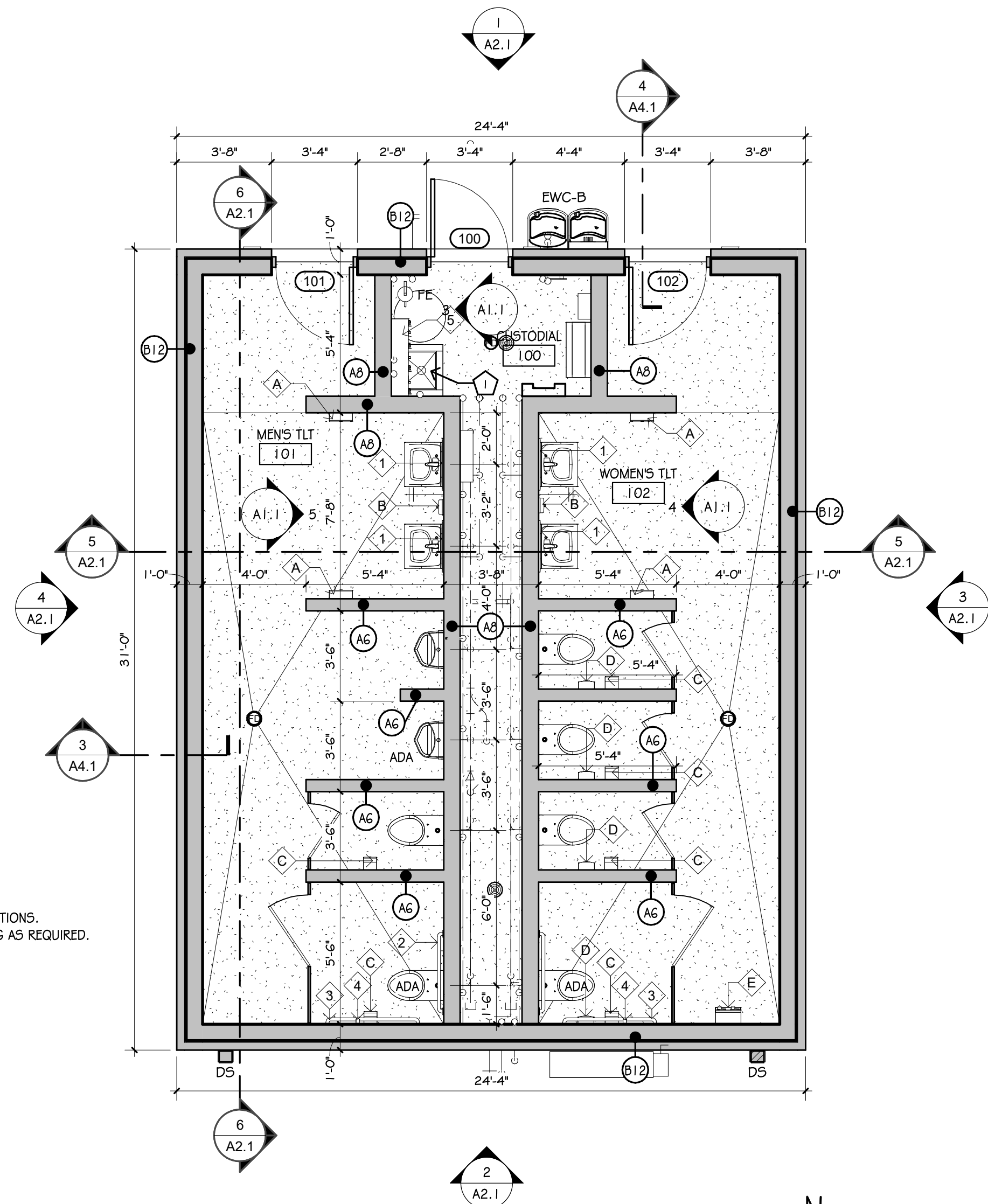
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SHEET NO.

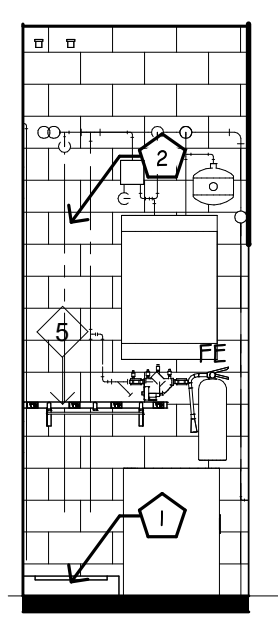
A1.0



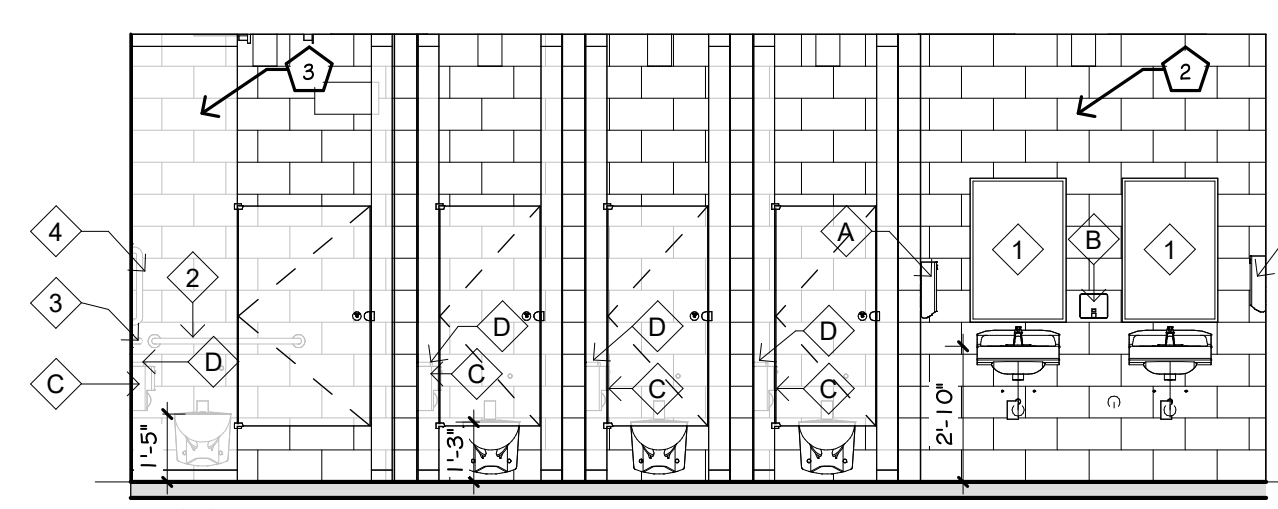
1/4" = 1'-0" **2** REFLECTED CEILING PLAN
A1.1



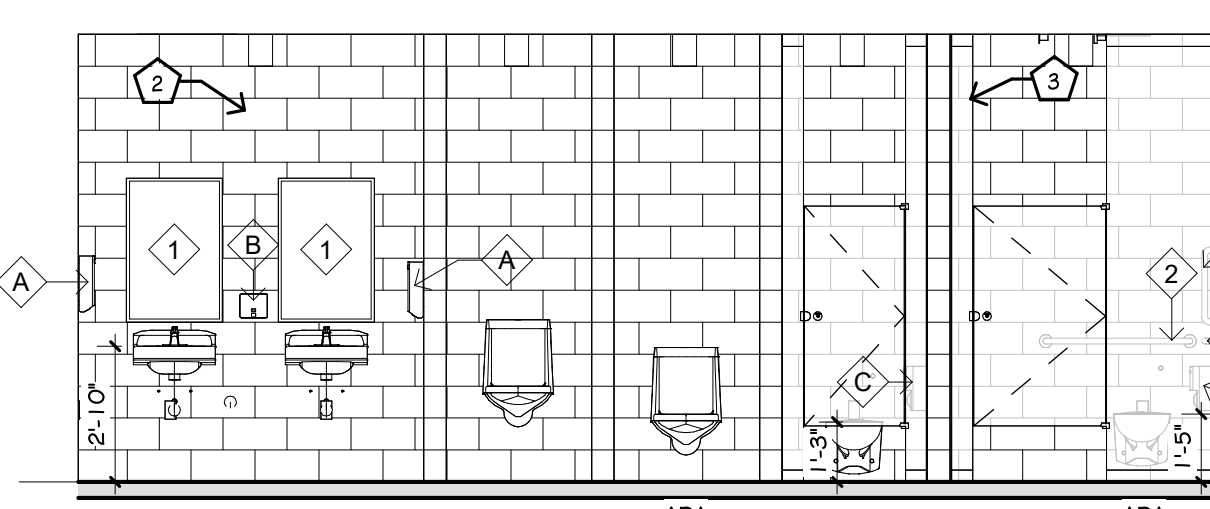
1/4" = 1'-0" **1** FLOOR PLAN
A1.1



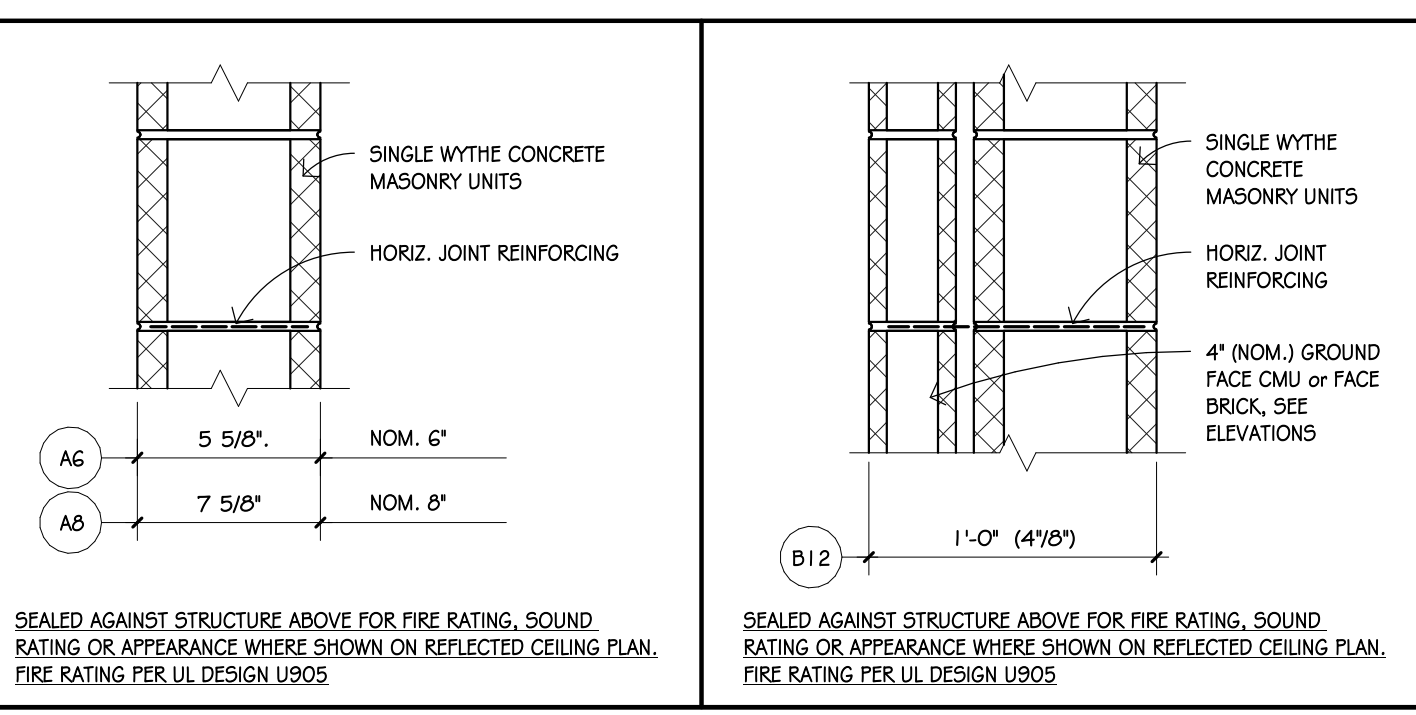
1/4" = 1'-0" **3** CUSTODIAL 100
A1.1



1/4" = 1'-0" **4** WOMEN'S TLT 102
A1.1



1/4" = 1'-0" **5** MEN'S TLT 101
A1.1



WALL TYPES

FLOOR PLAN LEGEND

DS DOWNSPOUT, SEE PLUMBING & CIVIL DRAWINGS
 EWC-B ELECTRIC WATER COOLER W/ BOTTLE FILLER, SEE PLUMBING DWGS
 FD FLOOR DRAIN, SEE PLUMBING DRAWINGS
 FE FIRE EXTINGUISHER W/ BRACKET, SEE SPEC.
 HB HOSE BIBB, SEE PLUMBING DRAWINGS
 FT PAINT FINISH, SEE SPECS.
 NIC 'NOT IN CONTRACT' (BY OWNER) ITEMS
 WH WATER HEATER, SEE PLUMBING DWGS.

1 A101 EXTERIOR ELEVATION REFERENCE
 X WASHROOM ACCESSORY
 KEYED NOTE
 101 DOOR NUMBER, SEE DOOR SCHEDULE AND DIVISION 5 DETAILS
 A12 WALL TYPE, SEE DIVISION 1 DETAILS

FLOOR PLAN GENERAL NOTES

1. ALL INTERIOR CMU BLOCK WALLS TO HAVE BULL-NOSE CORNERS.

KEYED NOTES

1 MOP/UTILITY SINK, SEE PLUMBING
 2 PAINTED CMU WALLS, SEE SPECS.
 3 FLOOR MOUNTED, CEILING BRACED TOILET PARTITIONS, SEE SPECS.

DOOR SCHEDULE

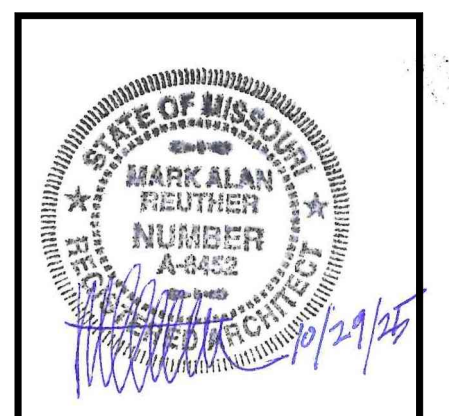
DOOR NO.	ROOM NO. FROM TO	DOOR SIZE WIDTH HEIGHT	DOOR TYPE	DOOR MAT'L	FRAME TYPE	MINUTE RATING	HWDR GROUP	DETAIL MANUAL
100	100	3'-0" 7'-2"	F	FRP	AL-1		--	
101	101	3'-0" 7'-2"	F	FRP	AL-1		--	
102	102	3'-0" 7'-2"	F	FRP	AL-1		--	

WASHROOM ACCESSORIES

ROOM NAME	ROOM NUMBER	QUANTITY	COMMENTS
ITEM 1: 24 x 36 WALL MOUNTED MIRROR			
MENS TLT	101	2	
WOMENS TLT	102	2	
ITEM 2: 36" GRAB BAR			
MENS TLT	101	1	
WOMENS TLT	102	1	
ITEM 3: 42" GRAB BAR			
MENS TLT	101	1	
WOMENS TLT	102	1	
ITEM 4: 18" GRAB BAR			
MENS TLT	101	1	
WOMENS TLT	102	1	
ITEM 5: MOP STRIP AND UTILITY SHELF			
CUSTODIAL	100	1	
ITEM A: PAPER TOWEL DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)			
MENS TLT	101	2	
WOMENS TLT	102	2	
ITEM B: SOAP DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)			
MENS TLT	101	1	
WOMENS TLT	102	1	
ITEM C: MULTI-ROLL TOILET PAPER DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)			
MENS TLT	101	2	
WOMENS TLT	102	4	
ITEM D: SURFACE MOUNTED SANITARY NAPKIN DISPOSAL (OWNER PROVIDED, CONTRACTOR INSTALLED)			
WOMENS TLT	102	4	
ITEM E: SURFACE MOUNTED SANITARY NAPKIN DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)			
WOMENS TLT	102	1	

ROOM MATERIAL SCHEDULE

NO.	NAME	FLOOR	BASE	WALL FINISHES				CEILING FINISH	NOTES
				NORTH	SOUTH	EAST	WEST		
MAIN LEVEL									
100	CUSTODIAL	SEALED CONG	N/A	CMU (PT #7)	CMU (PT #7)	CMU (PT #7)	CMU (PT #7)	DRYWALL (PT #7)	
101	MENS TLT	SEALED CONG	N/A	CMU (PT #7)	CMU (PT #7)	CMU (PT #7)	CMU (PT #7)	DRYWALL (PT #7)	
102	WOMENS TLT	SEALED CONG	N/A	CMU (PT #7)	CMU (PT #7)	CMU (PT #7)	CMU (PT #7)	DRYWALL (PT #7)	



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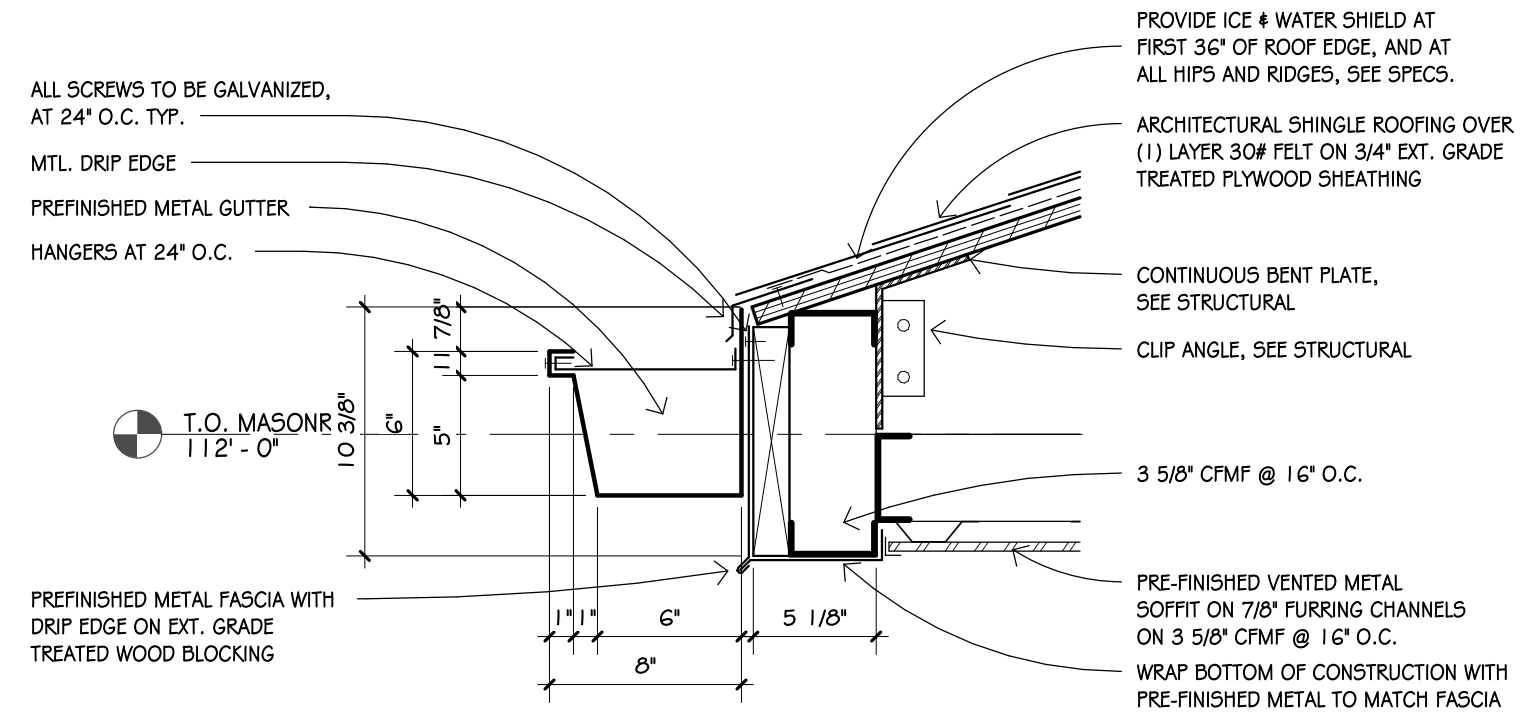
DATE REVISION

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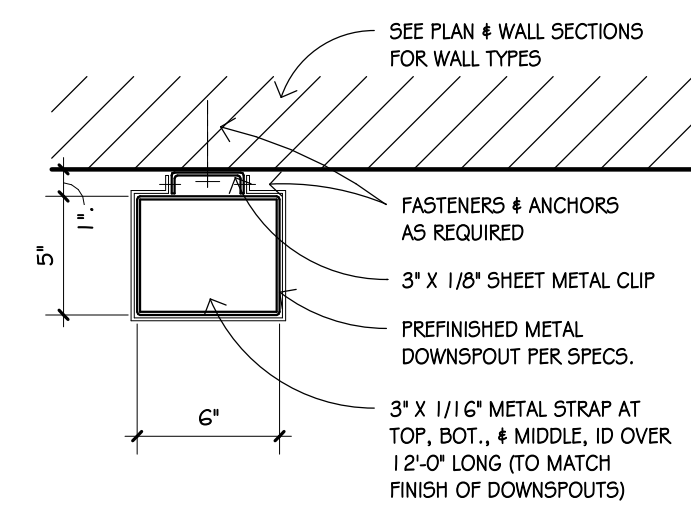
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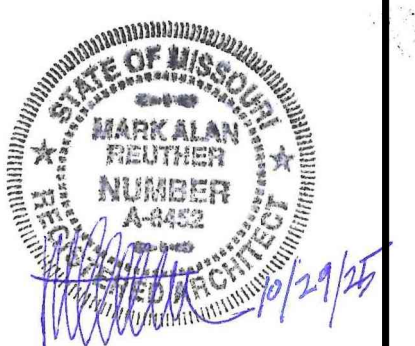
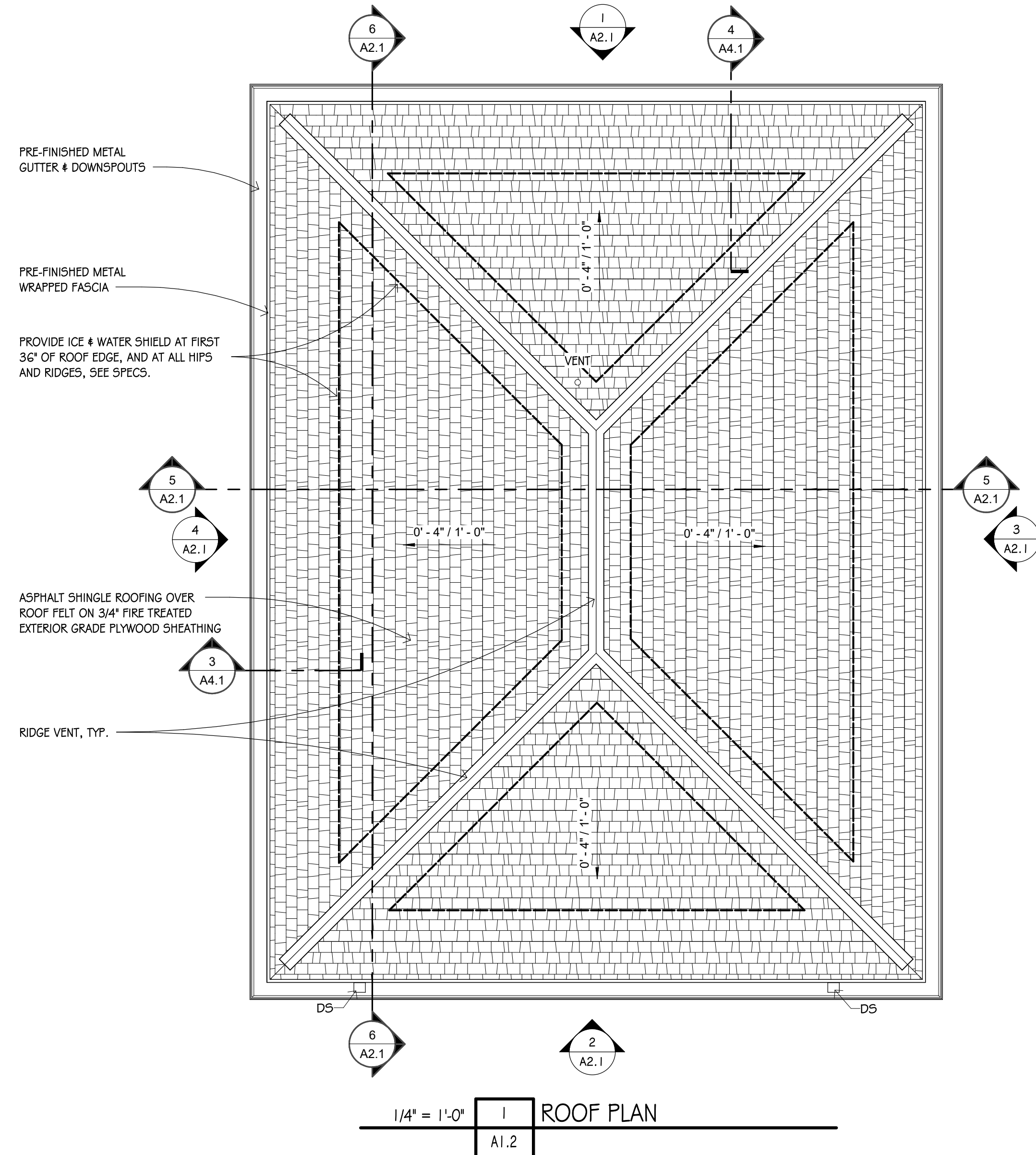
A1.1



1 1/2" = 1'-0" **2** FASCIA & GUTTER DETAIL
A1.2



1 1/2" = 1'-0" **3** TYP. DOWNSPOUT DETAIL
A1.2



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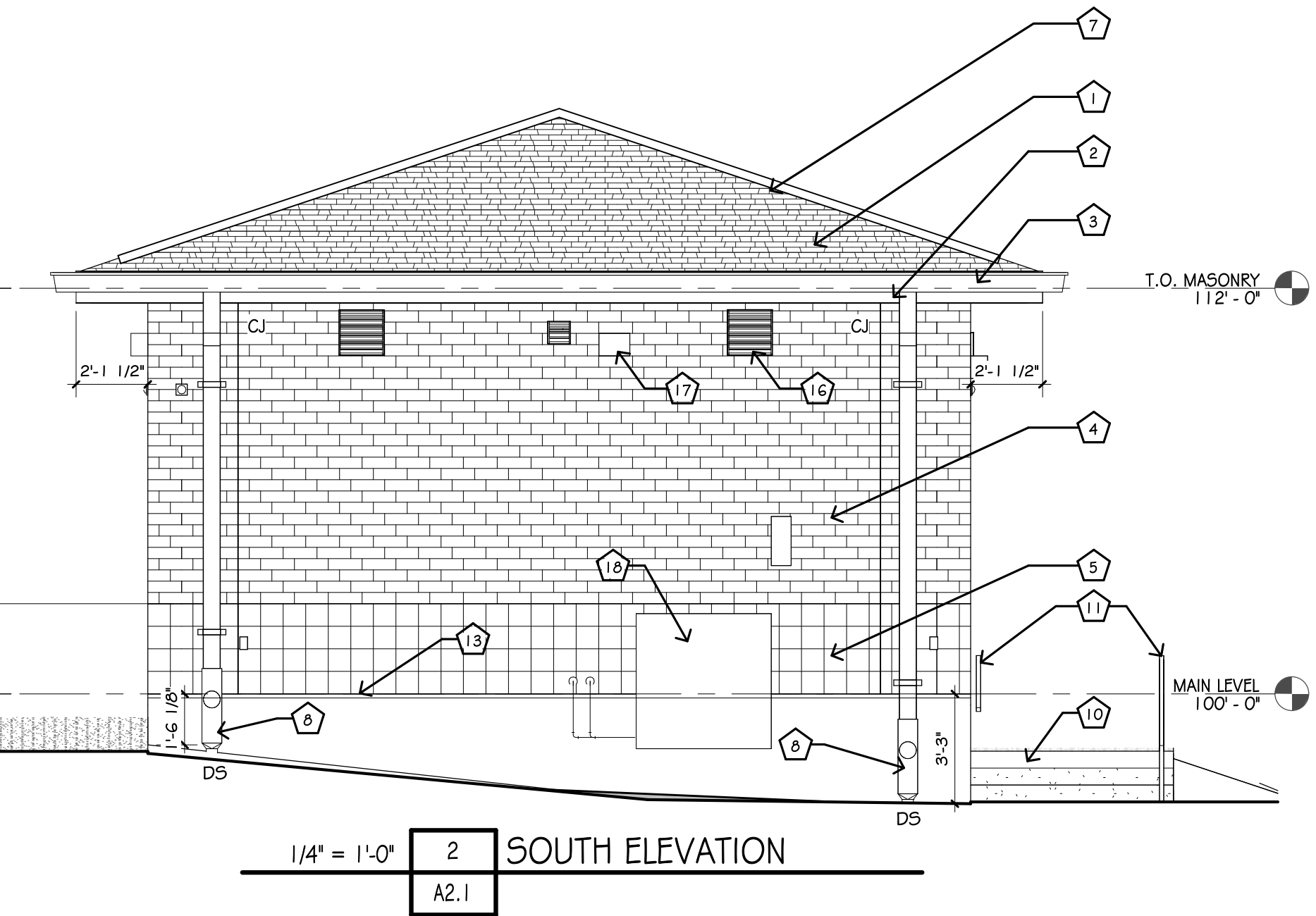
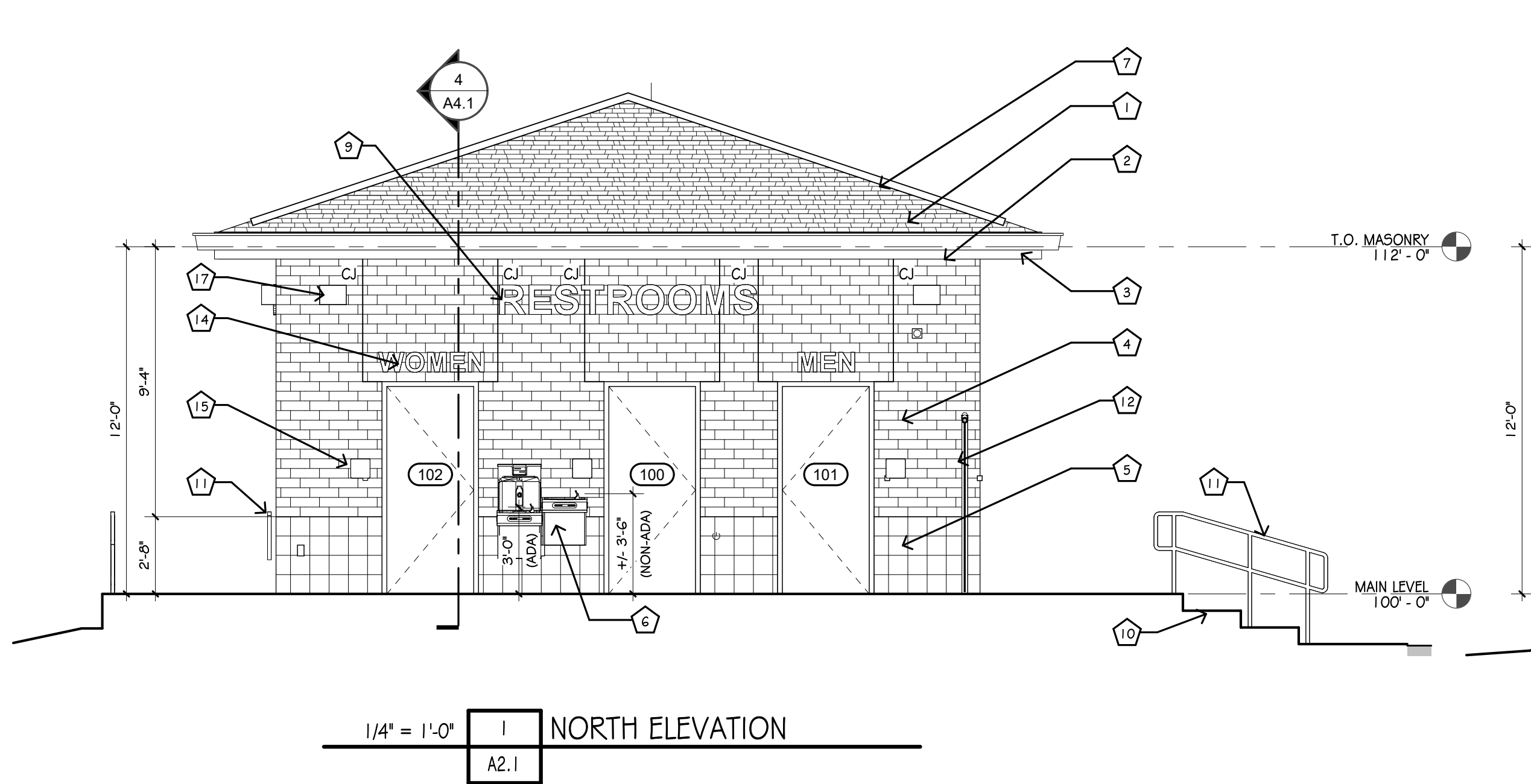
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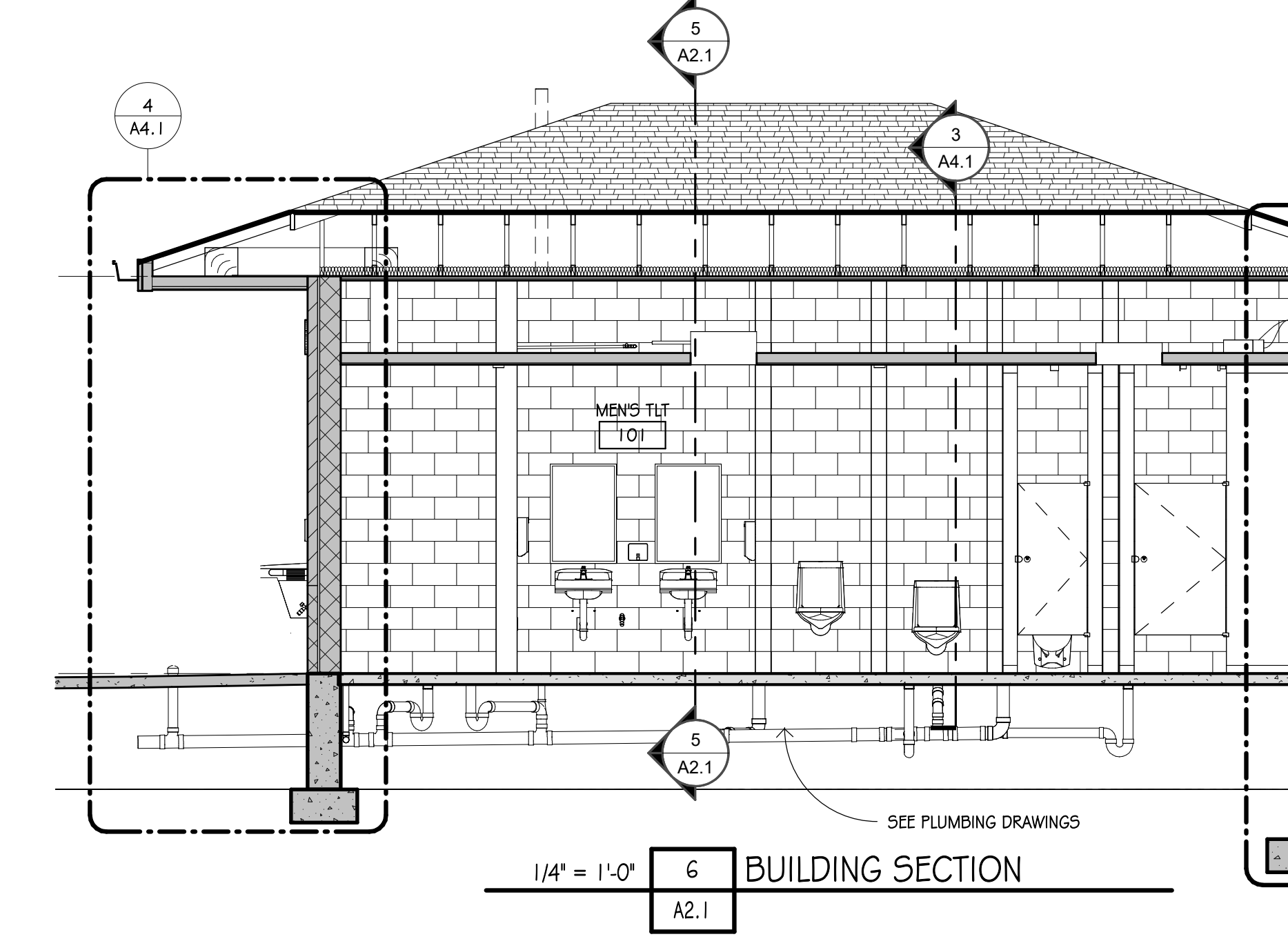
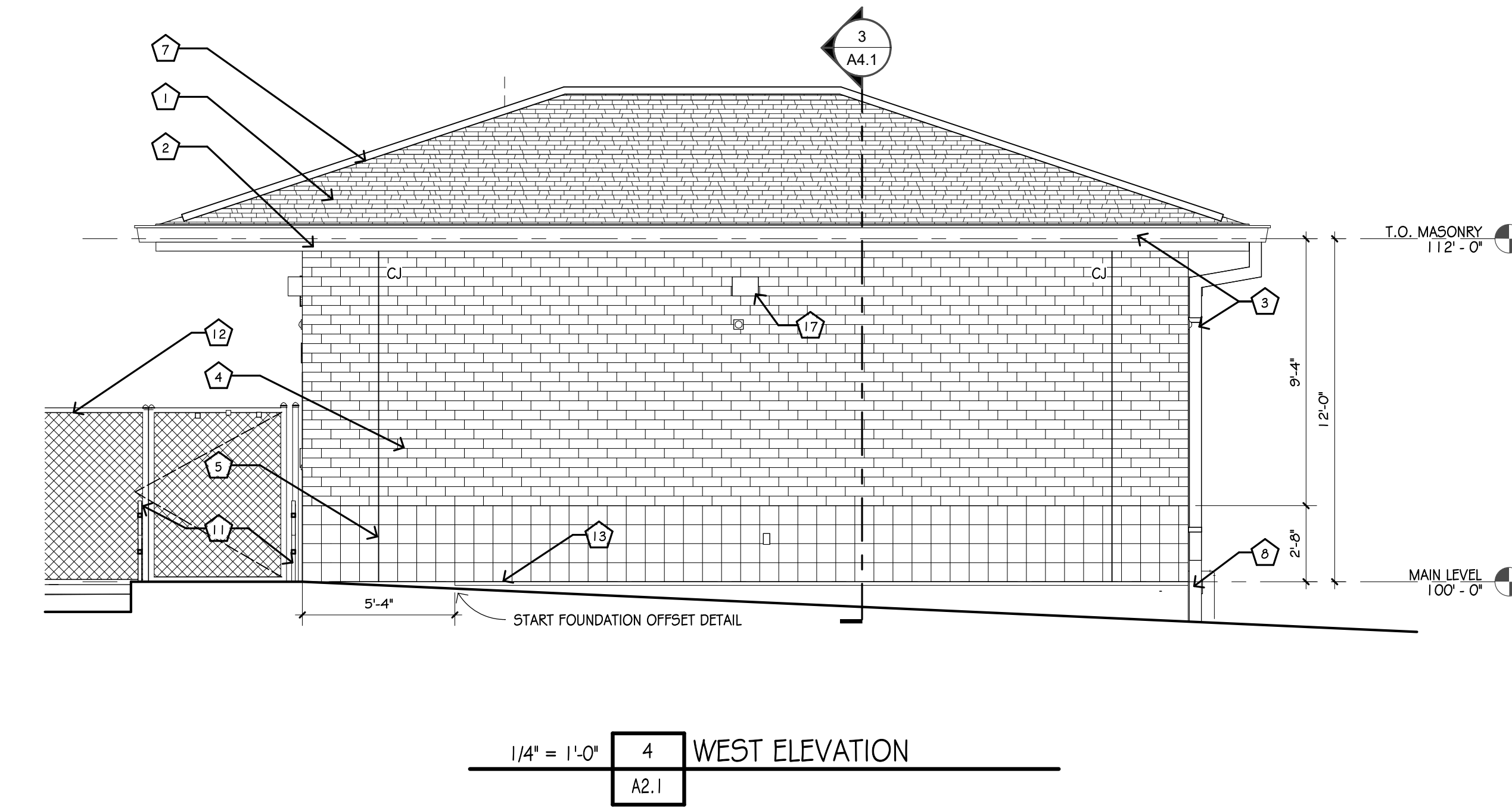
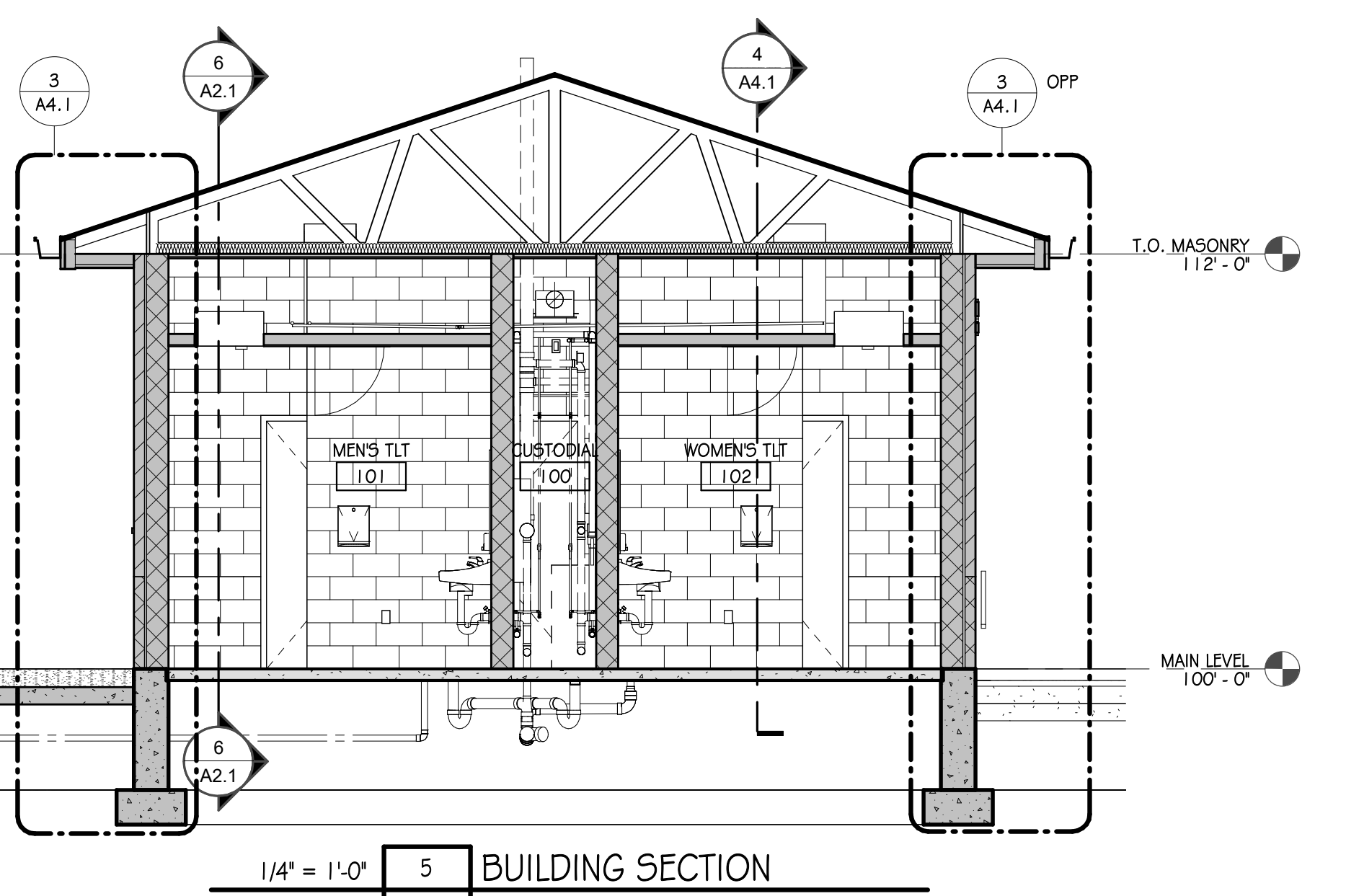
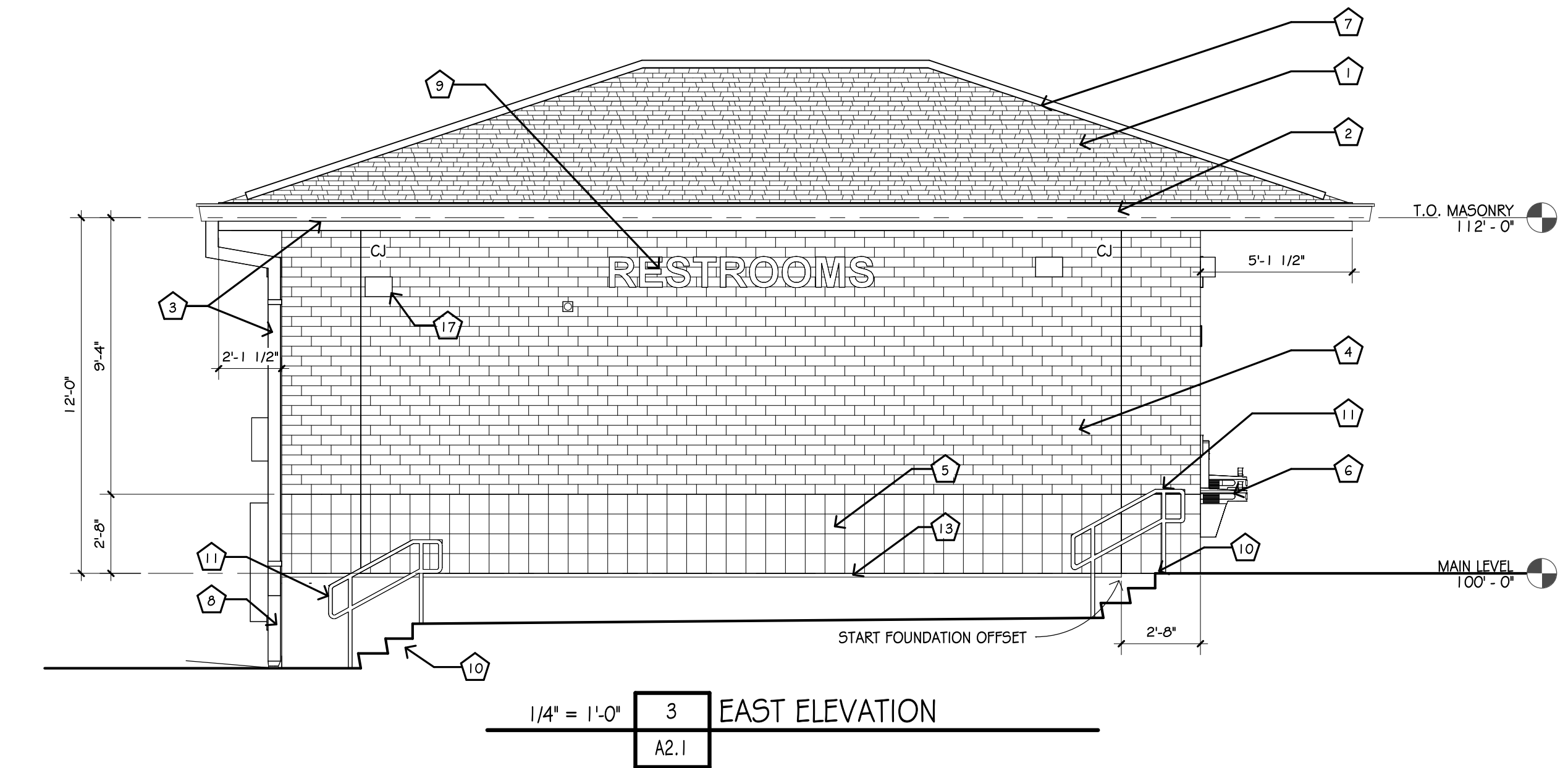
SHEET NO.

A1.2

FIELD VERIFY ALL DIMENSIONS NOTED AS +/-



- ### BUILDING ELEVATION KEYED NOTES
- 1 ASPHALT SHINGLE ROOFING OVER ROOF FELT ON 3/4" FIRE TREATED EXTERIOR GRADE PLYWOOD SHEATHING
 - 2 PRE-FINISHED METAL WRAPPED FASCIA, SEE 2/A1.2
 - 3 PRE-FINISHED METAL GUTTER & DOWNSPOUTS, SEE 243/A1.2
 - 4 FACE BRICK, SEE SPECS.
 - 5 GROUND FACE CMU, SEE SPECS.
 - 6 BI-LEVEL DRINKING FOUNTAIN WITH BOTTLE FILLER, SEE PLUMBING
 - 7 RIDGE VENT, SEE SPECS.
 - 8 CAST IRON DOWNSPOUT BOOT, SEE SPECS.
 - 9 12" HIGH, 1" DEEP CAST ALUMINUM BUILDING SIGNAGE. CLEAR ANODIZED. STUD MOUNT - 1/2" STANDOFF
 - 10 NEW CONCRETE STAIRS. COORDINATE WITH CIVIL DRAWINGS
 - 11 NEW STAIR HANDRAIL. SEE A1.0 AND COORDINATE WITH CIVIL PLANS
 - 12 NEW CHAINLINK FENCING, SEE CIVIL PLANS
 - 13 FOUNDATION OFFSET, SEE 5/A4.1. DISCONTINUE OFFSET WHERE FOUNDATION WALL MEETS CONCRETE PAVEMENT.
 - 14 8" HIGH, 1/2" DEEP CAST ALUMINUM 'MEN' AND 'WOMEN' SIGNAGE. CLEAR ANODIZED. STUD MOUNT FLUSH
 - 15 SIGNAGE, SEE AG.1
 - 16 LOUVER, SEE MECHANICAL
 - 17 WALL LIGHT, SEE ELECTRICAL
 - 18 CONDENSING UNIT, SEE MECHANICAL



FIELD VERIFY ALL DIMENSIONS NOTED AS +/-



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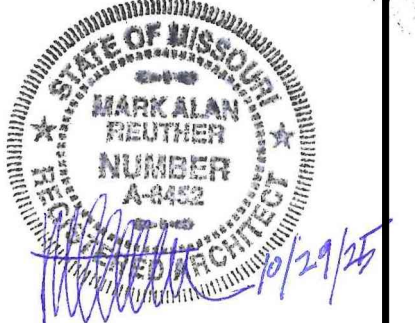
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A2.1



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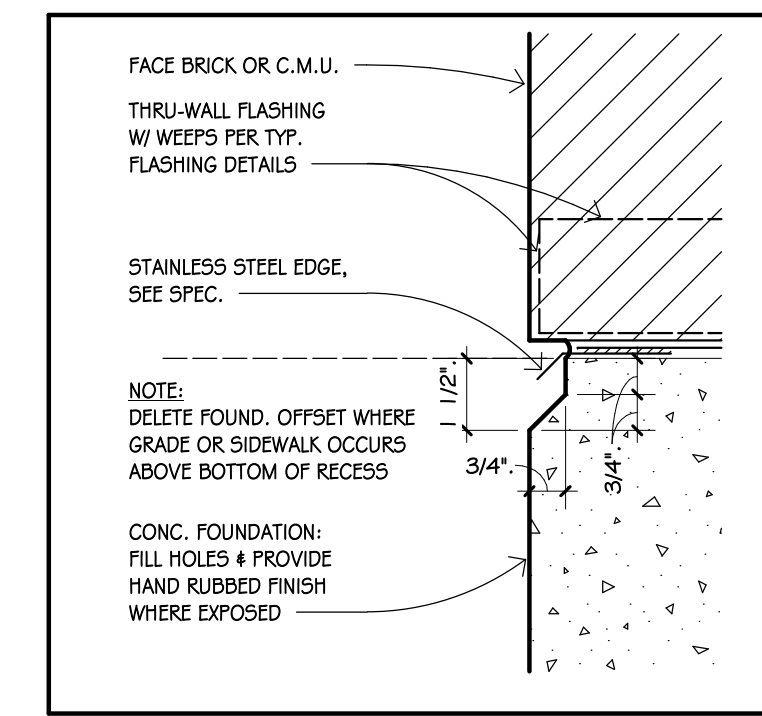
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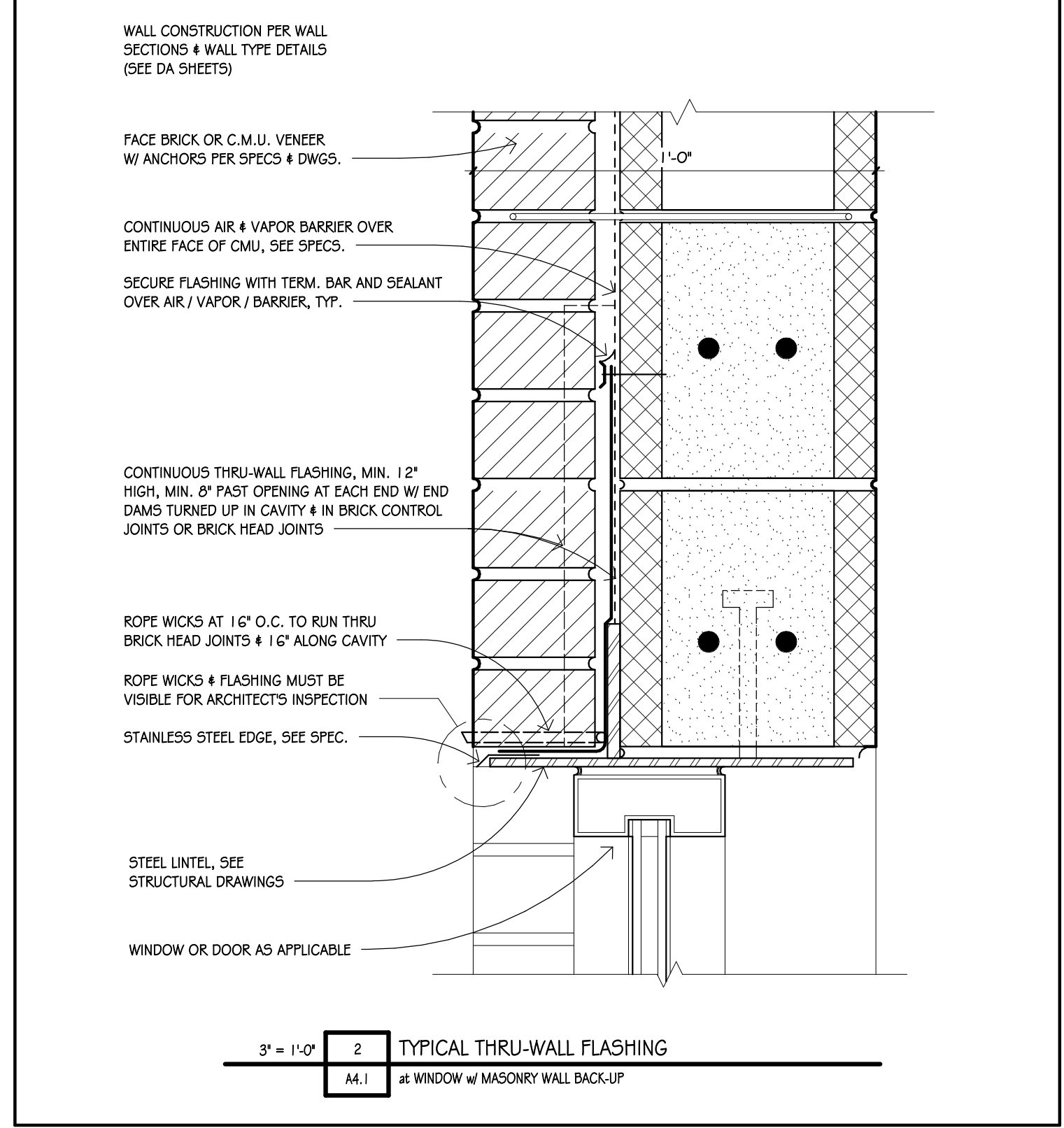
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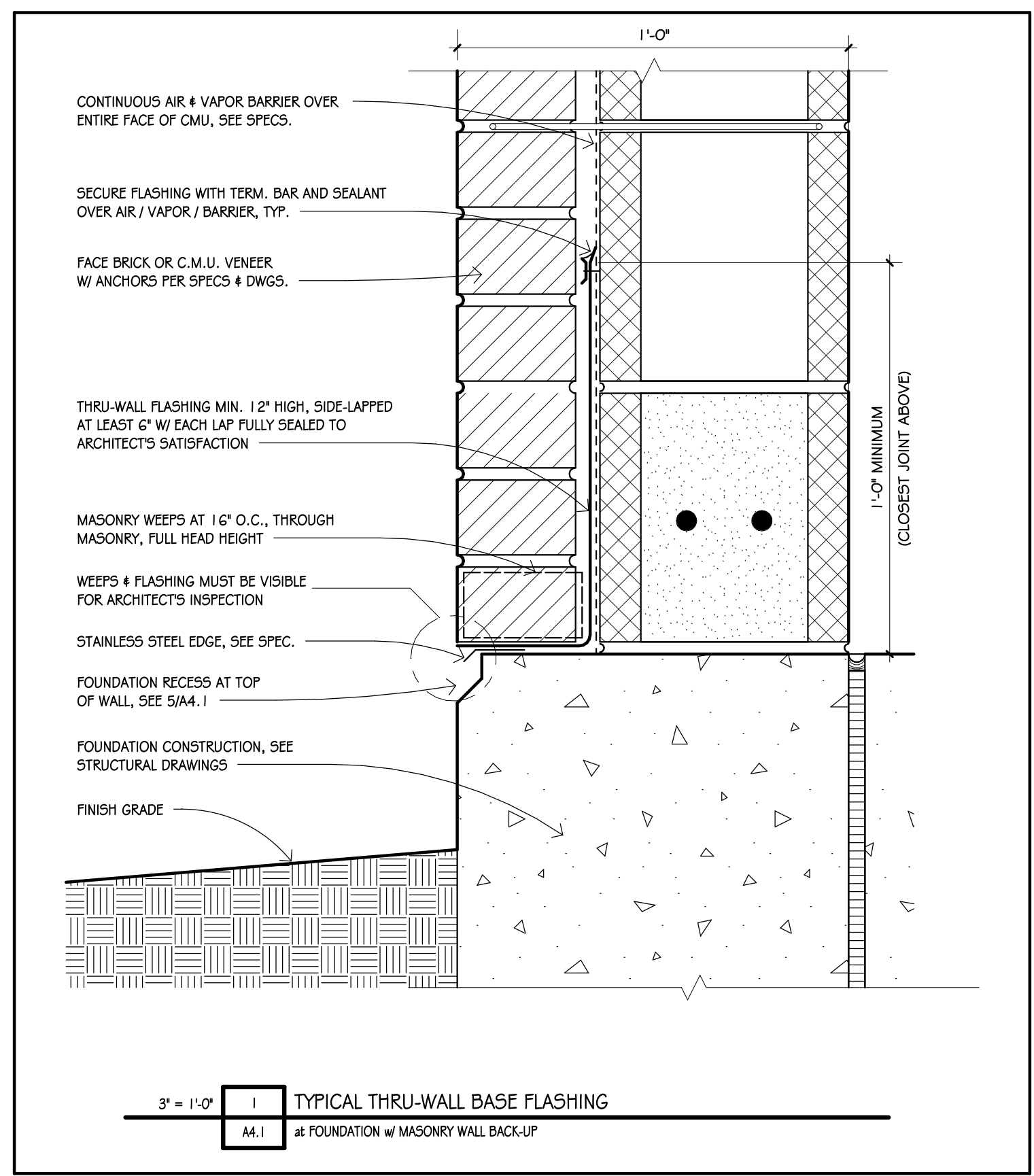
A4.1



3/4" = 1'-0" **5** TOP OF FOUNDATION
A4.1 OFFSET DETAIL

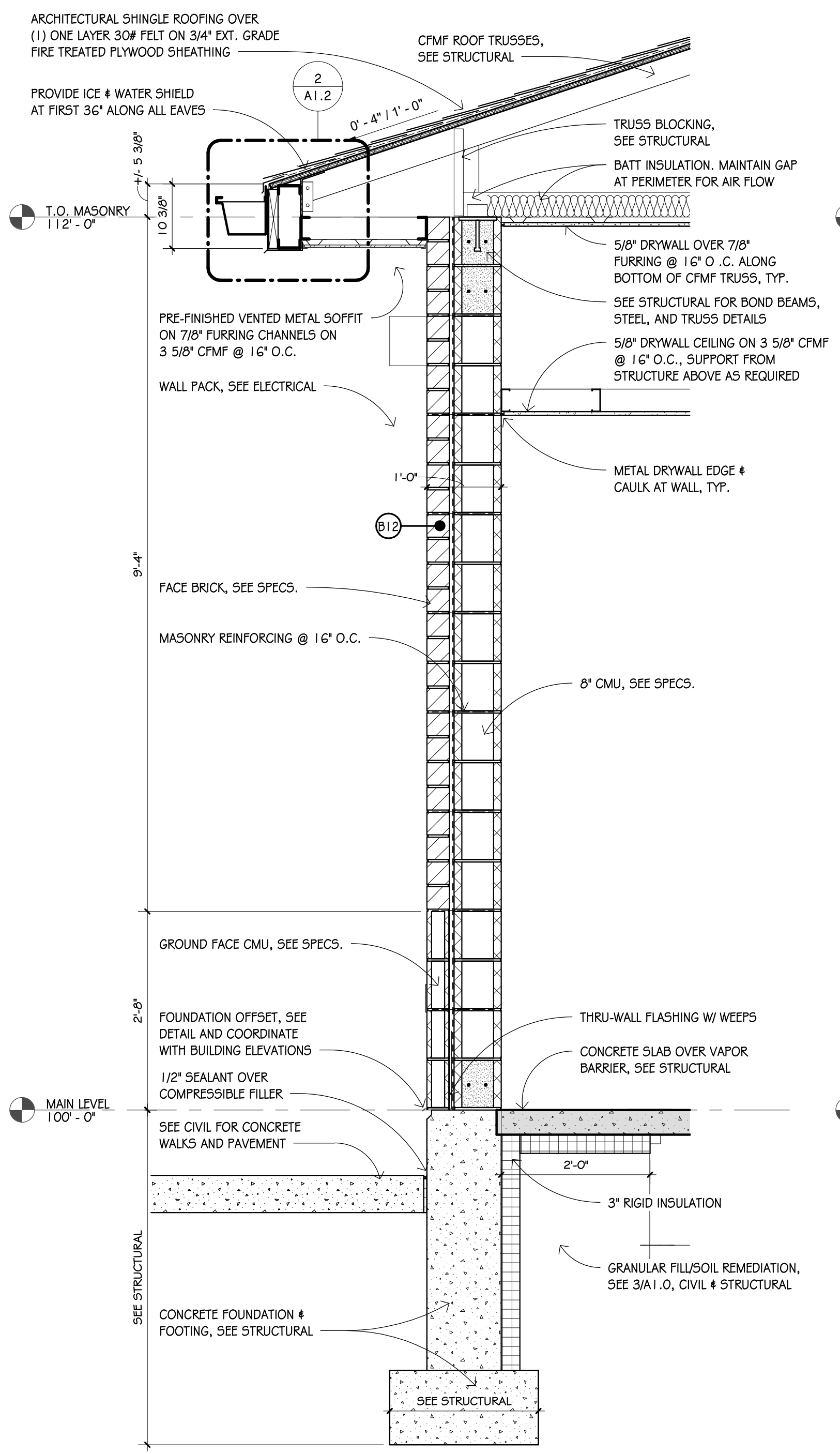


3" = 1'-0" **2** TYPICAL THRU-WALL FLASHING
A4.1 @ WINDOW w/ MASONRY WALL BACK-UP

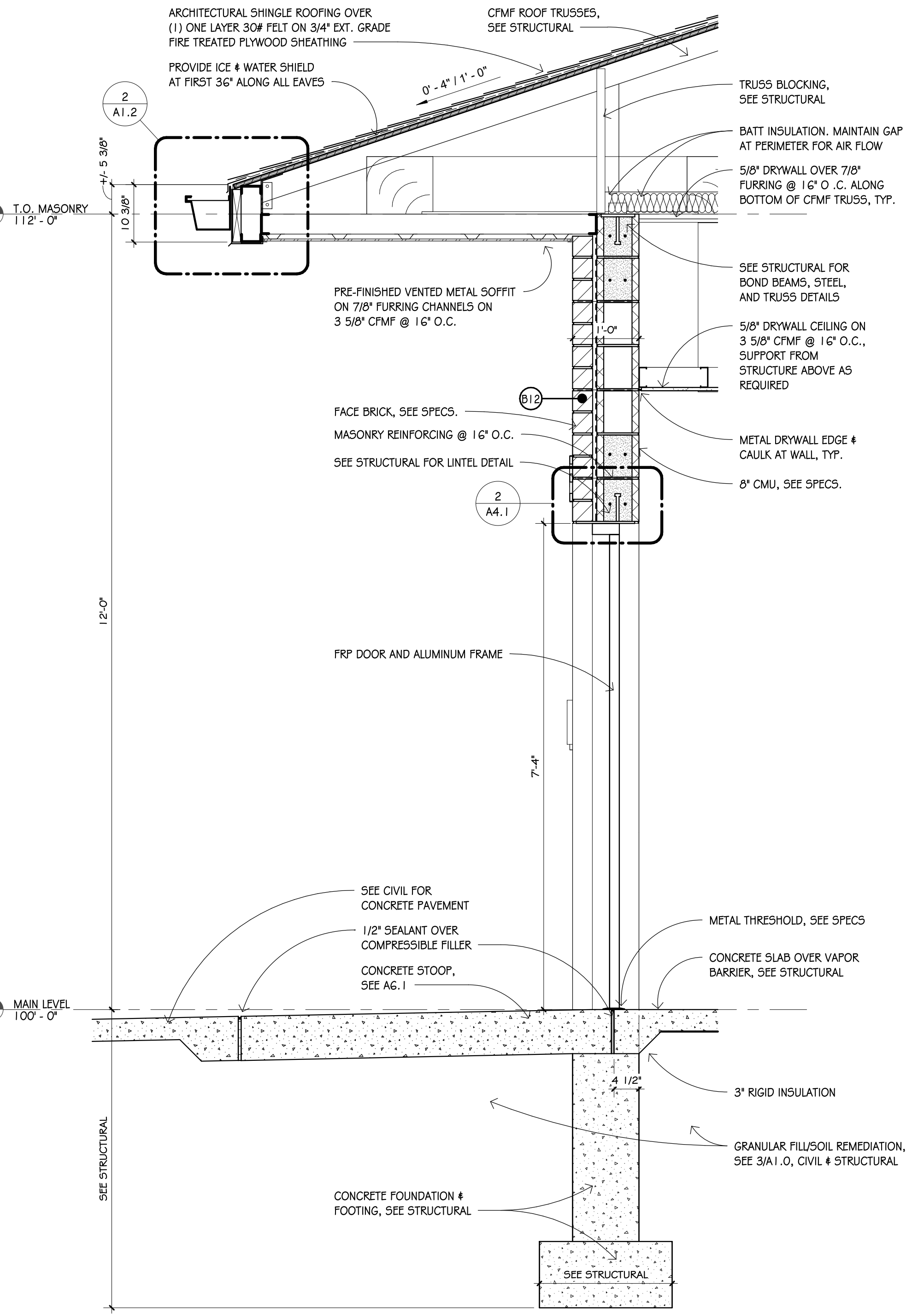


3" = 1'-0" **1** TYPICAL THRU-WALL BASE FLASHING
A4.1 @ FOUNDATION w/ MASONRY WALL BACK-UP

FIELD VERIFY ALL DIMENSIONS NOTED AS +/-



3/4" = 1'-0" **3** WALL SECTION - TYPICAL
A4.1



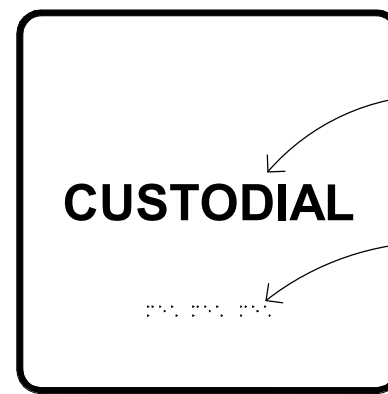
3/4" = 1'-0" **4** WALL SECTION - NORTH WALL
A4.1

SCHEDULE OF IDENTIFICATION DEVICES

NUMBER	LOCATION	ROOM NAME	TYPE	COPY REQUIRED	SIZE	REMARKS
102	WOMEN'S TLT		TYPE 5A	WOMEN	8" x 8"	
100	CUSTODIAL		TYPE 4	CUSTODIAL	8" x 8"	
101	MEN'S TLT		TYPE 5B	MEN	8" x 8"	

GENERAL NOTES:

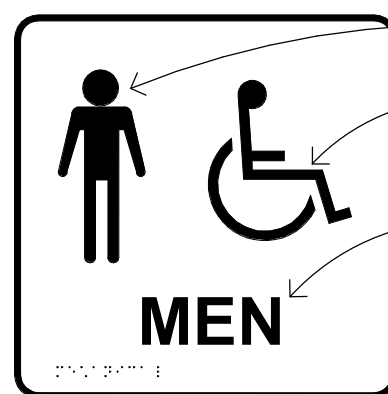
- ALL SIGNS TO COMPLY WITH CURRENT ICC A117.1 CHAPTER 7, SECTION 703 REQUIREMENTS INCLUDING BRAILLE.
- COPY SHOWN ON SCHEDULE IS FOR BIDDING ONLY. OBTAIN ARCHITECT'S APPROVAL OF ALL COPY BEFORE MANUFACTURER.
- FOR TYPICAL MOUNTING HEIGHTS SEE AG.1.
- OBTAIN ARCHITECT'S APPROVAL OF MOUNTING HEIGHTS AND LOCATIONS IN FIELD BEFORE INSTALLATION.
- USE MANUFACTURER'S STANDARD SIZES CLOSE TO THOSE SHOWN. NOTE ANY CHANGES ON SHOP DRAWINGS.
- PROVIDE TEXT HEIGHTS AS SHOWN, RADIUS CORNERS & RASPED BORDER 1/8" WIDE SAME COLOR AS TEXT.
- COLORS TO BE SELECTED FROM MANUFACTURER'S STANDARD COLORS.



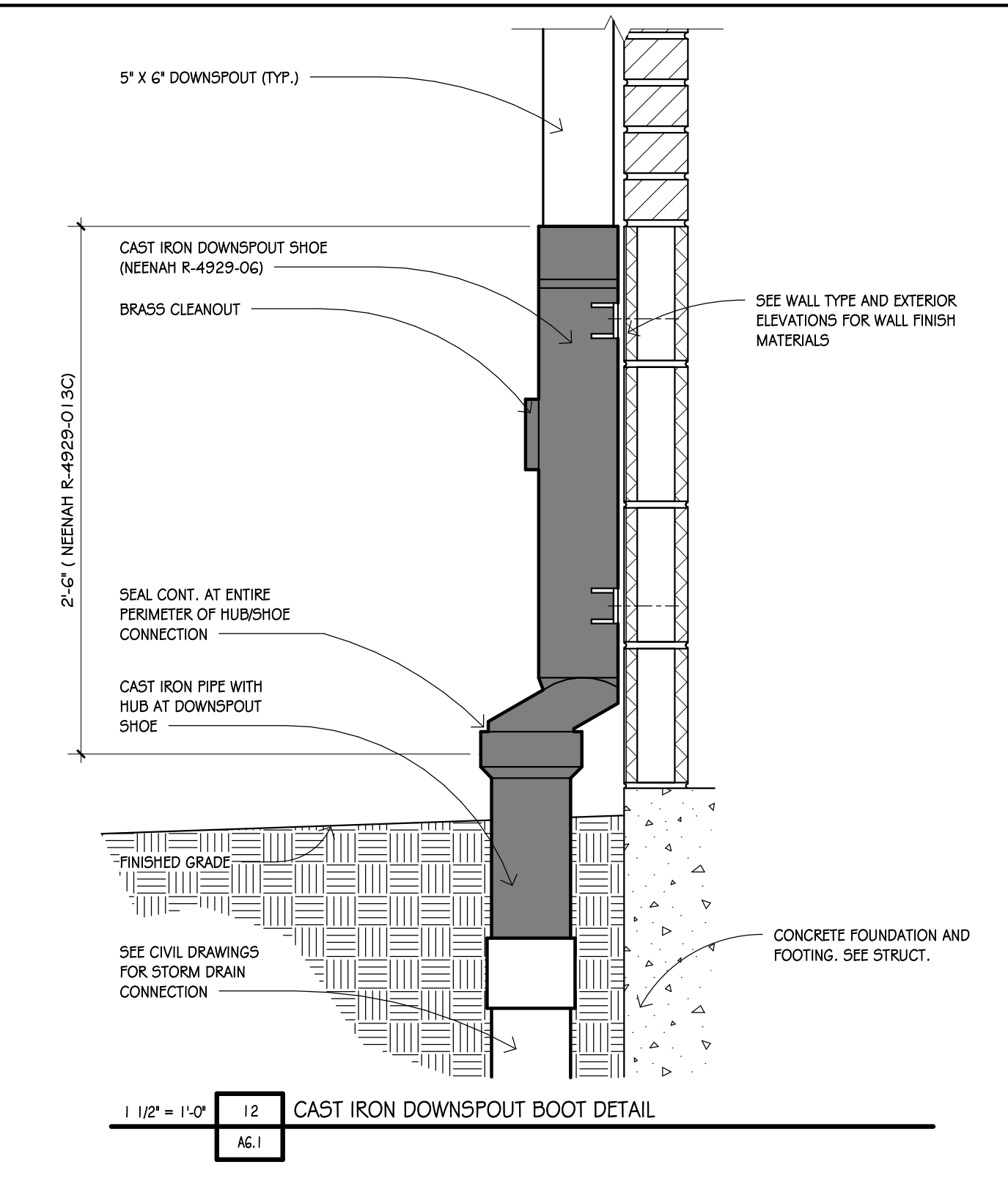
TYPE 4
(8" x 8")



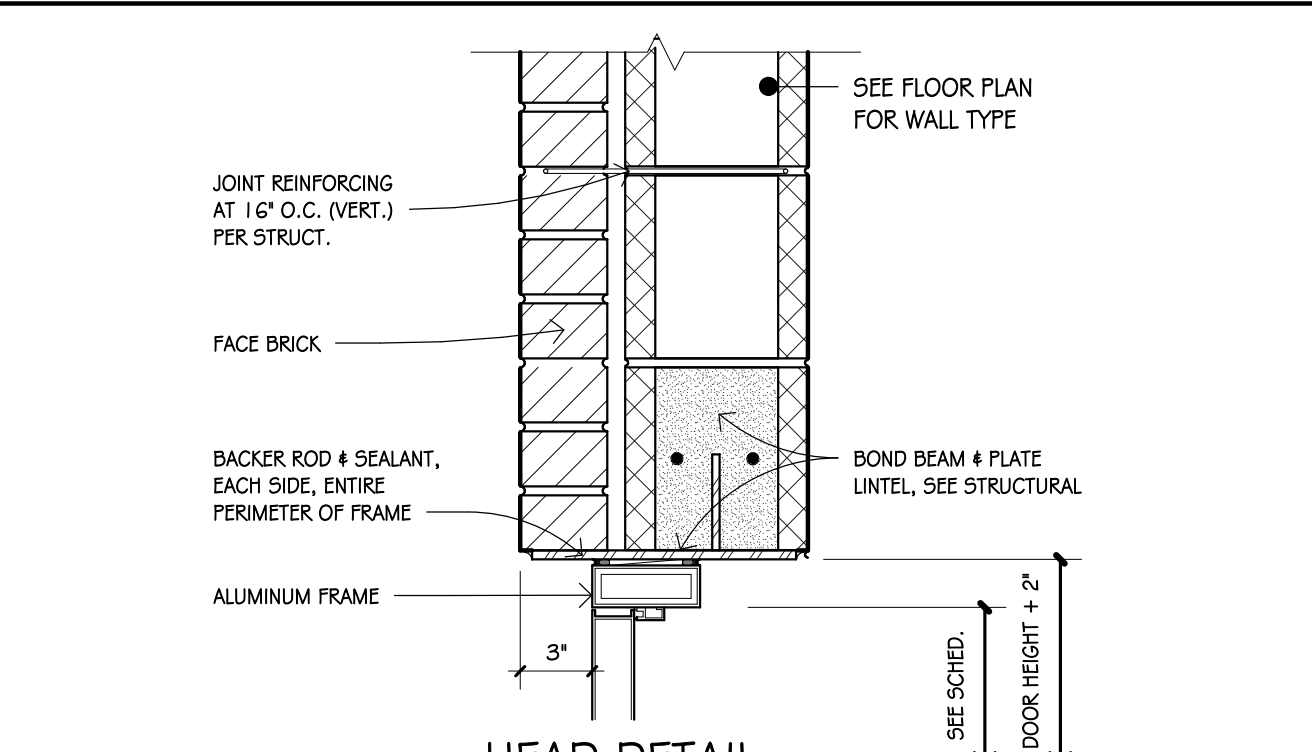
TYPE 5A
(8" x 8")



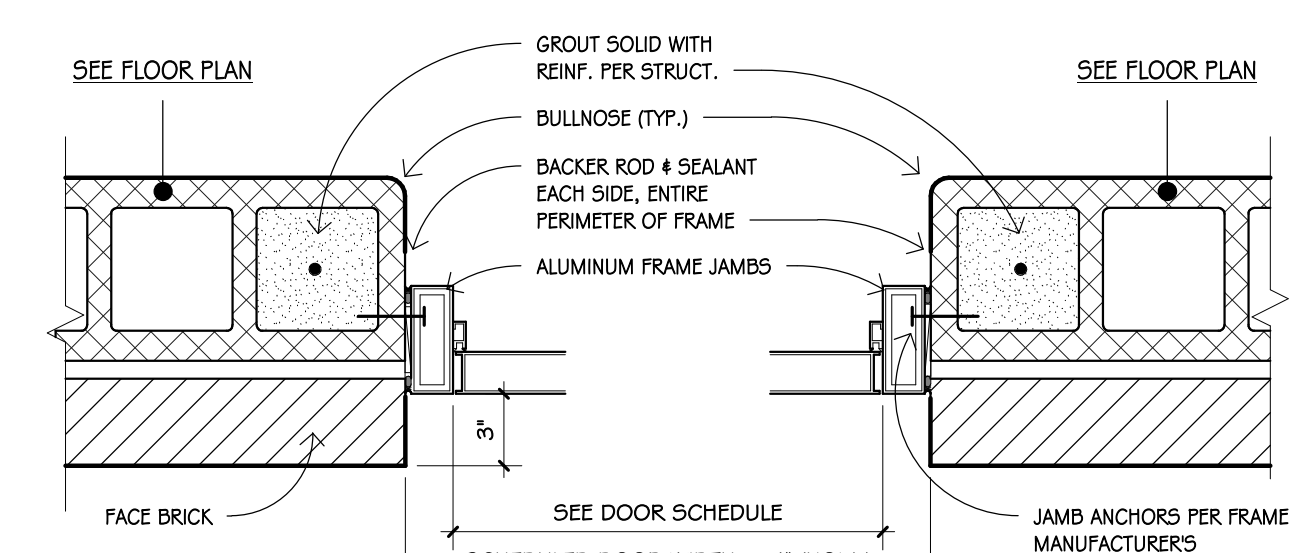
TYPE 5B
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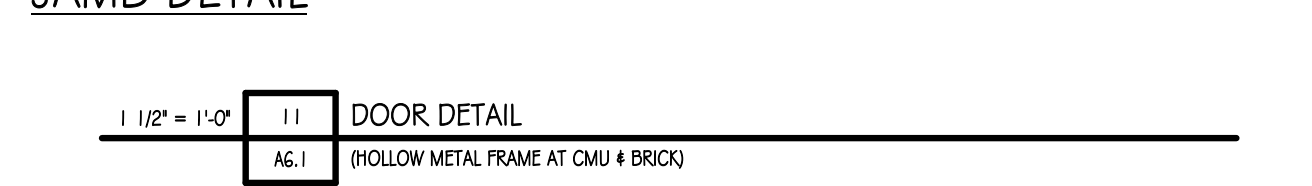
1 1/2" x 1'-0"
AG.1



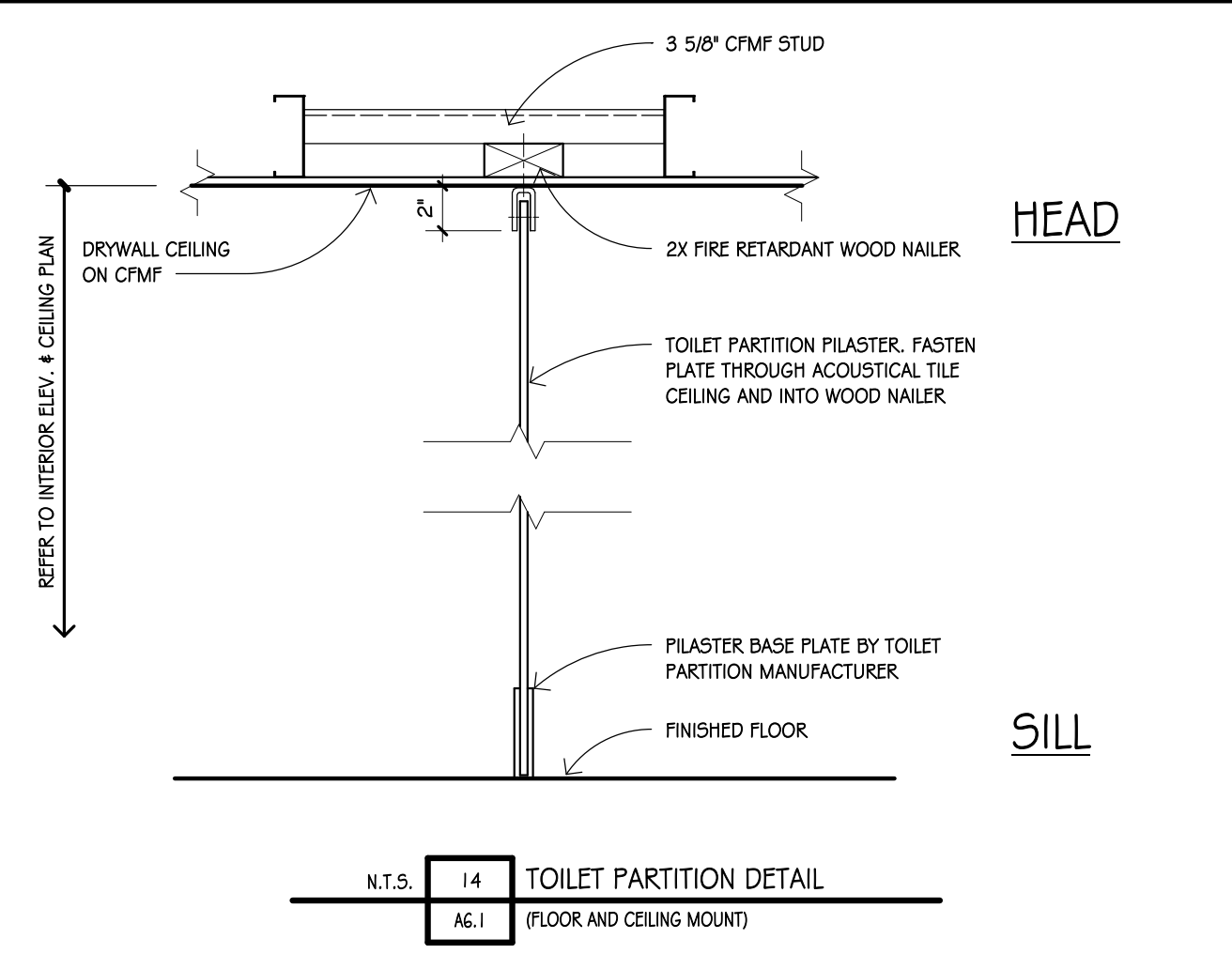
HEAD DETAIL



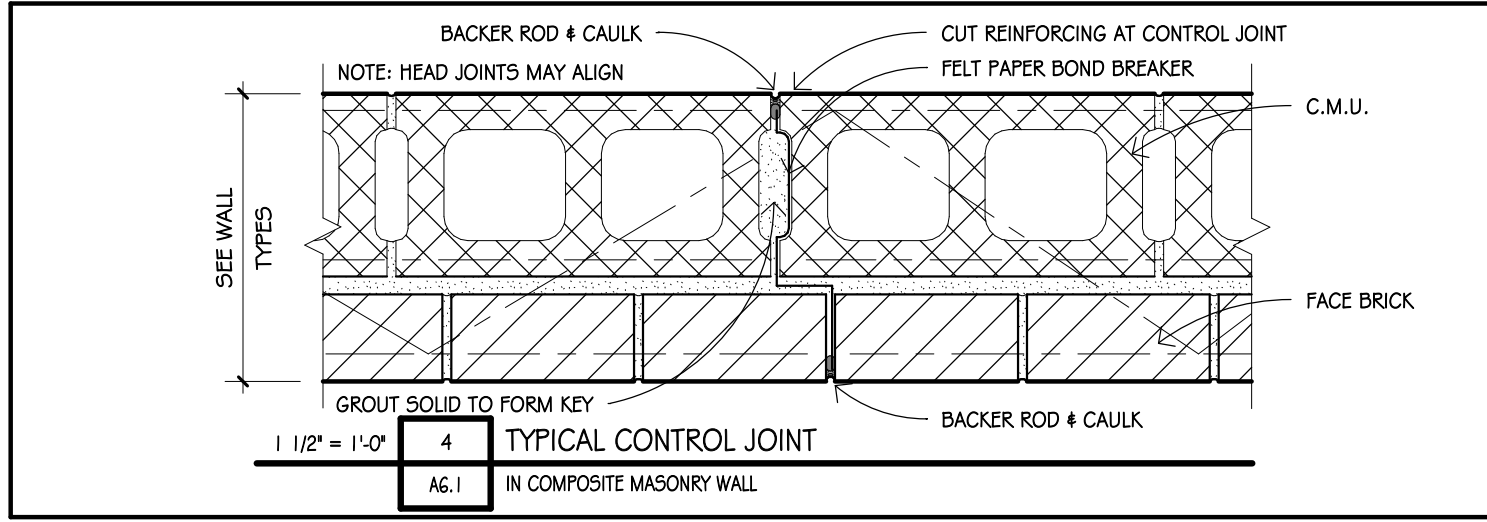
JAMB DETAIL



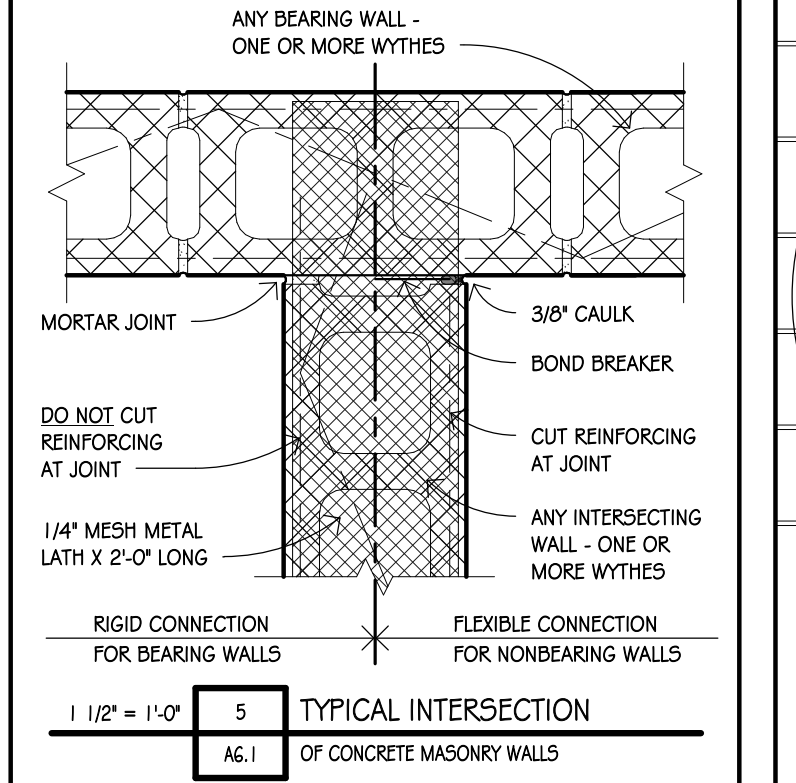
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AG.1



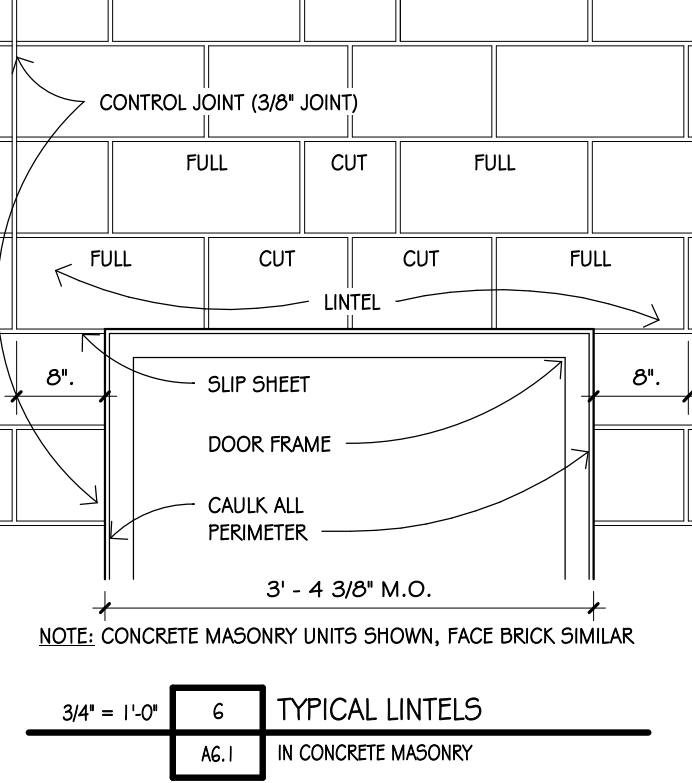
N.T.S. 14
AG.1



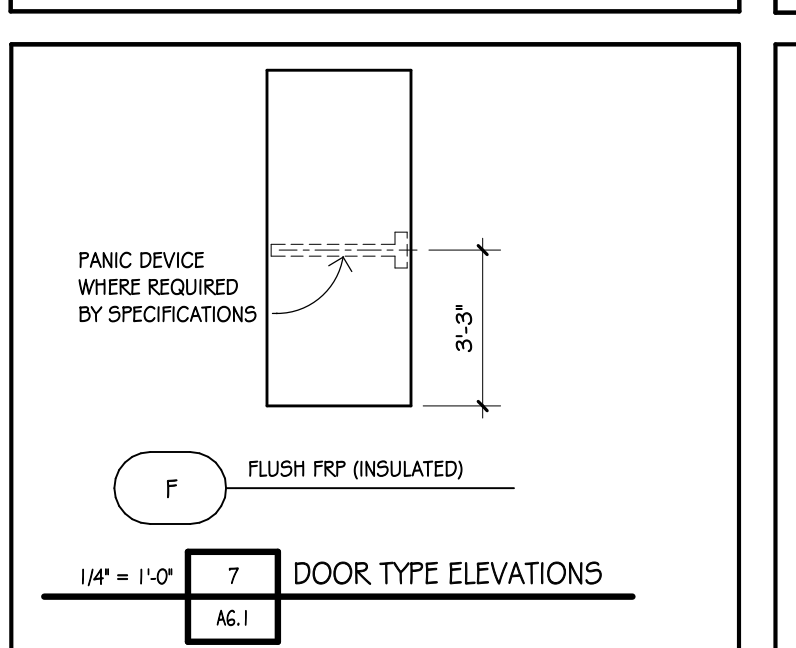
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AG.1



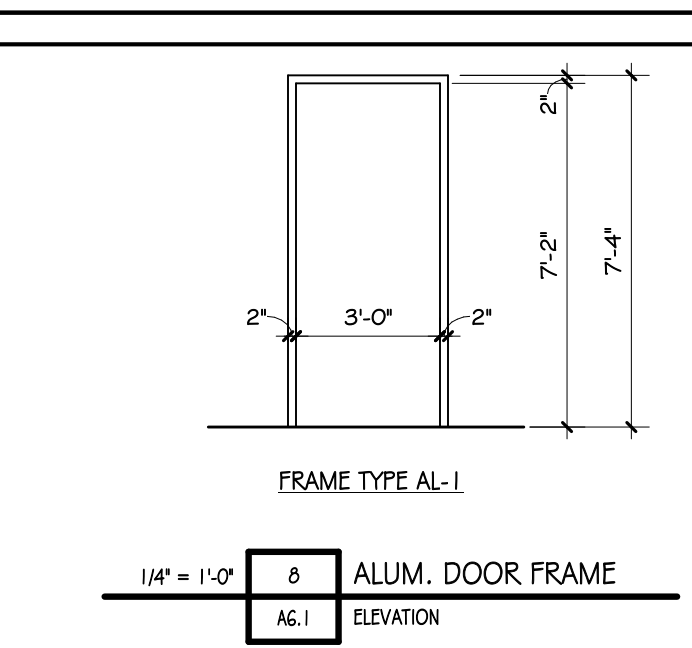
1 1/2" x 1'-0"
AG.1



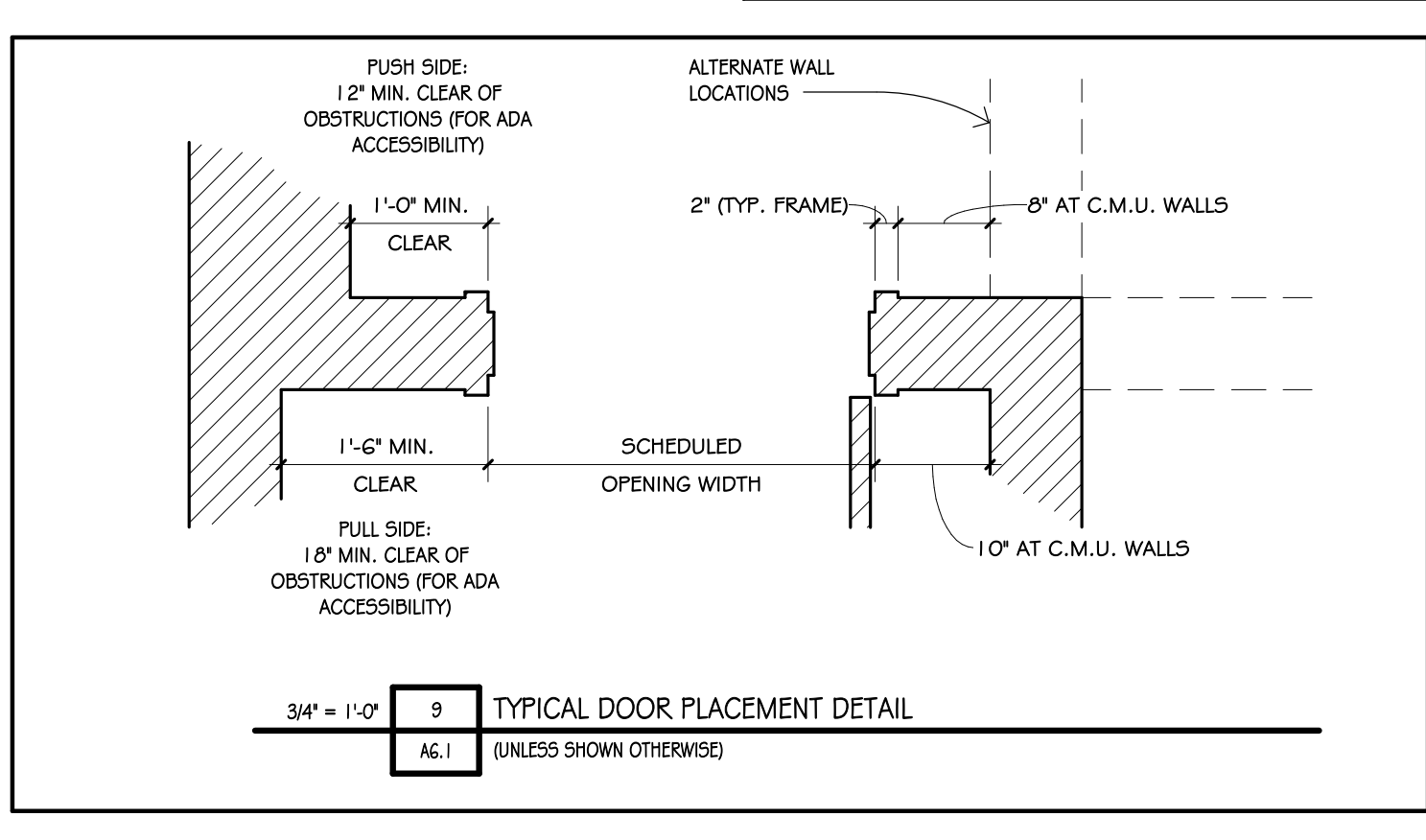
3/4" x 1'-0"
AG.1



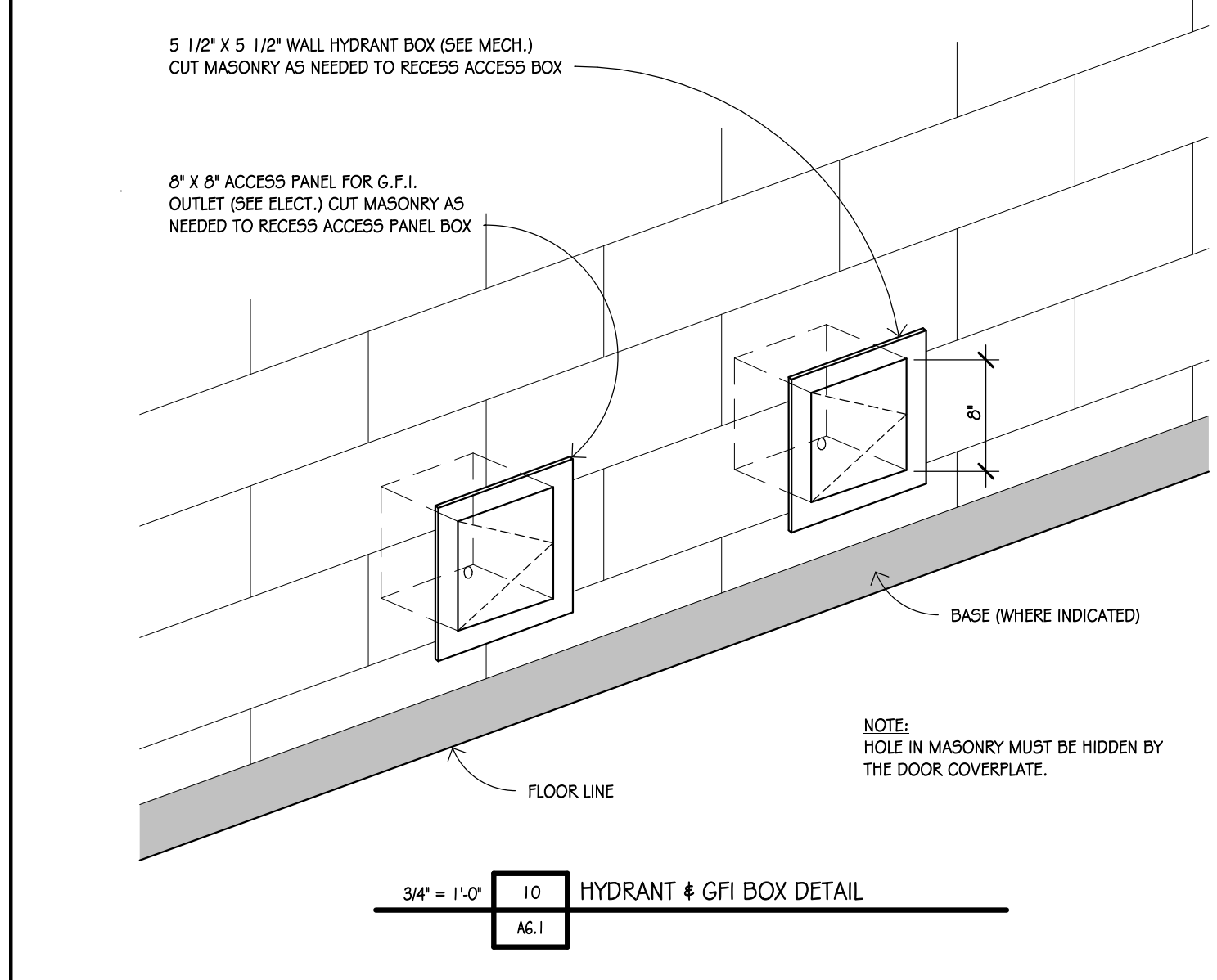
1/4" x 1'-0"
AG.1



1/4" x 1'-0"
AG.1

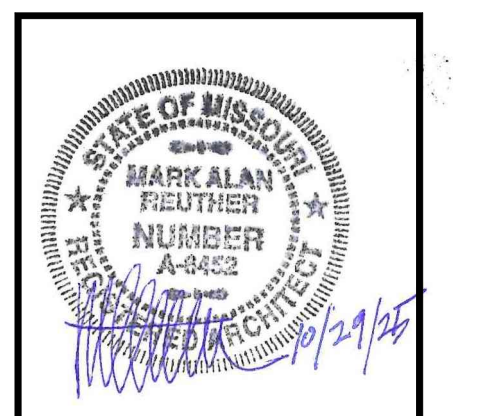
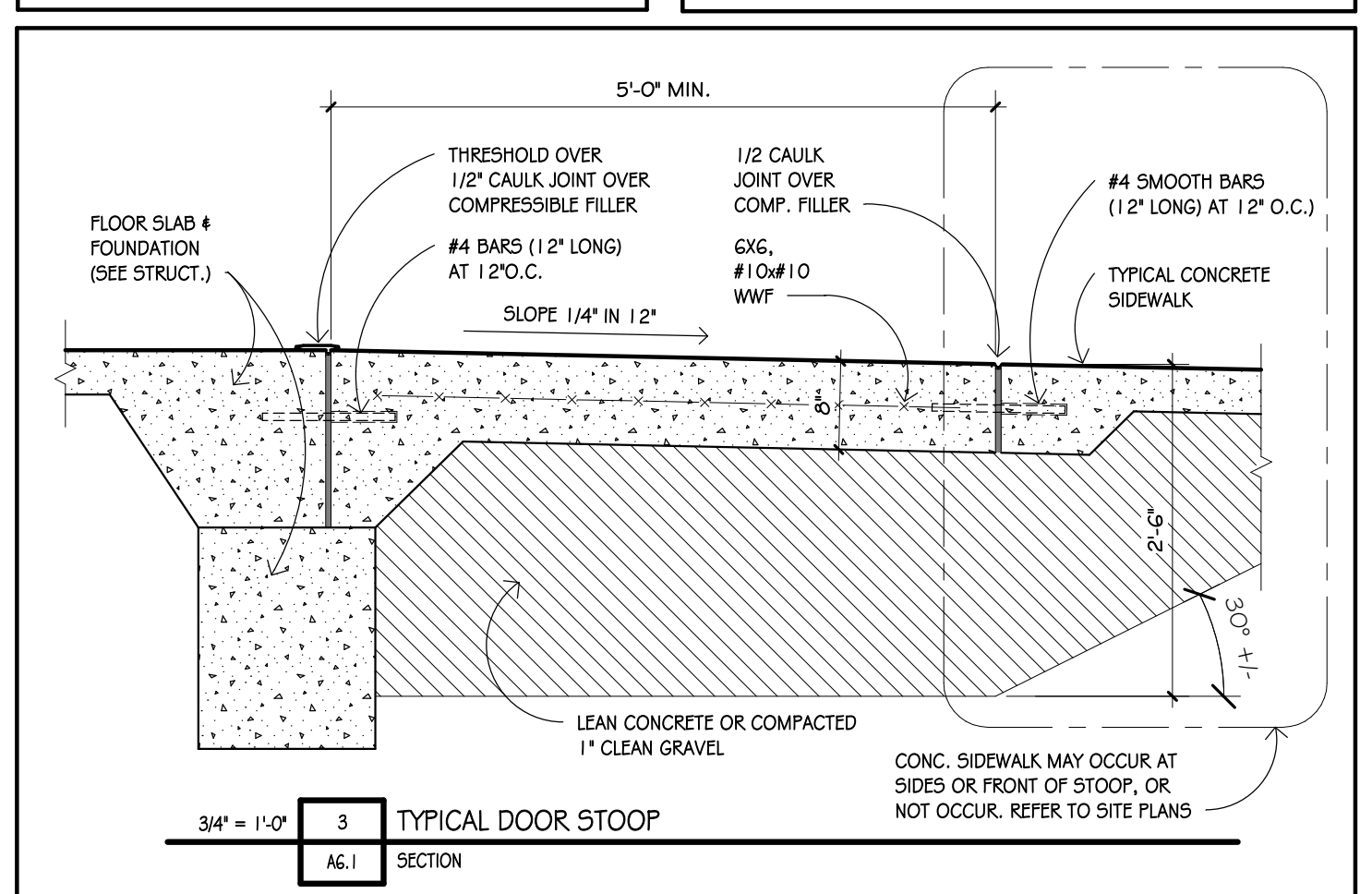
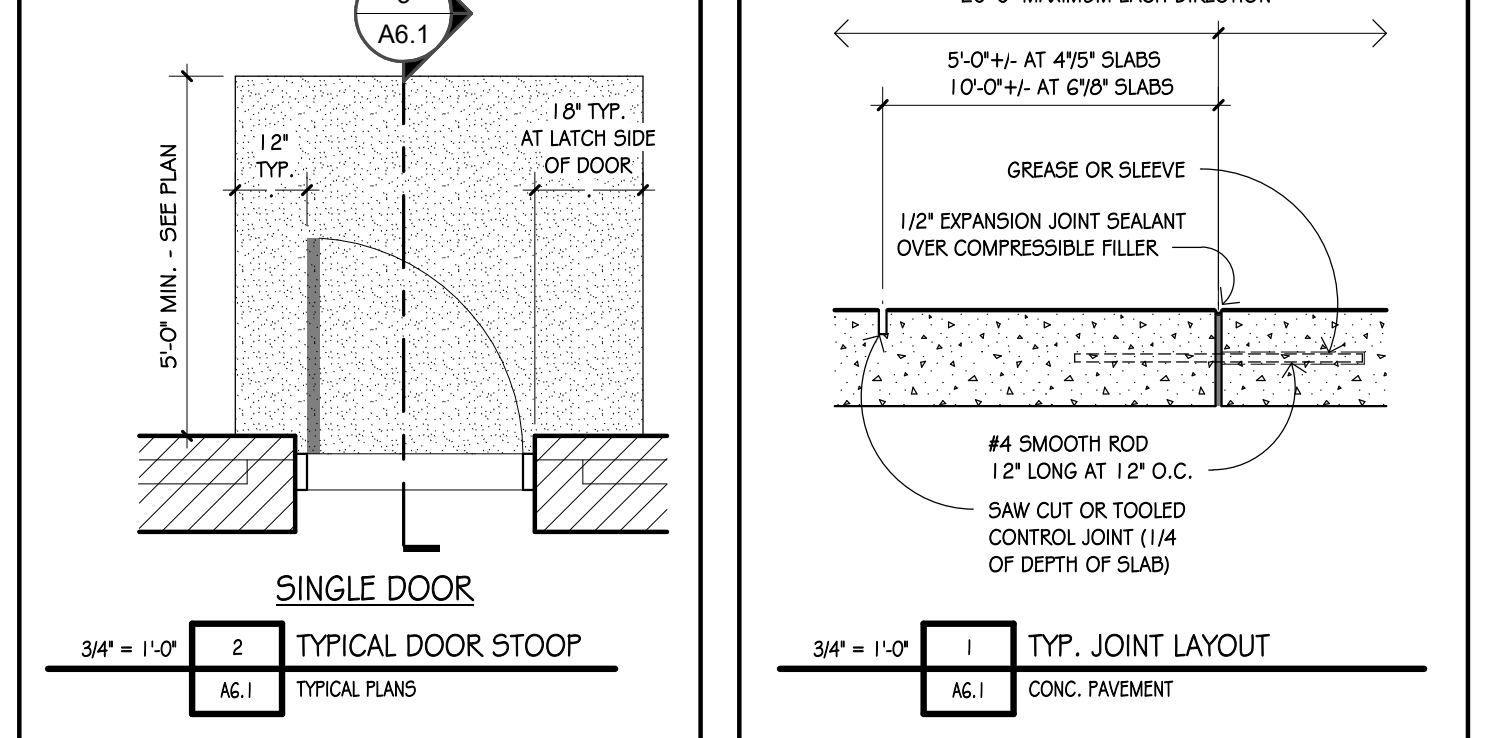
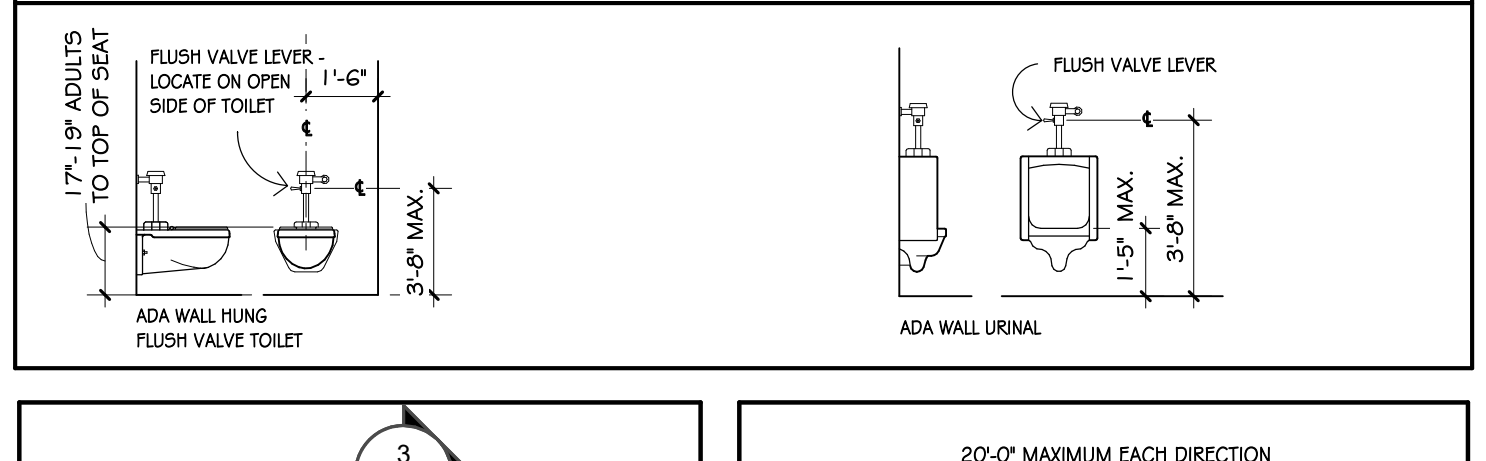
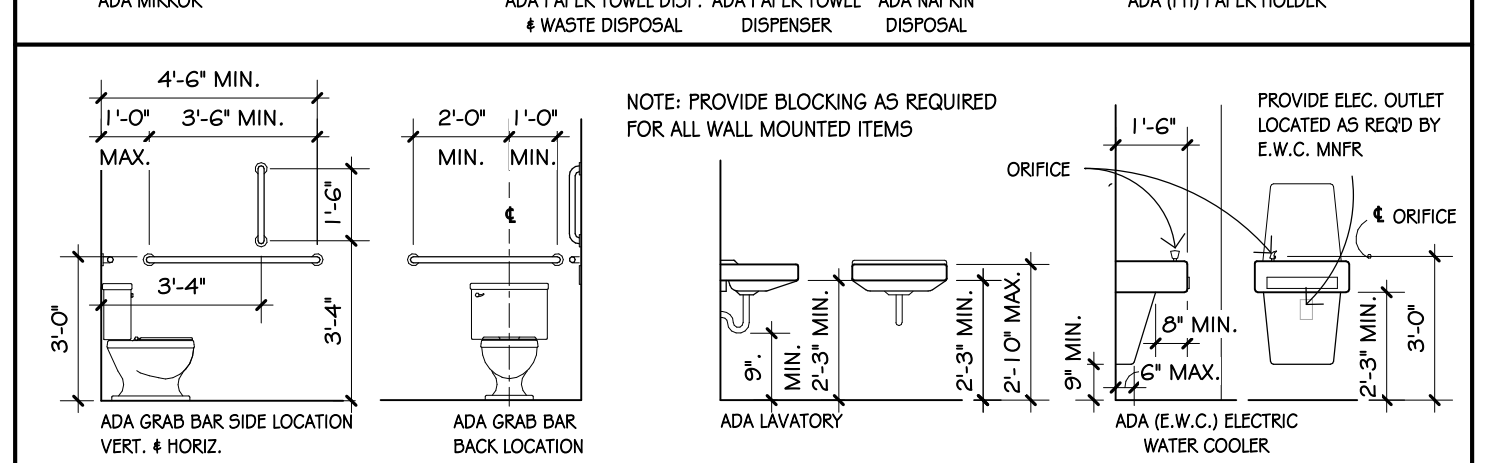
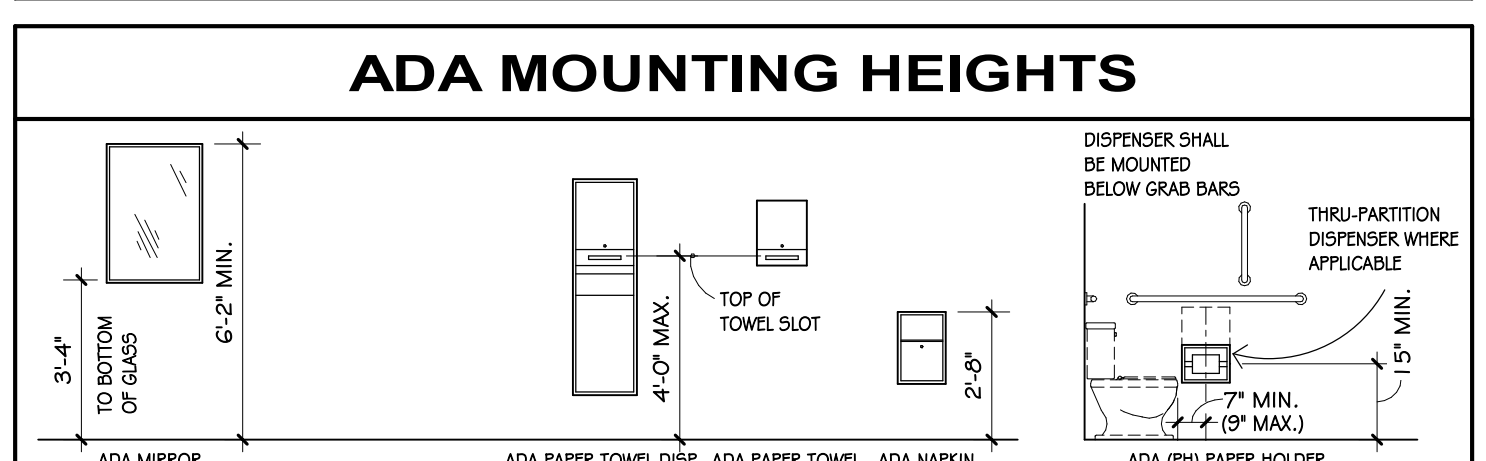
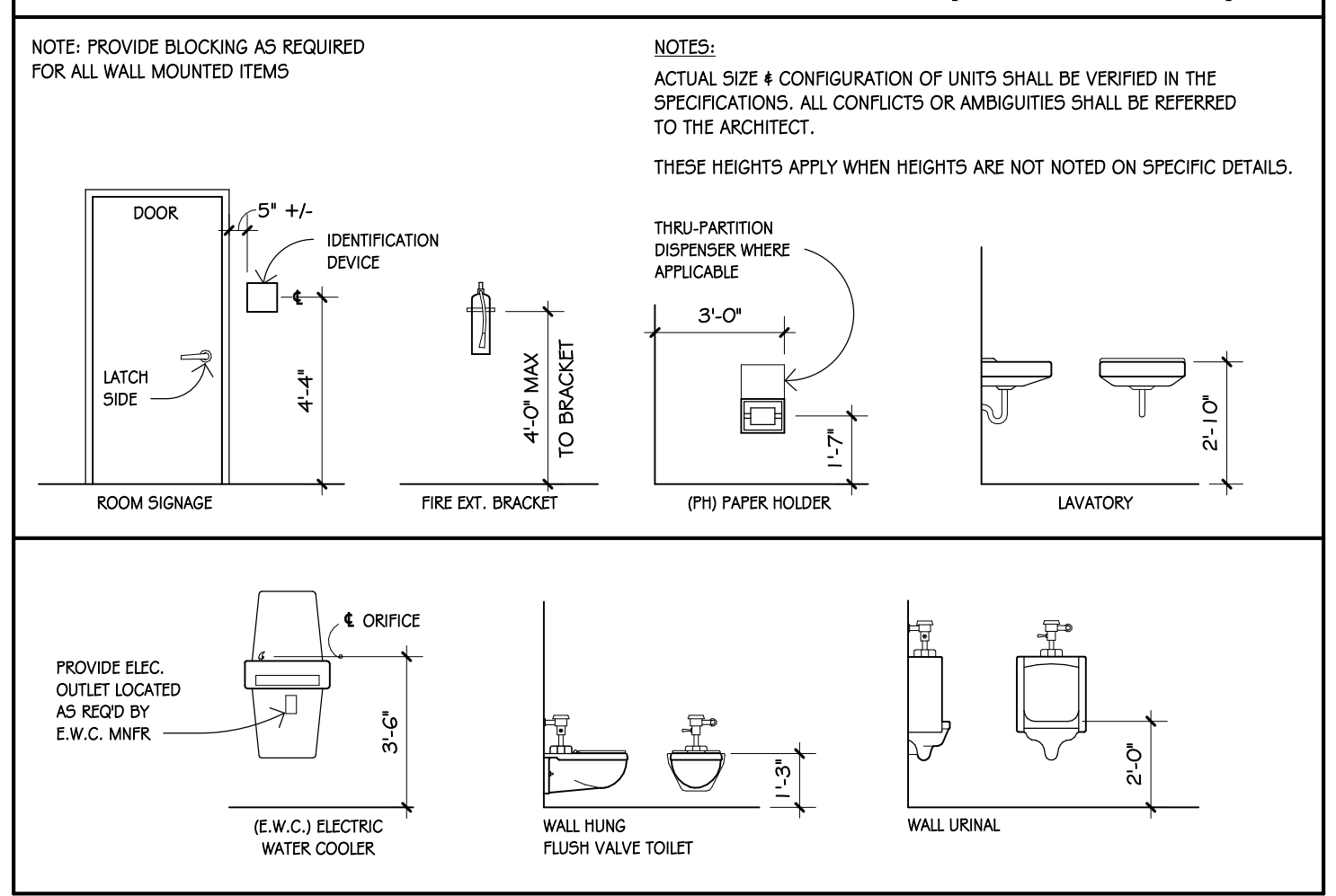


3/4" x 1'-0"
AG.1



3/4" x 1'-0"
AG.1

TYPICAL MOUNTING HEIGHTS (NON-ADA)



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PROJ. NO. 25-09D

DATE ISSUED

10-29-2025

DATE REVISION

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CHECKED BY MR

SHEET NO.

A6.1

DETAILS

STRUCTURAL GENERAL NOTES

DIVISION 1 - GENERAL REQUIREMENTS

- 1.1 CONSTRUCTION MEANS AND METHODS
A. Contractor agrees that Contractor shall assume sole and complete responsibility for job site conditions during the course of the Work, including safety of all persons and property...

- 1.2 SUBMITTALS
A. Submittals prepared by Subcontractors shall be reviewed by Contractor prior to submitting to Architect.
B. Reproduction of the Contract Documents for Shop Drawings is not permitted. Electronic drawing files will not be provided to Contractor.

- 1.3 QUALITY REQUIREMENTS
A. Reference to standard specifications or codes of any technical society, organization, or association of local or state authorities, shall mean the standards in effect as of date of the Contract Documents, unless otherwise noted.

- 2.1 GENERAL
A. Foundation design is based upon recommendations in the geotechnical report SCI No. 2020-1068.10 prepared by SCI Engineering, Inc. dated June 2021. The On-site Geotechnical Representative shall observe and certify the bearing medium for all foundations. Any unusual conditions or inadequate bearing conditions shall be reported to ASDG, LLC.

- 2.2 FOOTINGS
A. Individual spread footings and continuous footings shall bear on clean, undisturbed, virgin, sub-soil, rock or compacted engineered fill with an allowable bearing pressure of 2,500 psf and 2,000 psf, respectively.

- 2.3 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.4 CONCRETE
A. Reinforced concrete shall be normal weight and have a minimum 28-day compressive strength of 4,000 psi.
B. Lean concrete (for fill under footings and exterior door frost blocks) shall be normal weight and have a minimum 28-day compressive strength of 2000 psi.

- 2.5 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.6 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.7 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.8 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.9 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.10 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.11 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.12 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.13 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.14 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.15 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.16 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.17 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.18 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.19 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.20 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.21 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.22 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.23 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.24 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.25 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.26 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.27 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.28 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.29 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.30 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.31 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.32 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.33 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.34 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.

- 2.35 REINFORCING
A. GENERAL
1. Reinforcing steel shall be ASTM A615, Grade 60, deformed bars, unless noted otherwise. Welding of ASTM A615, Grade 60 reinforcing is not allowed.



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OCT. 29, 2025
DATE REVISION

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GENERAL NOTES

END OF STRUCTURAL GENERAL NOTES

SPECIAL INSPECTION TABLES

STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS		
THE OWNER SHALL RETAIN AND INCUR THE COST OF A SPECIAL INSPECTION AND TESTING AGENCY FOR THE PURPOSE OF FIELD INSPECTION AS REQUIRED BY CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE. THE TYPES OF STRUCTURAL WORK NOTED IN THE SPECIAL INSPECTION TABLES REQUIRE SPECIAL INSPECTION. COORDINATE REQUIREMENTS IN TABLES WITH SPECIFICATION SECTION 01400.		

SOILS IBC TABLE 1705.6		
TASK	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT THE SITE HAS BEEN PREPARED PROPERLY.	-	X

CONCRETE CONSTRUCTION IBC TABLE 1705.3		
TASK	CONTINUOUS	PERIODIC
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	X
2. REINFORCING BAR WELDING: <ul style="list-style-type: none"> a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16" AND c. INSPECT ALL OTHER WELDS. 	-	X
3. INSPECT ANCHORS CAST IN CONCRETE.	-	X
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. <ul style="list-style-type: none"> a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATION TO RESIST SUSTAINED TENSION LOADS. b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a. 	X	-
5. VERIFY USE OF REQUIRED DESIGN MIX.	-	X
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	X
9. INSPECT PRESTRESSED CONCRETE FOR: <ul style="list-style-type: none"> a. APPLICATION OF PRESTRESSING FORCES; AND b. GROUTING OF BONDED PRESTRESSING TENDONS. 	X	-
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	X
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLAB.	-	X
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X

MASONRY CONSTRUCTION LEVEL B QUALITY ASSURANCE		
TASK	CONTINUOUS	PERIODIC
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS.	-	X
2. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE: <ul style="list-style-type: none"> a. PROPORTIONS OF SITE-PREPARED MORTAR. b. CONSTRUCTION OF MORTAR JOINTS. c. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGE. d. LOCATION OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES. e. PRESTRESSING TECHNIQUE. f. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY. 	-	X
3. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE: <ul style="list-style-type: none"> a. GROUT SPACING. b. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES. c. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES. d. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS. e. CONSTRUCTION OF MORTAR JOINTS. 	-	X
4. VERIFY DURING CONSTRUCTION: <ul style="list-style-type: none"> a. SIZE AND LOCATION OF STRUCTURAL ELEMENTS. b. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION. c. WELDING OF REINFORCEMENT. d. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F (4.4°C)) OR HOT WEATHER (TEMPERATURE ABOVE 90°F (32.2°C)). e. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE. f. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE. g. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS. 	-	X
5. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	-	X

STEEL CONSTRUCTION AISC TABLE N5.4-1 - REQUIRED SPECIAL INSPECTION TASKS PRIOR TO WELDING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE.	X	-
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	X	-
MATERIAL IDENTIFICATION (TYPE/GRADE).	-	X
WELDER IDENTIFICATION SYSTEM.	-	X
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY). <ul style="list-style-type: none"> - JOINT PREPARATION - DIMENSION (ALIGNMENT, ROOF OPENING, ROOT FACE, BEVEL) - CLEANLINESS (CONDITION OF STEEL SURFACES) - TACKING (TACK WELD QUALITY AND LOCATION) - BACKING TYPE AND FIT (IF APPLICABLE) 	-	X
CONFIGURATION AND FINISH OF ACCESS HOLES.	-	X
FIT-UP OF FILLET WELDS. <ul style="list-style-type: none"> - DIMENSIONS (ALIGNMENT, GAPS AT ROOT) - CLEANLINESS (CONDITION OF STEEL SURFACES) - TACKING (TACK WELD QUALITY AND LOCATION) 	-	X
CHECK WELDING EQUIPMENT.	-	X

STEEL CONSTRUCTION AISC TABLE N5.4-2 - REQUIRED SPECIAL INSPECTION TASKS DURING WELDING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
USE OF QUALIFIED WELDERS.	-	X
CONTROL AND HANDLING OF WELDING CONSUMABLES. <ul style="list-style-type: none"> - PACKAGING - EXPOSURE CONTROL 	-	X
NO WELDING OVER CRACKED TACK WELDS.	-	X
ENVIRONMENTAL CONDITIONS. <ul style="list-style-type: none"> - WIND SPEED WITHIN LIMITS - PRECIPITATION AND TEMPERATURE 	-	X
WPS FOLLOWED. <ul style="list-style-type: none"> - SETTINGS ON WELDING EQUIPMENT - TRAVEL SPEED - SELECTED WELDING MATERIALS - SHIELDING GAS TYPE/FLOW RATE - PREHEAT APPLIED - INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) - PROPER POSITION (F, V, H, OH) 	-	X
WELDING TECHNIQUES. <ul style="list-style-type: none"> - INTERPASS AND FINAL CLEANING - EACH PASS WITHIN PROFILE LIMITATIONS - EACH PASS MEETS QUALITY REQUIREMENTS 	-	X

STEEL CONSTRUCTION AISC TABLE N5.4-3 - REQUIRED SPECIAL INSPECTION TASKS AFTER WELDING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
WELDING CLEANED.	-	X
SIZE, LENGTH AND LOCATION OF WELDS.	X	-
WELDS MEET VISUAL ACCEPTANCE CRITERIA. <ul style="list-style-type: none"> - CRACK PROHIBITION - WELD/BASE-METAL FUSION - CRATER CROSS SECTION - WELD PROFILES - WELD SIZE - UNDERCUT - POROSITY 	X	-
ARC STRIKES.	X	-
k-AREA.	X	-
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED).	X	-
REPAIR ACTIVITIES.	X	-
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER.	X	-

STEEL CONSTRUCTION AISC TABLE N5.6-1 - REQUIRED SPECIAL INSPECTION TASKS PRIOR TO BOLTING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIAL.	-	X
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS.	-	X
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE).	-	X
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL.	-	X
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS.	-	X
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED.	X	-
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS.	-	X

STEEL CONSTRUCTION AISC TABLE N5.6-22 - REQUIRED SPECIAL INSPECTION TASKS DURING BOLTING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED.	-	X
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION.	-	X
FASTENER COMPONENT NOT TURNED BY WRENCH PREVENTED FROM ROTATING.	-	X
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES.	-	X

STEEL CONSTRUCTION AISC TABLE N5.6-3 - REQUIRED SPECIAL INSPECTION TASKS AFTER BOLTING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS.	X	-

COMPOSITE STEEL CONSTRUCTION PRIOR TO CONCRETE PLACEMENT		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
PLACEMENT AND INSTALLATION OF STEEL DECK.	X	-
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS.	X	-
DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS.	X	-

STEEL DECKING CONSTRUCTION SDI TABLE 1.1 - REQUIRED SPECIAL INSPECTION OR EXECUTION TASKS PRIOR TO DECK PLACEMENT		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
a. VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS.	X	-
b. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES.	X	-

STEEL DECKING CONSTRUCTION SDI TABLE 1.2 - REQUIRED SPECIAL INSPECTION OR EXECUTION TASKS AFTER DECK PLACEMENT		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
a. VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS.	X	-
b. VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS.	-	X
c. DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES.	X	-

STEEL DECKING CONSTRUCTION SDI TABLE 1.3 - REQUIRED SPECIAL INSPECTION OR EXECUTION TASKS PRIOR TO WELDING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
a. WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE.	-	X
b. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE.	-	X
c. MATERIAL IDENTIFICATION (TYPE/GRADE).	-	X
d. CHECK WELDING EQUIPMENT.	-	X

STEEL DECKING CONSTRUCTION SDI TABLE 1.4 - REQUIRED SPECIAL INSPECTION OR EXECUTION TASKS DURING WELDING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
a. USE OF QUALIFIED WELDERS.	-	X
b. CONTROL AND HANDLING OF WELDING CONSUMABLES.	-	X
c. ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE).	-	X
d. WPS FOLLOWED.	-	X

STEEL DECKING CONSTRUCTION SDI TABLE 1.5 - REQUIRED SPECIAL INSPECTION OR EXECUTION TASKS AFTER WELDING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
a. VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, AND PERIMETER WELDS.	X	-
b. WELDS MEET VISUAL ACCEPTANCE CRITERIA.	X	-
c. VERIFY REPAIR ACTIVITIES.	X	-
d. DOCUMENT ACCEPTANCE OR REJECTION OF WELDS.	X	-

STEEL DECKING CONSTRUCTION SDI TABLE 1.6 - REQUIRED SPECIAL INSPECTION OR EXECUTION TASKS PRIOR TO MECHANICAL FASTENING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
a. MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS.	-	X
b. PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION.	-	X
c. PROPER STORAGE FOR MECHANICAL FASTENERS.	-	X

STEEL DECKING CONSTRUCTION SDI TABLE 1.7 - REQUIRED SPECIAL INSPECTION OR EXECUTION TASKS DURING MECHANICAL FASTENING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
a. FASTENERS ARE POSITIONED AS REQUIRED.	-	X
b. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.	-	X

STEEL DECKING CONSTRUCTION SDI TABLE 1.8 - REQUIRED SPECIAL INSPECTION OR EXECUTION TASKS AFTER MECHANICAL FASTENING		
TASK	PERFORM FOR EACH STEEL ELEMENT	OBSERVE ON A RANDOM BASIS
a. CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS.	X	-
b. CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS.	X	-
c. CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS.	X	-
d. VERIFY REPAIR ACTIVITIES.	X	-
e. DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS.	X	-

STRUCTURAL CFMF CONSTRUCTION	TYPE OF INSPECTION		REMARKS
	CONTINUOUS	PERIODIC	
1. MATERIAL VERIFICATION OF STUDS AND WELD ELECTRODES.	X	-	
2. INSPECTION OF LIGHT GAGE WELDS TO STRUCTURE.	X	-	
3. INSPECTION OF SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS.	X	-	
4. INSPECTION OF SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN WIND AND SEISMIC FORCE RESISTING SYSTEMS, INCLUDING SHEAR WALLS, BRACES, DIAPHRAGMS, COLLECTORS (DRAG STRUTS) AND HOLD-DOWNS.	X	-	



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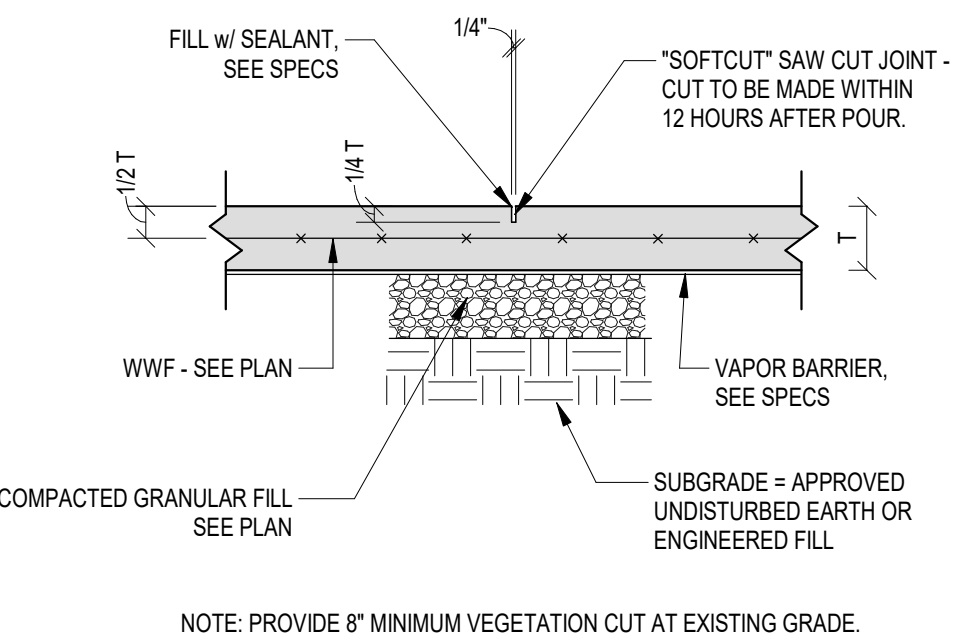
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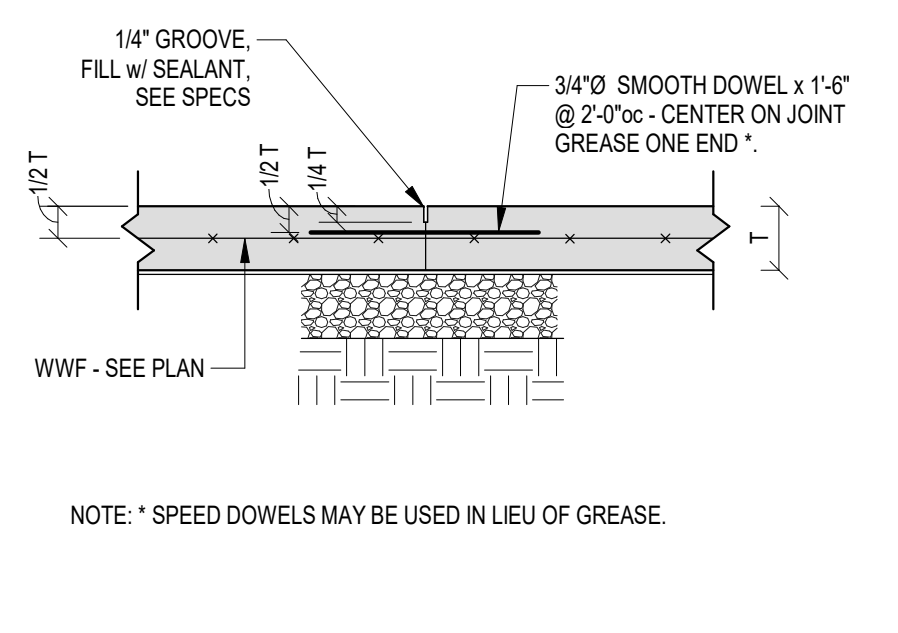
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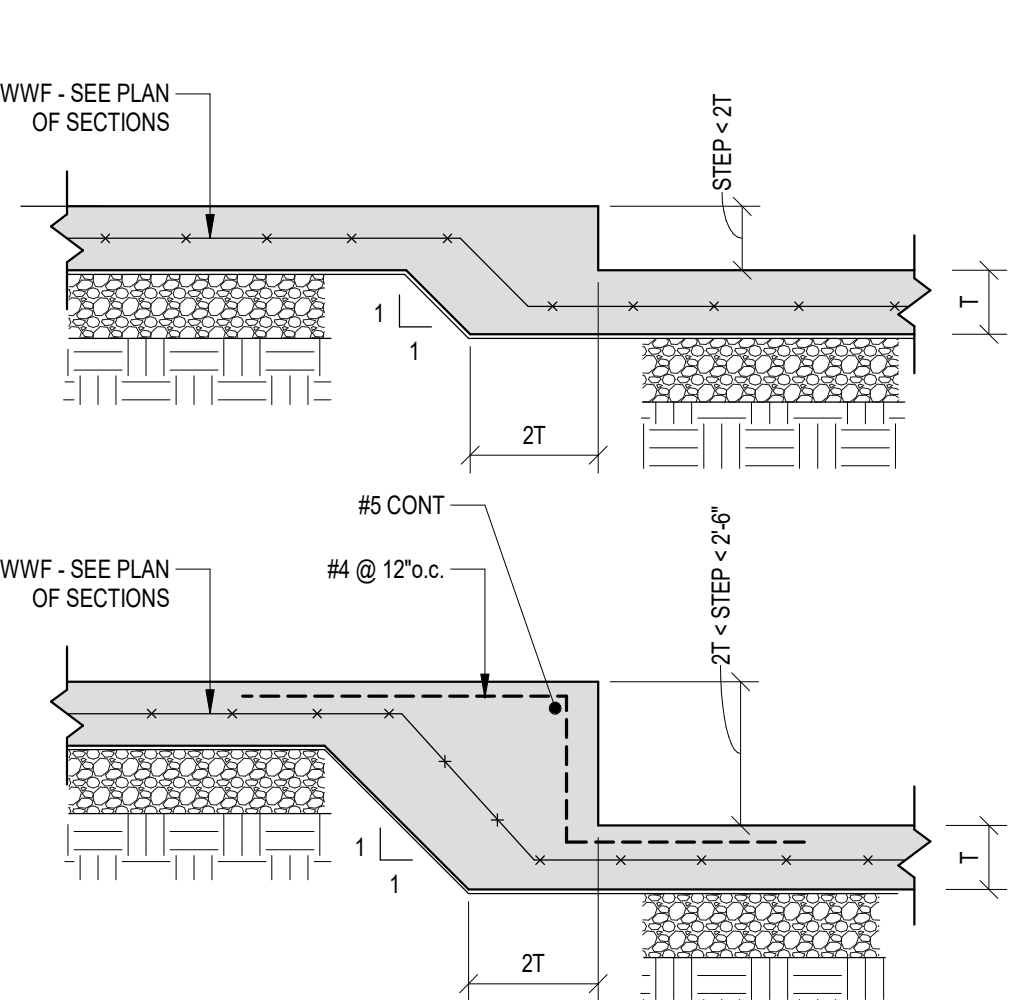
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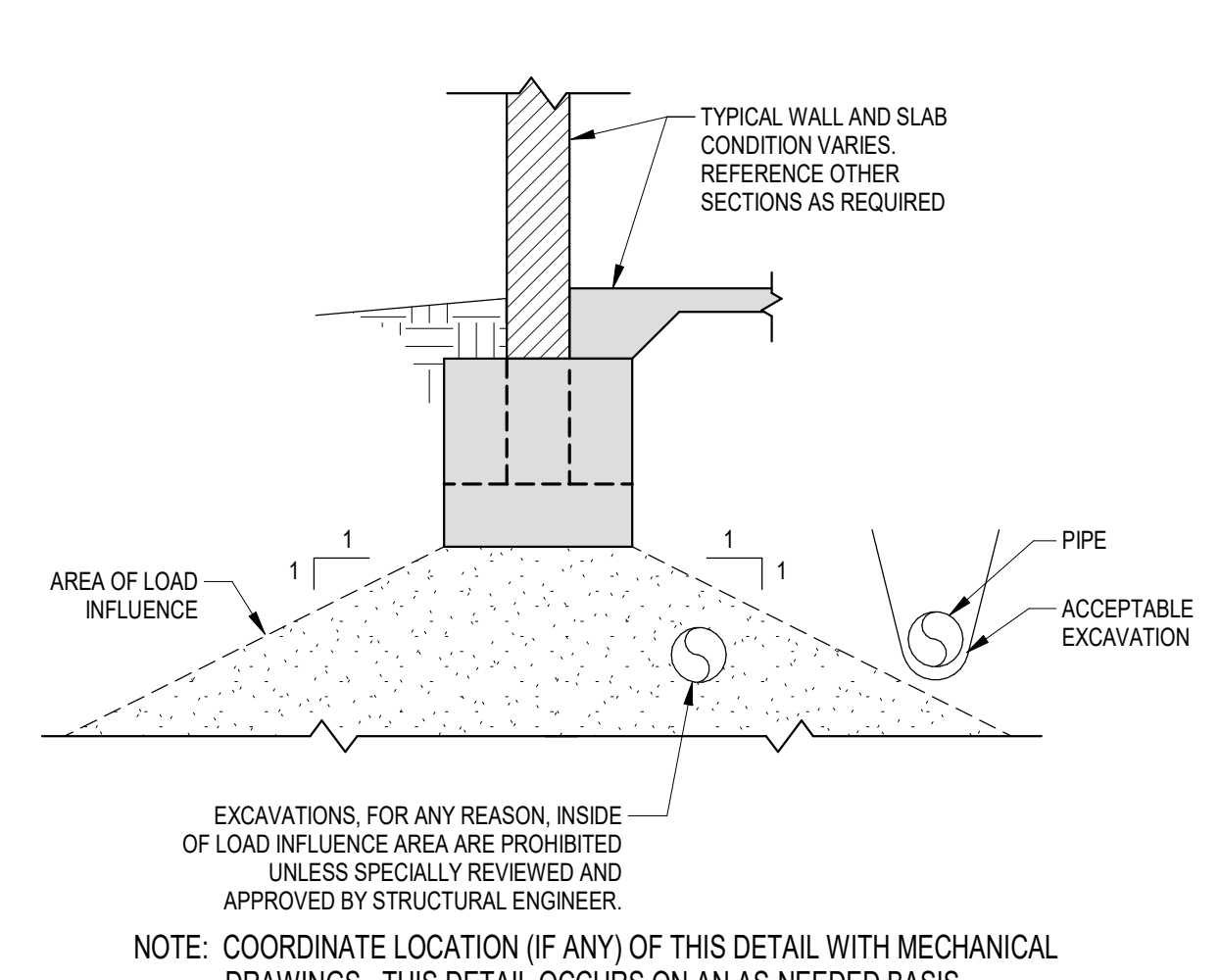
1 TYPICAL SLAB ON GRADE CONTROL JOINT DETAIL
NTS



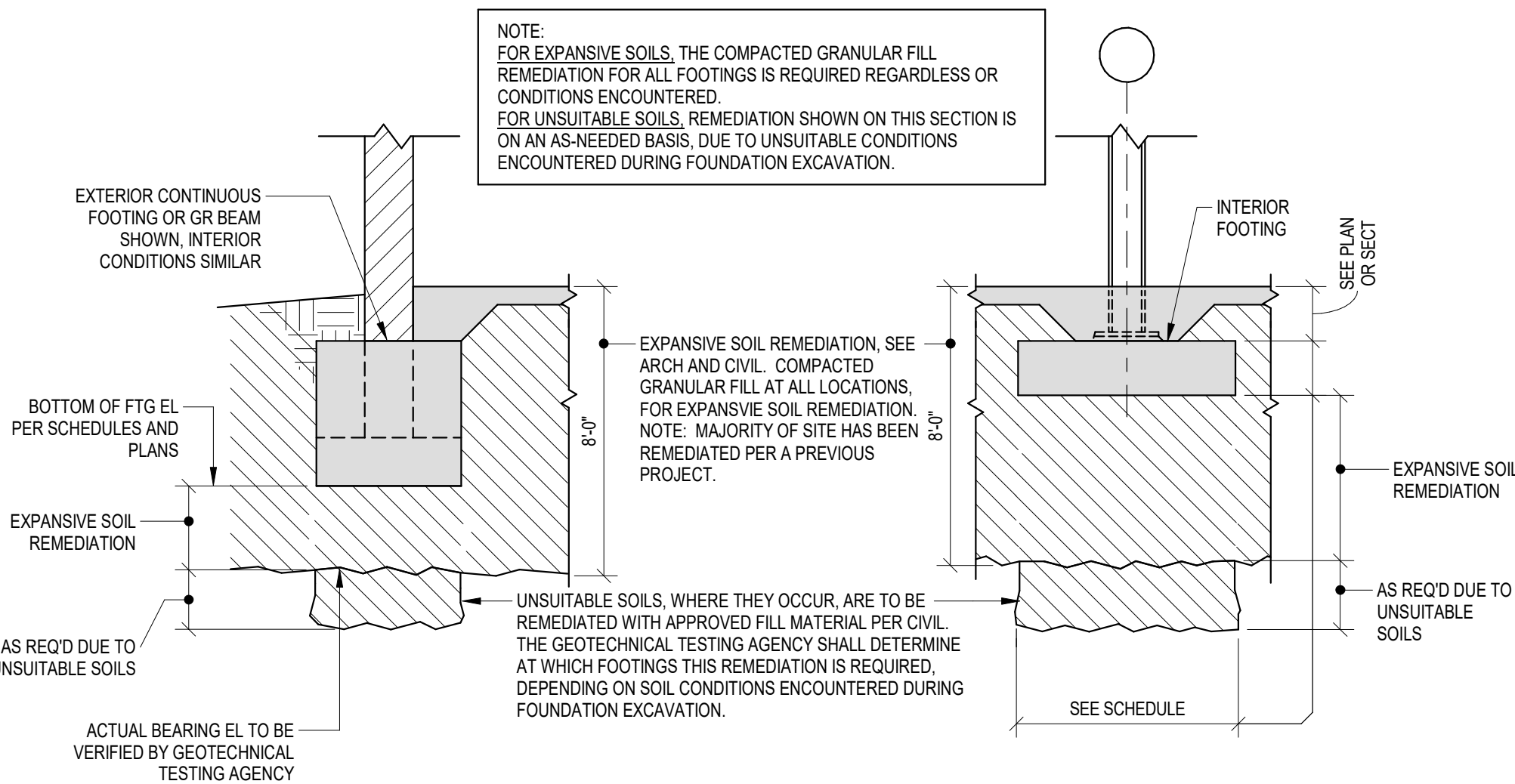
2 TYPICAL SLAB ON GRADE CONSTRUCTION JOINT DETAIL
NTS



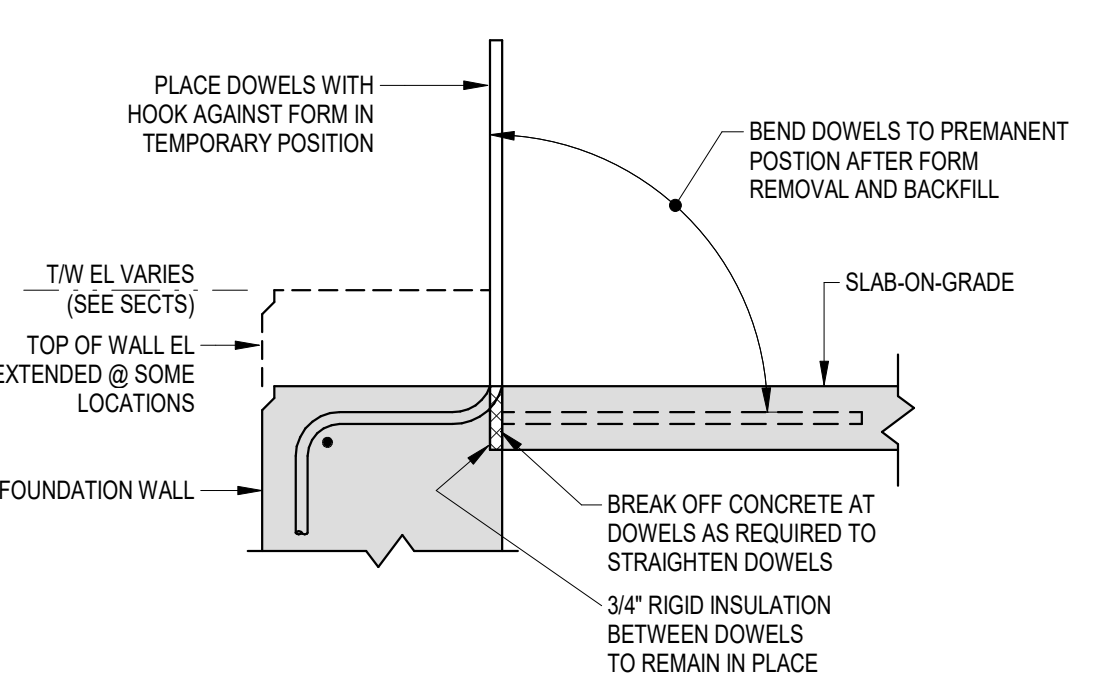
3 TYPICAL SLAB ON GRADE STEP/DEPRESSION DETAIL
NTS



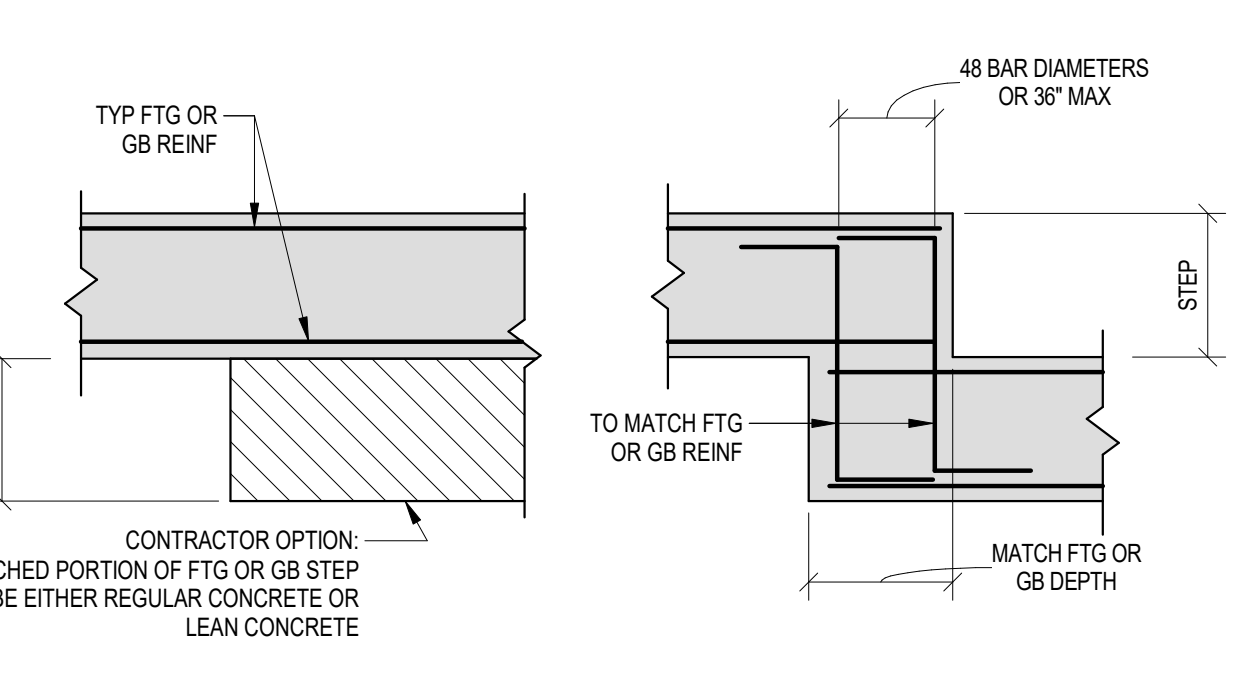
4 PERMITTED EXCAVATIONS AT LOAD BEARING FOUNDATION
NTS



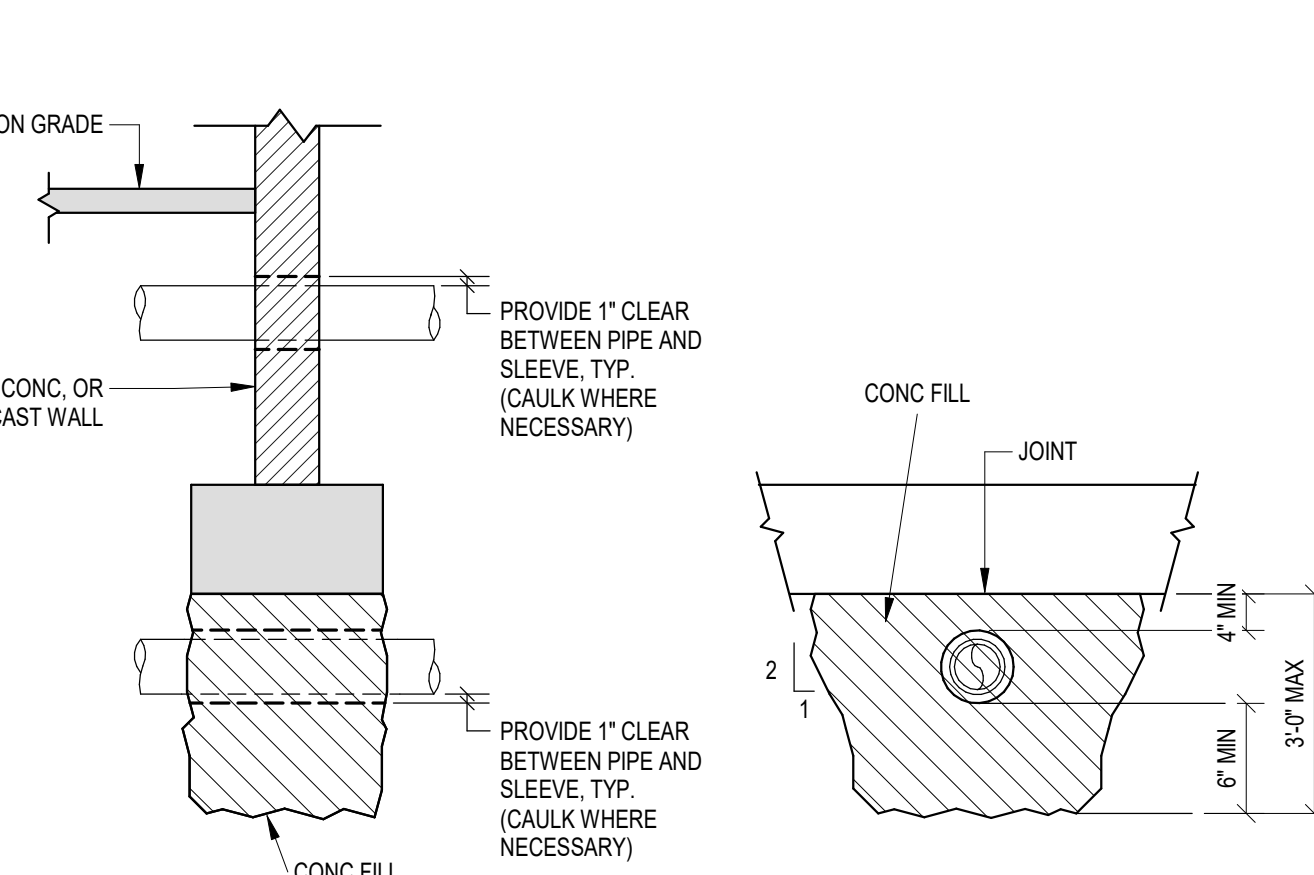
5 EXPANSIVE AND/OR UNSUITABLE SOIL REMEDIATION AT PRESS BOX, BATTING CAGE BUILDING AND LOCATIONS NOTED ON PLAN (COORDINATE WITH CIVIL DRAWINGS)
NTS



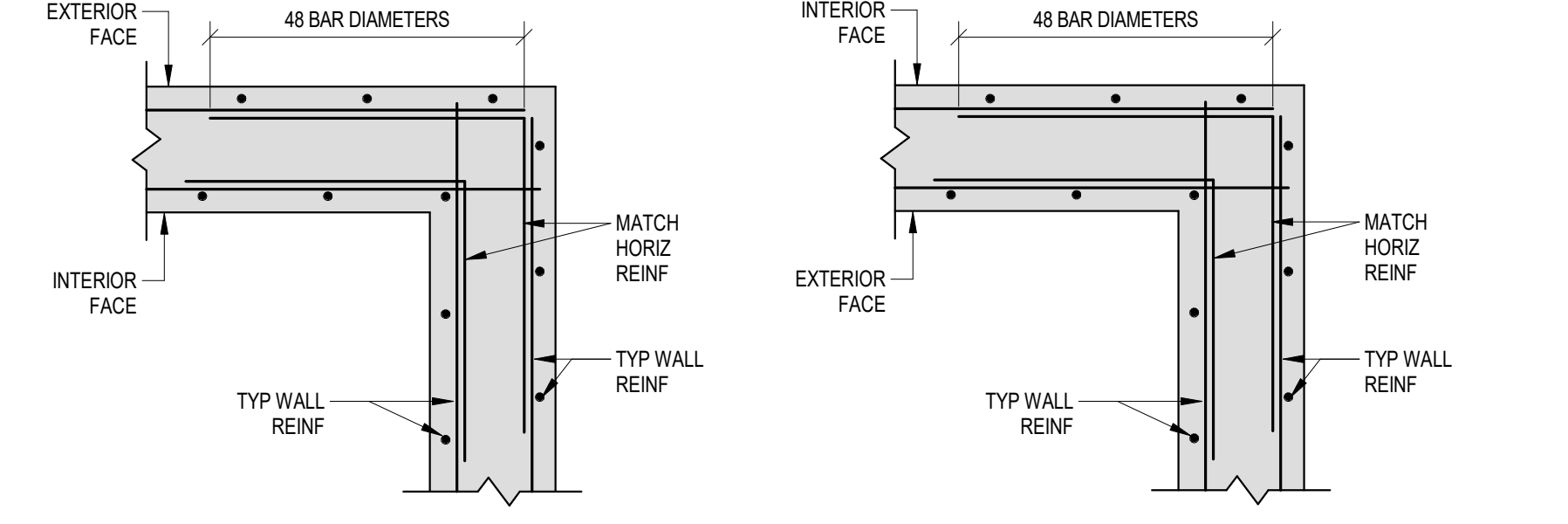
6 TYPICAL SLAB-ON-GRADE EDGE AT PERIMETER FOUNDATION WALL
NTS



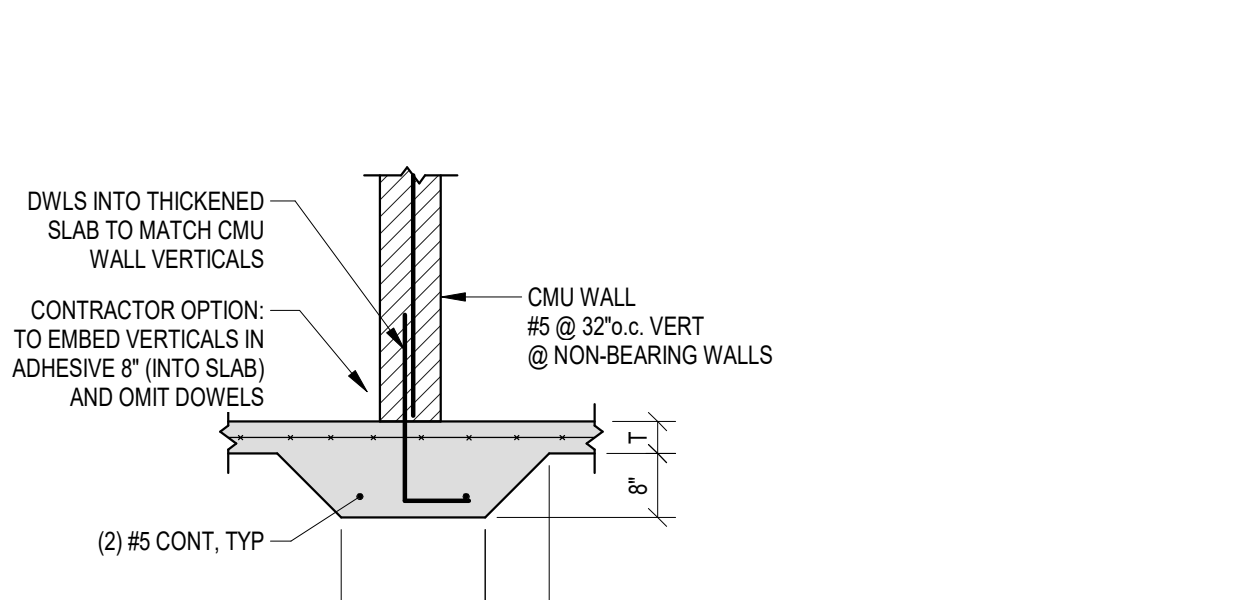
7 TYPICAL FOOTING OR GRADE BEAM STEP
NTS



8 TYPICAL PIPE THRU OR BELOW FOUNDATION
NTS

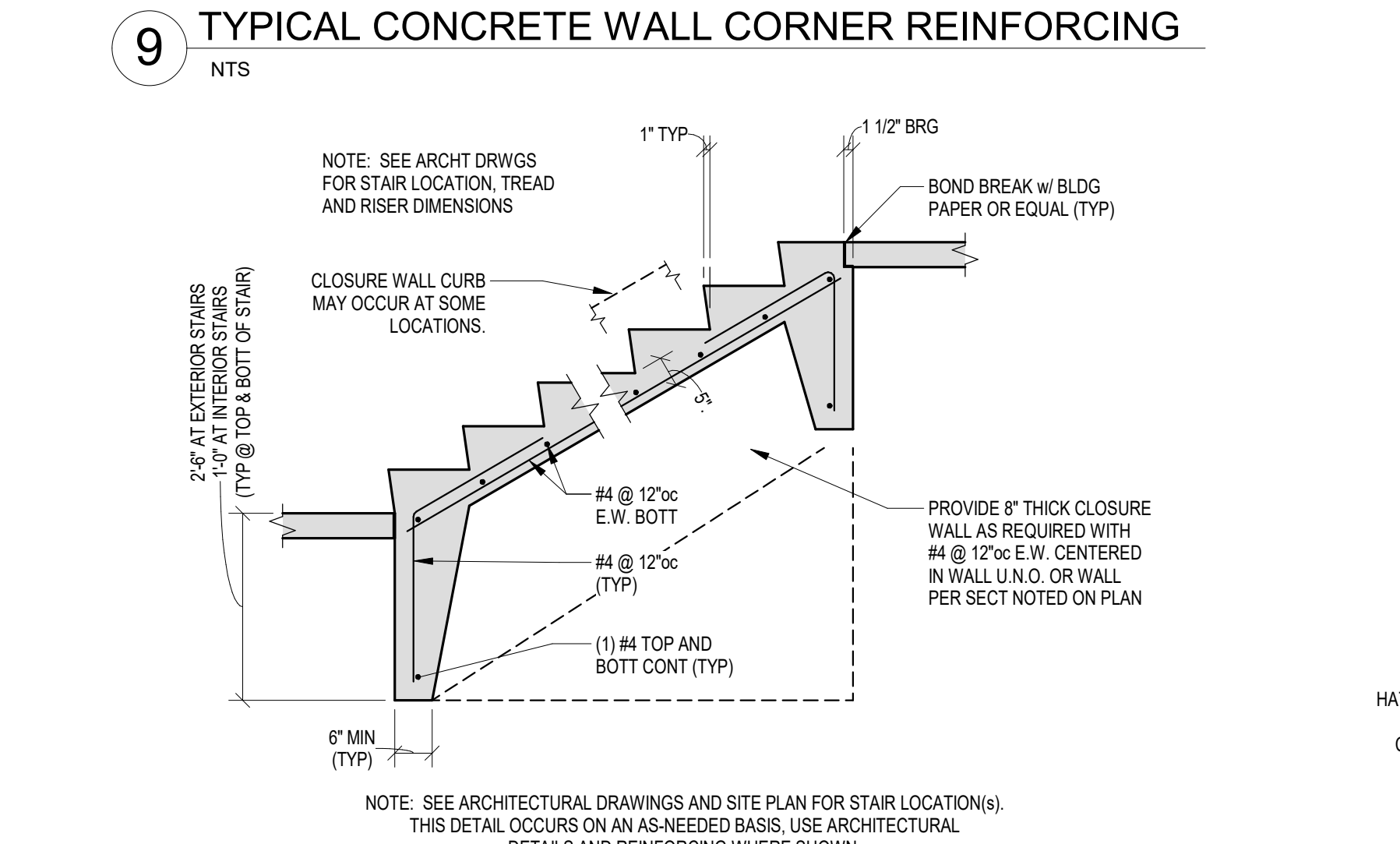


9 TYPICAL CONCRETE WALL CORNER REINFORCING
NTS

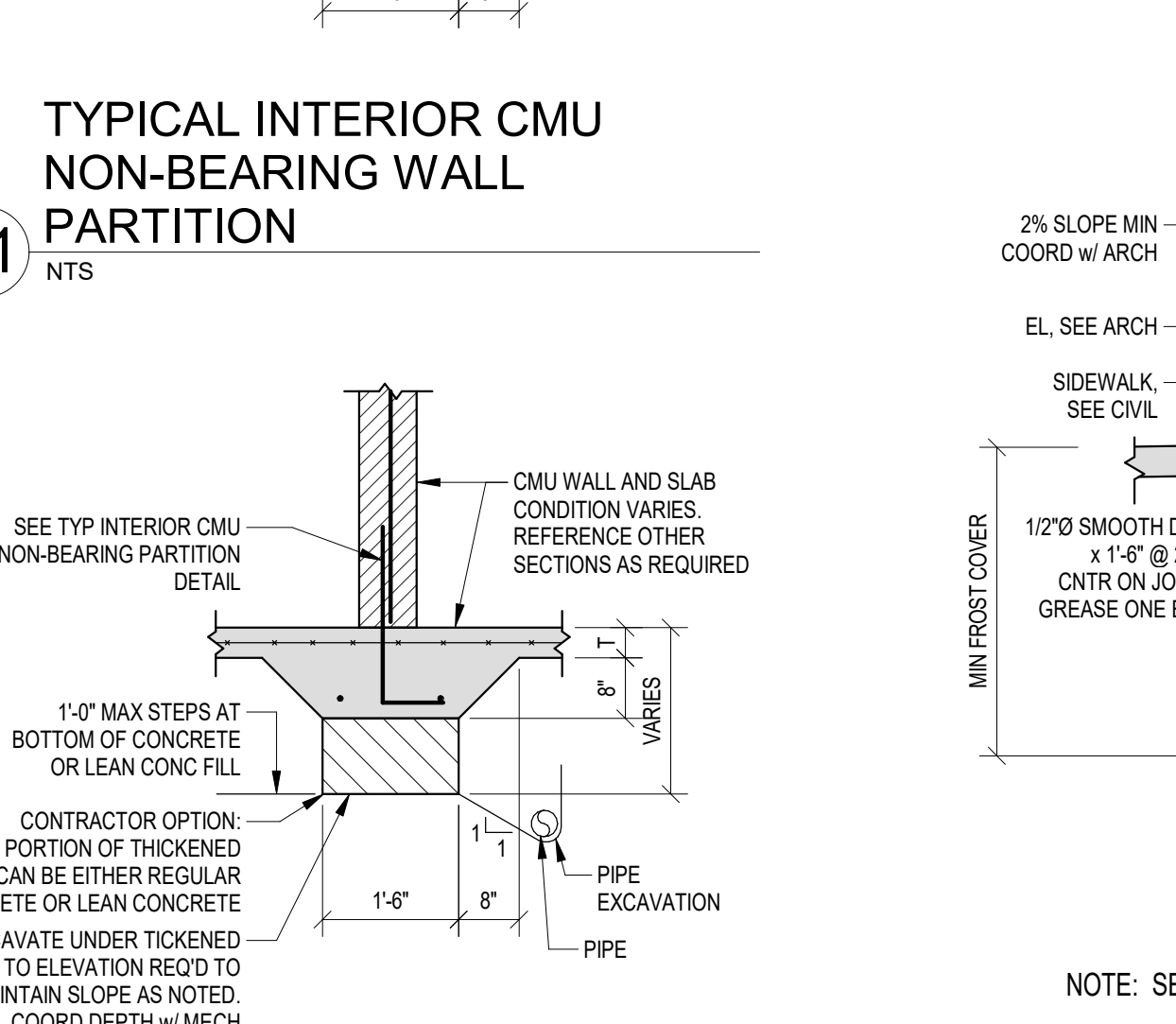


11 TYPICAL INTERIOR CMU NON-BEARING WALL PARTITION
NTS

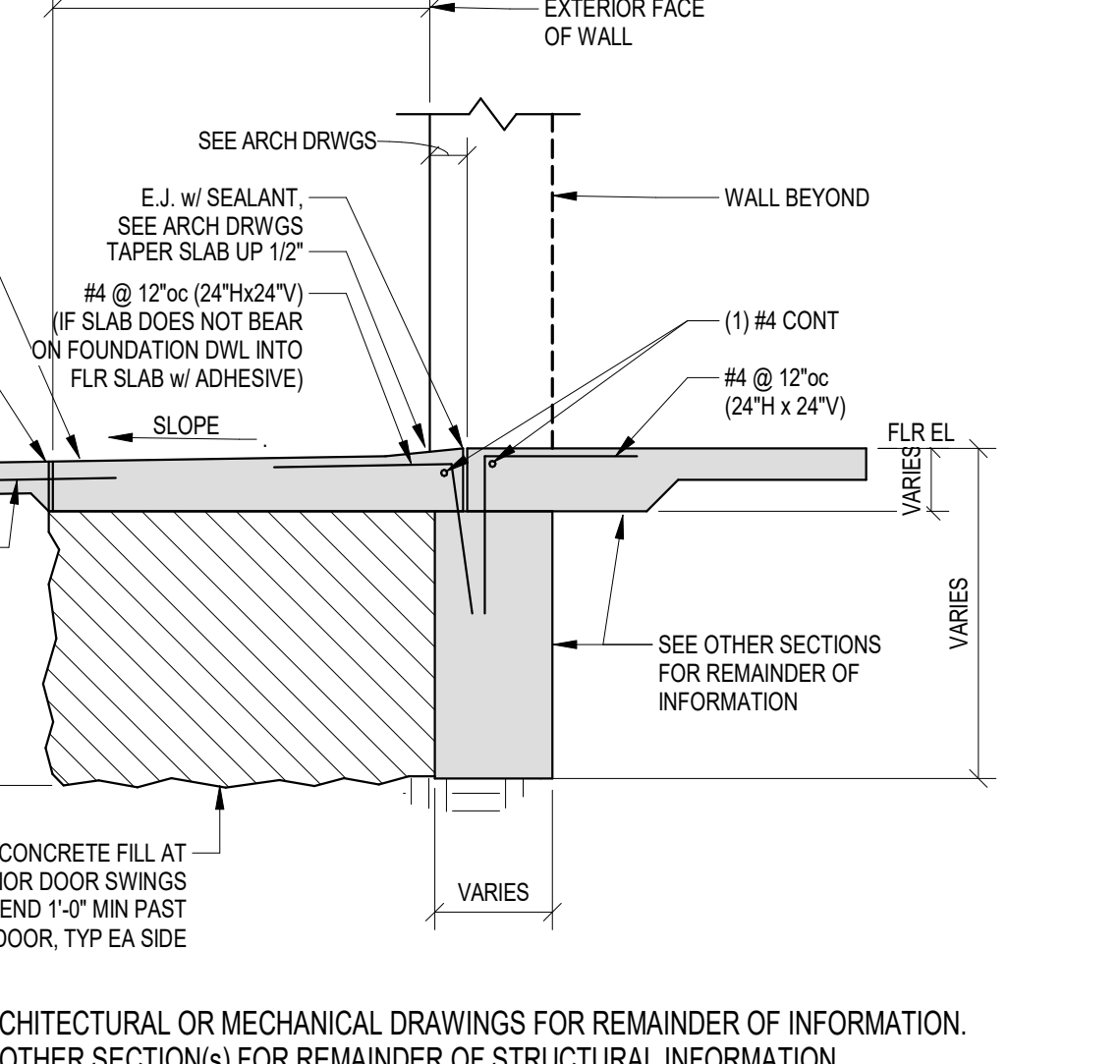
LIST OF ABBREVIATIONS			
ABOVE FINISH FLOOR	AFF	LAMINATED VENEER	LVL
ADDITIONAL	ADDL	LUMBER	LT
ALTERNATE	ALT	LIGHT	LL
ANCHOR ANCHORAGE	ANCH	LIVE LOAD	LG
ANCHOR ROD	AR	LONG LEG HORIZONTAL	LH
APPROXIMATE	APPROX	LONG LEG VERTICAL	LLV
ARCHITECT	ARCH	LOW POINT	LP
ALL THREAD ROD	ATR		
BOTTOM OF BALANCE BEAM	B/B	MANUFACTURER	MFR
BEARING	BRG	MASONRY	MSRY
BENT	BT	MECHANICAL	MECH
BETWEEN	BTWN	MEZZANINE	MEZZ
BLOCKING	BLKG	MIDDLE	MID
BOTTOM	BOTT, B	MINIMUM	MIN
BOTTOM OF METAL DECK	BMD	MISCELLANEOUS	MISC
BOTTOM OF PIER BUILDING	B/P		
CENTER	CTR	NEAR FACE	NF
CENTER-LINE	CL	NEAR SIDE	NS
CLEAR	CLR	NOT IN CONTRACT	NIC
COLUMN, COLUMNS	COL	NOT TO SCALE	NTS
CONCRETE	CONC	ON CENTER	OC
CONCRETE MASONRY UNIT	CMU	OPENING	OPNG
CONNECT, CONNECTION	CONN	OPPOSITE	OPP
CONSTRUCTION	CONSTR	OPPOSITE HAND	OPPH
CONTROL JOINT	CJ	OUT TO OUT	O.O.
CONTINUE, CONTINUOUS	CONT	OUTSIDE DIAMETER	OD
CONTRACTOR	CONTR		
CONT	CONT	PLATE	PL
DEAD LOAD	DL	PLYWOOD	PLYWD
DEGREE	DEG	POINT	PT
DIAGONAL	DIAG	POUND PER SQUARE FOOT	PSF
DIAMETER	DIA	POUND PER SQUARE INCH	PSI
DWL	DWL	PREFABRICATED	PREFAB
DOWN	DN		
DRAWING	DWG	RADIUS	RAD
		REFER, REFERENCE	REF
EACH	EA	REINFORCING	REINF
EACH FACE	EF	REQUIRED	REQD
EACH WAY	EW	ROOF TOP UNIT	RTU
EDGE OF SLAB	EOS		
ELEVATION	ELEV	SCHEDULE	SCHED
EMBEDMENT	EMBED, EMB	SECTION	SECT
ENGINEER	ENG	SHEAR WALL	SW
EQUAL	EQ	SHEET	SHT
EXISTING	EXIST OR (E)	SHEET METAL	SHTMTL
EXPANSION	EXP	SIMILAR	SIM
EXPANSION JOINT	EJ	SPACE	SPA
EXTERIOR	EXT	SPECIFICATIONS	SPEC
		SQUARE	SQ
		STAINLESS STEEL	S.S.
		STANDARD	STD
		STEEL	STL
		STIFFENER	STIFF
		STRUCTURAL	STRUC
		SYMETRICAL	SYM
		THICK, THICKNESS	THK
		THREAD, THREADED	THRD
		TOP OF	T/
		TOP & BOTTOM	T&B
		TOP OF CONCRETE	TC OR T/C
		TOP OF FOOTING	TF OR T/F
		TOP OF MASONRY	TMSRY
		TOP OF PIER	TP
		TOP OF STEEL	TS OR T/S
		TW OR TW	TW OR TW
		TREAD	TRD
		TYPICAL	TYP
		UNLESS NOTED OTHERWISE	UNO
		VERTICAL BRACE	VB
		VERTICAL, VERTICALLY	VT OR VERT
		WELDED WIRE FABRIC	WWF
		WITH	w/
		WOOD	WD
		WORKING POINT	WP OR W.P.
		X-BRACING	X-BR



10 TYPICAL INTERIOR OR EXTERIOR CONCRETE STAIR ON GRADE
NTS



12 TYPICAL INTERIOR CMU WALL PARTITION AT PLUMBING
NTS



13 TYPICAL FROST BLOCK AT ALL EXTERIOR DOOR(S), U.N.O.
NTS



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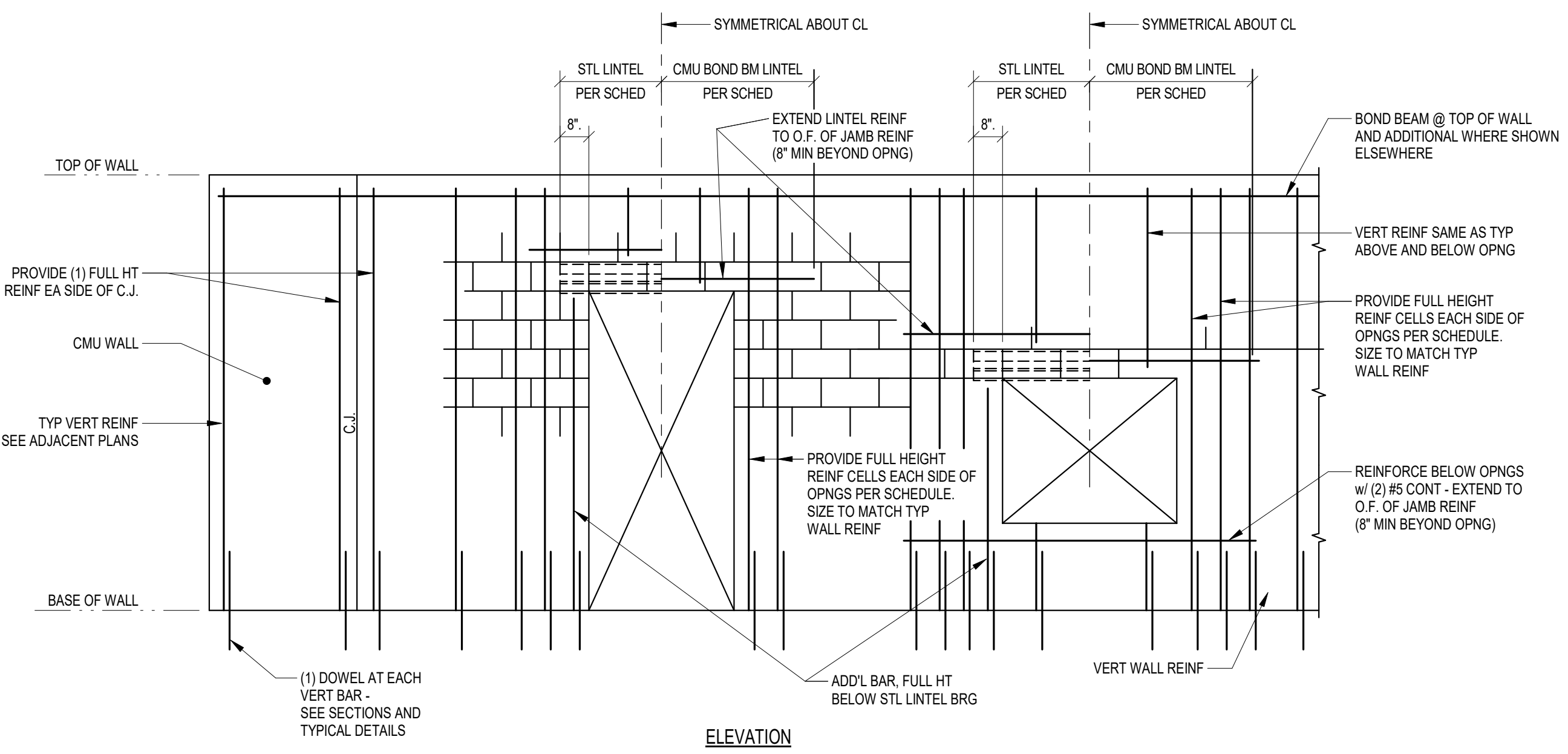
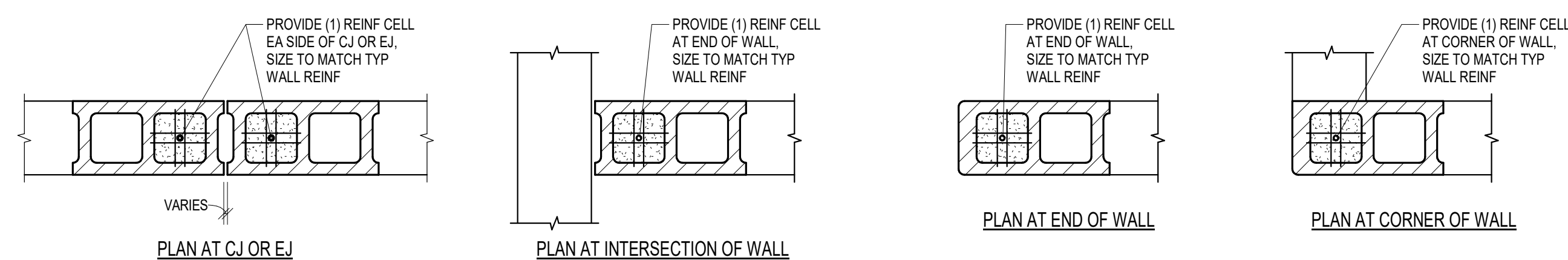
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TYPICAL DETAILS

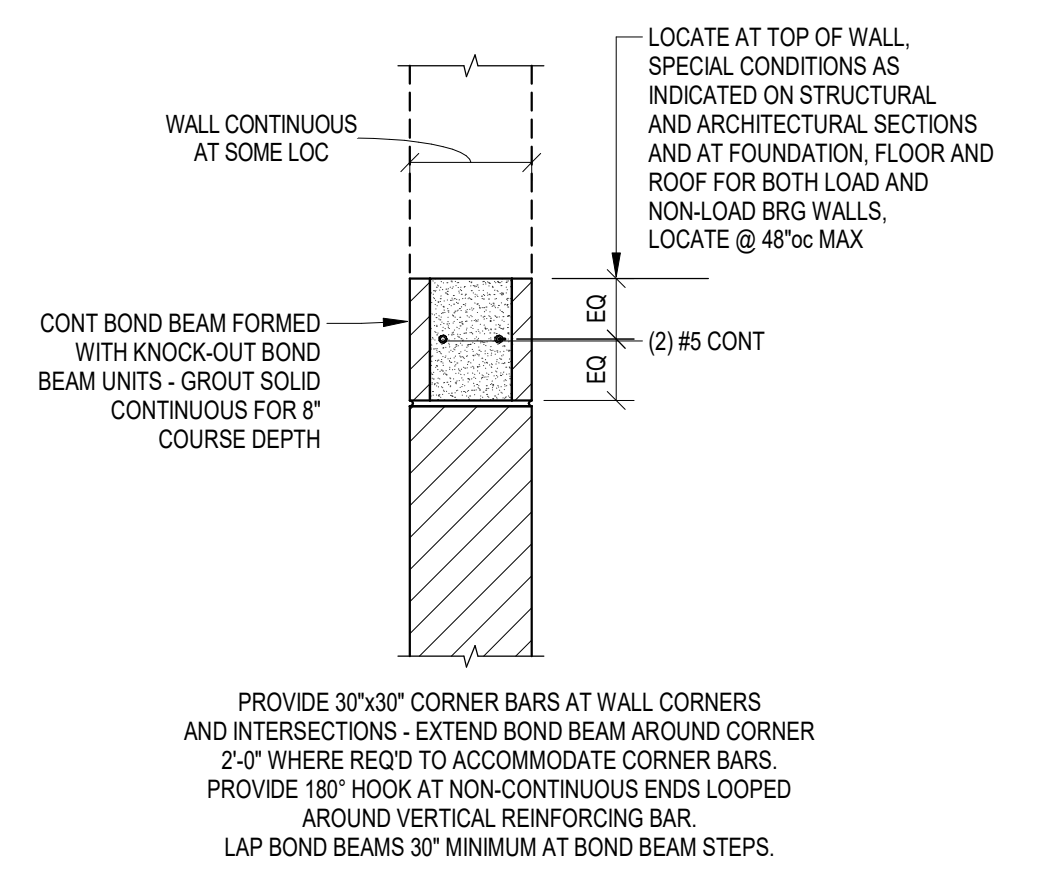
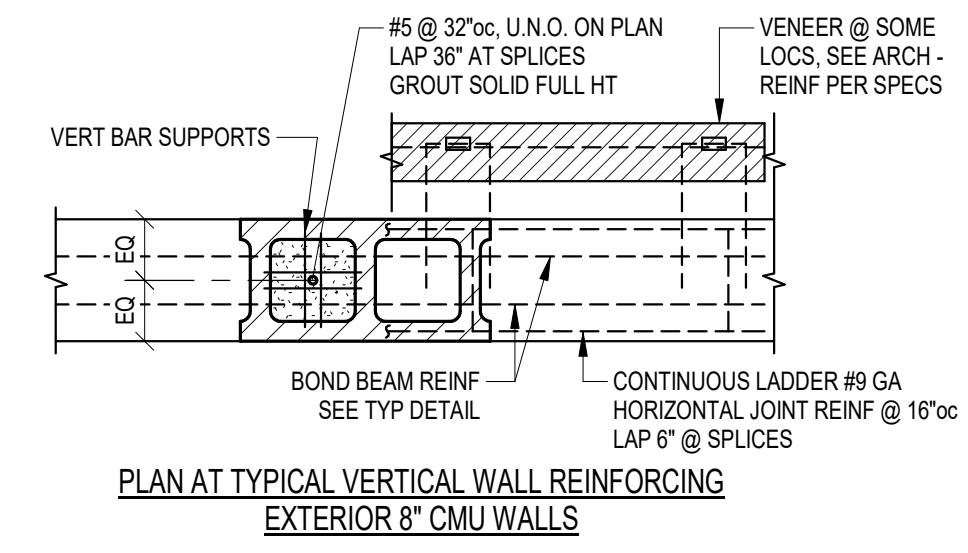
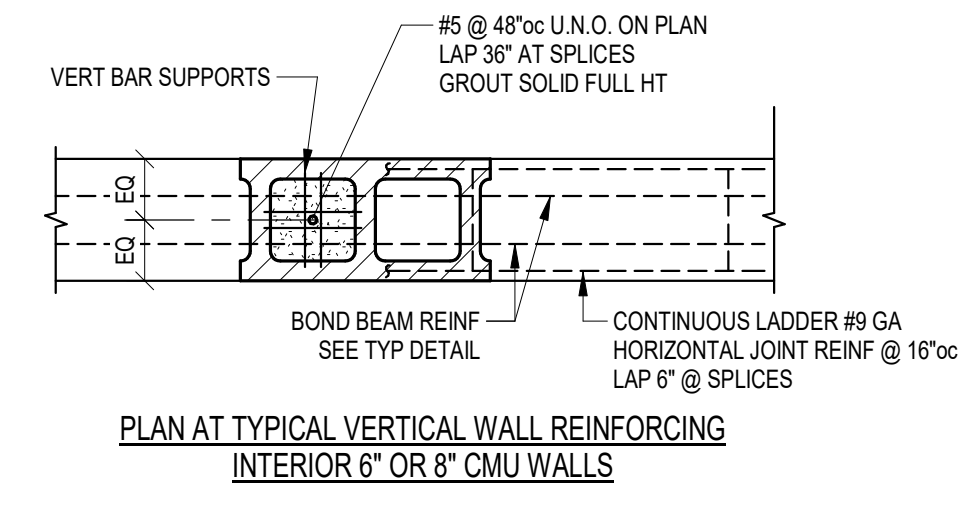


1. LOCATE REINFORCING AS SHOWN ON ADJACENT PLANS.
2. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATIONS OF WALLS NOT SHOWN ON STRUCTURAL DRAWINGS.
3. SPLICES IN VERTICAL REINFORCING TO BE AS IN GENERAL NOTES.
4. GROUT CELLS SOLID FULL HEIGHT AT ALL VERTICAL REINFORCING.
5. REINFORCING SHOWN ABOVE IS TYPICAL UNLESS NOTED OTHERWISE.
6. AT CMU WALLS SHOWN ON THE STRUCTURAL PLAN, THE CJ LOCATIONS ARE SHOWN. IF ADDITIONAL CJ(S) ARE WARRANTED, THE NEW LOCATION(S) ARE TO BE APPROVED BY THE ARCHITECT AND STRUCTURAL ENGINEER. FOR INTERIOR NON-BEARING CMU WALLS NOT SHOWN ON THE STRUCTURAL PLAN, CJ(S) TO BE PROVIDED AT APPROXIMATELY 30'-0" OC. ALL LOCATIONS TO BE APPROVED BY THE ARCHITECT AND STRUCTURAL ENGINEER.

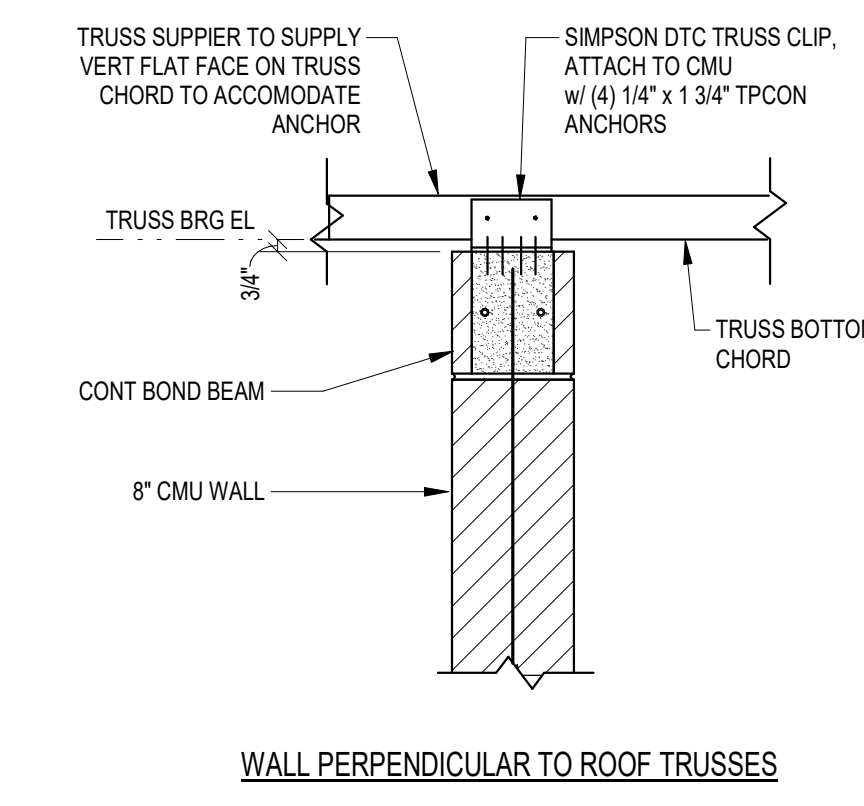
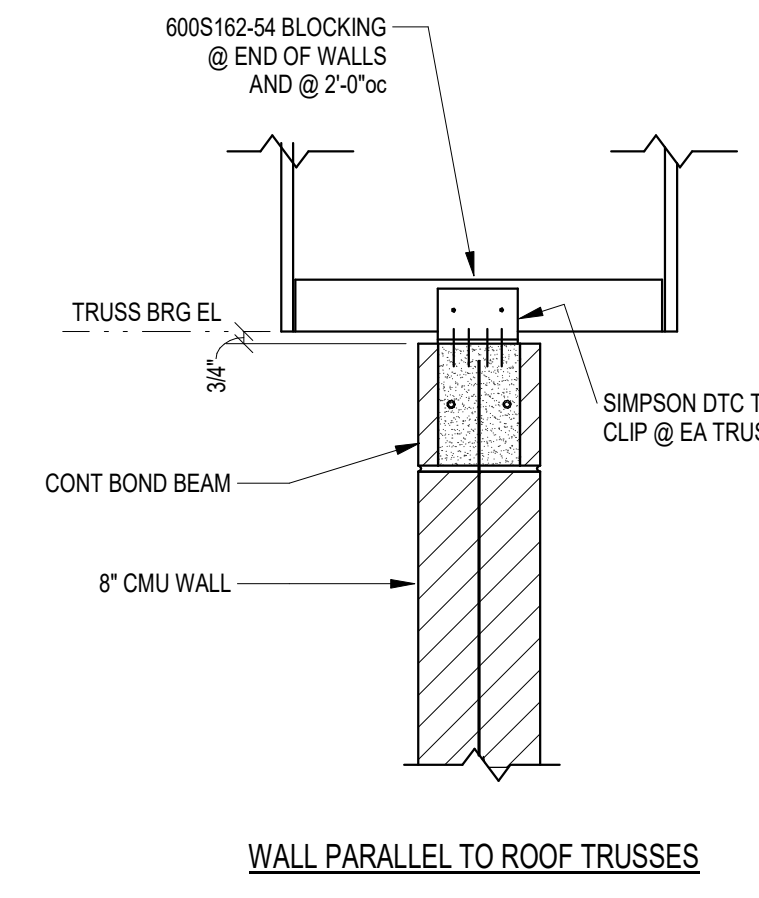
JAMB REINFORCING SCHEDULE			
INTERIOR 6" & 8" CMU	OPENINGS ≤ 4'-0" (1) FULL HEIGHT REINF CELL	OPENINGS > 4'-0" AND ≤ 6'-0" (2) FULL HEIGHT REINF CELL	OPENINGS > 6'-0" (3) FULL HEIGHT REINF CELL
EXTERIOR 8" CMU	OPENING ≤ 4'-0" (2) FULL HEIGHT REINF CELL	OPENINGS > 4'-0" AND ≤ 7'-4" (3) FULL HEIGHT REINF CELL	OPENINGS > 7'-4" (4) FULL HEIGHT REINF CELL

NOTE: FOR MULTISTORY WALLS WHERE BOTH INTERIOR AND EXTERIOR CONDITION OCCURS, THE FULL HEIGHT OF THE WALL SHALL BE REINFORCED AS AN EXTERIOR WALL.

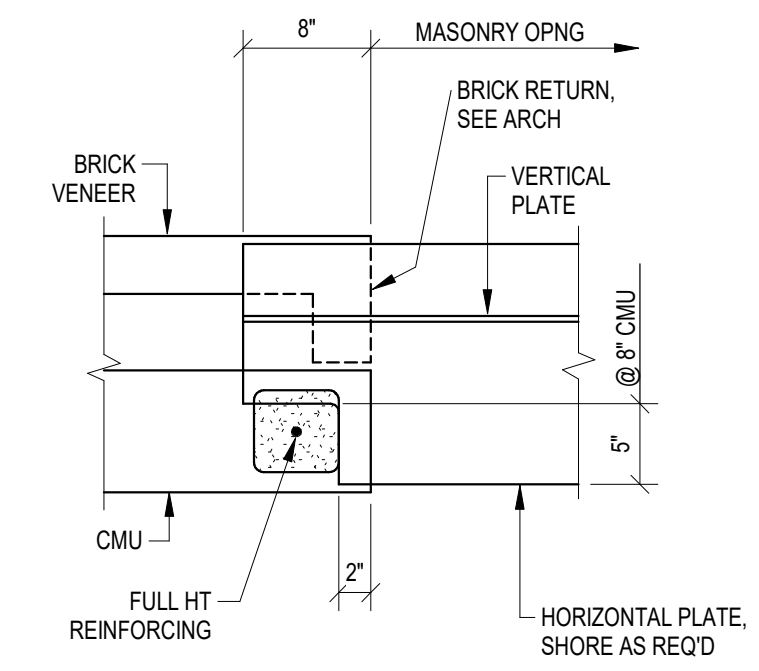
1 TYPICAL MASONRY WALL REINFORCING DIAGRAM
NTS



2 TYPICAL CMU BOND BEAM
NTS



3 TYPICAL NON-BEARING CMU WALL BRACING DETAIL
NTS

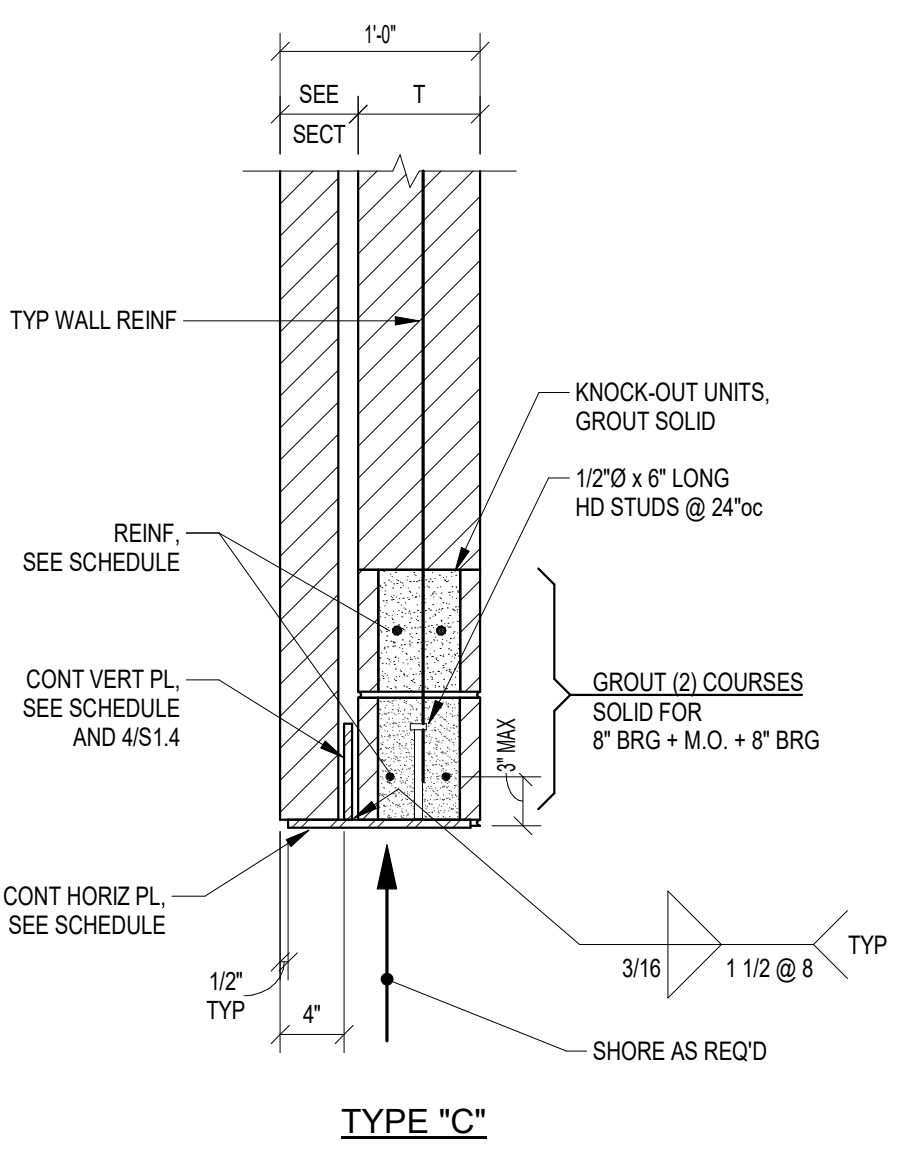
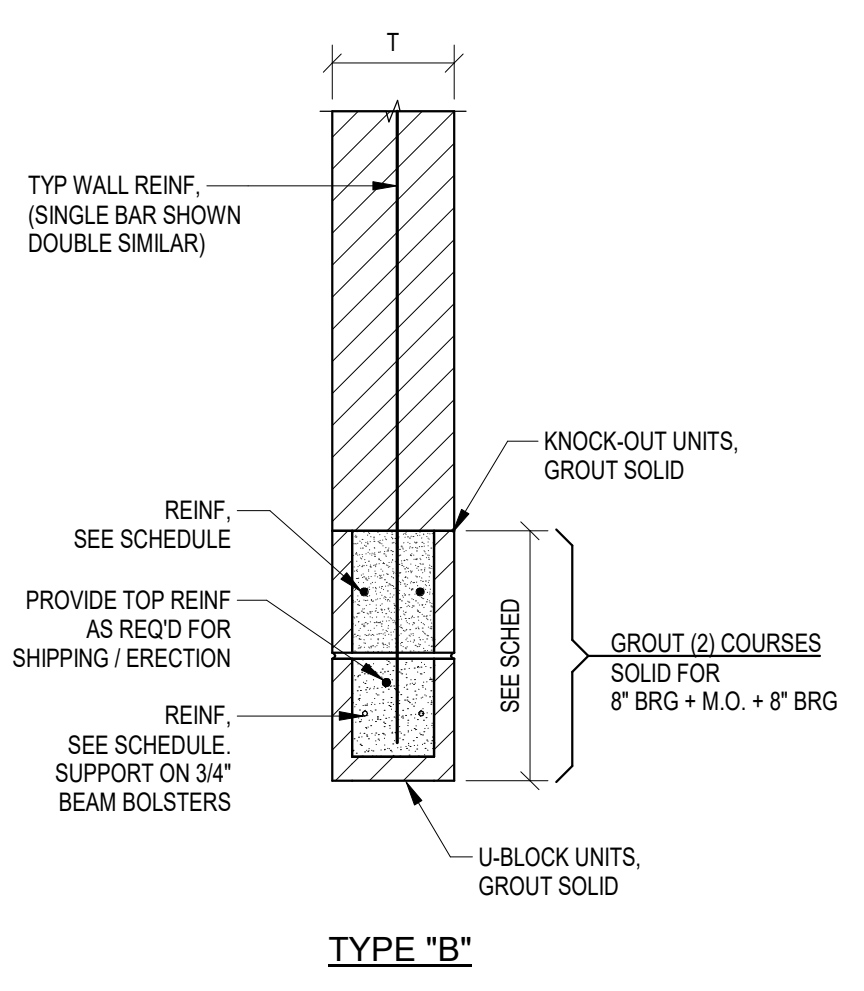
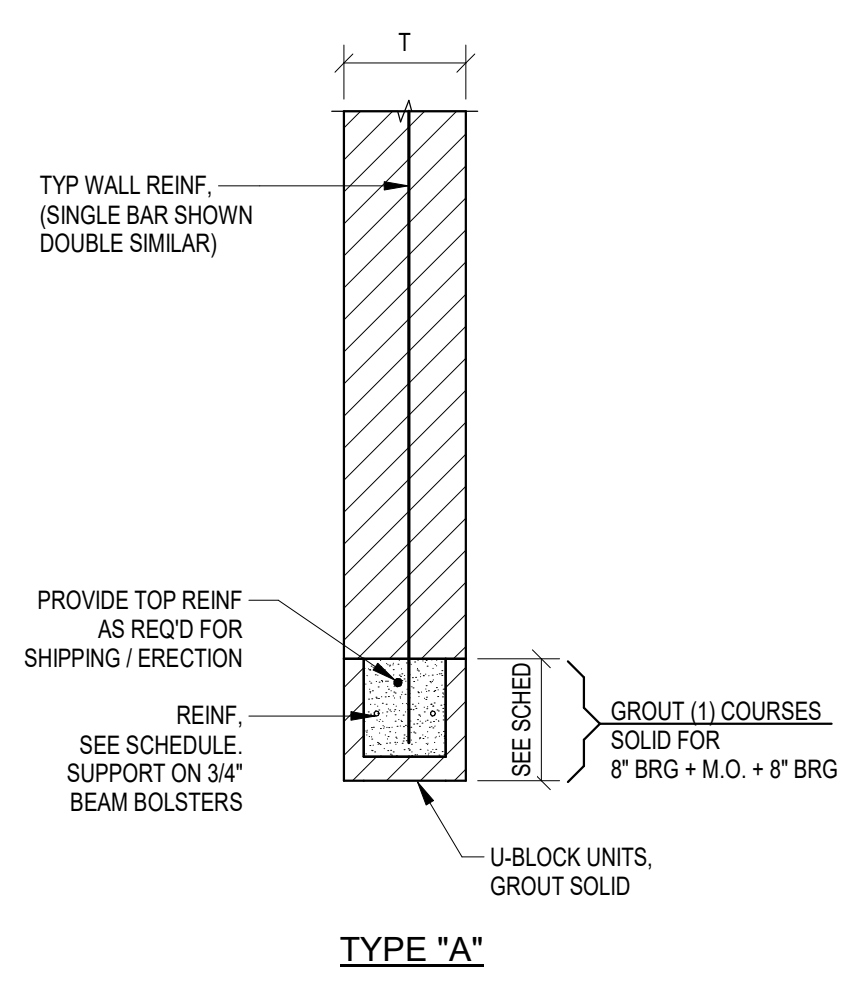


4 SECTION
1" = 1'-0"

STEEL AND CMU LINTEL SCHEDULE

MARK	LINTEL SIZE	REINF	BOTT PL	VERT PL	TYPE	COMMENTS
L1	8" VERT CMU	(2) #5	-	-	A	1, 3
L2	16" VERT CMU	(4) #5	-	-	B	2, 3
L3	16" VERT CMU	(4) #5	5/16"	3/8" x 4"	C	3

COMMENTS:
 1. TYPICAL AT ALL PENETRATIONS IN INTERIOR NON-BEARING CMU WALLS, OPENINGS < 4'-8", U.N.O.
 2. TYPICAL AT ALL PENETRATIONS IN INTERIOR NON-BEARING CMU WALLS, OPENINGS > 4'-8" AND ≤ 9'-4", U.N.O.
 3. OCCURS WHERE NOTED ON PLAN.
 LINTEL NOTES (APPLIES TO ALL LINTELS):
 1. 8" BEARING EACH END TYPICAL UNLESS NOTED. SEE ARCHITECT AND MECHANICAL DRAWINGS FOR OPENING LOCATIONS AND DIMENSIONS.
 2. CONNECT LINTEL TO STEEL COLUMN WHERE STEEL COLUMN OCCURS WITHIN 16" OF CMU OPENING. CONNECT LINTEL TO CONCRETE WALL WHERE CONCRETE WALL OCCURS WITHIN 16" OF CMU OPENINGS.
 3. EXTERIOR LINTELS TO BE PAINTED.
 4. INTERIOR LINTELS TO BE PAINTED.
 5. SEE GENERAL NOTES FOR LOOSE LINTEL ANGLES REQUIRED AT OPENINGS IN MASONRY VENEER WHERE STEEL STUD BACKUP OCCURS.



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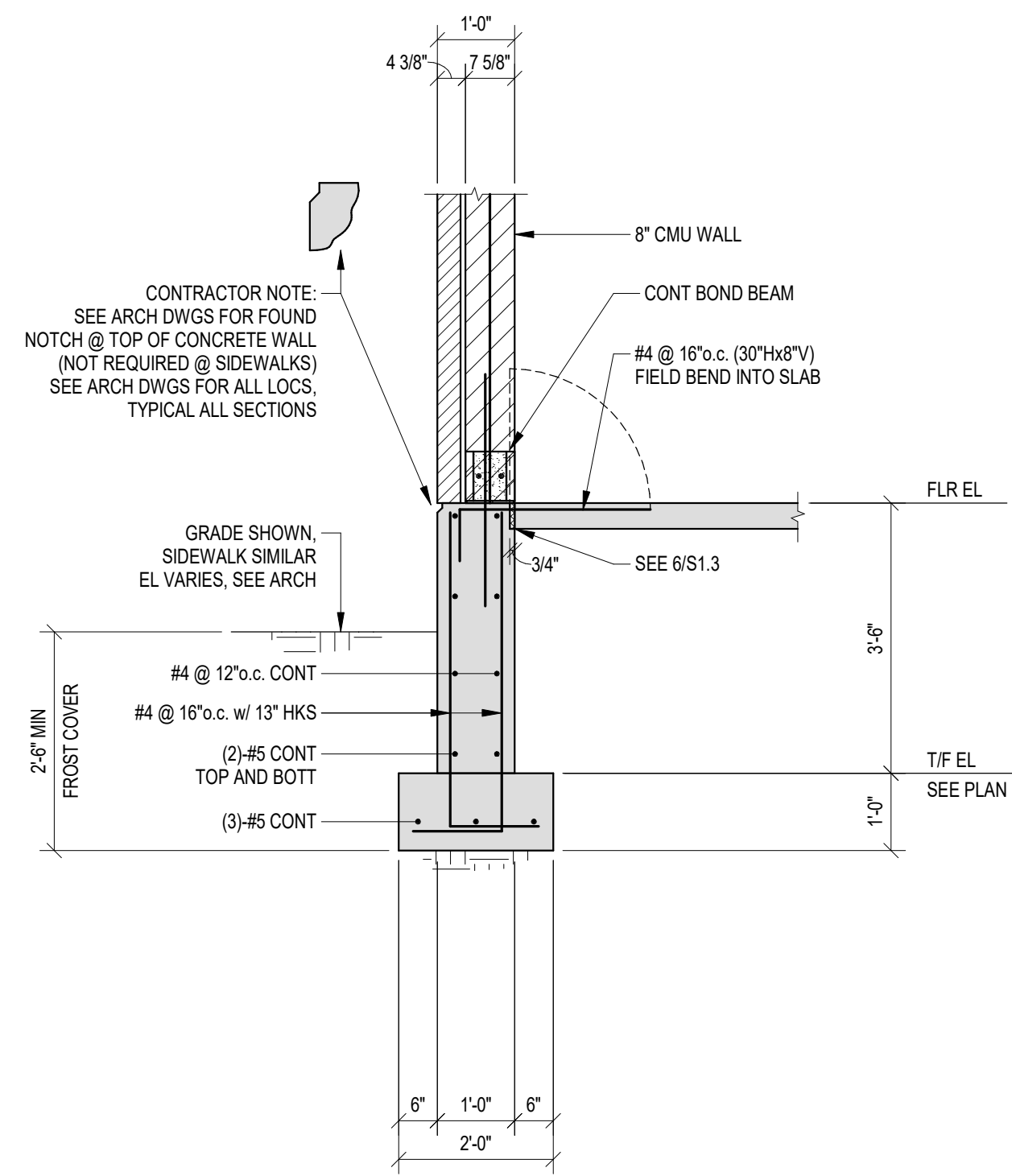
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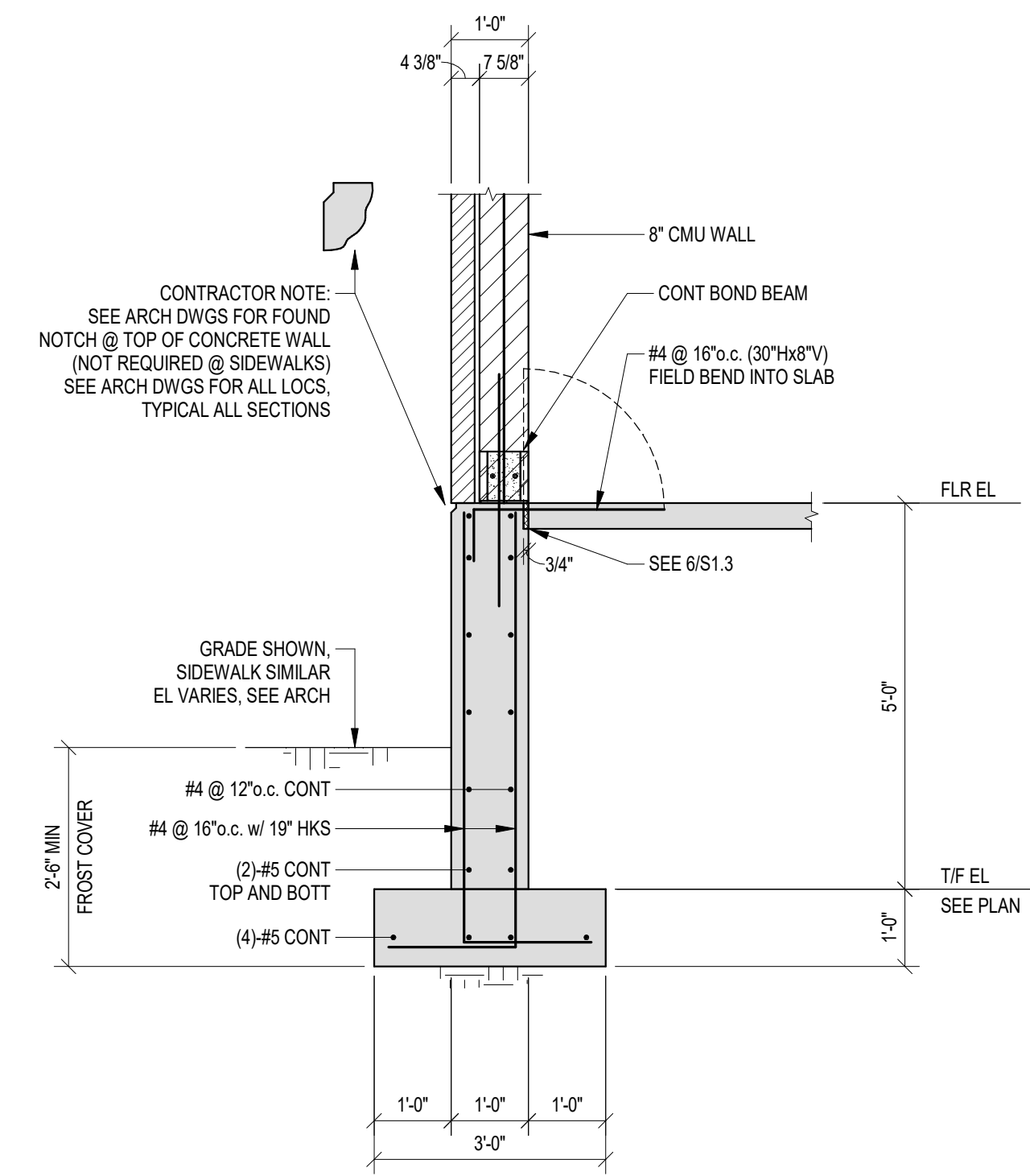
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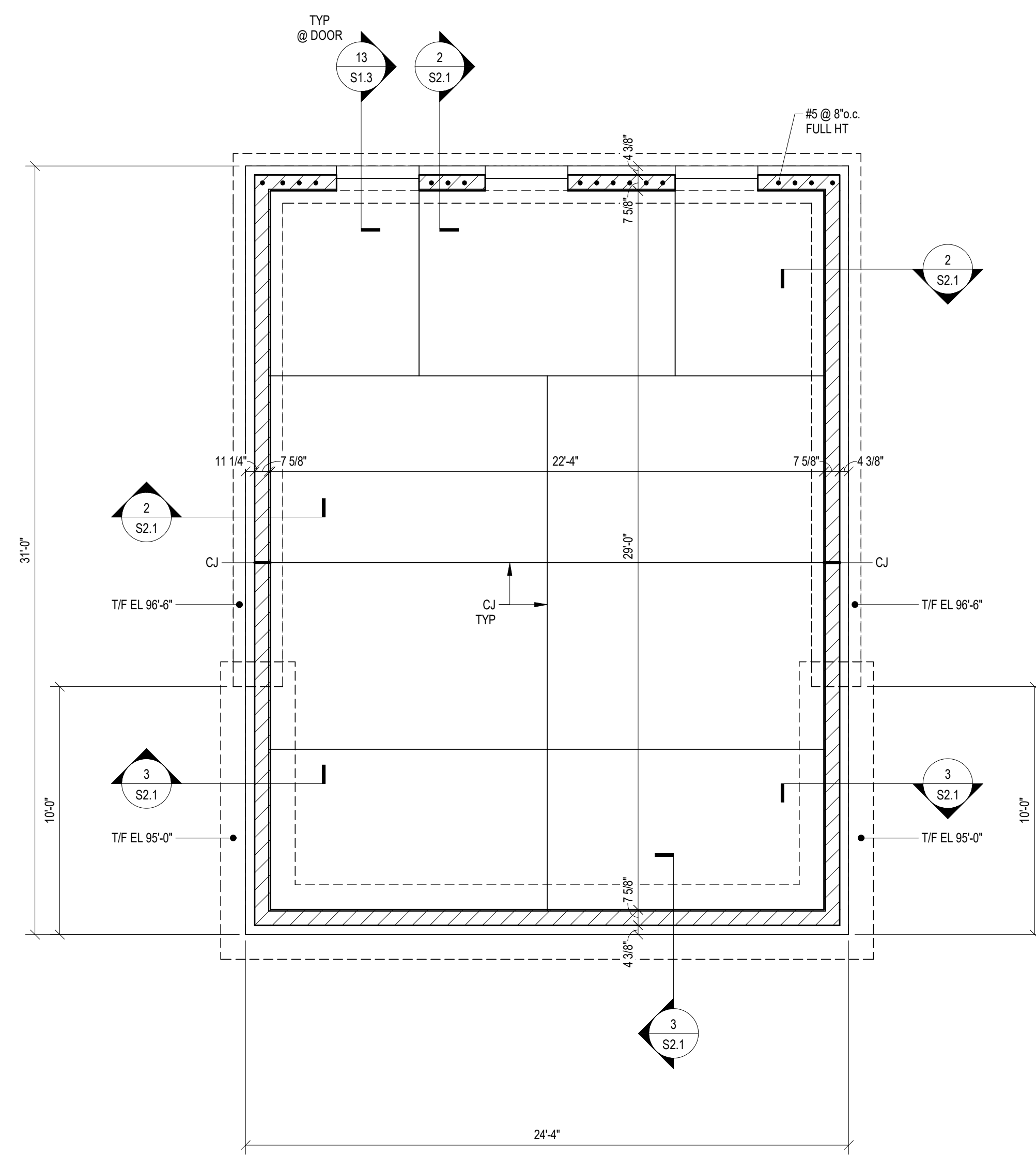
S1.4



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



3 SECTION
1/2" = 1'-0"



1 FIRST FLOOR AND FOUNDATION PLAN
1/4" = 1'-0"

- FLOOR AND FOUNDATION PLAN NOTES:**
- FINISH FLOOR ELEVATION = 100'-0" (451.20 AS NOTED ON CIVIL DRAWINGS, UNLESS NOTED OTHERWISE).
 - FLOOR CONSTRUCTION TO BE AS FOLLOWS:
@ TYPICAL:
4" CONCRETE SLAB (TYPICAL U.N.O. ON PLAN), ON VAPOR BARRIER (PER SPECS) ON 4" GRANULAR FILL.
REINFORCE SLAB w/ 6"x6"-W14xW14 WWF.
 - TOP OF EXTERIOR FOOTING ELEVATION (T/F EL) = 96'-6" OR 95'-0", U.N.O. ON PLAN.
 - SEE SHEET S1.3 FOR TYPICAL FOUNDATION DETAILS.
 - SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL SLAB DEPRESSIONS AND EMBEDDED ITEMS (IF ANY) NOT SHOWN ON THIS PLAN. REPORT ALL OCCURRENCES TO STRUCTURAL ENGINEER.
 - INDICATES LEAN CONCRETE FILL. ALL LOCATIONS NOTED, THE MATERIAL BELOW THE FOOTING OR GRADE BEAM SHALL BE REMOVED TO THE ELEVATION INDICATED AND REPLACED WITH LEAN CONCRETE. THE EXTENTS OF THE LEAN CONCRETE SHALL MATCH THE EXTENTS OF THE FOOTING OR GRADE BEAM. COORDINATE WITH S1.3.
 - INDICATES PIPING SLEEVE BY PLUMBING CONTRACTOR THRU FOUNDATION OR LEAN CONCRETE FILL AND PIPING SLEEVE BELOW FOUNDATION AT PLUMBING LOCATIONS. SEE PLUMBING DRAWINGS FOR ADDITIONAL LOCATIONS NOT SHOWN. SEE S1.3 FOR ADDITIONAL INFORMATION. COORDINATE FINAL LOCATION WITH MEP DRAWINGS.
 - CJ AT CMU WALL LOCATION INDICATES VERTICAL CONTROL JOINT AT LOAD BEARING CMU WALLS. PROVIDE VERTICAL CONTROL JOINTS @ 20'-0" MAX AT NON-LOAD BEARING CMU WALLS, UNLESS NOTED OTHERWISE.
 - CJ AT SLAB-ON-GRADE INDICATES CONTROL JOINT. SEE S1.3 FOR INFORMATION. PROVIDE CONTROL JOINTS @ 15'-0" MAX, UNLESS NOTED OTHERWISE. TERMINATE CONTROL JOINTS AT BUILDING COLUMNS AND INSIDE CORNERS WHEREVER POSSIBLE. SUBMIT PROPOSED CONTROL JOINT LAYOUT TO ARCHITECT FOR APPROVAL A MINIMUM OF 10 DAYS PRIOR TO FIRST SLAB-ON-GRADE POUR.
 - PROVIDE THICKENED SLAB UNDER ALL INTERIOR NON-LOAD BEARING CMU WALLS PER S1.3 AND S1.3 SEE ARCH DRAWINGS FOR WALL LOCATIONS NOT SHOWN.
 - SEE S1.3 FOR TYPICAL FROST BLOCK AT ALL EXTERIOR DOORS, SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.
 - INDICATES LOAD BEARING CMU WALLS. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF ALL CMU WALLS. NON-LOAD BEARING CMU WALLS ARE NOT SHOWN FOR CLARITY.
 - SEE SHEET S1.4 FOR TYPICAL CMU WALL REINFORCING, U.N.O.



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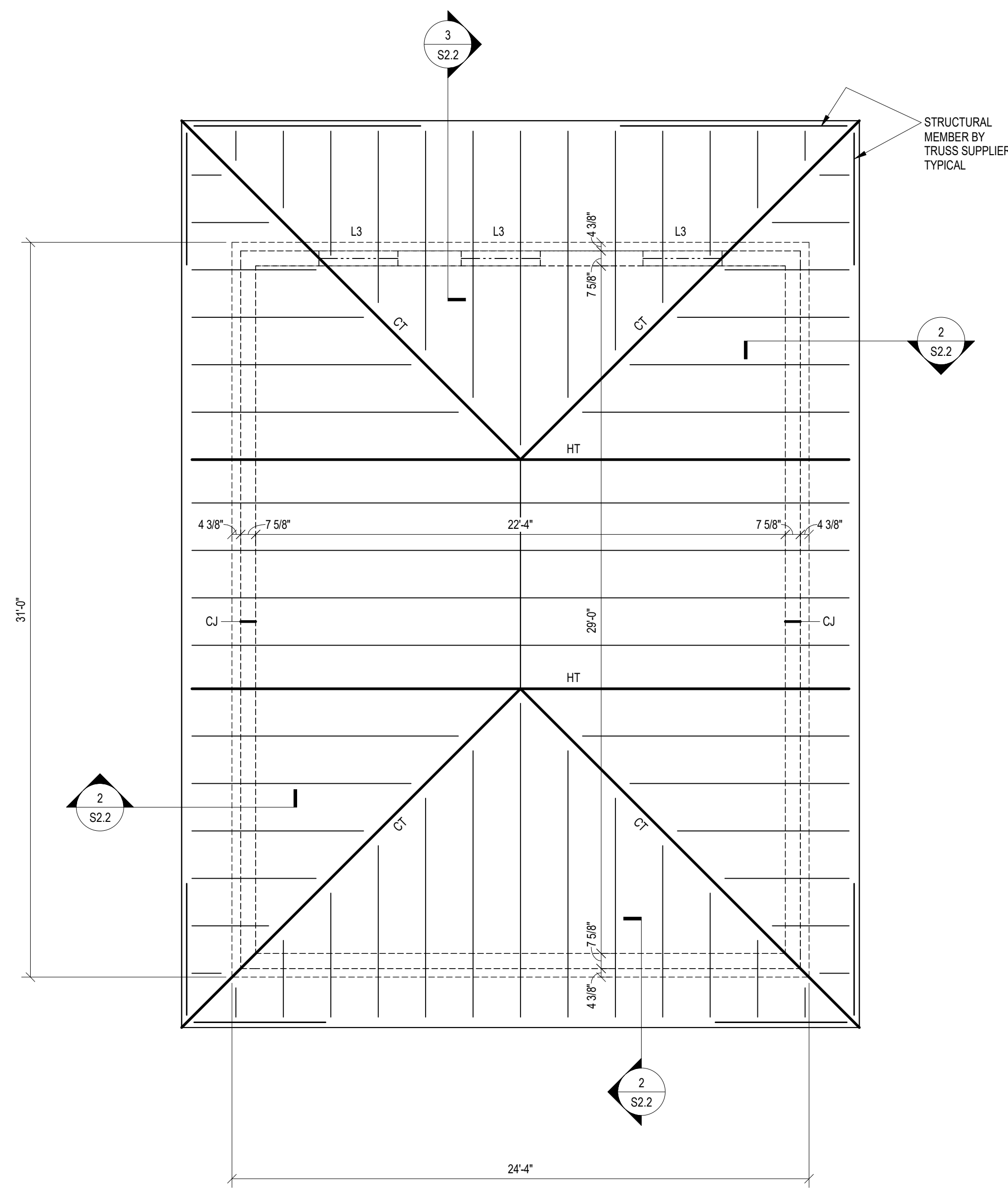
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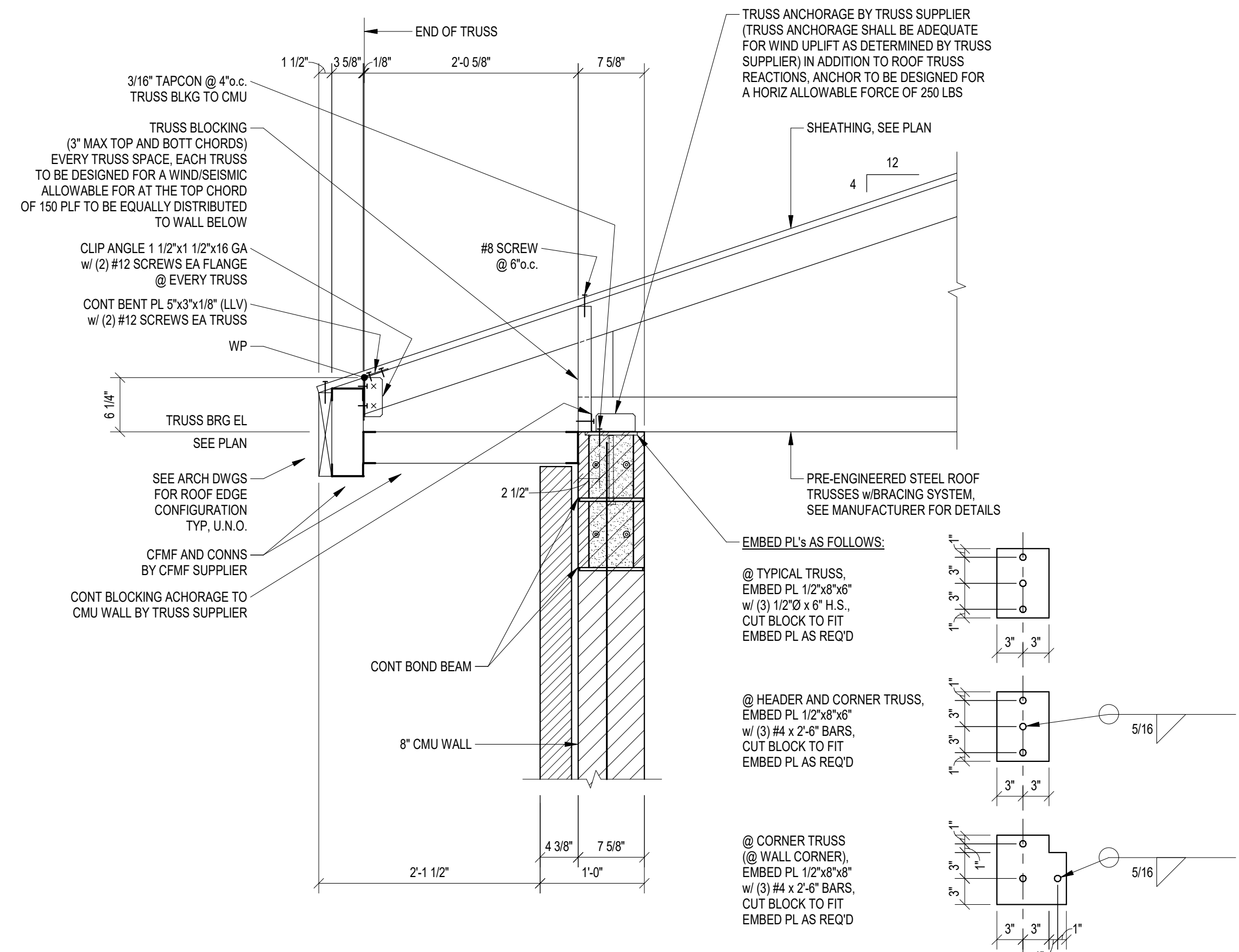
SHEET NO.

S2.2

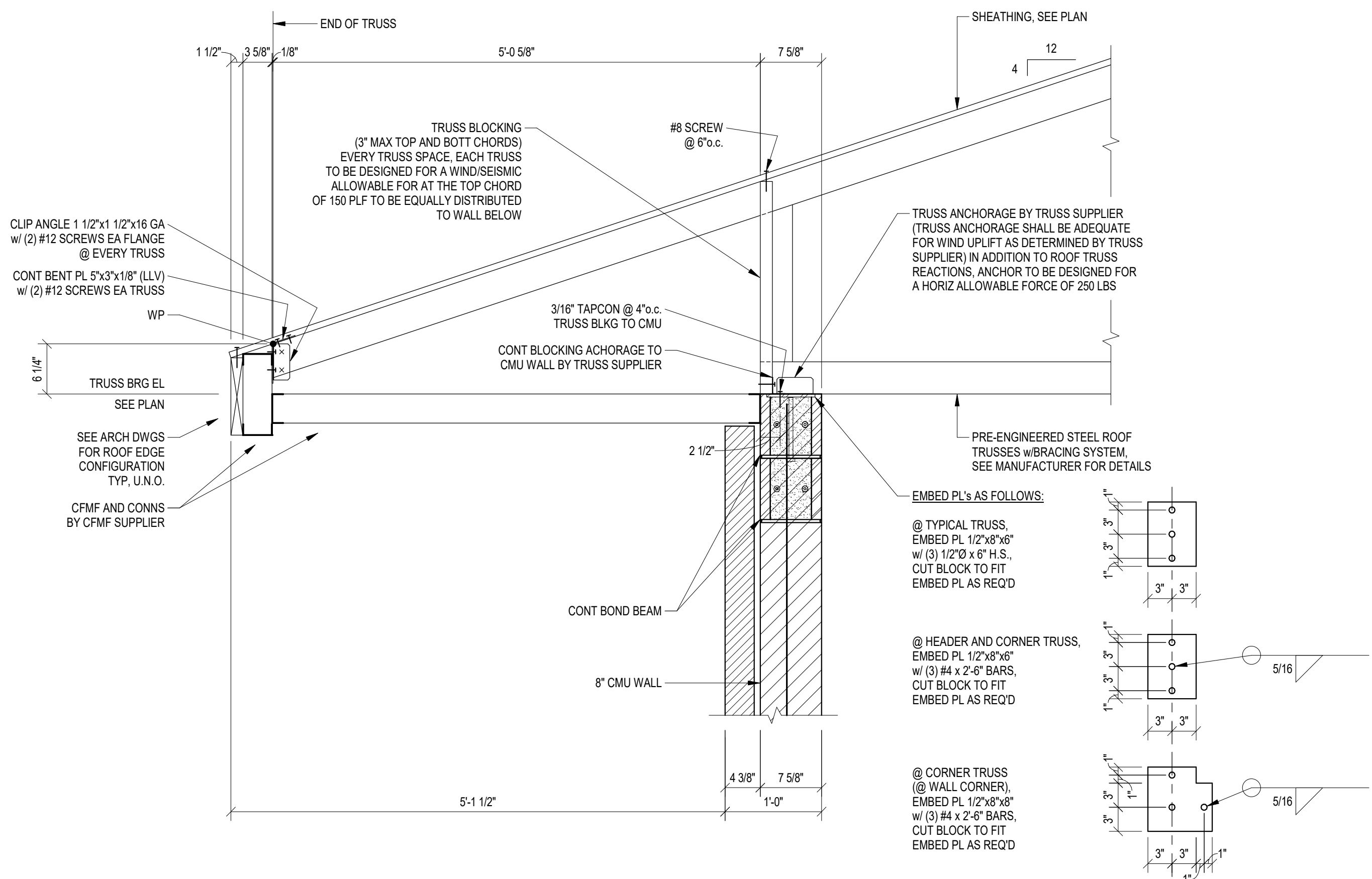


1 ROOF FRAMING PLAN
 1/4" = 1'-0"

- PLAN NOTES:**
- ROOF CONSTRUCTION TO BE AS FOLLOWS:
 @ TYPICAL ROOF:
 3/4" CDX FIRE RETARDANT TREATED PLYWOOD DECK OVER PREFABRICATED STEEL ROOF TRUSSES. ATTACH PLYWOOD DECK TO STEEL ROOF TRUSSES AND SUPPLEMENTARY FRAMING w/ #8 LOW PROFILE SCREWS SPACED @ 6" o.c. AT PLYWOOD EDGES AND @ 12" o.c. AT INTERMEDIATE SUPPORTS. AT RIDGE VENTS (SEE ARCHITECT FOR LOCATIONS), PROVIDE CONTINUOUS 2" VENTILATION GAP BETWEEN THE PLYWOOD DECK.
 - TRUSS BEARING ELEVATION = 112'-0". UNLESS NOTED OTHERWISE ON SECTIONS OR PLAN.
 - PREFABRICATED STEEL ROOF TRUSSES TO BE SPACED AT 24 INCHES ON CENTER, UNLESS NOTED OTHERWISE ON PLANS. PROVIDE STACKED TRUSSES WHERE REQUIRED FOR SHIPPING. PROVIDE HEADER TRUSSES OR SUPPLEMENTARY FRAMING, AS REQUIRED TO SUPPORT DECK EDGES AT OPENINGS THROUGH ROOF. TOP CHORD OF ROOF TRUSSES SHALL FORM PROFILE INDICATED ON PLAN. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION ON ROOF PROFILE.
 - HEADER TRUSSES (HT) SHALL BE PROVIDED WHERE INDICATED ON PLAN(S) WALL FRAMING HAS BEEN DESIGNED TO ACCOMMODATE THE HT LOCATION(S) SHOWN.
 - CORNER TRUSSES (CT) SHALL BE PROVIDED WHERE INDICATED ON PLAN(S) WALL FRAMING HAS BEEN DESIGNED TO ACCOMMODATE THE CT LOCATION(S) SHOWN.
 - ROOF TRUSS WEB CONFIGURATION SHALL PROVIDE OPEN AREAS ADEQUATE FOR PASSAGE OF DUCTWORK.
 - TRUSS SUPPLIER SHALL PROVIDE SUPPLEMENTARY FRAMING FOR CONTINUOUS SUPPORT OF PLYWOOD DECK EDGES AT RIDGES AND VALLEYS AT THE CONTOURS INDICATED. PROVIDE DECK 3/4" MINIMUM BEARING.
 - TRUSS SUPPLIER SHALL DESIGN AND PROVIDE ALL TRUSS-TO-TRUSS, SUPPLEMENTARY FRAMING-TO-TRUSS AND TRUSS-TO-STRUCTURE CONNECTIONS.
 - SEE ARCHITECTS DRAWINGS FOR ADDITIONAL CMU WALLS NOT SHOWN ON THIS PLAN FOR CLARITY.
 - SEE ARCHITECTS DRAWINGS FOR LOCATION AND THICKNESS OF ALL CMU WALLS.
 - SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION AND SIZE OF ALL OPENINGS IN CMU WALLS.
 - "L" INDICATES LINTEL DESIGNATION (EX. "L1"). SEE SHEET S1.4 FOR SIZE AND DETAILS. TYPICAL LINTELS NOT DENOTED ON PLAN FOR CLARITY. PROVIDE TYPICAL LINTELS IN CMU WALLS PER LINTEL SCHEDULE AND DETAILS ON SHEET S1.4, U.N.O. ON PLAN. SEE ARCH AND MECH DRWGS FOR SIZES AND LOCATIONS OF OPENINGS.
 - SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL ROOF PENETRATIONS NOT SHOWN.
 - BRACE TOP OF INTERIOR NON-BEARING CMU WALLS PER 3/1.4.



2 SECTION
 1" = 1'-0"

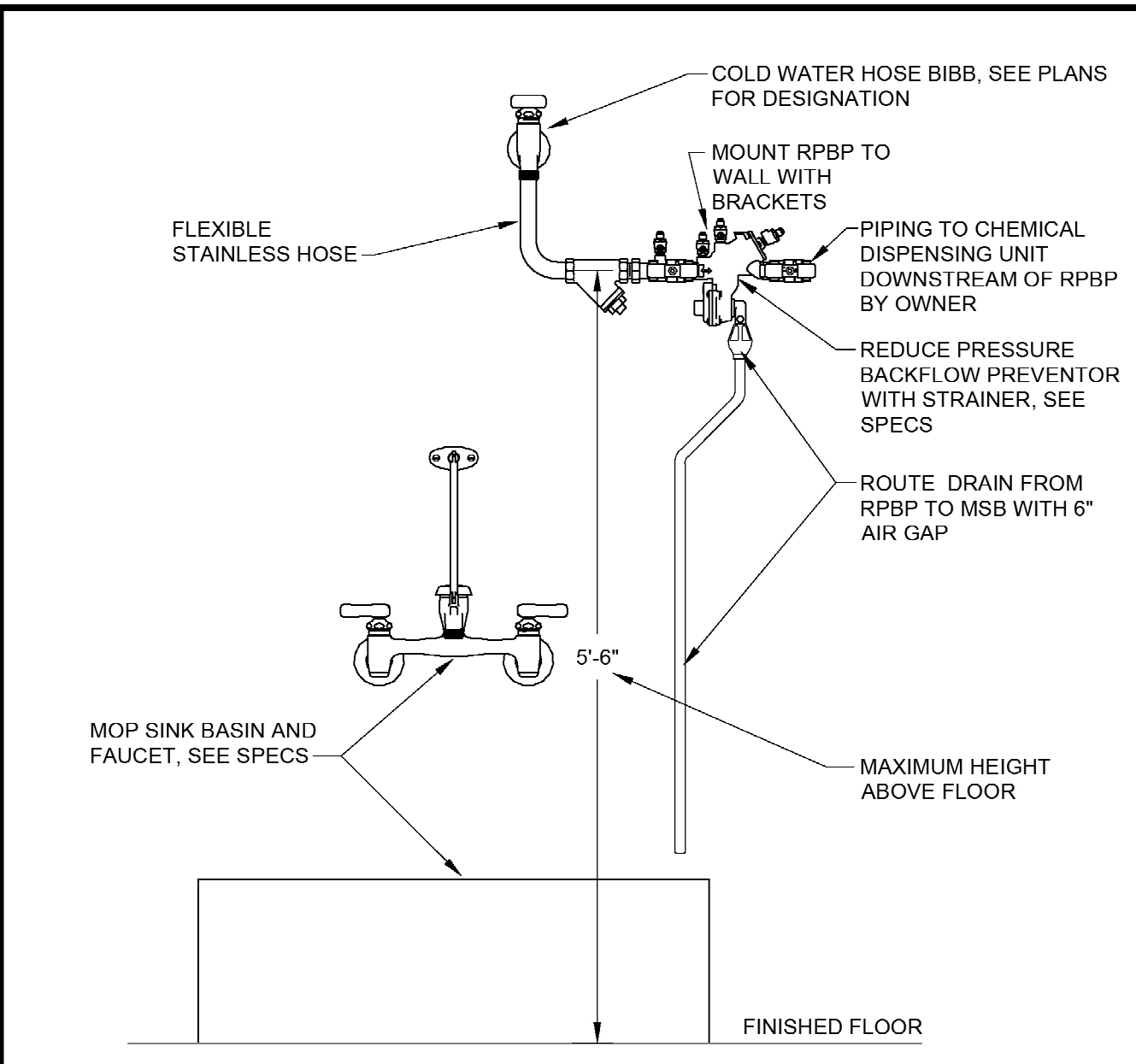


3 SECTION
 1" = 1'-0"

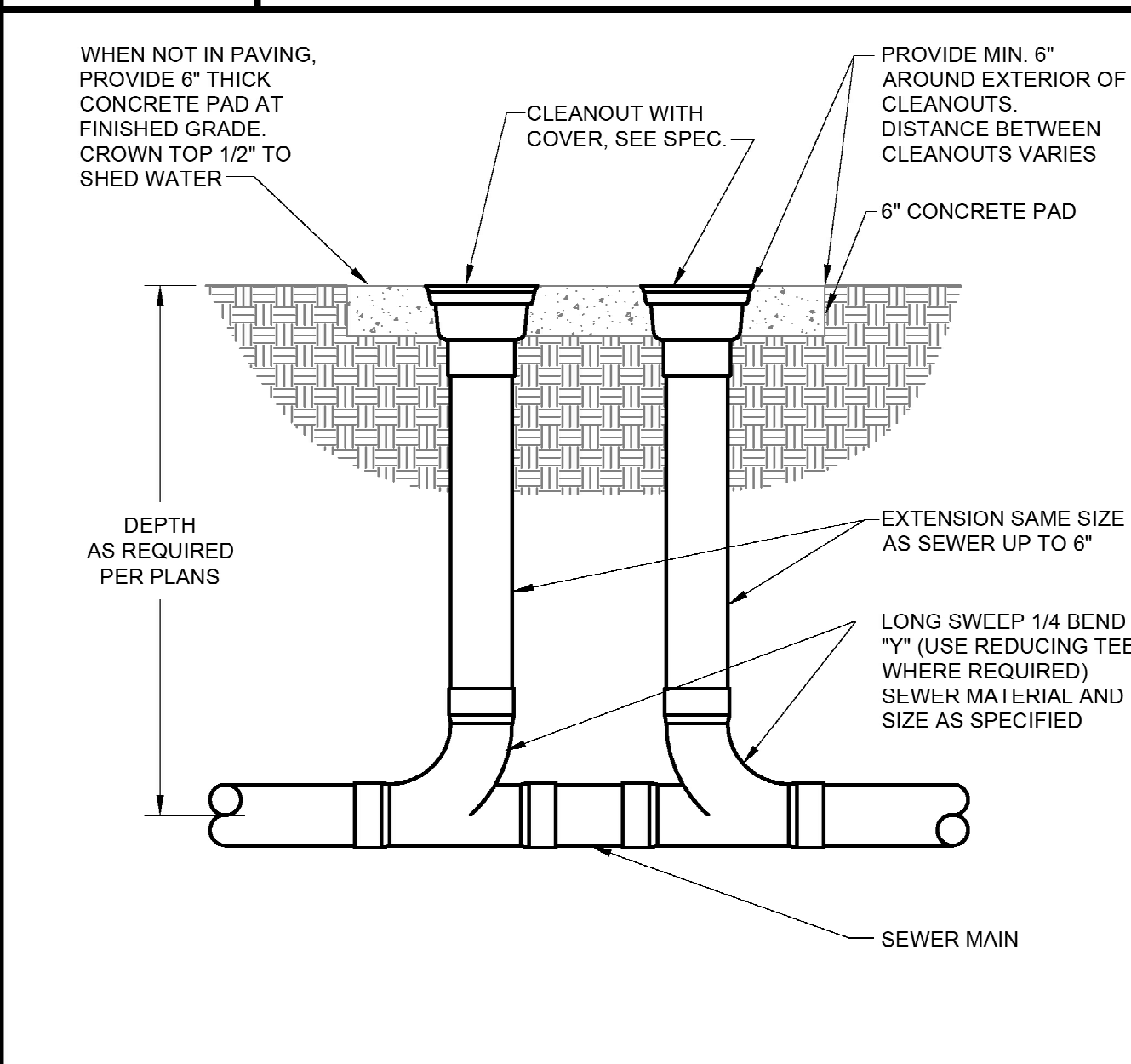
PLUMBING

AP	ACCESS PANEL	V	VENT
BV	BALANCE VALVE	VTR	VENT THROUGH ROOF
CO	CLEANOUT	W	WASTE
CHV	CHECK VALVE	WC	WATER CLOSET
CW	COLD WATER	WCO	WALL CLEANOUT
DF	DRINKING FOUNTAIN	WH	WALL HYDRANT
DN	DOWN	WM	WATER MAIN
DS	DOWNSPOUT	YCO	YARD CLEANOUT
DSS	DOWNSPOUT SHOE	YD	YARD DRAIN
DV	DRAIN VALVE		
DWH	DOMESTIC WATER HEATER		
ET	EXPANSION TANK		
EX	EXISTING PIPING OR EQUIPMENT		
F	FLANGE CONNECTION		
FCO	FLOOR CLEANOUT		
FD	FLOOR DRAIN		
FS	FLOOR SINK		
GA	GAUGE		
GC	GAUGE COCK		
HB	HOSE BIBB		
HD	HUB DRAIN		
HW	HOT WATER		
HWC	HOT WATER CIRCULATING		
INV	INVERT		
L	LAVATORY		
MH	MANHOLE		
MSB	MOP SERVICE BASIN		
PRV	PRESSURE REDUCING VALVE		
RPBP	REDUCE PRESSURE BACKFLOW PREVENTER		
S	SOIL		
SAN	SANITARY SEWER		
SSD	SUBSOIL DRAIN		
ST	STORM SEWER		
SV	SERVICE VALVE		
TH	THERMOMETER		
TT	TEST TEE		
U	UNION		
UR	URINAL		

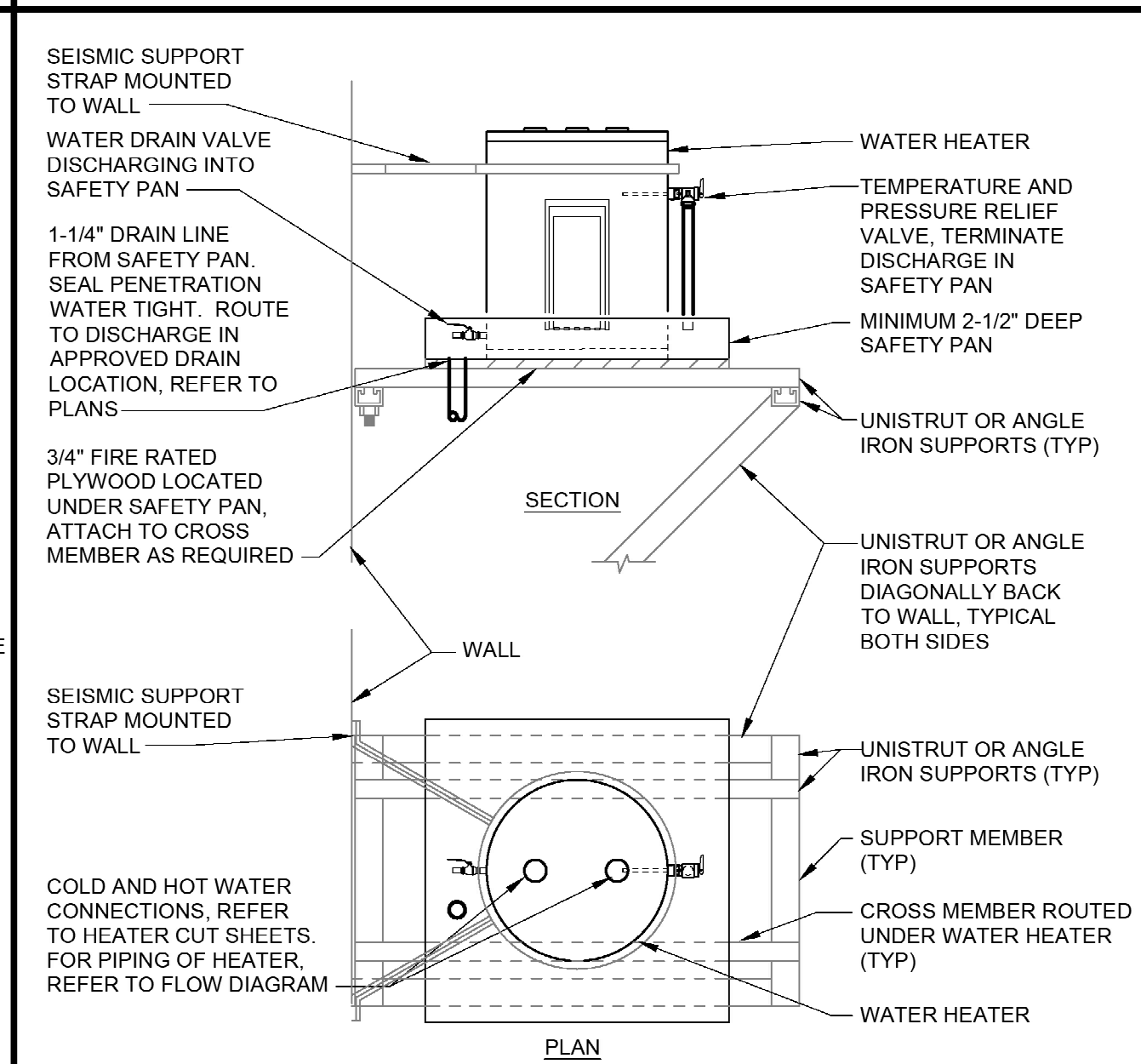
SAN	SANITARY SEWER (SOIL, WASTE)
XXX	VARIOUS SYSTEM TYPE, IF NOT SHOWN
V	VENT
CW	COLD WATER
HW	HOT WATER
TPV	TEMPERATURE & PRESSURE RELIEF VALVE
UP	PIPE LINE, TURN UP
DN	PIPE LINE, TURN DOWN
BV	BALANCE VALVE
CHV	CHECK VALVE
DV	DRAIN VALVE
GA	GAUGE
GC	GAUGE AND GAUGE COCK
PRV	PRESSURE REDUCING VALVE
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
SV	SERVICE VALVE
TH	THERMOMETER
U	UNION



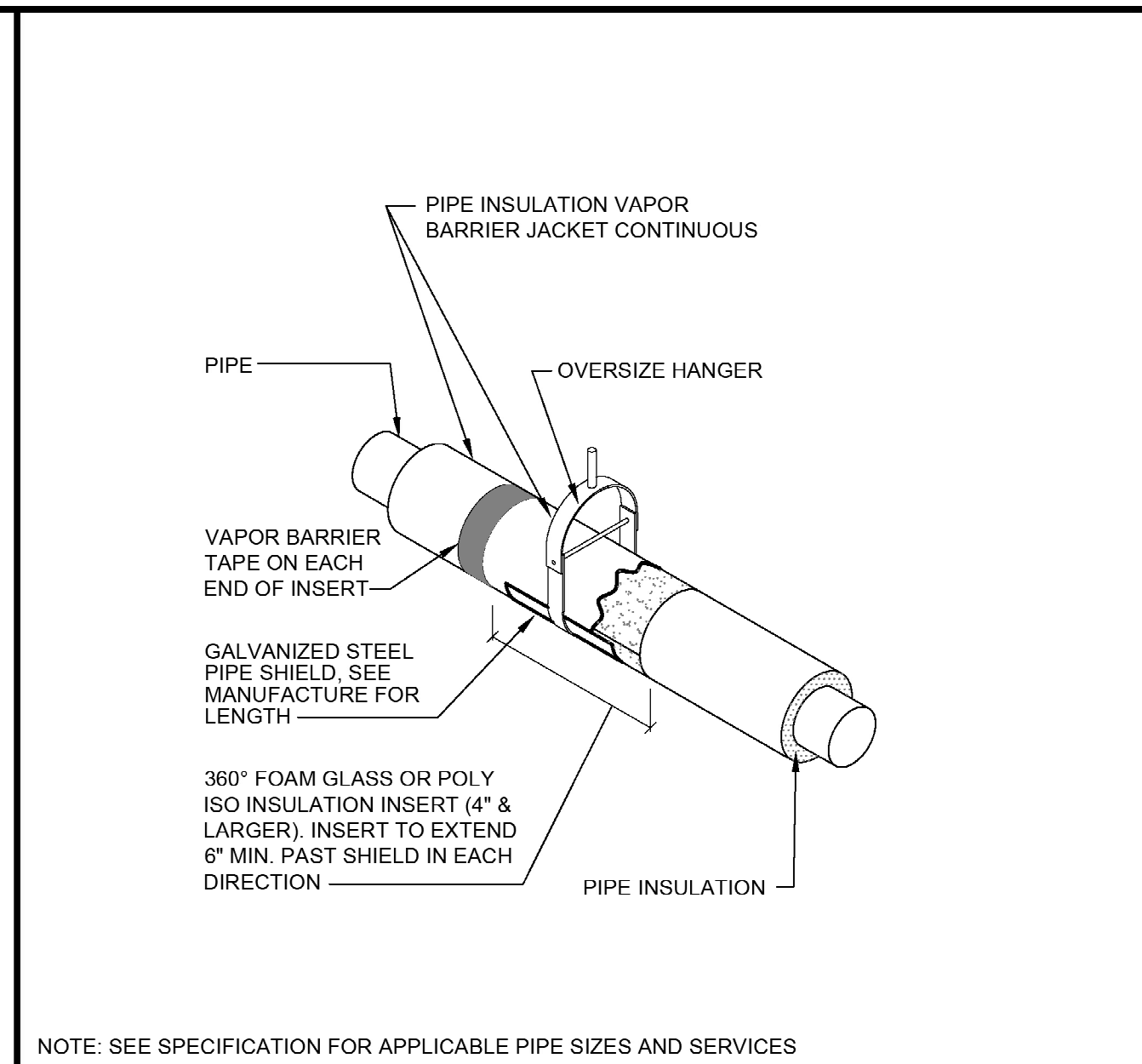
FILE NAME: 204
SCALE: NONE
CHEMICAL DISPENSING UNIT WATER SUPPLY AT MOP SINK BASIN



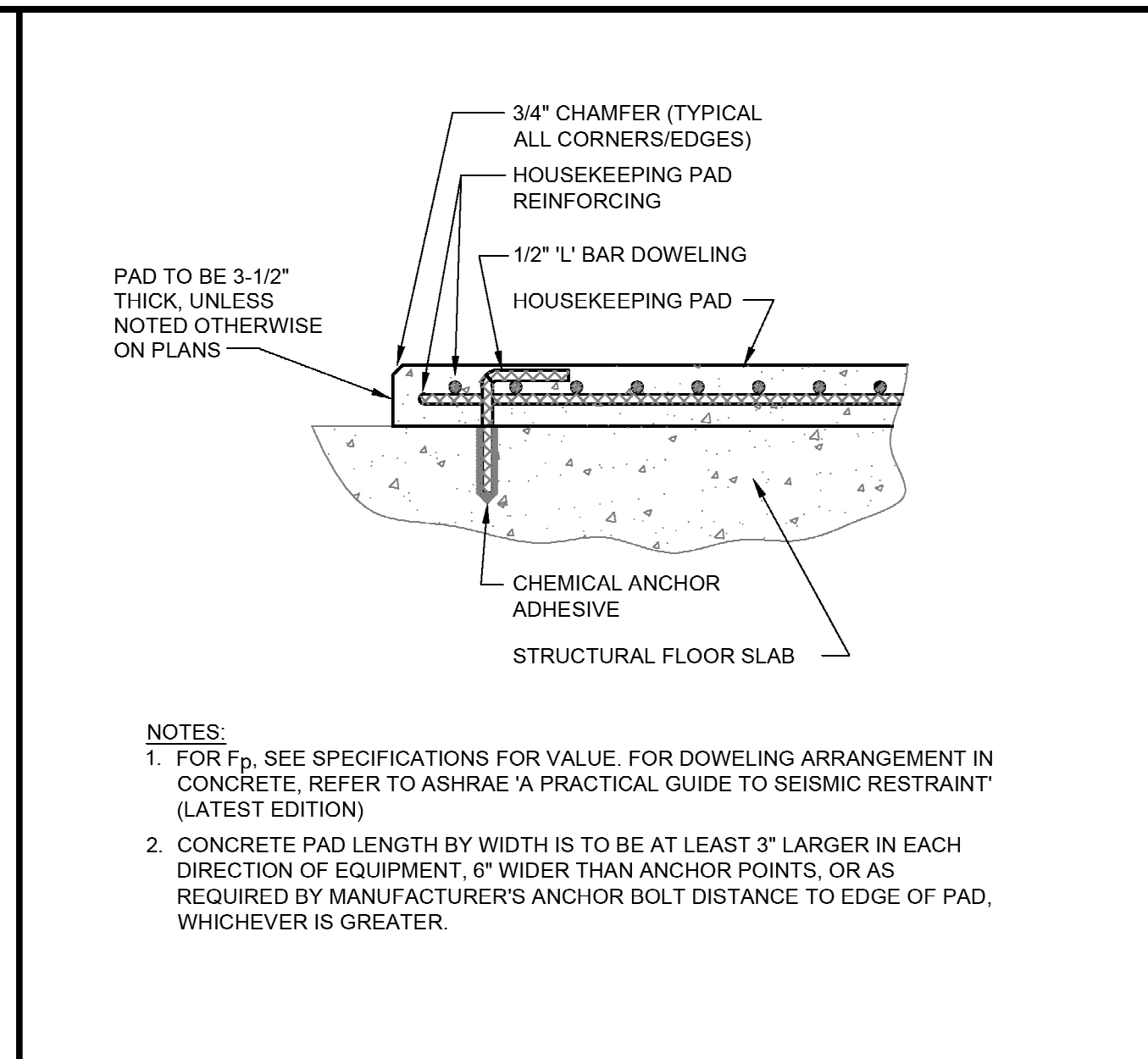
FILE NAME: 202B
SCALE: NONE
SITE/EXTERIOR BURIED PIPING TWO WAY CLEANOUT



FILE NAME: 210B
SCALE: NONE
SMALL ELEVATED WATER HEATER (MOUNTED FROM WALL)



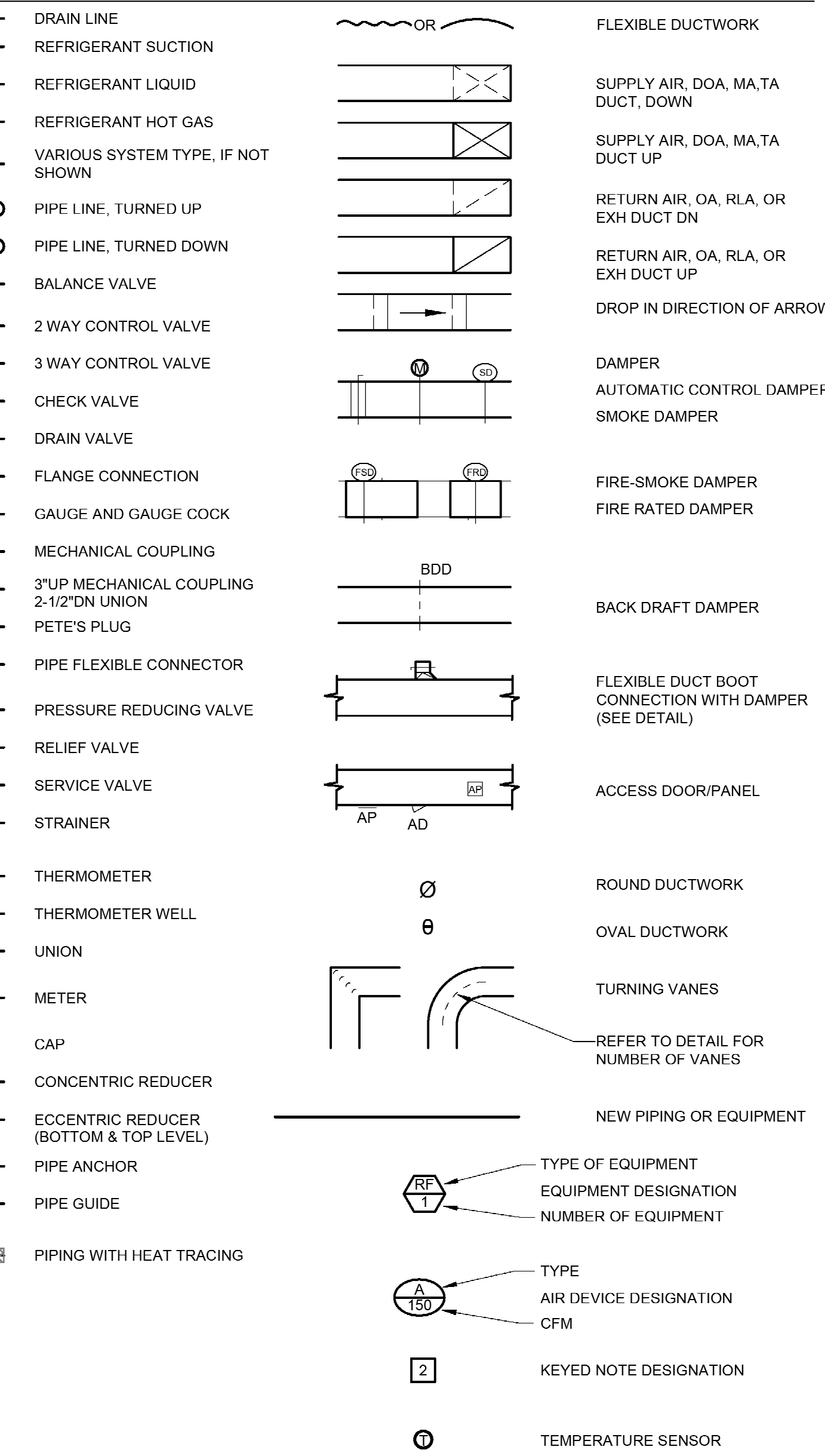
FILE NAME: 002
SCALE: NONE
PIPE HANGER SUPPORT WITH INSERT



FILE NAME: 003A
SCALE: NONE
CONCRETE HOUSEKEEPING PAD

MECHANICAL

AD	ACCESS DOOR	DR	DRAIN LINE
AHU	AIR HANDLING UNIT	RSUC	REFRIGERANT SUCTION
AP	ACCESS PANEL	RLIQ	REFRIGERANT LIQUID
AV	AIR VENT	RHG	REFRIGERANT HOT GAS
BV	BALANCE VALVE	XXX	VARIOUS SYSTEM TYPE, IF NOT SHOWN
CD	CONTROL DAMPER	UP	PIPE LINE, TURNED UP
CHV	CHECK VALVE	DN	PIPE LINE, TURNED DOWN
COM	COMMON	BV	BALANCE VALVE
CU	CONDENSER UNIT	CV	2 WAY CONTROL VALVE
CUH	CABINET UNIT HEATER	3CV	3 WAY CONTROL VALVE
CV	CONTROL VALVE	CHV	CHECK VALVE
D	DOWN	DV	DRAIN VALVE
DP	DIFFERENTIAL PRESSURE	F	FLANGE CONNECTION
DR	DRAIN LINE	GC	GAUGE AND GAUGE COCK
DV	DRAIN VALVE	MC	MECHANICAL COUPLING
EF	EXHAUST FAN	CP	3"UP MECHANICAL COUPLING
ET	EXPANSION TANK	P	PETE'S PLUG
EX	EXISTING	PFC	PIPE FLEXIBLE CONNECTOR
EXH	EXHAUST AIR	PRV	PRESSURE REDUCING VALVE
F	FLANGE CONNECTION	RV	RELIEF VALVE
FC	FLEXIBLE CONNECTION	SV	SERVICE VALVE
GA	GAUGE	STR	STRAINER
GC	GAUGE COCK	TH	THERMOMETER
MBH	1000 BTU/HR	TW	THERMOMETER WELL
MC	MECHANICAL COUPLING	U	UNION
MXA	MIXED AIR		
NC	NORMALLY CLOSED		
NO	NORMALLY OPEN		
OA	OUTSIDE AIR		
P	PETE'S PLUG		
PRV	PRESSURE REDUCING VALVE		
RSUC	REFRIGERANT SUCTION		
RLIQ	REFRIGERANT LIQUID		
RHG	REFRIGERANT HOT GAS		
RTU	ROOF TOP UNIT		
RV	RELIEF VALVE		
SA	SUPPLY AIR		
SF	SUPPLY FAN		
STR	STRAINER		
SUC	SUCTION		
SV	SERVICE VALVE		
TA	TRANSFER AIR		
TH	THERMOMETER		
TW	THERMOMETER WELL		
U	UNION		
UH	UNIT HEATER		
V	VENT		



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PROJ. NO. 25-09D

DATE ISSUED
10.29.2025

DATE REVISION

DRAWN BY CRO

CHECKED BY RLH

SHEET NO.

M0.0

MECHANICAL AND PLUMBING EQUIPMENT COMPONENTS EARTHQUAKE LOAD RESISTANCE

Seismic Design Category: **D**
 Seismic Site Class: **D**
 Risk Category: **II**

SEISMIC DESIGN REQUIREMENT EXEMPTIONS FOR MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS

Listing of Equipment and System Components	Anchorage to Floors, Roofs, etc.		Sway Bracing		Location of Professionally Sealed Anchorage and Sway Bracing Details		EXEMPTIONS	COMMENTS / NOTES
	Not Provided for Project	Provided for Project	Not Provided for Project	Provided for Project	On Const. Documents Drawing No. or Spec. Section	SUBSEQUENT SUBMITTAL Separate Permit & Plans		
HAZARDOUS EQUIPMENT & SYSTEM COMPONENTS; IP = 1.5								
Domestic Hot Water Heater		X	X			X		4
Expansion Tanks		X		X		X		
OTHER GENERAL EQUIPMENT & SYSTEM COMPONENTS; IP = 1.0								
Air Cooled Condenser and Condensing Units Floor Mounted (≤ 400 lbs):	X		X				1	
Condensing Unit Piping Suspended From Structure: (High Deformability Piping Systems) Welded, Brazed, Soldered and Flanged Steel and Copper Piping Suspended From Structure	X		X				1	
Steel /Copper Piping - 3" and smaller - hangers >...	X			X		X		
(Low Deformability Piping Systems) Cast Iron and Nonductile Plastic Piping Systems or Any System Joined with Cast Iron Fittings								
Cast Iron / PVC Piping larger than 3"		X		X		X		
Cast Iron / PVC Piping 3" and smaller - hangers > 12"		X		X		X		
Ductwork Suspended From Structure:								
Ductwork < 6 sq. ft. X-section	X		X				4	
Equipment Supported By A Suspended Ceiling:								
Air Devices < 20 lbs	X		X				1	1
Equipment Suspended From Structure:								
Cabinet Unit Heaters	X			X		X		
Unit Heaters	X			X		X		
FCU, VAV, FTU > 20 Lbs	X			X		X		
Wall mounted equipment:								
Louvers	X		X				1	

* applies to equipment and devices directly attached to structure

GENERAL NOTES:

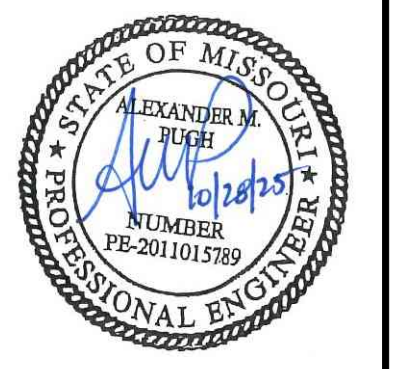
- A. It is the basic intent of this Code Block to declare whether or not anchorage and sway bracing is being provided on the project. If so, to declare whether or not the details are shown on the plans or will be shown on a subsequent submission. If seismic restraint of a component is not required by code this should be stated in comments. If seismic restraint, which is not required by code, is being provided due to owner/designer requirements this should also be stated in the comments.
- B. Plans signed and sealed by a Missouri Professional Engineer along with a separate permit application need to be submitted to the County a minimum of two weeks prior to the planned installation to allow for plan review and distribution to the inspector. Additional time may be needed if such submissions are deficient.
- C. All anchors and attachments to structure shall be seismically rated and listed.

COMMENTS/NOTES:

- 1. Shall be positively attached to the ceiling grid using four approved attachment devices.
- 2. Shall have two No. 12 gauge wires connecting opposite corners of the air device to the structure above.
- 3. Shall be independently supported from the structure above by approved hangers.

1 - General Exemptions (ASCE 07-16 Chap 13.1.4)	1) Seismic Design Category A, B. 2) Seismic Design Category C and the component importance factor IP = 1.0 provided that EITHER 1) The component is positively attached to the structure, or 2) The component weights 20 lbs. or less, or 5 lbs./ft or less for distributed systems. 3) Seismic Design Category D, E, or F that are positively attached to the structure and EITHER: 1) The component weights 400 lbs. or less, the center of mass is located 4 ft or less above the adjacent floor, flexible connections are provided between the component and associated ductwork, piping, and conduit, and the component IP = 1.0, OR 2) The component weights 20 lbs. or less, or 5 lbs./ft or less for distributed systems.
2 - Light Fixture, Sign and Ceiling Fan Exemptions (ASCE 07-16 Chap 13.6.1)	1) Not connected to ducts or piping, supported by chains or otherwise suspended from the structure, provided ALL of the following criteria A. through C. below are met: A. The design load for such items shall be equal to 1.4 times the operating weight acting down with a simultaneous horizontal load equal to 1.4 times the operating weight. The horizontal load shall be applied in the direction that results in the most critical loading for design. B. Seismic interaction effects shall be considered per Section 13.2.3 of ASCE 7-16. C. The connection to the structure shall allow a 360 degree range of motion in the horizontal plane.
3 - Distribution Systems: Conduit, Cable Tray, and Raceways Exemptions (ASCE 07-16 Chap 13.6.5.1)	1) Raceways with IP = 1.0 where flexible connections or other assemblies are provided between the cable tray or raceway and associated components to accommodate the relative displacement, where the cable tray or raceway is positively attached to the structure, and where ONE of items A. through D. below apply: A. Trapeze assemblies with 3/8 in. diameter rod hangers not exceeding 12 in. length and the total weight supported by any single trapeze is 100 lbs. or less. B. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 12 in. in length and the total weight supported by any single trapeze is 200 lbs. or less. C. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 24 in. in length and the total weight supported by any single trapeze is 100 lbs. or less. D. Individual rod hangers 3/8 in. or 1/2 in. diameter and each hanger is 12 in. or less in length and the total weight per any single rod is 50 lbs. or less. 2) Conduit less than 2.5 in. trade size.
4 - Duct System Exemptions (ASCE 07-16 Chap 13.6.5)	Ducts not part of hazardous exhaust systems or fire protection systems such as smoke control or evacuation systems when EITHER 1) or 2) below apply: 1) IP = 1.0 where flexible connections or other assemblies are provided to accommodate the relative displacement between the duct system and associated components, the duct system is positively attached to the structure, and where ONE of items A. through D. below apply: A. Trapeze assemblies with 3/8 in. diameter rod hangers not exceeding 12 in. length and the total weight supported by any single trapeze is less than 10 lbs./ft B. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 12 in. in length and the total weight supported by any single trapeze is 200 lbs. or less. C. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 24 in. in length and the total weight supported by any single trapeze is 100 lbs. or less. D. Individual rod hangers 3/8 in. or 1/2 in. diameter and each hanger is 12 in. or less in length and the total weight per any single rod is 50 lbs. or less. 2) Locations where provisions are made to avoid impact with other ducts or mechanical components or to protect the ducts in the event of such impact, the distribution system is positively attached to the structure, and HVACR ducts have a cross-sectional area of less than 6 sq. ft and weight 20 lbs./ft or less. 3) Components installed in line with duct systems with an operating weight of 75 lbs. or less (terminal units, dampers, louvers, and diffusers) that are independently braced or positively attached to the ductwork with mechanical fasteners on both sides.
5 - Piping and Tubing Distribution Systems (not including fire protection systems installed per NFPA 13) (ASCE 07-16 Chap 13.6.7.3)	Piping systems where flexible connections, expansion loops, or other assemblies are provided to accommodate the relative displacement between component and piping, where the piping system is positively attached to the structure and where ONE of items 1 through 7 below apply: 1) Trapeze assemblies are used to support piping whereby no single pipe exceeds the limits set forth in 5A, 5B, or 5C. below and the total weight of the piping supported by the trapeze assemblies is less than 10 lbs./ft 2) Trapeze assemblies with 3/8 in. diameter rod hangers not exceeding 12 in. length, do not support piping with IP > 1.0, and no single pipe exceeds the limits set forth in 5A, 5B, or 5C below, and the total weight supported by any single trapeze is 100 lbs. or less. 3) Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 12 in. length, do not support piping with IP > 1.0, and no single pipe exceeds the limits set forth in 5A, 5B, or 5C below, and the total weight supported by any single trapeze is 200 lbs. or less. 4) Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 24 in. length, do not support piping with IP > 1.0, and no single pipe exceeds the limits set forth in 5A, 5B, or 5C below, and the total weight supported by any single trapeze is 100 lbs. or less. 5) Piping that has an RP in ASCE 7-16 Table 13.6-1 of 4.5 or greater is either supported by rod hangers and provisions are made to avoid impact with other structural or non-structural components or to protect piping in the event of such impact, or pipes with IP = 1.0 are supported by individual rod hangers 3/8 in. or 1/2 in. in diameter; where each hanger is 12 in. or less and the total weight supported by any single hanger is 50 lbs. or less. Pipe size limitations in items 5A, 5B, and 5C below apply: 5A) Seismic Design Category C where IP > 1.0 nominal pipe size shall be 2 in. or less 5B) Seismic Design Category D, E, or F where IP > 1.0 nominal pipe size shall be 1 in. or less 5C) Seismic Design Category D, E, or F where IP = 1.0 nominal pipe size shall be 3 in. or less 6) Pneumatic tube systems supported with trapeze assemblies using 3/8 in. diameter rod hangers not exceeding 12 in. and the total weight supported by any single trapeze is 100 lbs. or less. 7) Pneumatic tube systems supported with trapeze assemblies using 3/8 in. or 1/2 in. diameter rod hangers not exceeding 12 in. and the total weight supported by any single rod is 50 lbs. or less.

- 1) Flexible connections are not required for connections to appliances or electrical or plumbing fixtures that are mounted to walls or floors.
- 2) Distribution systems would include the following code complying components:
 - a. The following sanitary, drain, waste and vent pipe: Schedule 40 PVC, 6" or less in diameter; Schedule 80 PVC, 4" or less in diameter; service weight and no hub cast iron, 2" or less in diameter.
 - b. The following storm drain pipe: Schedule 40 and 80 PVC, 3" or less in diameter; service weight and no hub cast iron, not applicable.
 - c. The following water pipe: Type L & M copper, 2-1/2" or less in diameter; Schedule 40 and 80 CPVC, 3" or less in diameter.
 - d. The following electrical conduit: Rigid steel and intermediate metal conduit (IMC), 1-1/2" and less in diameter; EMT conduit and rigid aluminum conduit 2" and less in diameter.
 - e. Flexible electrical wiring methods weighing 5 lbs./ft or less.
- 3) High-deformability exception, above, would include interior and exterior gas piping such as gas piping serving RTUs.
- 4) Seismic shut-off valves are not considered to be an acceptable alternative to seismic support/restraint of gas piping on the interior of buildings or gas piping under more than 2 psi of pressure.
- 5) Elevator piping systems shall satisfy the requirements of Section 13.6.11 of ASCE 7-16



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PROJ. NO. **25-09D**

DATE ISSUED
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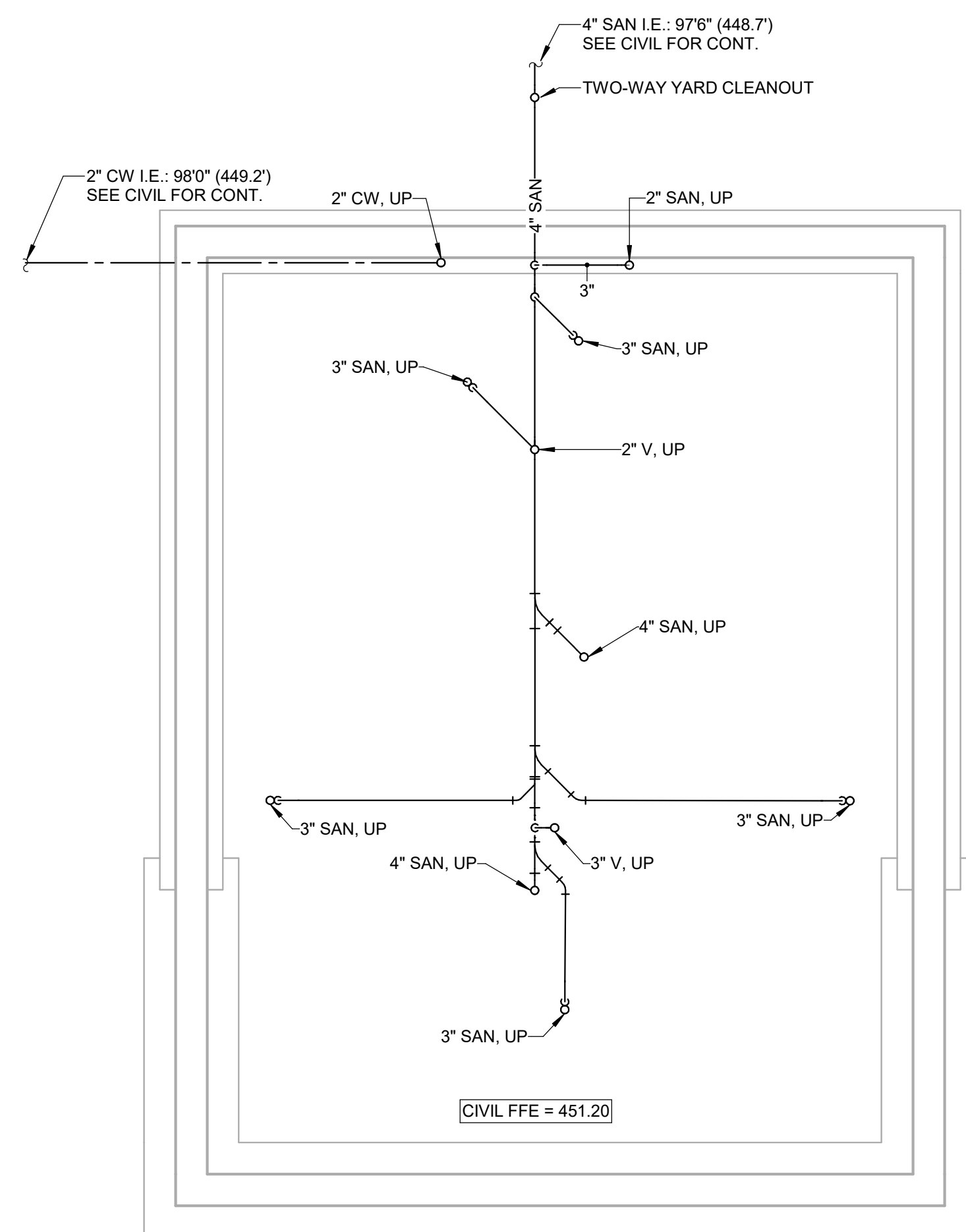
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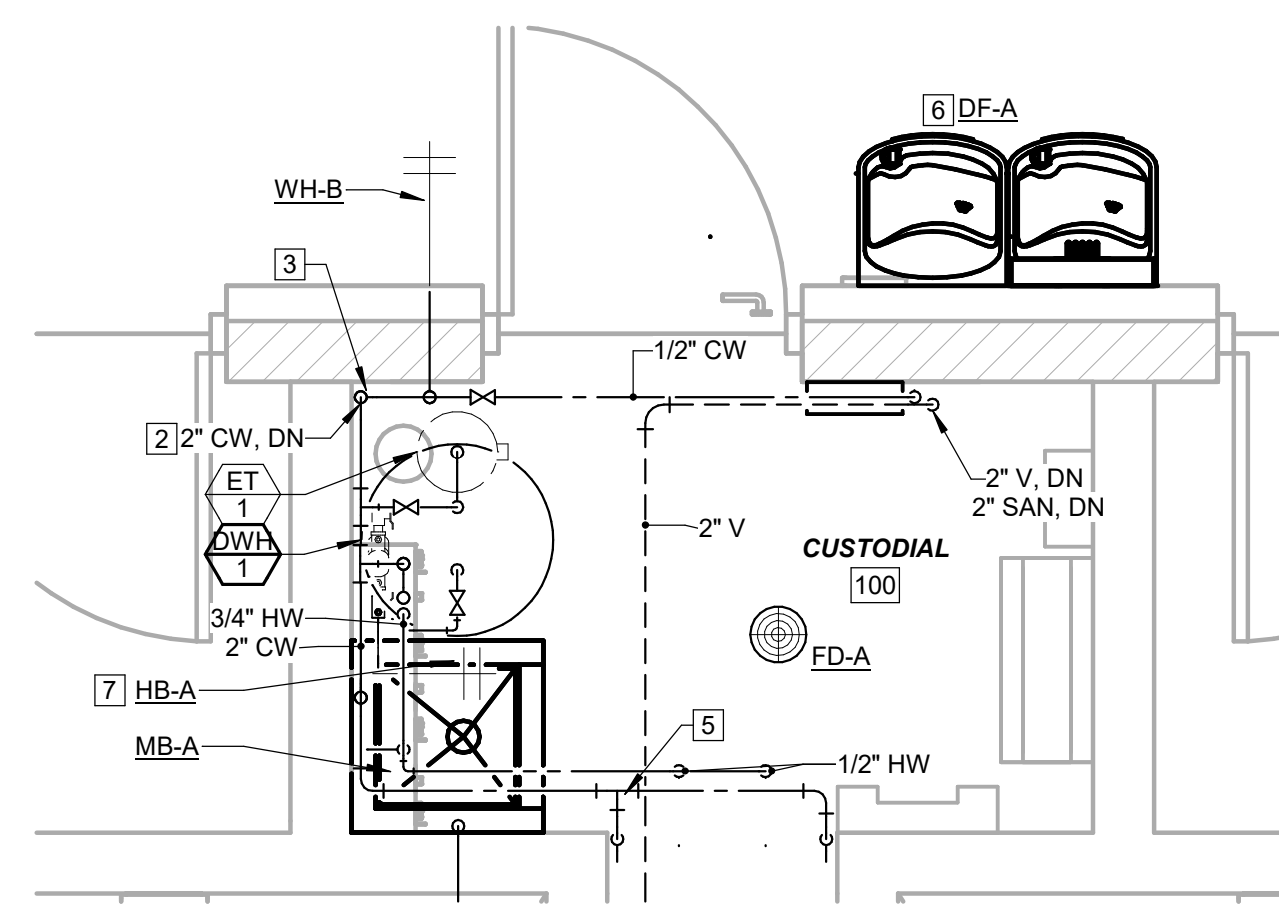
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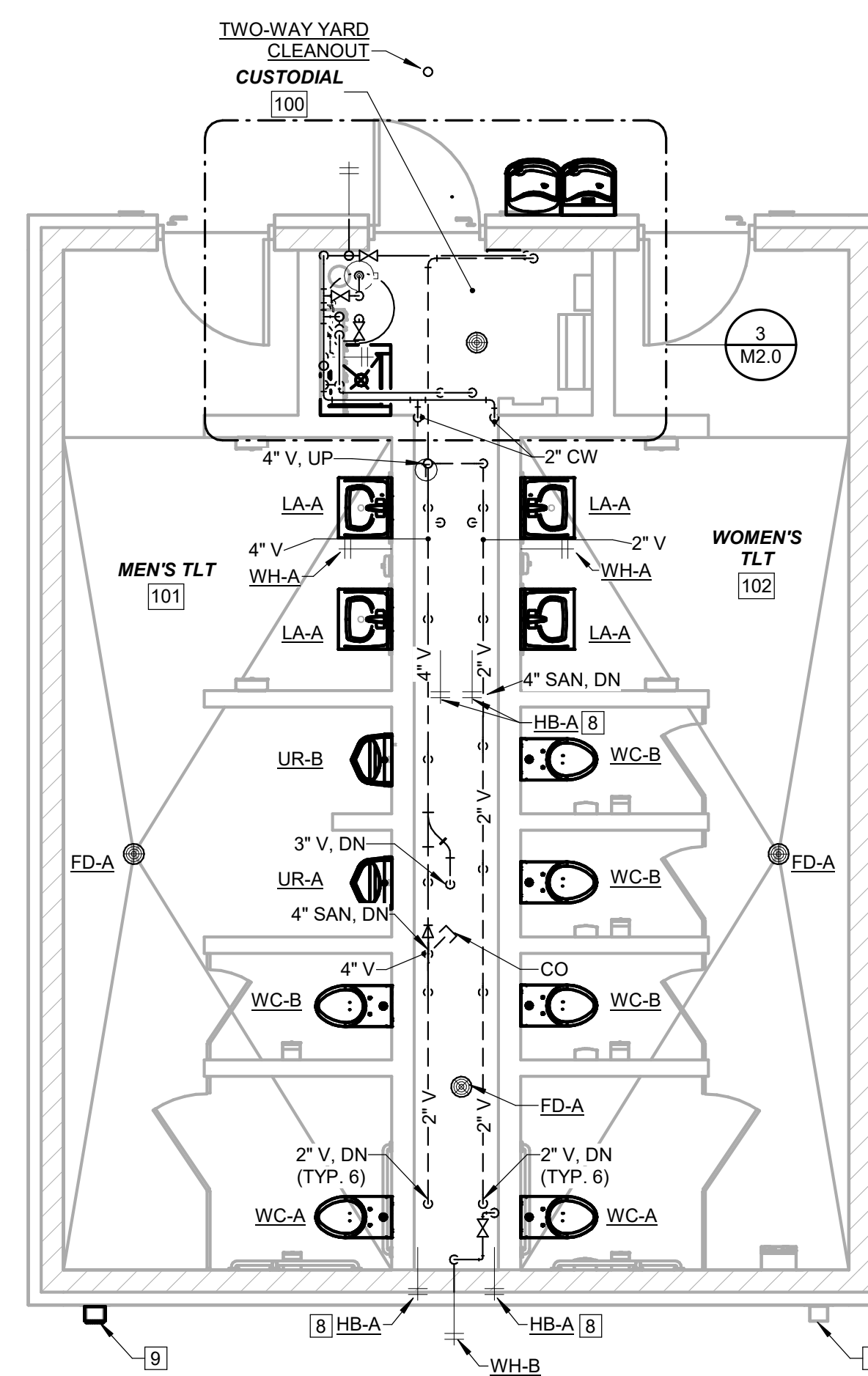
M0.1



PLUMBING FOUNDATION PLAN
SCALE: 1/4" = 1'-0"
0 1 2 4 1/4"=1'



PLUMBING FIRST FLOOR ENLARGED PLAN - CUSTODIAL
SCALE: 1/2" = 1'-0"
0 1 2 1/2"=1'



PLUMBING FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"
0 1 2 4 1/4"=1'

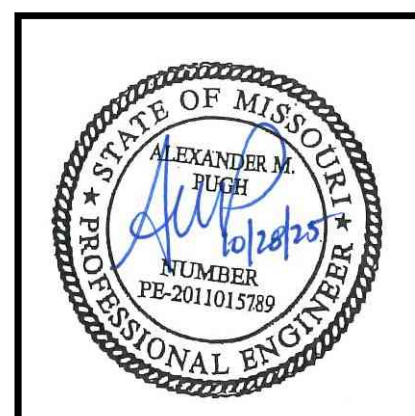
PLUMBING KEYED NOTES:

- 1 INSTALL WATER HEATER ON HOUSEKEEPING PAD. REFER TO DETAILS FOR MORE INFORMATION.
- 2 PROVIDE SERVICE VALVE AT FLOOR PENETRATION AND TEE WITH DRAIN VALVE.
- 3 AT SYSTEM HIGH POINT, PROVIDE TEE, SERVICE VALVE, AND CONNECTION FOR AIR COMPRESSOR TO ALLOW SYSTEM TO BE BLOWN OUT FOR WINTERIZATION.
- 4 WALL HYDRANT TO SERVE AS LOW POINT DRAIN FOR EMPTYING COLD AND HOT WATER PIPING SYSTEMS.
- 5 TEMPERATURE MAINTENANCE ELECTRIC HEAT TRACE SHALL BE PROVIDED ON ALL HOT WATER PIPING. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- 6 1/2" COLD WATER, DOWN TO FREEZE RESISTANT BOX AT EXTERIOR DRINKING FOUNTAIN. PROVIDE SHUT OFF VALVE IN VERTICAL PIPING DOWN.
- 7 CONTRACTOR TO INSTALL RBPB FOR CHEMICAL UNIT CONNECTION. REFER TO DETAIL FOR MORE INFORMATION.

- 8 HOSE BIBB TO SERVE AS DRAIN DOWN POINT FOR HOT / COLD WATER PIPING WITHIN PLUMBING CHASE.
- 9 DOWNSPOUT - SEE ARCHITECTURAL DRAWINGS FOR DOWNSPOUT LOCATION AND CIVIL PLANS FOR CONTINUATION OF STORM DRAIN.

PLUMBING GENERAL NOTES:

1. FURNISH AND INSTALL SUPPLY STOP SHUT-OFF VALVES ON ALL FIXTURE WATER SUPPLY LINES. FURNISH AND INSTALL WATER HAMMER ARRESTORS PER PDI WH201 AND AS INDICATED ON DRAWINGS. INSTALL VALVES IN ACCESSIBLE LOCATIONS. IF LOCATION IS NOT READILY ACCESSIBLE, COORDINATE ACCESS PANEL REQUIREMENTS WITH GENERAL CONTRACTOR.
2. ALL PIPING SHALL BE CONCEALED IN CHASE, WALL, CEILING, FLOORING, ETC. UNLESS OTHERWISE NOTED. PIPING SHOWN OUTSIDE OF WALL FOR CLARITY ONLY.
3. EQUIPMENT AND FIXTURE SYMBOLGY ON PLANS MAY NOT REFLECT ACTUAL TYPE. REFER TO SPECIFICATIONS AND SCHEDULES FOR FIXTURE OR EQUIPMENT TYPE.
4. LOCATIONS OF FLOOR DRAINS, INDICATED ON THESE DRAWINGS ARE CONSIDERED APPROXIMATE. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF FINAL AND EXACT LOCATIONS WITH ALL OTHER TRADES AND EQUIPMENT SUPPLIERS PRIOR TO INSTALLATION. DRAINS, ETC. NOT CORRECTLY LOCATED AS DETERMINED BY THE ARCHITECT/ENGINEER/OWNER, SHALL BE REMOVED AND RELOCATED AT THIS CONTRACTOR'S EXPENSE.
5. ALL DOMESTIC WATER PIPING TO BE ARRANGED AND ROUTED TO ALLOW FOR SYSTEM TO BE COMPLETELY DRAINED FOR WINTERIZATION.



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10.29.2025

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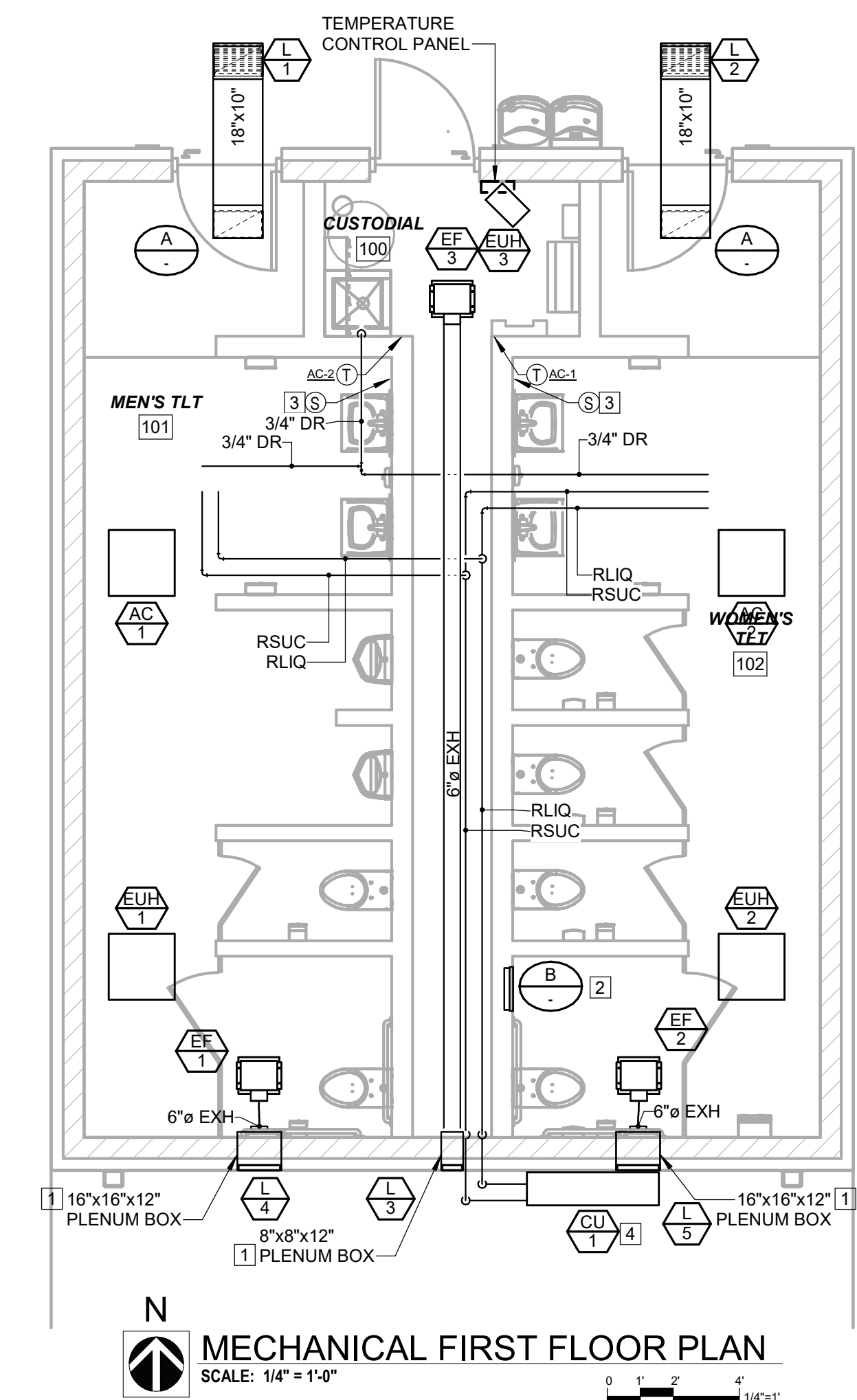
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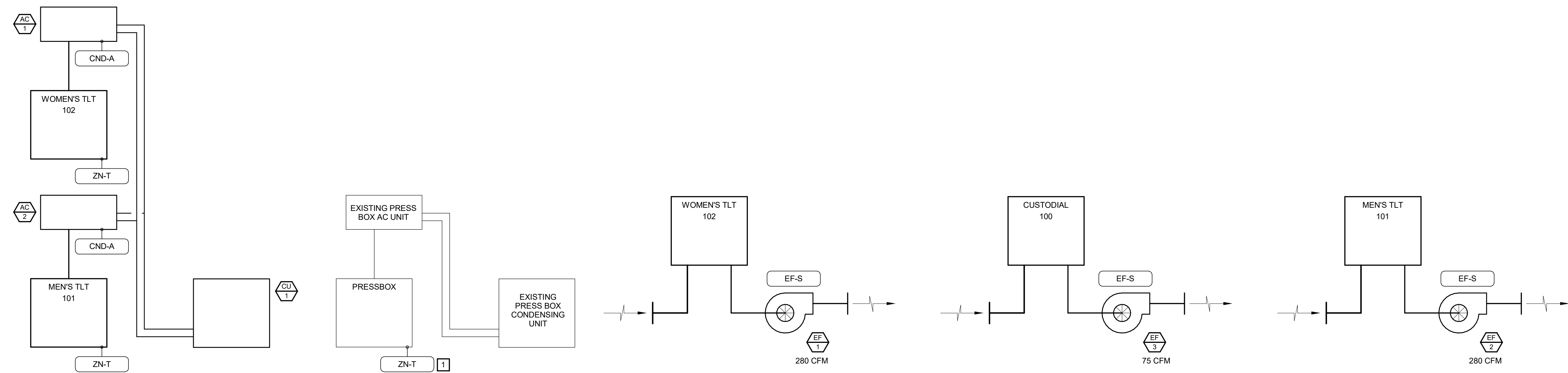


MECHANICAL KEYED NOTES:

- 1 COORDINATE ELEVATION OF LOUVER AND ASSOCIATED PLENUM BOX WITH ARCHITECTURAL ELEVATIONS.
- 2 PROVIDE GRILLE MOUNTED 8" A.F.F..
- 3 BAS ROOM SENSOR.
- 4 CONDENSING UNIT TO BE MOUNTED ON WALL BRACKET.

MECHANICAL GENERAL NOTES:

- 1. THESE DRAWINGS WERE PREPARED UTILIZING EXISTING DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO STARTING WORK. NOTIFY CONSTRUCTION MANAGER IMMEDIATELY OF ANY DISCREPANCIES.
- 2. CONTRACTOR SHALL TAKE EXTREME CARE HANDLING MATERIAL DEBRIS IN AN EFFORT TO AVOID ANY DISRUPTIONS OF ONGOING BUILDING OPERATIONS. PROJECT SHALL BE CLEANED FREE OF DUST AND DEBRIS AT THE END OF THE WORK DAY.
- 3. CONTRACTOR SHALL COORDINATE ANY SHUTDOWN OF UTILITIES WITH THE OWNER'S REPRESENTATIVE. NOTICE FOR SHUTDOWN SHALL BE GIVEN TO THE OWNER AT LEAST THREE DAYS PRIOR TO SHUTDOWN.
- 4. CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES PRIOR TO BEGINNING WORK.
- 5. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR FIELD COORDINATION AND DIMENSIONAL VERIFICATION AS SPECIFIED IN THE PROJECT MANUAL.
- 6. ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS AND ALL LOCAL CODES.



AIR FLOW DIAGRAMS
NOT TO SCALE

KEYED NOTES

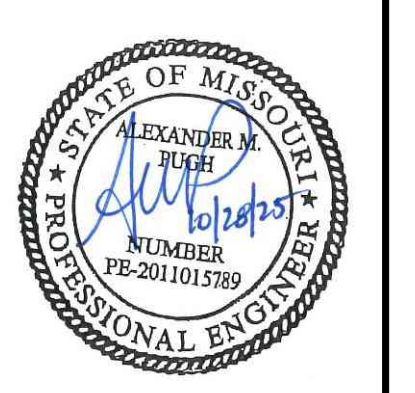
- 1. INSTALL NEW ROOM TEMPERATURE SENSOR IN EXISTING PRESSBOX. REFER TO ELECTRICAL DRAWINGS FOR TEMPERATURE CONTROL PANEL LOCATION.

EXHAUST FAN POINTS LIST

TYPE	NAME	POINT DESCRIPTION DESCRIPTION	UNITS	STARTUP TREND		SERVICE TREND		FIELD DEVICE DESCRIPTION INSTRUMENT TYPE	NOTES	
				FREQ	ARCHIVE	FREQ	ARCHIVE			
BI	EF-S	EXHAUST FAN STATUS	OFF / ON	-	-	COV	240 CNT	CURRENT SWITCH		
	BI	BINARY INPUT		GENERAL NOTES						
	BO	BINARY OUTPUT		1. FOR ANALOG POINTS, UNITS COLUMN HAS TWO COMPONENTS: FIRST VALUE INDICATES ENGINEERING UNITS FOR POINT, SECOND VALUE IS NUMBER OF DECIMAL PLACES TO DISPLAY.						
	AI	ANALOG INPUT		2. FOR BINARY POINTS, UNITS COLUMN LISTS "OFF" AND "ON" STATE LABELS FOR POINT.						
	AO	ANALOG OUTPUT								

FAN COIL UNIT POINTS LIST

TYPE	NAME	POINT DESCRIPTION DESCRIPTION	UNITS	STARTUP TREND		SERVICE TREND		FIELD DEVICE DESCRIPTION INSTRUMENT TYPE	NOTES	
				FREQ	ARCHIVE	FREQ	ARCHIVE			
AI	ZN-T	ZONE TEMPERATURE	°F,1	1 MIN	4 HR	15 MIN	1 WEEK	ROOM TEMPERATURE SENSOR		
AI	ZN-T	ZONE TEMPERATURE	°F,1	1 MIN	4 HR	15 MIN	1 WEEK	ROOM TEMPERATURE SENSOR	ADD SENSOR TO EXISTING PRESS BOX	
BI	CND-A	DRAIN PAN CONDENSATE SWITCH ALARM	ALARM / NORMAL	-	-	-	-	DRY CONTACT / RELAY	HARDWIRED SAFETY INTERLOCK	
	BI	BINARY INPUT		GENERAL NOTES						
	BO	BINARY OUTPUT		1. FOR ANALOG POINTS, UNITS COLUMN HAS TWO COMPONENTS: FIRST VALUE INDICATES ENGINEERING UNITS FOR POINT, SECOND VALUE IS NUMBER OF DECIMAL PLACES TO DISPLAY.						
	AI	ANALOG INPUT		2. FOR BINARY POINTS, UNITS COLUMN LISTS "OFF" AND "ON" STATE LABELS FOR POINT.						
	AO	ANALOG OUTPUT								



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VRF INDOOR UNIT SCHEDULE

UNIT DESIG.	AREA SERVED	MANUFACTURER	MODEL NO.	AIRFLOW (CFM)	EAT (DB/WB)	LAT (DB/WB)	SENSIBLE LOAD (BTUH)	ELECTRICAL DATA		HEAT RECOVERY UNIT	TYPE
								VOLT/PH	MCA		
AC-1	WOMEN'S TOILET 101	DAIKIN	FXZA18AAVJU	450	75 / 63	55 / 54	11600	208/1	0.6	CU-1	CEILING CASSETTE
AC-2	MEN'S TOILET 102	DAIKIN	FXZA18AAVJU	450	75 / 63	55 / 54	11600	208/1	0.6	CU-1	CEILING CASSETTE

NOTES:

- PROVIDE WALL MOUNTED THERMOSTAT WITH REMOTE RETURN AIR THERMISTOR.
- ALL WALL MOUNT UNITS SHALL BE PROVIDED WITH INTERNAL CONDENSATE PUMP.

UNIT HEATER SCHEDULE

DIV 23

UNIT DESIG.	LOCATION	MANUFACTURER & MODEL NO.	AIRFLOW (CFM)	EAT (°F)	TOTAL CAPACITY (MBH)	ELECTRIC POWER (KW)	THERMOSTAT TYPE / LOCATION	ELECTRICAL DATA				NOTES	
								VOLTS / PH	FLA	MCA	MOP		
EUH-1	WOMEN'S RR	QMARK CDF558	300	60	17.1	5	INTERGRAL	208/3	13.9	17.4	20	TST (UNIT MOUNTED)	1
EUH-2	MEN'S RR	QMARK CDF558	300	60	17.1	5	INTEGRAL	208/3	13.9	17.4	20	TST (UNIT MOUNTED)	1
EUH-3	CUSTODIAL	BERKO HUHA320	350	60	10.2	3	INTEGRAL	208/1	14.5	18.1	20	TST (UNIT MOUNTED)	1

NOTES:

- PROVIDE UNIT MOUNTED FACTORY DISCONNECT SWITCH
-

AIR DEVICE SCHEDULE

DIV 24

UNIT DESIG.	SERVICE	MANUFACTURER & MODEL NO.	TYPE	NECK SIZE (IN.)	FACE SIZE (IN.)	MODULE SIZE (IN)	FINISH	NOTES
A	TRANSFER	GREENHECK RG	LOUVERED GRILLE	18"x10"	22"x14"	-	WHITE	1,2
B	TRANSFER	KEES GHD15	HEAVY DUTY BAR GILLE	16"x8"	19"x11"	-	WHITE	1

NOTES:

- GRILLE SHALL BE ALUMINUM
- PROVIDE BORDER FOR DRYWALL INSTALLATION

CONDENSING UNIT SCHEDULE

UNIT DESIG.	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	TYPE	AMBIENT DB (°F)	MIN. COOLING CAPACITY (TONS)	COMPRESSOR DATA			ELECTRICAL DATA				NOTES		
							QTY.	TYPE	TURNDOWN RATIO	REFRIGERANT TYPE	VOLTS/PH	MCA	MOP		DISC INCLUDED	UNIT CONTROL
CU-1	ON GRADE	VRF SYSTEM	DAIKIN RXL48AAVJU	HEAT RECOVERY	95	4.0	1	INVERTER	10:1	R-32	208 / 1	34.6	35	NO	PWCP	1,2,3,4

NOTES:

- UNIT TO BE SUPPLIED WITH HAIL GUARDS.
- PROVIDE STAINLESS STEEL WALL MOUNT BRACKET EQUAL TO RECTORSEAL 87734.
- PROVIDE LEAK DETECTION AND ISOLATION VALVES FOR VRF INDOOR UNITS
- TURNDOWN RATIO REFERS TO THE TURNDOWN OF THE UNIT, NOT INDIVIDUAL COMPRESSORS

DOMESTIC WATER HEATER SCHEDULE

DIV 22

UNIT DESIG.	LOCATION	MANUFACTURER	MODEL NO.	CAPACITY (GAL)	MAXIMUM INPUT (KW)	RECOVERY GAL / HR	°F RISE	ELECTRICAL DATA VOLTS / PH	NOTES
DWH-1	CUSTODIAL 100	AO SMITH	DEL-30	36	6000	24	100	208/1	

FAN SCHEDULE

DIV 24

UNIT DESIG.	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	AIRFLOW (CFM)	FSP (IN WG)	RPM	FAN TYPE	WHEEL DIA. (IN)	FAN DISCH.	ARRANGEMENT	DRIVE	MOTOR			UNIT CONTROL	OPERATING WEIGHT LBS	ACCESSORIES	NOTES
												BHP	MCA	RPM				
EF-1	WOMEN'S RR	WOMEN'S EXHAUST	GREENHECK SP-A700-VG	280	0.18	776	INLINE	7.8	HM	CEILING MOUNT	DIRECT	0.04	5.1	1800	115/1	ECM (MANUAL)	40	3,4,6
EF-2	MEN'S RR	MEN'S EXHAUST	GREENHECK SP-A700-VG	280	0.18	776	INLINE	7.8	HM	CEILING MOUNT	DIRECT	0.04	5.1	1800	115/1	ECM (MANUAL)	40	3,4,6
EF-3	CUSTODIAL	CUSTODIAL EXHAUST	GREENHECK SP-A125	75	0.25	973	INLINE	5.5	HM	CEILING MOUNT	DIRECT	0.05	0.2	1800	115/1	ECM (MANUAL)	18	3,4,5

FAN TYPE: CENTRIFUGAL
IN-LINE CENTRIFUGAL

FAN DISCHARGE: HM - HORIZONTAL MOUNT

ACCESSORIES:

- GRAVITY BACKDRAFT DAMPER
- MOTORIZED DAMPER - 24V
- MOTORIZED DAMPER - 120V
- FACTORY MOUNTED DISCONNECT
- SPEED CONTROLLER
- EC MOTOR WITH UNIT-MOUNTED POTENTIOMETER FOR SPEED ADJUSTMENT.

DRIVE: DIRECT

PLUMBING FIXTURE SCHEDULE

DIV 22

UNIT DESIG.	FIXTURE DESCRIPTION	ADA (YES/NO)	CARRIER (YES/NO)	TRIM	SUPPLIES	ACCESSORIES	PIPE SIZE (IN)			NOTES
							SANITARY / WASTE	VENT SIZE	COLD WATER SUPPLY	
DF-A	BI-LEVEL DRINKING FOUNTAIN	YES	YES	-	LOOSE KEY ANGLE STOP AND... SHUT-OFF VALVE	FREEZE RESISTANT BOX	2"	2"	1/2"	-
HB-A	HOSE BIBB	NO	NO	-	-	-	-	-	3/4"	-
LA-A	WALL HUNG LAVATORY	YES	YES	0.5 GPM AUTOMATIC FAUCET, HARDWIRED	LOOSE KEY ANGLE STOP AND...	TMV, INSULATION KIT	2"	2"	1/2"	1/2"
MB-A	MOP BASIN	NO	NO	VACUUM BREAKER RIGID SPOUT, LEVEL...	INTEGRAL	SPLASH PANELS	3"	2"	1/2"	1/2"
UR-A	WALL HUNG URINAL - ADA	YES	YES	1.0 GPM, AUTOMATIC HARDWIRED	-	-	2"	2"	3/4"	-
UR-B	WALL HUNG URINAL	NO	YES	1.0 GPM, AUTOMATIC HARDWIRED	-	-	2"	2"	3/4"	-
WC-A	WATER CLOSET - ADA	YES	YES	1.6 GPM, AUTOMATIC HARDWIRED	-	SEAT	4"	2"	1-1/4"	-
WC-B	WATER CLOSET	NO	YES	1.6 GPM, AUTOMATIC HARDWIRED	-	SEAT	4"	2"	1-1/4"	-
WH-A	WALL HYDRANT - INTERIOR	NO	NO	-	SHUT-OFF VALVE	-	-	-	3/4"	-
WH-B	WALL HYDRANT - EXTERIOR	NO	NO	-	SHUT-OFF VALVE	-	-	-	3/4"	-

GENERAL: FIXTURE MOUNTING ELEVATIONS SHALL BE COORDINATED WITH ARCHITECT. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS AND MODELS.

THERMOSTATIC MIXING VALVE SCHEDULE

DIV 22

UNIT DESIG.	LOCATION	MANUFACTURER	MODEL NO.	SERVICE				NOTES
				DHW EWT (°F)	LWT (°F)	MIN SYSTEM DRAW (GPM)	MAX. PRESSURE DROP	
TMV-1	CUSTODIAL 100	LEONARD VALVE	554-270-LF	140	120	0.25	20 PSI @ 7.5 GPM	

LOUVER SCHEDULE

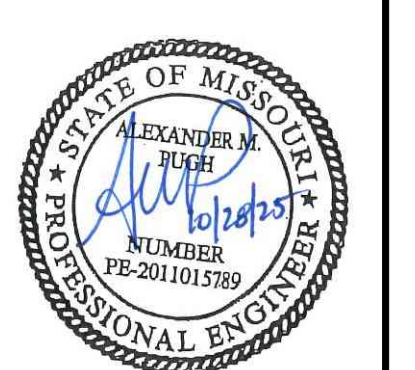
DIV 24

UNIT DESIG.	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	AIRFLOW (CFM)	MAXIMUM FREE AREA VELOCITY (FPM)	MAXIMUM PRESSURE DROP (IN WG)	MINIMUM FREE AREA (SF)	LOUVER SIZE WIDTH X HEIGHT (IN)	MOUNTING TYPE	NOTES
L-1	WOMEN'S RR	WOMEN'S EXHAUST	GREENHECK ESD-202	280	622.0	0.06	0.45	16X16	1	1
L-2	MEN'S RR	MEN'S EXHAUST	GREENHECK ESD-202	280	622.0	0.06	0.45	16X16	1	1
L-3	CUSTODIAL	CUSTODIAL EXHAUST	GREENHECK ESD-202	75	750.0	0.08	0.1	8X8	1	1
L-4	WOMEN'S RR	WOMEN'S OA INTAKE	GREENHECK ESJ-202	280	600	0.05	0.47	24x12	2,3	1,2
L-5	MEN'S RR	MEN'S OA INTAKE	GREENHECK ESJ-202	280	600	0.05	0.47	24x12	2,3	1,2

MOUNTING TYPE:

- IN WALL
- FLANGED FRAME
- FLANGED FRAME WITH EXTENDED SILL PAN

1. SEE STATIONARY LOUVER SPECIFICATIONS FOR ADDITIONAL CONSTRUCTION, FINISH AND PERFORMANCE REQ.
2. PROVIDE WITH 1/2" GRID BIRD SCREEN.
3. LOUVER MOUNTED IN SOFFIT.



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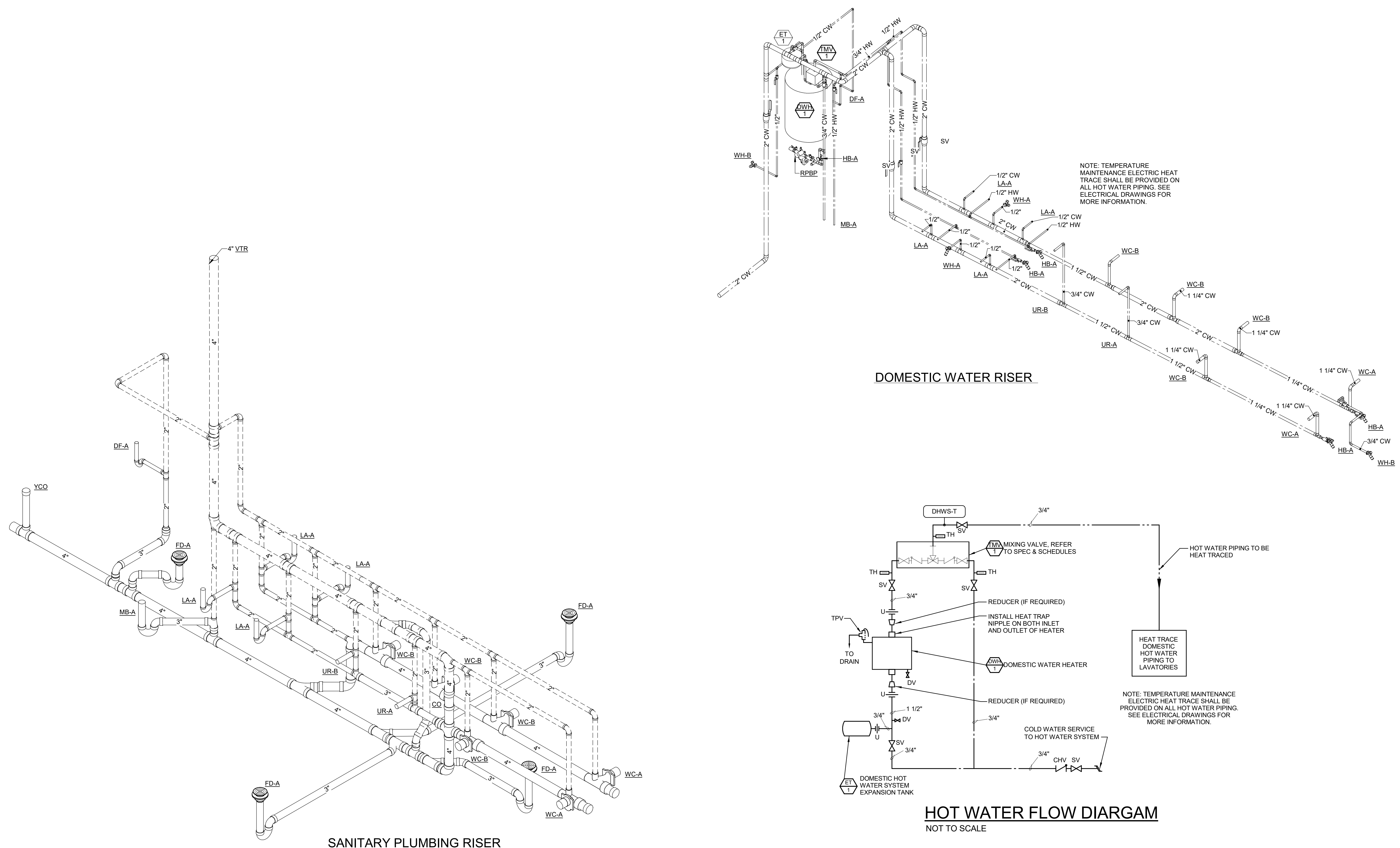
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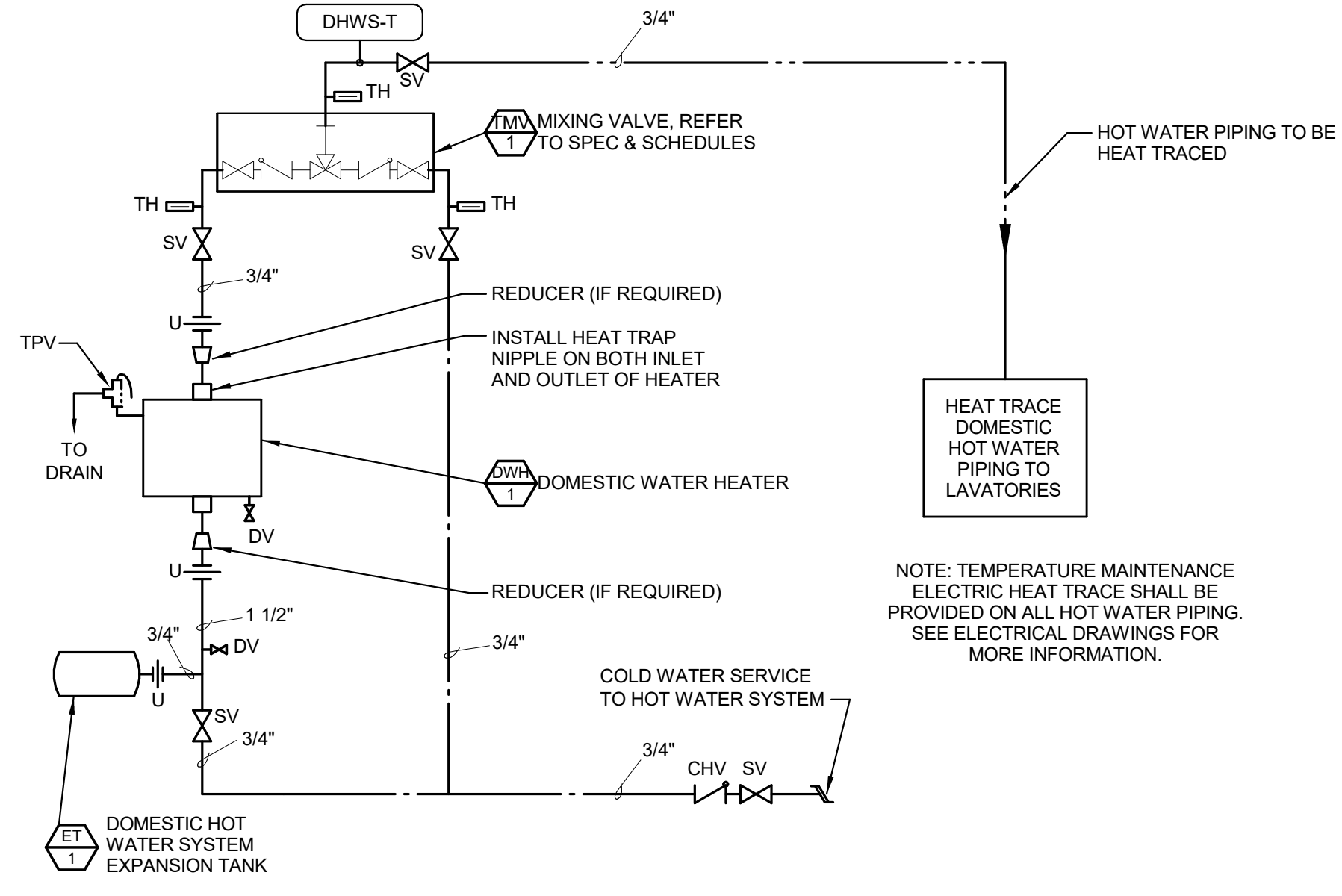
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NOTE: TEMPERATURE MAINTENANCE ELECTRIC HEAT TRACE SHALL BE PROVIDED ON ALL HOT WATER PIPING. SEE ELECTRICAL DRAWINGS FOR MORE INFORMATION.

DOMESTIC WATER RISER

SANITARY PLUMBING RISER



HOT WATER FLOW DIAGRAM

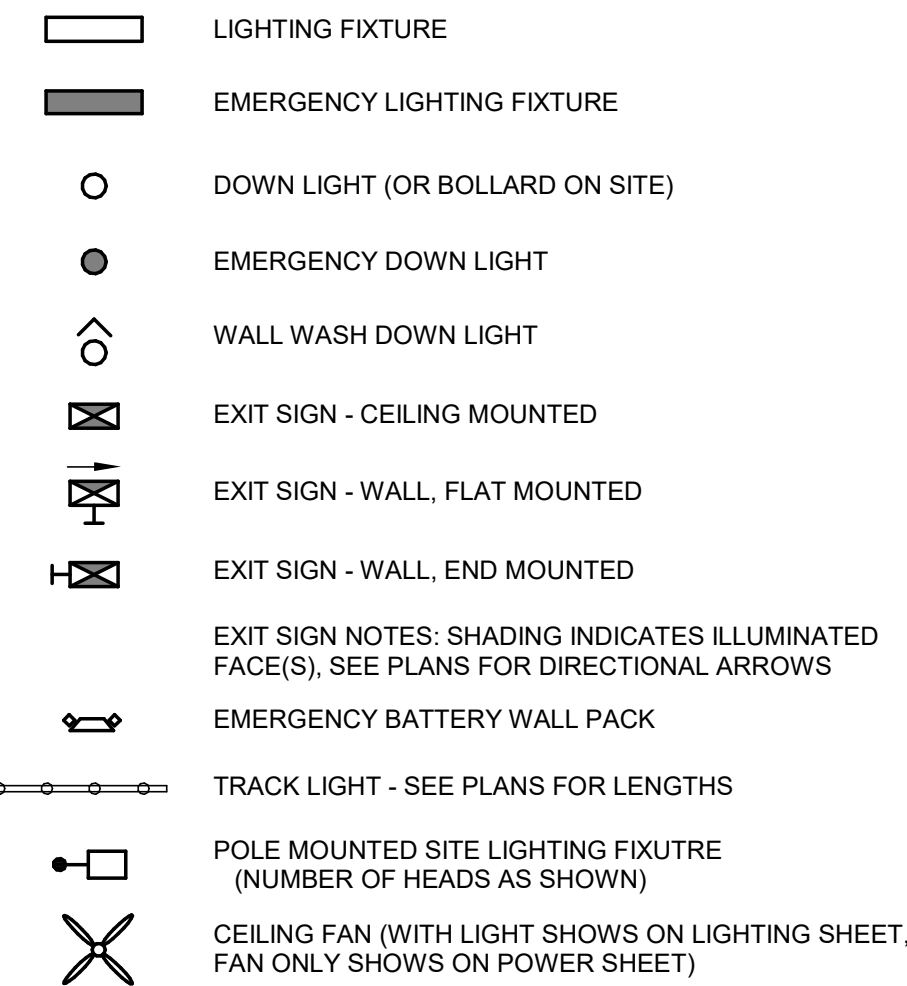
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PLUMBING POINTS LIST

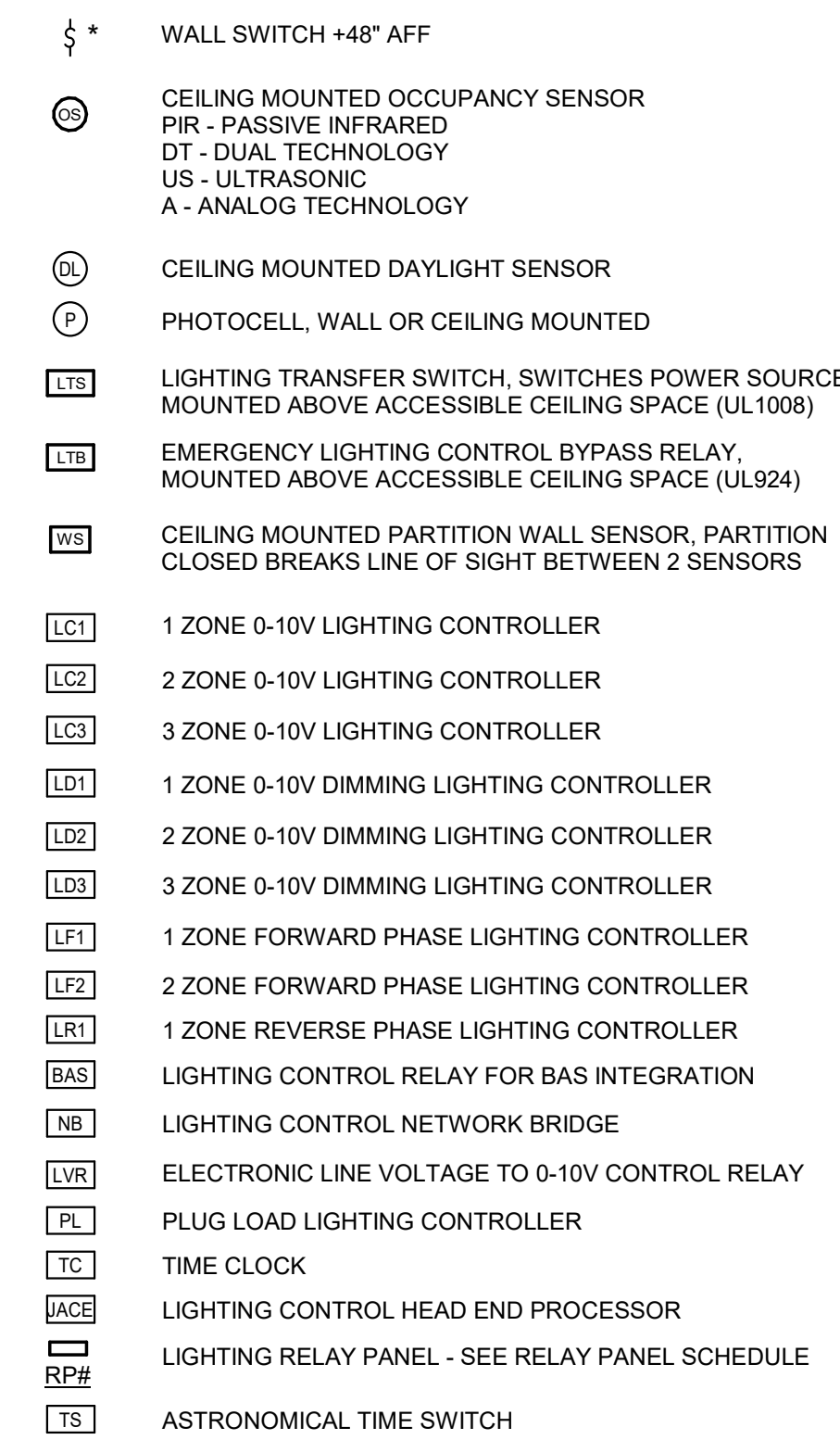
POINT DESCRIPTION		STARTUP TREND	SERVICE TREND	FIELD DEVICE DESCRIPTION	NOTES		
TYPE	NAME DESCRIPTION	FREQ	ARCHIVE	FREQ		ARCHIVE	INSTRUMENT TYPE
DOMESTIC HOT WATER SYSTEM...							
AI	DHWS-T	DOMESTIC HOT WATER SUPPLY TEMP.		*F,1	1 MIN 4 HR 15 MIN 1 WEEK	INSERTION ELEMENT FLUID TEMPERATURE SENSOR	DOWNSTREAM OF MIXING VALVE
	BI	BINARY INPUT					
	BO	BINARY OUTPUT					
	AI	ANALOG INPUT					
	AO	ANALOG OUTPUT					
GENERAL NOTES							
1. FOR ANALOG POINTS, UNITS COLUMN HAS TWO COMPONENTS: FIRST VALUE INDICATES ENGINEERING UNITS FOR POINT, SECOND VALUE IS NUMBER OF DECIMAL PLACES TO DISPLAY.							
2. FOR BINARY POINTS, UNITS COLUMN LISTS "OFF" AND "ON" STATE LABELS FOR POINT.							

ELECTRICAL SYMBOLS

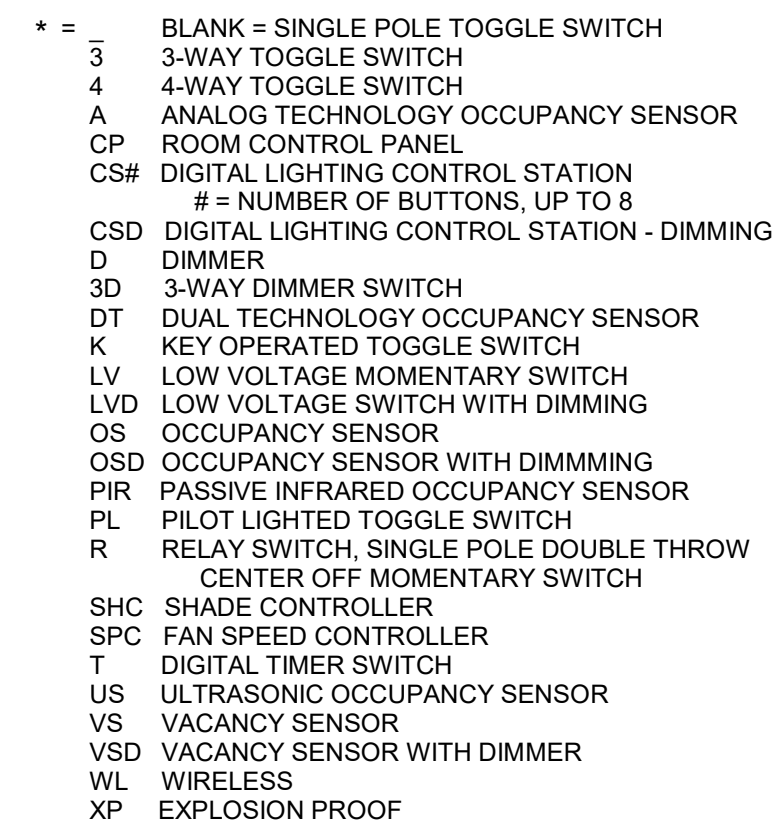
LUMINAIRES - REFER TO LUMINAIRE SCHEDULE



LIGHTING CONTROL



LIGHTING CONTROL SUBSCRIPT TAGS



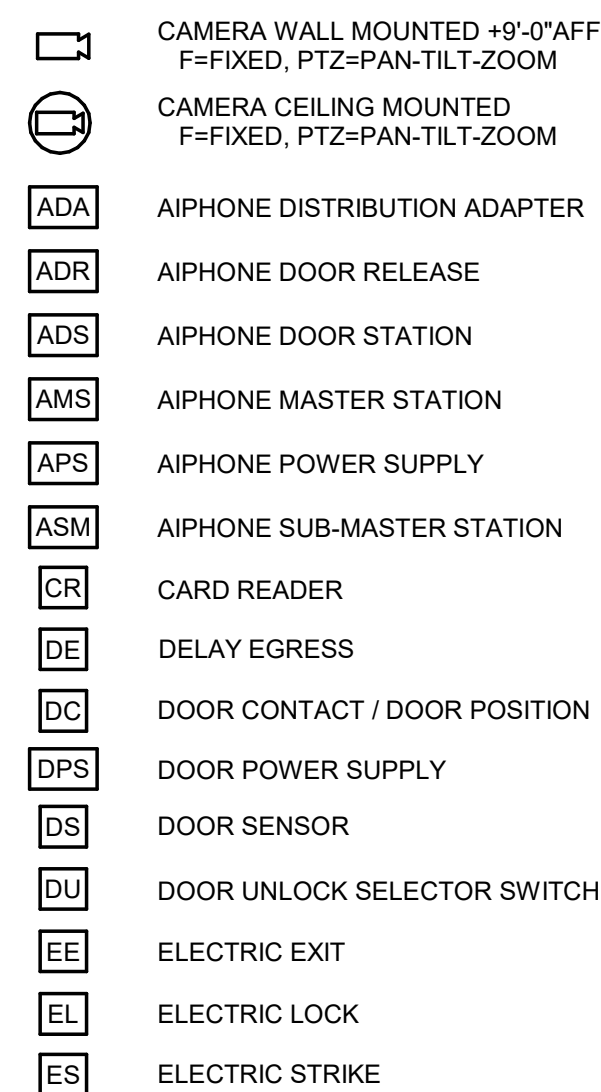
DEVICE HEIGHTS AS ABOVE UNLESS OTHERWISE NOTED ON DRAWINGS.

RECEPTACLES

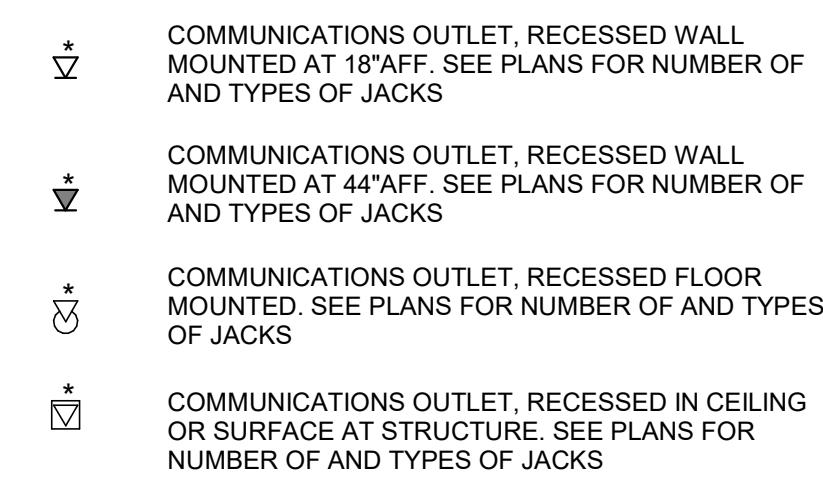


DEVICE HEIGHTS AS ABOVE UNLESS OTHERWISE NOTED ON DRAWINGS.

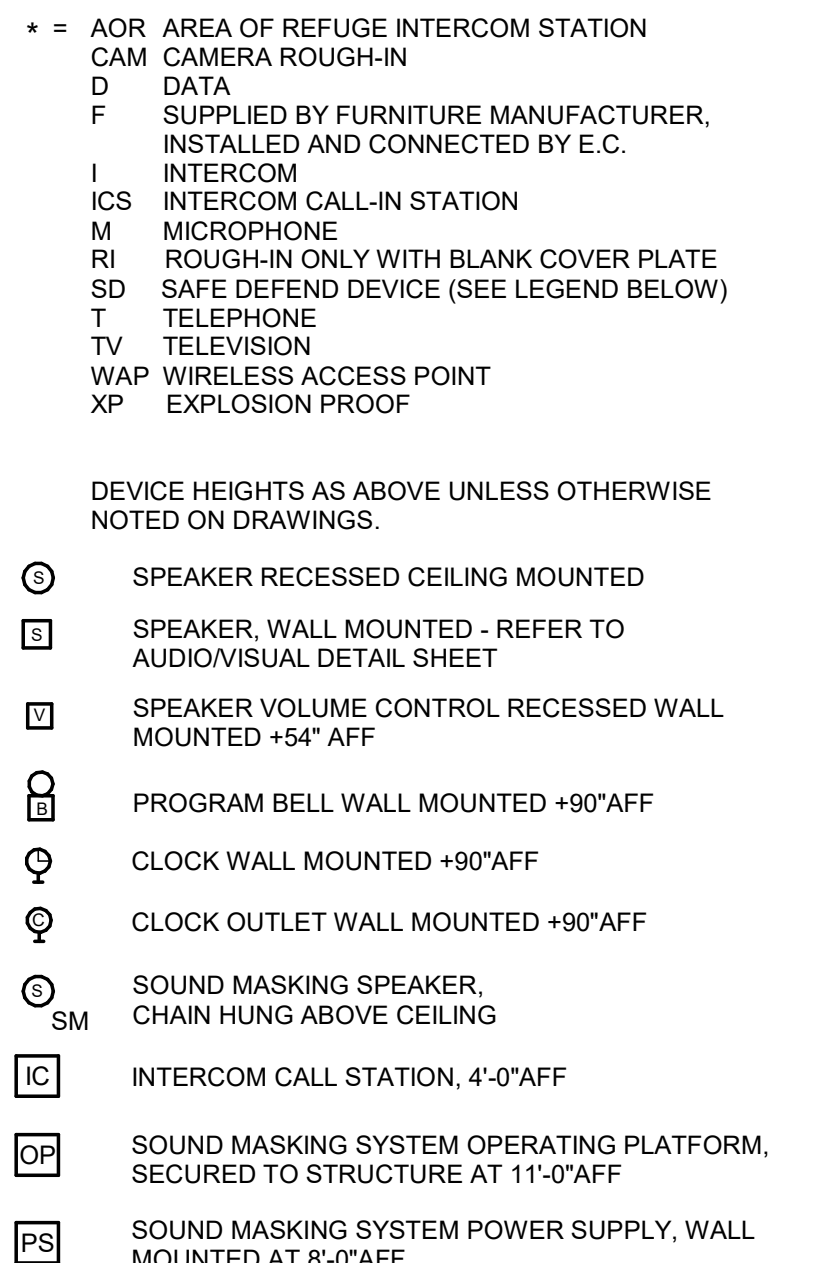
SECURITY



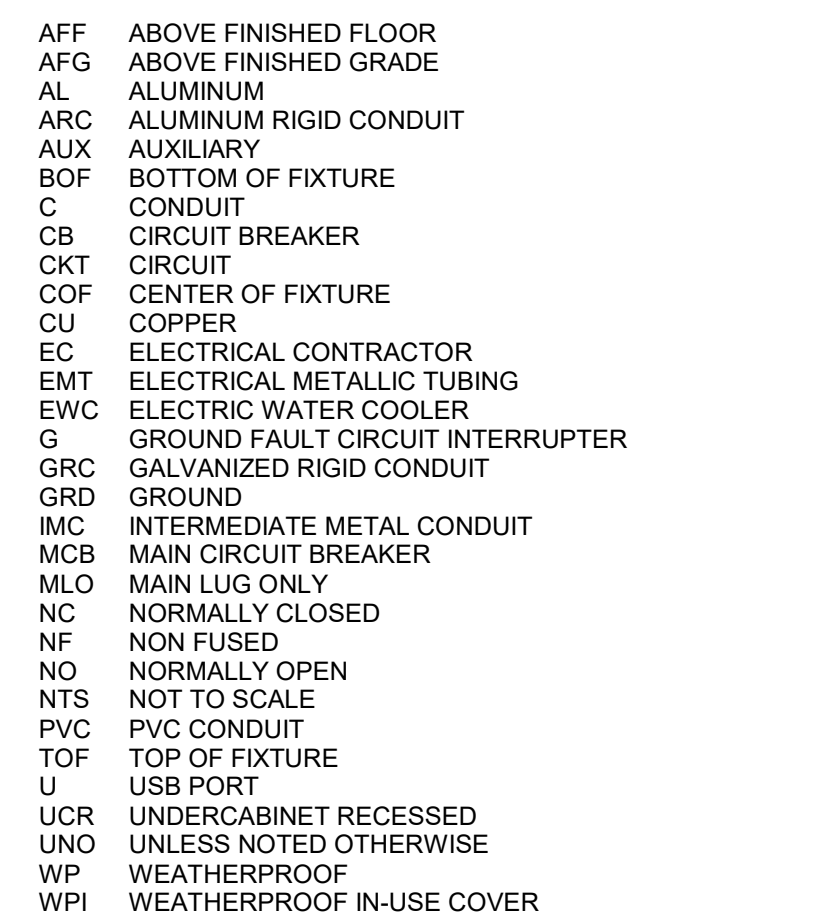
DATA / COMMUNICATION DEVICES



DATA / COMMUNICATIONS SUBSCRIPT TAGS



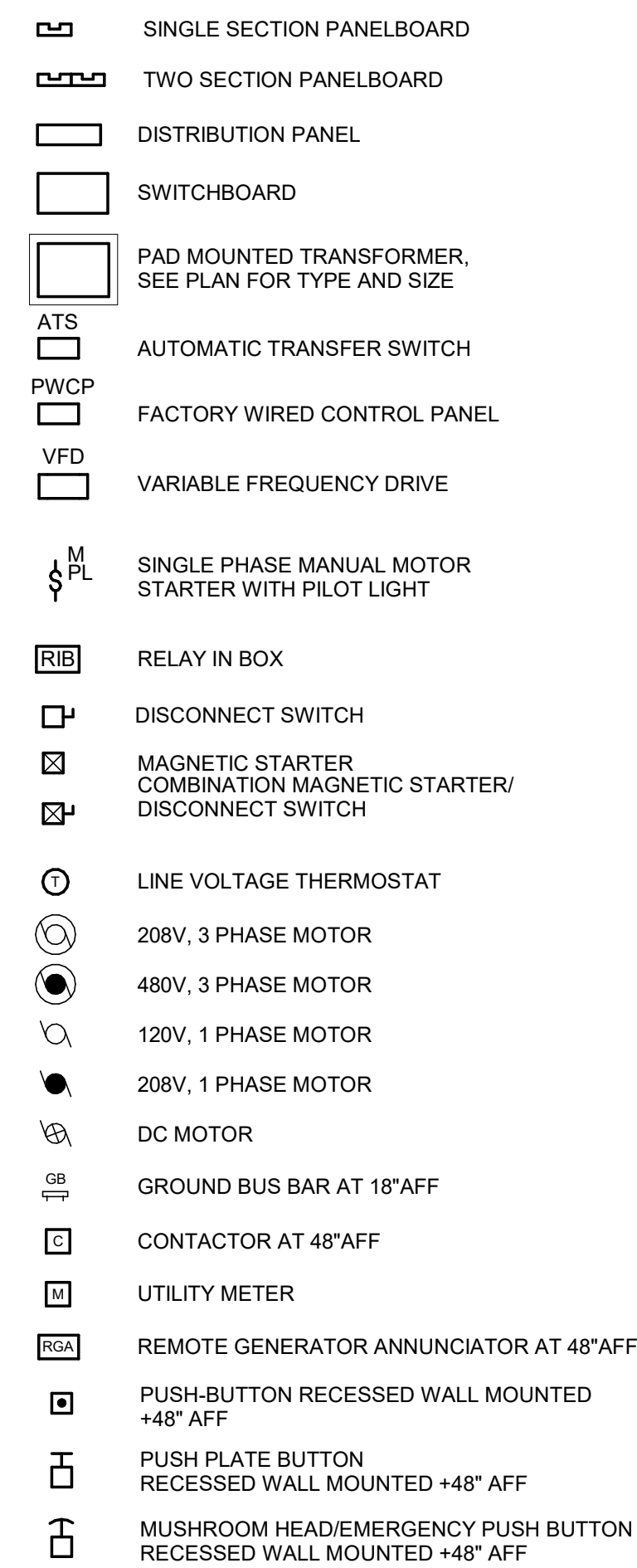
ABBREVIATIONS



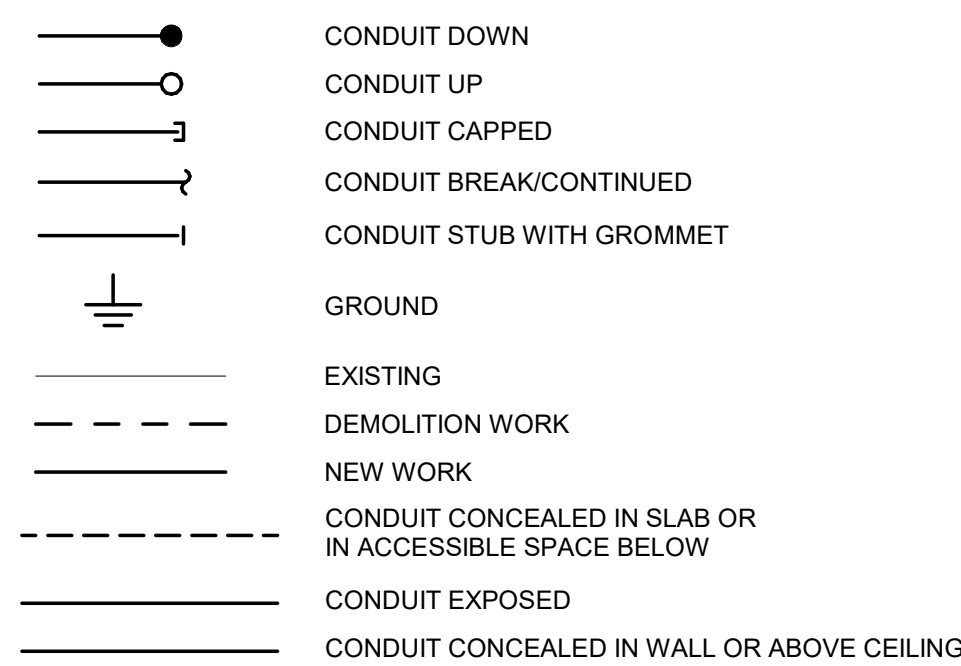
ELECTRICAL SHEET INDEX

SHEET NO.	SHEET NAME
E0.0	ELECTRICAL SYMBOLS AND ABBREVIATIONS
E0.1	ELECTRICAL SEISMIC CODE BLOCK
E0.2	LIGHTING SCHEDULES AND DETAILS
E0.3	ELECTRICAL ONE-LINE DIAGRAM, SCHEDULES AND DETAILS
E0.4	ME INTERFACE, HVAC POWER DETAILS AND DIAGRAMS
E0.5	ELECTRICAL SCHEDULES AND DETAILS
E1.0	PARTIAL SITE PLAN - ELECTRICAL
E2.0	FIRST FLOOR PLAN - LIGHTING
E3.0	FIRST FLOOR PLAN - POWER, DATA, SYSTEMS AND HVAC POWER
E3.1	PRESS BOX - LOWER LEVEL - POWER

POWER EQUIPMENT



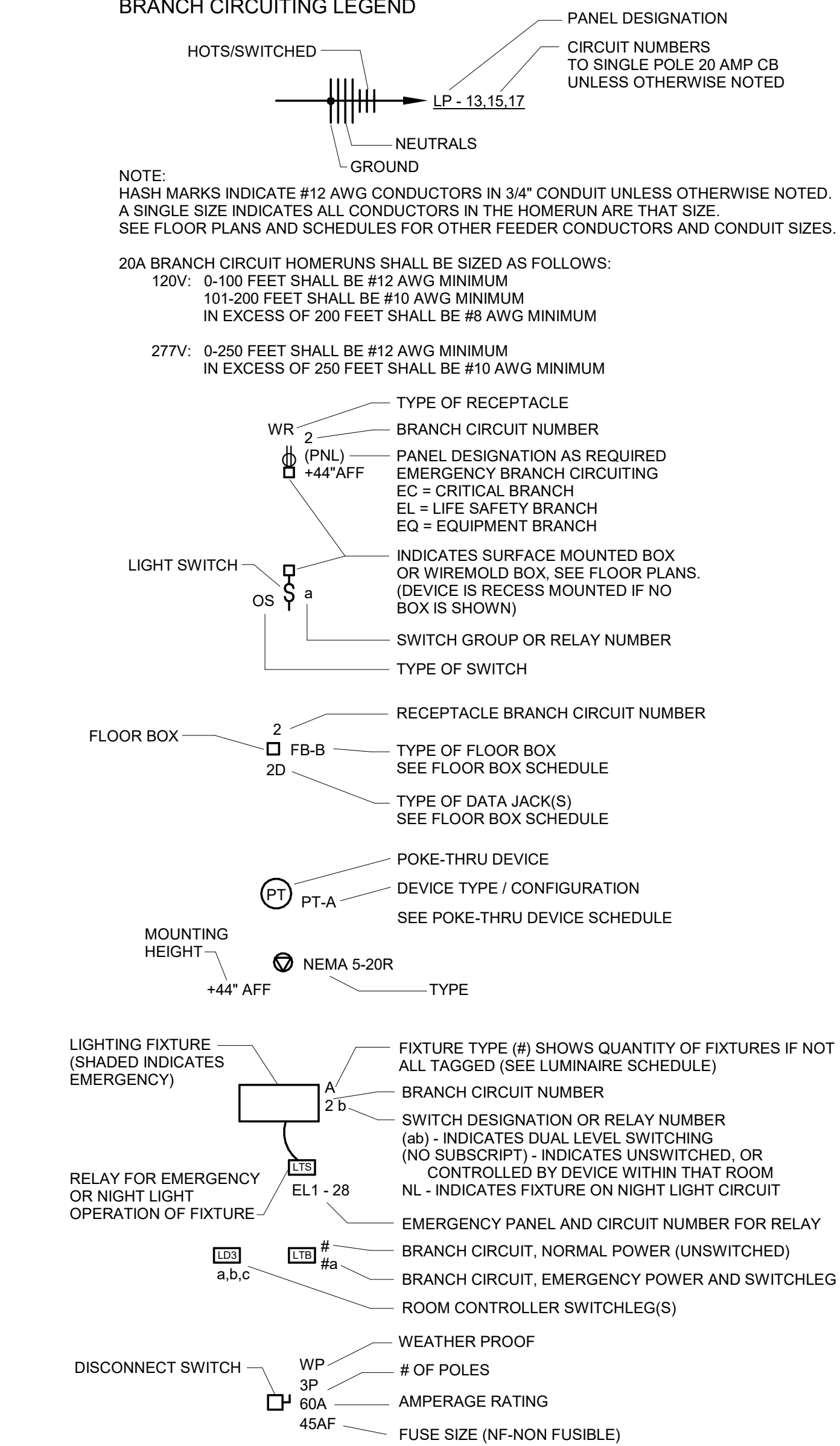
WIRING SYMBOLS



MOUNTING HEIGHTS

ALL MOUNTING HEIGHTS ARE AS GIVEN UNLESS OTHERWISE NOTED ON PLANS.
ALL MOUNTING HEIGHTS ARE TO CENTER OF DEVICE UNLESS OTHERWISE NOTED.

BRANCH CIRCUITING LEGEND



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ELECTRICAL EQUIPMENT COMPONENTS EARTHQUAKE LOAD RESISTANCE					Seismic Design Category: D		Seismic Site Class: D		Risk Category: II	
Listing of Equipment and System Components	Anchorage to Floors, Roofs, etc.		Sway Bracing		Location of Professionally Sealed Anchorage and Sway Bracing Details		EXEMPTIONS	COMMENTS / NOTES		
	Not Provided for Project	Provided for Project	Not Provided for Project	Provided for Project	On Const. Documents Drawing No. or Spec. Section	SUBSEQUENT SUBMITTAL Separate Permit & Plans				
OTHER GENERAL EQUIPMENT & SYSTEM COMPONENTS; IP = 1.0										
Floor mounted equipment:										
Transformers		X	X			X				
Wall mounted equipment:										
Transformers		X	X			X				
Distribution Panels		X	X			X				
Equipment Supported By A Suspended Ceiling:										
Lighting Fixtures < 10 lbs	X		X				1		4	
Lighting Fixtures > 10 lbs and < 56 lbs	X			X		X			5	
Lighting Fixtures > 56 lbs	X			X		X			6	
Equipment Suspended From Structure:										
Items positively attached to the structure	X		X				1		1	
Items < 20 lbs	X		X				1		2	
EMT Conduit and Wiring ≤ 2"	X		X				1		3, 7	
RC or IMT Conduit and Wiring ≥ 2.5"				X		X				
RC or IMT Conduit and Wiring ≤ 1.5"	X		X				1		3, 7	
RC or IMT Conduit and Wiring ≥ 2"				X		X				

* applies to equipment and devices directly attached to structure

GENERAL NOTES:

- A. It is the basic intent of this Code Block to declare whether or not anchorage and sway bracing is being provided on the project. If so, to declare whether or not the details are shown on the plans or will be shown on a subsequent submission. If seismic restraint of a component is not required by code this should be stated in comments. If seismic restraint, which is not required by code, is being provided due to owner/designer requirements this should also be stated in the comments.
- B. Plans signed and sealed by a Professional Engineer licensed in the project area along with a separate permit application need to be submitted to the Authority Having Jurisdiction a minimum of two weeks prior to the planned installation to allow for plan review and distribution to the inspector. Additional time may be needed if such submissions are deficient.
- C. Items indicated that are "Anchorage to Floors, Roofs, etc." are "Provided", assumes item to be directly attached to building structure. If the item is installed with brackets, hangers, or stands, then the attachment to the supports shall be seismically engineered and may require sway bracing.
- D. All anchors and attachments to structure shall be seismically rated and listed.

COMMENTS/NOTES:

- General Exemptions (ASCE 07-16 Chap 13.1.4) Seismic Design Category D, Ip = 1.0. The component is positively attached to the structure.
- General Exemptions (ASCE 07-16 Chap 13.1.4) Seismic Design Category D, Ip = 1.0. The component weights 20 lbs.
- General Exemptions (ASCE 07-16 Chap 13.1.4) Seismic Design Category D, Ip = 1.0. The component weights 5 lbs./ft or less for distributed systems.
- Shall have one No. 12 gauge wires connecting the center of the fixture to the structure above. Support wire slack permitted. Rigid conduit connection to light not permitted.
- Shall have two No. 12 gauge wires connecting opposite corners of the fixture to the structure above. Support wire slack permitted. Rigid conduit connection to light not permitted.
- Lighting fixture shall be independently supported from structure and no slack support wires are required.
- Table 4.4, item 2 d., rigid steel or IMC conduit ≤ 1-1/2 inches in diameter, or EMT or aluminum conduit ≤ 2 inches in diameter.

SEISMIC DESIGN REQUIREMENT EXEMPTIONS FOR MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS	
1 - General Exemptions (ASCE 07-16 Chap 13.1.4)	1) Seismic Design Category A, B. 2) Seismic Design Category C and the component importance factor $I_p = 1.0$ provided that EITHER 1) The component is positively attached to the structure, or 2) The component weights 20 lbs. or less, or 5 lbs./ft or less for distributed systems. 3) Seismic Design Category D, E, or F that are positively attached to the structure and EITHER: 1) The component weights 400 lbs. or less, the center of mass is located 4 ft or less above the adjacent floor, flexible connections are provided between the component and associated ductwork, piping, and conduit, and the component $I_p = 1.0$, OR 2) The component weights 20 lbs. or less, or 5 lbs./ft or less for distributed systems.
2 - Light Fixture, Sign and Ceiling Fan Exemptions (ASCE 07-16 Chap 13.6.1)	1) Not connected to ducts or piping, supported by chains or otherwise suspended from the structure, provided ALL of the following criteria A. through C. below are met: A. The design load for such items shall be equal to 1.4 times the operating weight acting down with a simultaneous horizontal load equal to 1.4 times the operating weight. The horizontal load shall be applied in the direction that results in the most critical loading for design. B. Seismic interaction effects shall be considered per Section 13.2.3 of ASCE 7-16. C. The connection to the structure shall allow a 360 degree range of motion in the horizontal plane.
3 - Distribution Systems: Conduit, Cable Tray, and Raceways Exemptions (ASCE 07-16 Chap 13.6.5.1)	1) Raceways with IP = 1.0 where flexible connections or other assemblies are provided between the cable tray or raceway and associated components to accommodate the relative displacement, where the cable tray or raceway is positively attached to the structure, and where ONE of items A. through D. below apply: A. Trapeze assemblies with 3/8 in. diameter rod hangers not exceeding 12 in. length and the total weight supported by any single trapeze is 100 lbs. or less. B. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 12 in. in length and the total weight supported by any single trapeze is 200 lbs. or less. C. Trapeze assemblies with 1/2 in. diameter rod hangers not exceeding 24 in. in length and the total weight supported by any single trapeze is 100 lbs. or less. D. Individual rod hangers 3/8 in. or 1/2 in. diameter and each hanger is 12 in. or less in length and the total weight per any single rod is 50 lbs. or less. 2) Conduit less than 2.5 in. trade size.

¹Flexible connections are not required for connections to appliances or electrical or plumbing fixtures that are mounted to walls or floors.
²Distribution systems would include the following code complying components:
a. through c. refer to plumbing items.
d. The following electrical conduit: Rigid steel and intermediate metal conduit (IMC), 1-1/2" and less in diameter; EMT conduit and rigid aluminum conduit 2" and less in diameter.
e. Flexible electrical wiring methods weighing 5 lbs./ft or less.

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PROJ. NO. 25-09D

DATE ISSUED

10.29.2025

DATE REVISION

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SHEET NO.

E0.1



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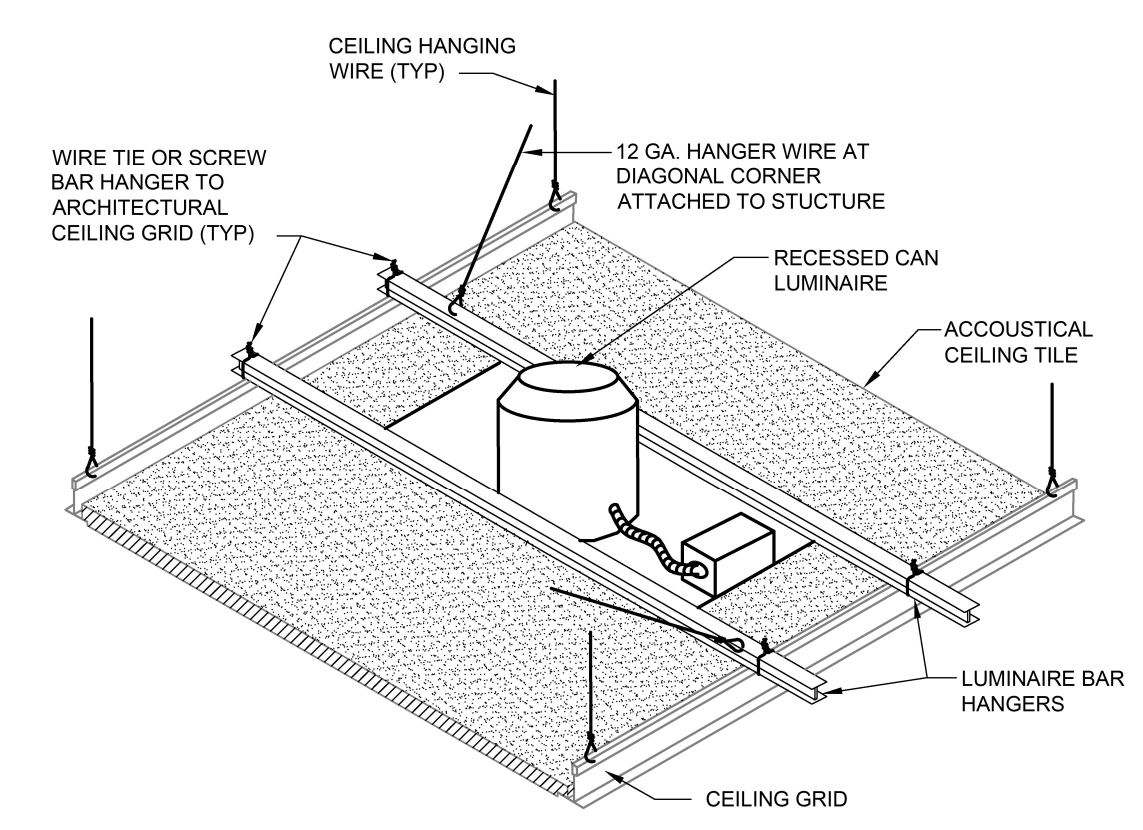
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LUMINAIRE SCHEDULE

TYPE	MANUFACTURER	MODEL NUMBER	APPROVED EQUALS	DESCRIPTION	VOLTAGE	WATTAGE	CCT	CRI	DIMMING TYPE	MOUNTING	REMARKS
DA	PORTFOLIO	LD4C209035D010W1H	FOCAL POINT GOTHAM USA LIGHTOLIER C4RDL	OPEN SELF-FLANGED DOWNLIGHT	120	20	3500K	90+	0-10V TO 1%	RECESSED	
EA	DUAL-LITE	EV2I (WHITE)	NOT APPLICABLE PROVIDE CAMPUS STANDARD	EMERGENCY UNIT WALL PACK	120	2	4000K	N/A	NON-DIMMING	WALL	TWO ADJUSTABLE HEADS. SELF-TESTING.
GA	METALUX	4VT3-LD5-6-W-UNV-L840-CD1-U	ACUITY METALUX WILLIAMS	4FT VAPORTIGHT	120	49	4000K	80+	0-10V TO 10%	SUSPENDED OR SURFACE	
WA	GARDCO	121-16L-700-NMG4-4-BZ	NOT APPLICABLE PROVIDE CAMPUS STANDARD	EXTERIOR WALLPACK	120	38	4000K	70	NON-DIMMING	WALL/ SURFACE	COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS.
WAE	GARDCO	121-16L-700-NMG4-4-EBPC-BZ	NOT APPLICABLE PROVIDE CAMPUS STANDARD	EXTERIOR WALLPACK INTEGRAL BATTERY	120	38	4000K	70	NON-DIMMING	WALL/ SURFACE	COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS. THIS TYPE IS TO BE PRICED WITH AN ALTERNATE PART OF THE PROJECT FOR MAIN BUILDING. COORDINATE EXACT MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS.
WB	GARDCO	ECF-S 32L-700-CWG2-4-BZ	NOT APPLICABLE PROVIDE CAMPUS STANDARD	EXTERIOR AREA LIGHT	277	73	5000K	70	NON-DIMMING	WALL/ SURFACE	

GENERAL NOTE:
LIGHT FIXTURE SUBSTITUTIONS TO THE BASIS OF DESIGN MUST BE EQUAL QUALITY, EQUAL PERFORMANCE, AND SUBMITTED 10 DAYS PRIOR TO BIDDING FOR PRE-APPROVAL.
REFERENCE DIVISION 01 - 'GENERAL REQUIREMENTS' OF THE CONTRACT SPECIFICATIONS FOR PROCESS REQUIRED FOR PRE-APPROVAL. NO SUBSTITUTIONS WILL BE REVIEWED AFTER BASE-BIDS ARE ACCEPTED.



DOWNLIGHT MOUNTING - LAY-IN-CEILING

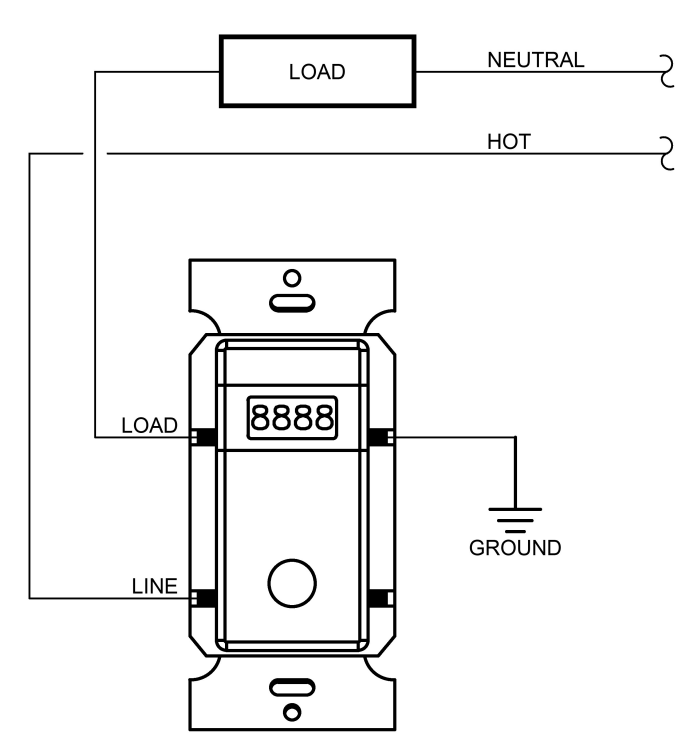
NO SCALE
EARTHQUAKE RESISTANT COMPONENTS FOR LAY-IN LIGHT FIXTURES:
LIGHT FIXTURES:
NEW OR REPLACED LIGHT FIXTURES MUST BE POSITIVELY ATTACHED TO THE CEILING GRID WITH AN ATTACHMENT CAPABLE OF CARRYING 100 PERCENT OF THE WEIGHT OF THE WEIGHT OF THE LIGHT FIXTURE ACTING IN ANY DIRECTION. THIS ATTACHMENT SHALL CONSIST OF FOUR (4) EQUALLY SPACED ATTACHMENT POINTS USING SCREWS, RIVETS, BOLTS OR OTHER APPROVED POSITIVE ATTACHMENT DEVICES. IN ADDITION, THE FOLLOWING SUPPORTS SHALL BE PROVIDED:
1. LIGHT FIXTURES WEIGHING LESS THEN 10 POUNDS SHALL HAVE ONE No. 12 GAUGE WIRE CONNECTED TO THE CENTER OF THE LIGHT FIXTURE HOUSING AND THE STRUCTURE ABOVE. THIS WIRE MAY BE INSTALLED SLACK.
2. LIGHT FIXTURES WEIGHING 10 POUNDS OR MORE BUT LESS THEN 56 POUNDS SHALL HAVE TWO No. 12 GAUGE WIRE CONNECTED TO OPPOSITE CORNERS OF THE LIGHT FIXTURE HOUSING AND THE STRUCTURE ABOVE. THESE WIRES MAY BE INSTALLED SLACK.
3. LIGHT FIXTURES WEIGHING 56 POUNDS OR MORE SHALL BE INDEPENDENTLY SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE, BY APPROVED HANGERS. IN ADDITION, OTHER APPLICABLE REQUIREMENTS OF THE COUNTY BUILDING CODE AND RULES FOR EARTHQUAKE RESISTANT ELECTRICAL SYSTEM COMPONENTS SHALL APPLY.

EXCEPTIONS:
1. LIGHT FIXTURES THAT ARE NOT COMPONENTS OF A STAND-BY EMERGENCY LIGHTING SYSTEM AND WEIGH LESS THAN 20 POUNDS AND POWERED USING APPROVED FLEXIBLE CABLE ASSEMBLIES NO LESS THAN 3 FEET LONG CONNECTED TO SUCH FIXTURES, ARE NOT REQUIRED TO HAVE ADDITIONAL SUPPORT WIRE(S) DESCRIBED ABOVE. SUCH FIXTURES ARE REQUIRED TO BE POSITIVELY ATTACHED TO THE CEILING GRID AS DESCRIBE ABOVE.
2. LIGHT FIXTURES INSTALLED IN EXISTING CEILING GRID OF EXISTING BUILDINGS ARE NOT REQUIRED TO HAVE ADDITIONAL VERTICAL SUPPORT WIRES DESCRIBED ABOVE, WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET:
A. THE LIGHT FIXTURE(S) ARE REPLACING FIXTURE(S) THAT ARE DAMAGED, DILAPIDATED OR INOPERATIVE AS PART OF GENERAL MAINTENANCE.
B. THE EXISTING CEILING GRID IS CAPABLE OF PROVIDING ADEQUATE VERTICAL SUPPORT FOR THE LIGHT FIXTURES, AND
C. EXISTING LIGHT FIXTURES ARE NOT PROVIDED WITH THE ADDITIONAL VERTICAL SUPPORT WIRES DESCRIBED ABOVE, AND
D. THE LIGHT FIXTURES ARE POSITIVELY ATTACHED TO THE CEILING GRID AS DESCRIBED ABOVE.

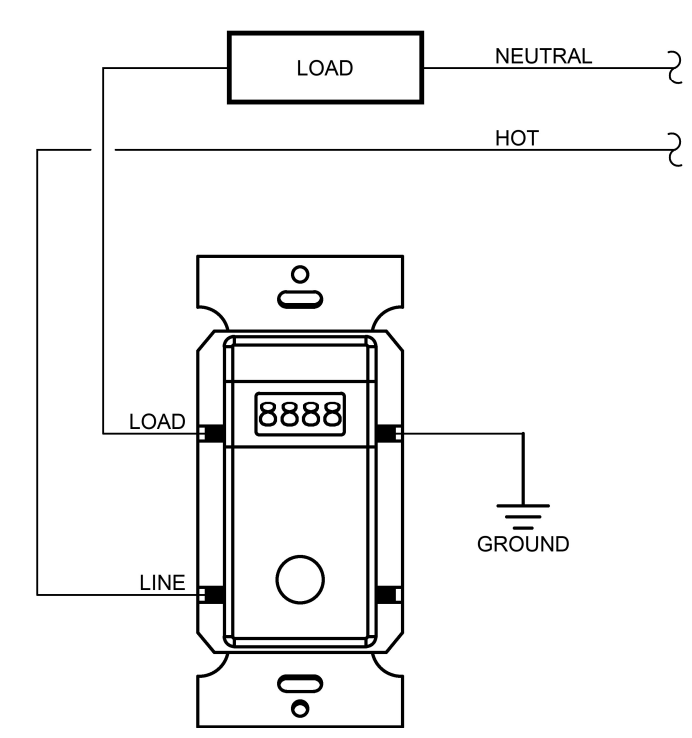
LIGHTING CONTROL MATRIX

ROOM TYPE	MANUAL ON	AUTO ON	AUTO-OFF (MINUTES)	PARTIAL OFF - NORMAL HOURS	AUTO OFF - AFTER HOURS	WALL OCCUPANCY/VACANCY	CEILING OCCUPANCY/VACANCY	WALL SWITCH	DIMMER SWITCH	SCENE CONTROL	OVERRIDE SWITCH	DIGITAL TIMER	FULL RANGE	MULTI-ZONE	STEP DIMMING	NON-DIM	DAY LIGHT HARVESTING	CONTINUOUS DIMMING	ON/OFF	TIME ON	TIME OFF	ASTRONOMICAL	PLUG LOAD	STANDALONE	ANALOG	NETWORK	DIGITAL	BAS INTEGRATION	AV INTEGRATION	SHADE CONTROL	ON	OFF	OVERRIDE	PHOTOCELL	ADDITIONAL INFORMATION	
CUSTODIAL	X		20									X				X								X		X										
LARGE RESTROOM		X	20			X											X						X			X										
EXTERIOR WALLPACKS		X									X					X								X			X							X		

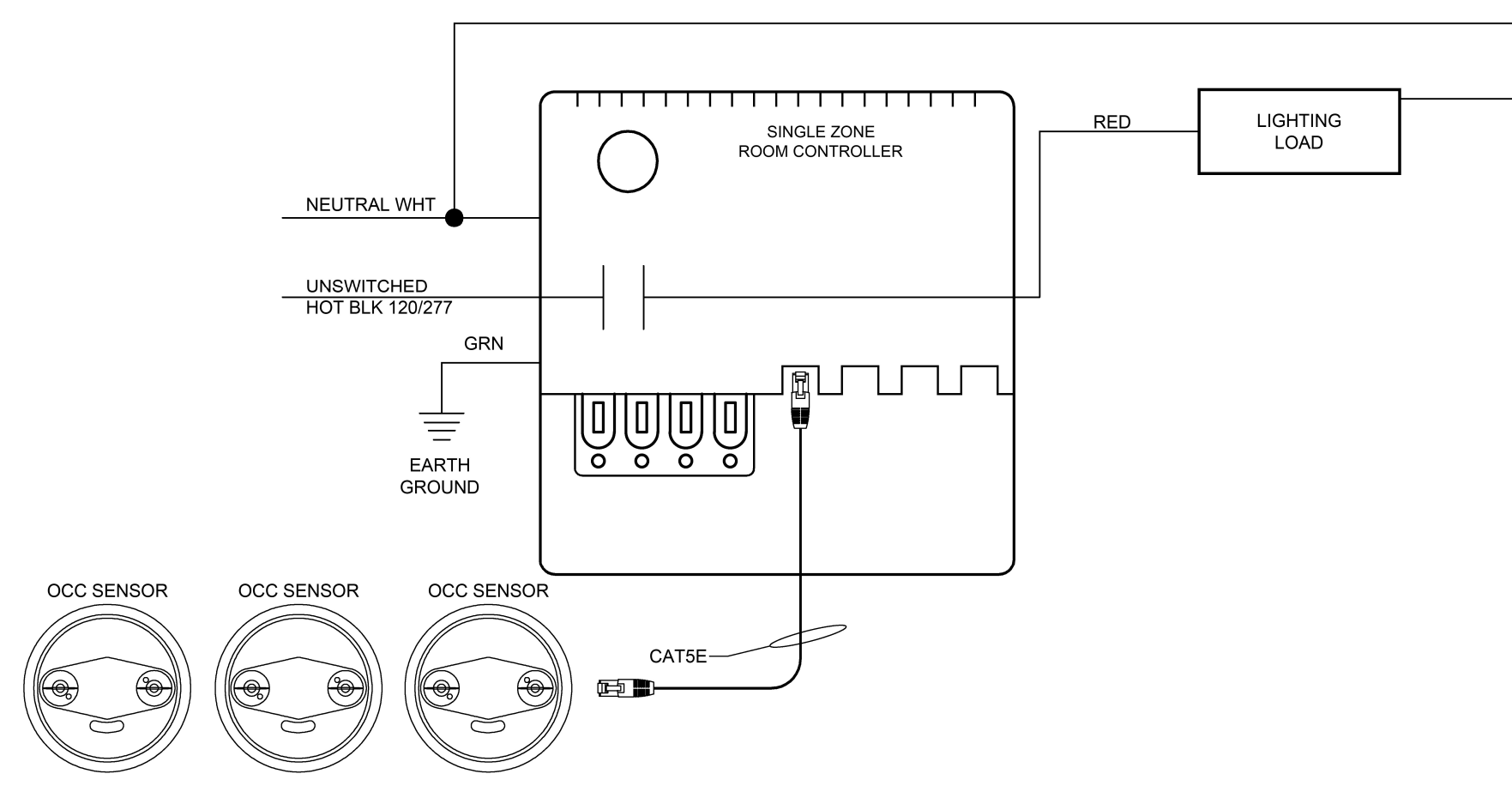
GENERAL NOTES:
1. CONTROL DEVICE QUANTITIES SHOULD BE SELECTED FROM THE ELECTRICAL DRAWINGS, NOT THIS SPREADSHEET.
2. NETWORKING REQUIREMENTS TO BE DETERMINED BY EACH MANUFACTURER. SEE NETWORK COLUMN ABOVE. ALL AREAS DENOTED AS NETWORK SHALL BE CONNECTED TO LIGHTING CONTROL SYSTEM HEADEND ALLOWING FOR TIME BASED CONTROL NEEDS AND BAS INTEGRATION.
3. LIGHTING CONTROL MANUFACTURER SHALL INCLUDE THE FOLLOWING SITE VISITS TO SUPPORT CONSTRUCTION: A PRE-CABLING MEETING WITH EC AND ENGINEER PRIOR TO INITIAL ROUGH-IN; 2 FACTORY STARTUPS TO COINCIDE WITH PROJECT PHASING (IF APPLICABLE).
4. LIGHTING CONTROL MANUFACTURER SHALL INCLUDE 1HR OWNER TRAINING DURING EACH STARTUP VISIT.
5. LIGHTING CONTROLS MANUFACTURER SHALL INCLUDE A FOLLOW UP VISIT 3 MONTHS AFTER FINAL OCCUPANCY TO ADDRESS FINAL PUNCHLIST AND COMMISSIONING REPORT NEEDS. NOTICE SHALL BE GIVEN TO ENGINEER FOR SCHEDULING OF FOLLOW UP VISIT.



TYPICAL ASTRONOMICAL TIME SWITCH
SCALE: NO SCALE
REFERENCE LIGHTING CONTROL MATRIX FOR FURTHER DETAIL WIRING DIAGRAM IS BASED ON WATTSTOPPER LIGHTING CONTROLS



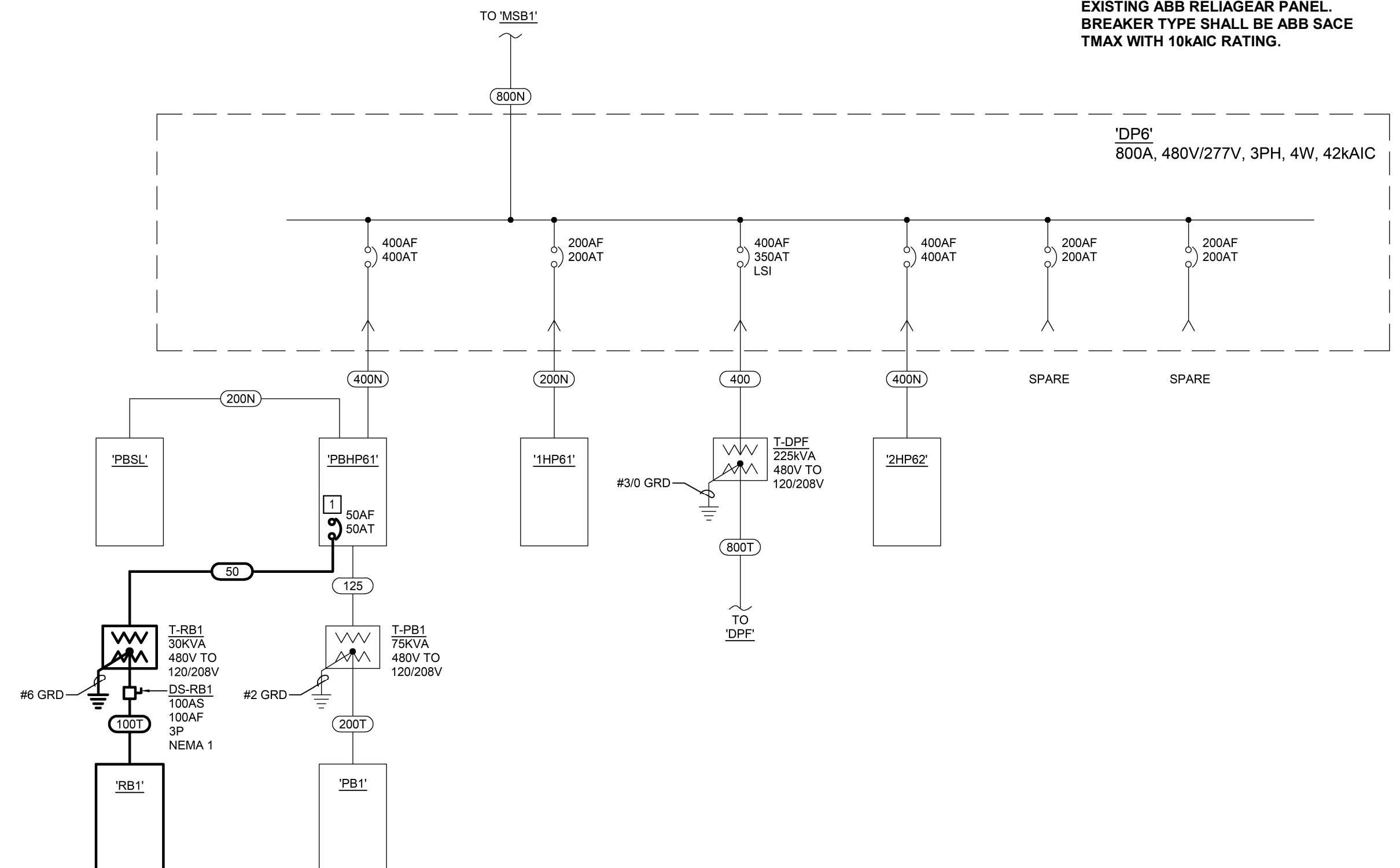
TYPICAL DIGITAL TIMER DIAGRAM
SCALE: NO SCALE
REFERENCE LIGHTING CONTROL MATRIX FOR FURTHER DETAIL WIRING DIAGRAM IS BASED ON WATTSTOPPER LIGHTING CONTROLS



1 ZONE ON/OFF -
(2) US SENSORS (TYP. MULTI STALL RESTROOM)
SCALE: NO SCALE

KEYED NOTES

- 1) INSTALL NEW 50A/3P BREAKER IN EXISTING ABB RELIAGEAR PANEL. BREAKER TYPE SHALL BE ABB SACE TMAX WITH 10KAIC RATING.



ONE-LINE DIAGRAM

Branch Panel: RB1

Location: CUSTODIAL 100
Supply From:
Mounting: SURFACE
Enclosure: NEMA 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 14KAIC
Mains Type: MCB
Mains Rating: 100 A

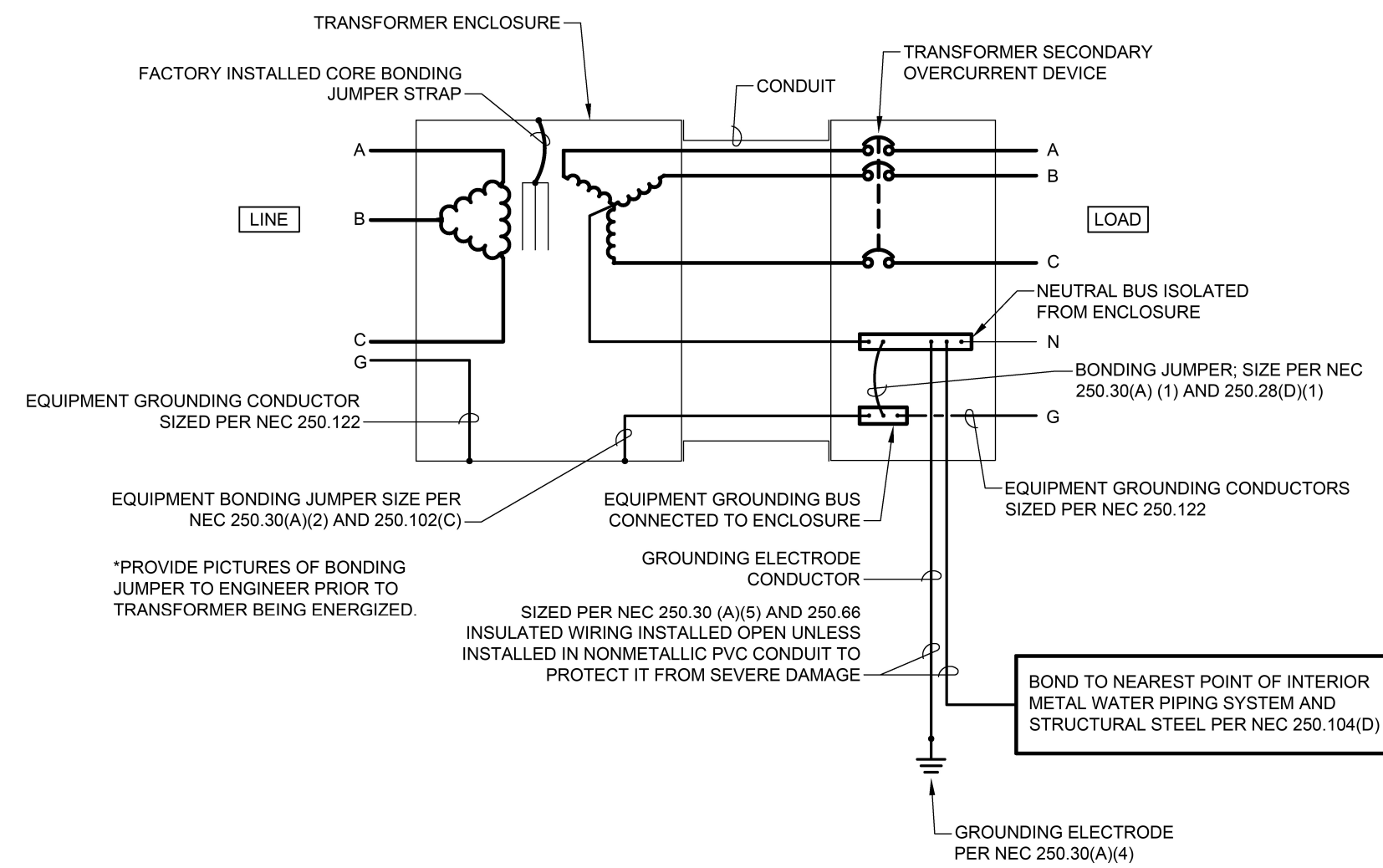
CKT	Circuit Description	Trip (A)	Poles	A (VA)	B (VA)	C (VA)	Poles	Trip (A)	Circuit Description	CKT	
1	MEN'S TLT 101 & WOMEN'S TLT 102 LIGHTING	20	1	444	720				EXT. RECEPTACLES	2	
3	CUSTODIAL 100 LIGHTING	20	1		147	540			MEN'S TLT 101 RECEPTACLES & TOILET/SIN...	4	
5	EXT. WALL PACKS	20	1			228	720		WOMEN'S TLT 102 RECEPTACLES &...	6	
7	ACCESS CONTROL PANEL	20	1	500	500				TEMPERATURE CONTROL PANEL	8	
9	DOOR POWER SUPPLIES PANEL	20	1		500	1500			(*)WH-1	10	
11	IDF-RB RECEPTACLE	20	1			180	1500			12	
13	EUH-3	20	2	1500	612					14	
15	EUH-3	20	2	1500	612					16	
17	EF-3	20	1			612	1667			18	
19	EUH-2	20	3	1667	1667					20	
21	EUH-2	20	3	1667	1667					22	
23	AC-1 & AC-2	15	2	250	3599					24	
25	AC-1 & AC-2	15	2	250	3599					26	
27	SPARE	20	1		250	500			HEAT TRACE	28	
29	SPARE	20	1			0	0			30	
31	SPARE	20	1		0	0				32	
33	SPARE	20	1		0	0				34	
35	SPARE	20	1		0	0				36	
37	SPARE	20	1		0	0				38	
39	SPARE	20	1		0	0				40	
41	SPARE	20	1		0	0				42	
				Total Load:	11458 VA	8882 VA	10172 VA				
				Total Amps:	97 A	74 A	86 A				

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
HVAC	22533 VA	100.00%	22533 VA	
Lighting	819 VA	100.00%	819 VA	Total Conn. Load: 30512 VA
Other	500 VA	100.00%	500 VA	Total Est. Demand: 30512 VA
Power	2220 VA	100.00%	2220 VA	Total Conn. Current: 85 A
Receptacle	4440 VA	100.00%	4440 VA	Total Est. Demand Current: 85 A

Notes: Panel to have integrated SPD.
(*) Provide locking handle clasp for breaker.

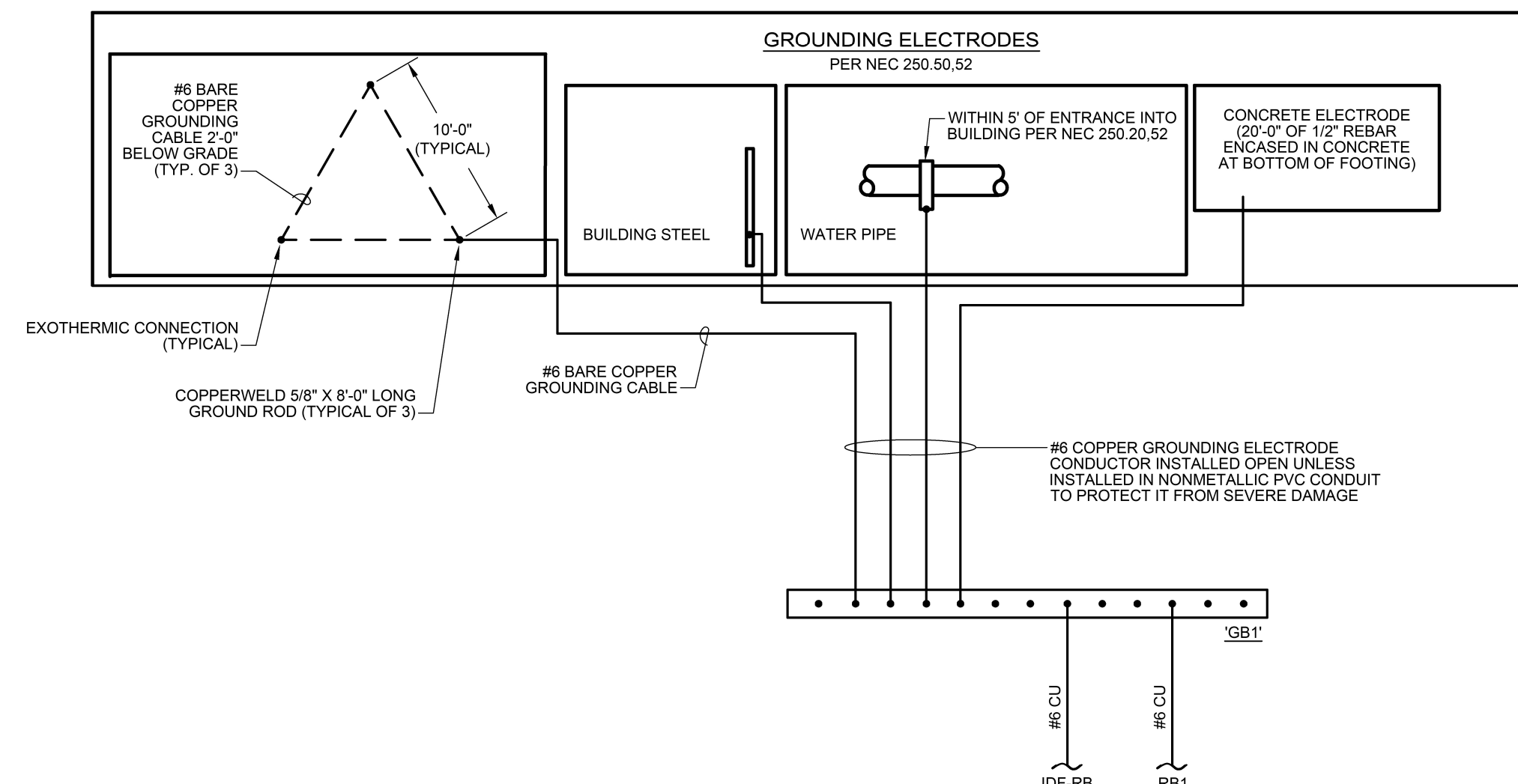
FEEDER SCHEDULE

ID #	AMPACITY:	COPPER:
METER		10#10 - 1'C
SPD(M SWBD)		5#1 - 1 1/2'C
SPD(PNLBDO)		5#8 - 1'C
20	20	3#12, 1#12 GRD - 3/4"C
20N	20N	4#12, 1#12 GRD - 3/4"C
30	30	3#10, 1#10 GRD - 3/4"C
30N	30N	4#10, 1#10 GRD - 3/4"C
40	40	3#8, 1#10 GRD - 3/4"C
40N	40N	4#8, 1#10 GRD - 3/4"C
50	50	3#6, 1#10 GRD - 1"C
50N	50N	4#6, 1#10 GRD - 1"C
60	60	3#4, 1#10 GRD - 1 1/4"C
60N	60N	4#4, 1#10 GRD - 1 1/4"C
70	70	3#4, 1#8 GRD - 1 1/4"C
70N	70N	4#4, 1#8 GRD - 1 1/4"C
80	80	3#3, 1#8 GRD - 1 1/4"C
80N	80N	4#3, 1#8 GRD - 1 1/4"C
90	90	3#2, 1#8 GRD - 2"C
90N	90N	4#2, 1#8 GRD - 2"C
100	100	3#1, 1#8 GRD - 2"C
100N	100N	4#1, 1#8 GRD - 2"C
110	110	3#2, 1#6 GRD - 2"C



TYPICAL 3 PHASE WYE SEPARATELY DERIVED SYSTEM TRANSFORMER CONNECTION DIAGRAM BONDING AT PANEL

NEC PARAGRAPHS REFERENCES ARE TO NEC 2020/2023 CODES.



GROUNDING AND BONDING - RESTROOM BUILDING

ELECTRICAL SERVICE AND GENERAL BUILDING REQUIREMENTS



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MECHANICAL-ELECTRICAL INTERFACE

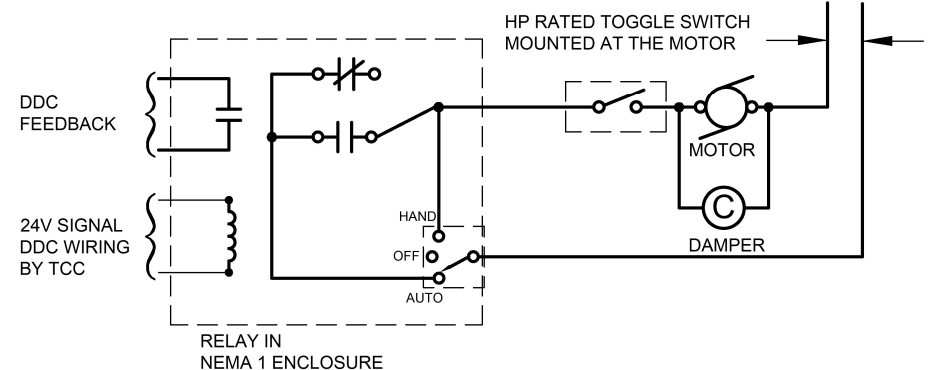
EQUIP. ID	EQUIPMENT DESCRIPTION	MOTOR DATA		BRANCH CIRCUIT DATA		SOURCE DATA		UNIT CONTROLS					EQUIPMENT DISCONNECT					REMARKS					
		HP / (KW) / (MCA) ³	VOLTAGE / PHASE	FEEDER SIZE	SOURCE:	TYPE ¹ / POLES	SWITCH/FUSE SIZE or CB TRIP (A)	TYPE ²	TYPE ¹	SWITCH/FUSE or CB TRIP	NEMA RATING	F	I	C	EQUIP. ID	SWITCH SIZE	POLE		OCF SIZE	NEMA RATING	F	I	C
CU-1	CONDENSING UNIT	34.6 MCA	208 / 1	2#8, 1#10 GRD-3/4"C	RB1	CB / 2	35	TST	-	-	-	M	M	M	CU-1	60A	2	NF	3R	E	E	E	
AC-1	AIR CONDITIONING UNIT	0.6 MCA	208 / 1	3#12, 1#12 GRD-3/4"C	RB1	CB / 2	15	TST	-	-	-	M	M	M	AC-1	20A	2	NF	1	E	E	E	
AC-2	AIR CONDITIONING UNIT	0.6 MCA	208 / 1	3#12, 1#12 GRD-3/4"C	RB1	CB / 2	15	TST	-	-	-	M	M	M	AC-2	20A	2	NF	1	E	E	E	
EUH-1	ELECTRIC UNIT HEATER	5 KW	208 / 3	3#10, 1#10 GRD-3/4"C	RB1	CB / 3	20	TST	-	-	-	M	M	M	EUH-1	BY OTHERS	-	-	-	M	M	E	FACTORY PROVIDED DISCONNECT. WIRE UPSIZED PER EQUIPMENT CUTSHEET.
EUH-2	ELECTRIC UNIT HEATER	5 KW	208 / 3	3#10, 1#10 GRD-3/4"C	RB1	CB / 3	20	TST	-	-	-	M	M	M	EUH-2	BY OTHERS	-	-	-	M	M	E	FACTORY PROVIDED DISCONNECT. WIRE UPSIZED PER EQUIPMENT CUTSHEET.
EUH-3	ELECTRIC UNIT HEATER	3 KW	208 / 1	2#12, 1#12 GRD-3/4"C	RB1	CB / 2	20	TST	-	-	-	M	M	M	EUH-3	BY OTHERS	-	-	-	M	M	E	FACTORY PROVIDED DISCONNECT.
EF-1	EXHAUST FAN	5.1 MCA	120 / 1	2#12, 1#12 GRD-3/4"C	RB1	CB / 1	20	RIB	-	-	1	E	E	E	EF-1	BY OTHERS	-	-	-	M	M	E	FACTORY PROVIDED DISCONNECT. INTERCONNECT TO 120V MOTORIZED DAMPER.
EF-2	EXHAUST FAN	5.1 MCA	120 / 1	2#12, 1#12 GRD-3/4"C	RB1	CB / 1	20	RIB	-	-	1	E	E	E	EF-2	BY OTHERS	-	-	-	M	M	E	FACTORY PROVIDED DISCONNECT. INTERCONNECT TO 120V MOTORIZED DAMPER.
EF-3	EXHAUST FAN	0.2 MCA	120 / 1	2#12, 1#12 GRD-3/4"C	RB1	CB / 1	20	RIB	-	-	1	E	E	E	EF-3	BY OTHERS	-	-	-	M	M	E	FACTORY PROVIDED DISCONNECT. INTERCONNECT TO 120V MOTORIZED DAMPER.
DWH-1	DOMESTIC WATER HEATER	6 KW	208 / 1	2#8, 1#10 GRD-3/4"C	RB1	CB / 2	40	PWCP	-	-	-	M	M	M	DWH-1	NA	NA	NA	NA	E	E	E	USE CIRCUIT BREAKER IN PANEL AS DISCONNECTING MEANS.

(KW)³: HORSEPOWER IS SHOWN UNLESS KILOWATTS (KW) OR MINIMUM CIRCUIT AMPACITY (MCA) IS CALLED OUT

TYPE¹: FS FUSED SWITCH
CB CIRCUIT BREAKER
NA NOT APPLICABLE

TYPE²: COMB COMBINATION MAGNETIC STARTER / DISCONNECT SWITCH OR CIRCUIT BREAKER
MAG MAGNETIC STARTER
MAN MANUAL MOTOR STARTER
PWCP PRE-WIRED CONTROL PANEL
VFD - 4KHZ VARIABLE FREQUENCY DRIVE - MAXIMUM CARRIER FREQUENCY OF 4KHZ
VFD - 12KHZ VARIABLE FREQUENCY DRIVE - MAXIMUM CARRIER FREQUENCY OF 12KHZ
TOG TOGGLE SWITCH (HORSEPOWER RATE)
TST THERMOSTAT
RIB RELAY IN A BOX
2S1W 2-SPEED 1-WINDING MAGNETIC STARTER
2S2W 2-SPEED 2-WINDING MAGNETIC STARTER
NA NOT APPLICABLE

F I C¹: (FURNISHED, INSTALLED, CONNECTED)
M MECHANICAL, PLUMBING, FIRE PROTECTION CONTRACTOR, OR FACTORY
E ELECTRICAL CONTRACTOR
N NOT APPLICABLE

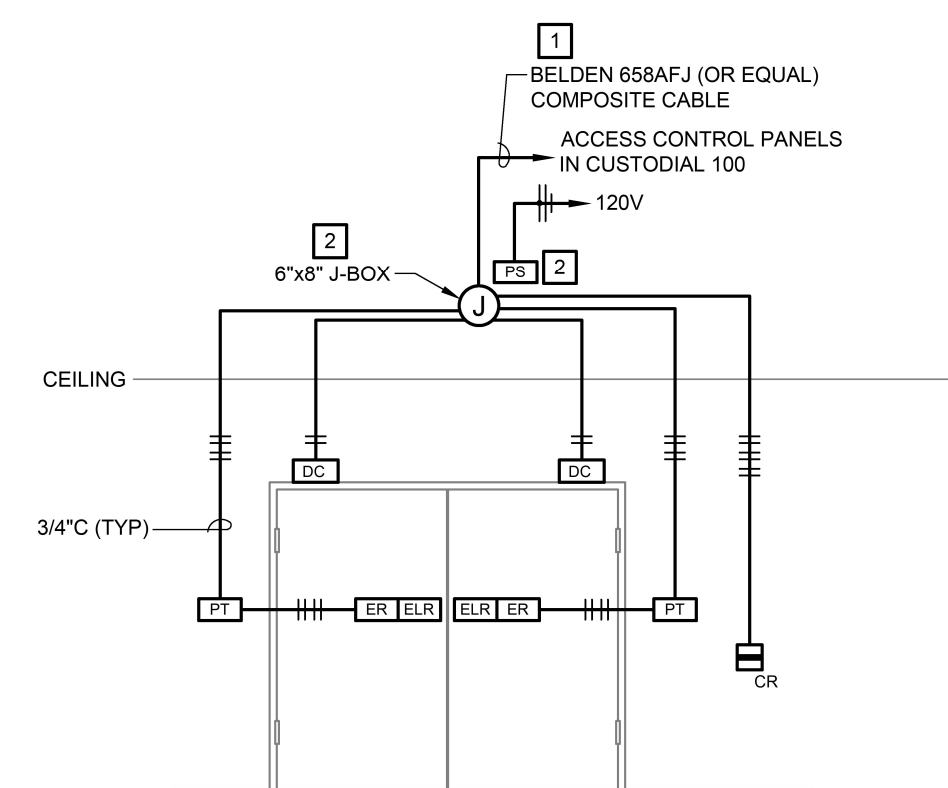


EF-1, EF-2, EF-3 R.I.B. CONNECTION DIAGRAM

ORCHARD FARM HIGH SCHOOL NEW RESTROOMS - LOW VOLTAGE RESPONSIBILITY MATRIX						
SCOPE OF SYSTEM	DATA / TELECOMMUNICATIONS SYSTEM					
	RESPONSIBLE PARTY					
	ELECTRICAL CONTRACTOR		OWNER		GENERAL CONTRACTOR	
	FURNISH	INSTALL	FURNISH	INSTALL	FURNISH	INSTALL
Conduit / Backbox / Pull Strings	X	X				
Data Jacks + Data Jack Terminations	X	X				
Copper + Fiber Optic Wiring	X	X				
Patch Panel Terminations	X	X				
Punch Down Blocks	X	X				
Servers			X	X		
Patch Panels	X	X				
Patch Cords			X	X		
Racks and Wire Management	X	X				
Rack Mounted Power Distribution	X	X				
Wall Outlets / Faceplate / Jacks	X	X				
Testing, Commissioning and Certification	X	X				
Wireless Access Points			X	X		

ACCESS CONTROL SYSTEM						
SCOPE OF SYSTEM	RESPONSIBLE PARTY					
	ELECTRICAL CONTRACTOR		OWNER		GENERAL CONTRACTOR	
	FURNISH	INSTALL	FURNISH	INSTALL	FURNISH	INSTALL
Access Control Main Control Panel	X	X				
Wiring (to and within doors)	X	X				
Power Supplies	X	X				
Power Supply Power (120V and low voltage)	X	X				
Conduit / Backbox / Pull Strings	X	X				
Physwood Board	X	X				
Testing, Commissioning and Certification	X	X				
Door Components (strikes, latches, etc.)					X	X
Wall Outlets	X	X				
Servers			X	X		
Card Readers					X	X
Access Control Software	X	X				
Testing, Certification and Commissioning	X	X				

SECURITY CAMERA SYSTEM						
SCOPE OF SYSTEM	RESPONSIBLE PARTY					
	ELECTRICAL CONTRACTOR		OWNER		GENERAL CONTRACTOR	
	FURNISH	INSTALL	FURNISH	INSTALL	FURNISH	INSTALL
Cameras			X	X		
Conduit / Backbox / Pull Strings	X	X				
Data Jacks + Terminations + Wiring	X	X				
Camera Licenses			X	X		
Camera and Recording Software			X	X		
Testing, Commissioning and Certification			X	X		
Power Supply Power (120V and low voltage)	X	X				
Server(s)			X	X		
Testing, Certification and Commissioning			X	X		

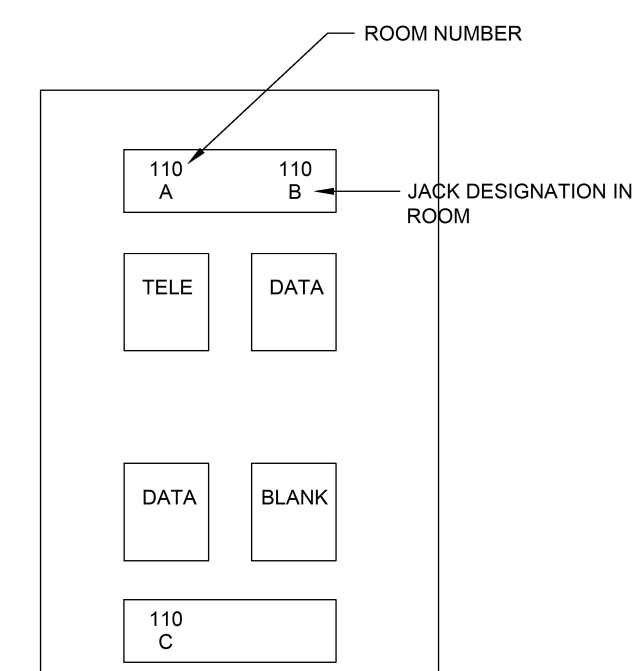


TYPICAL DOOR HARDWARE ROUGH-IN

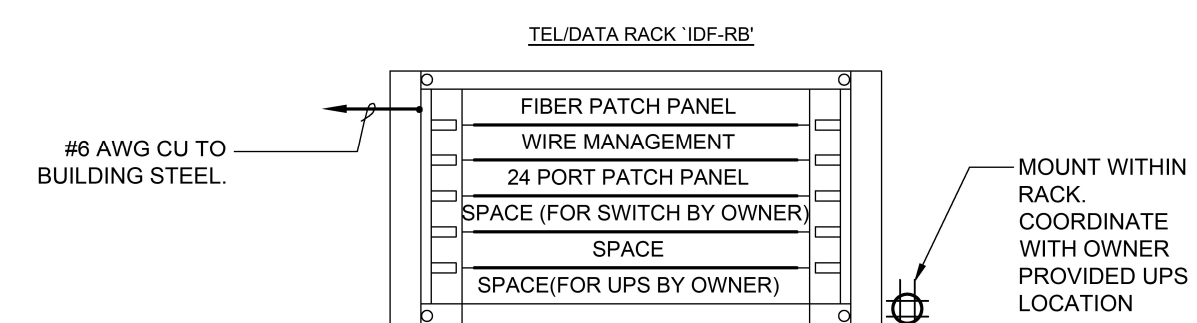
NO SCALE

KEYED NOTES

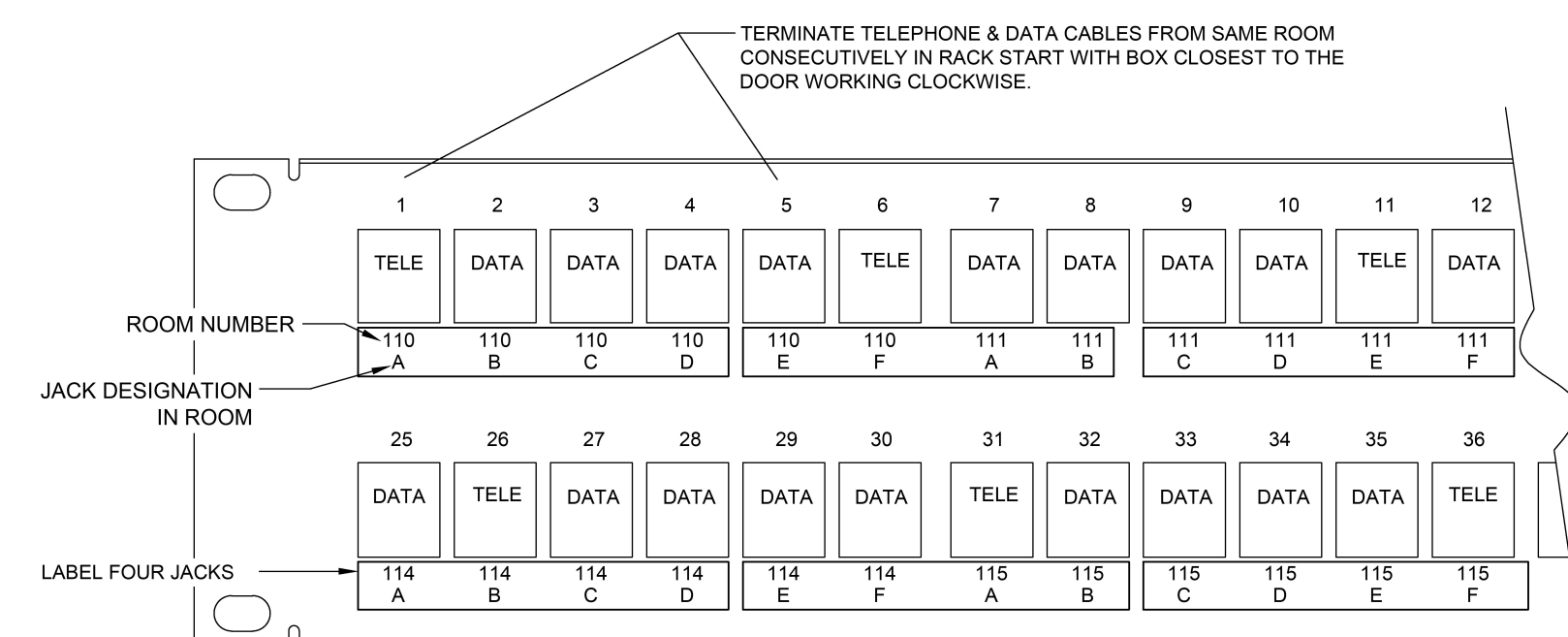
- 1 INSTALL CABLING TO EACH ACCESS CONTROL AND DOOR HARDWARE DEVICE.
- 2 LOCATE ABOVE ACCESSIBLE CEILING SPACE NEAR CORRESPONDING DOOR.



FACEPLATE DETAIL
NO SCALE

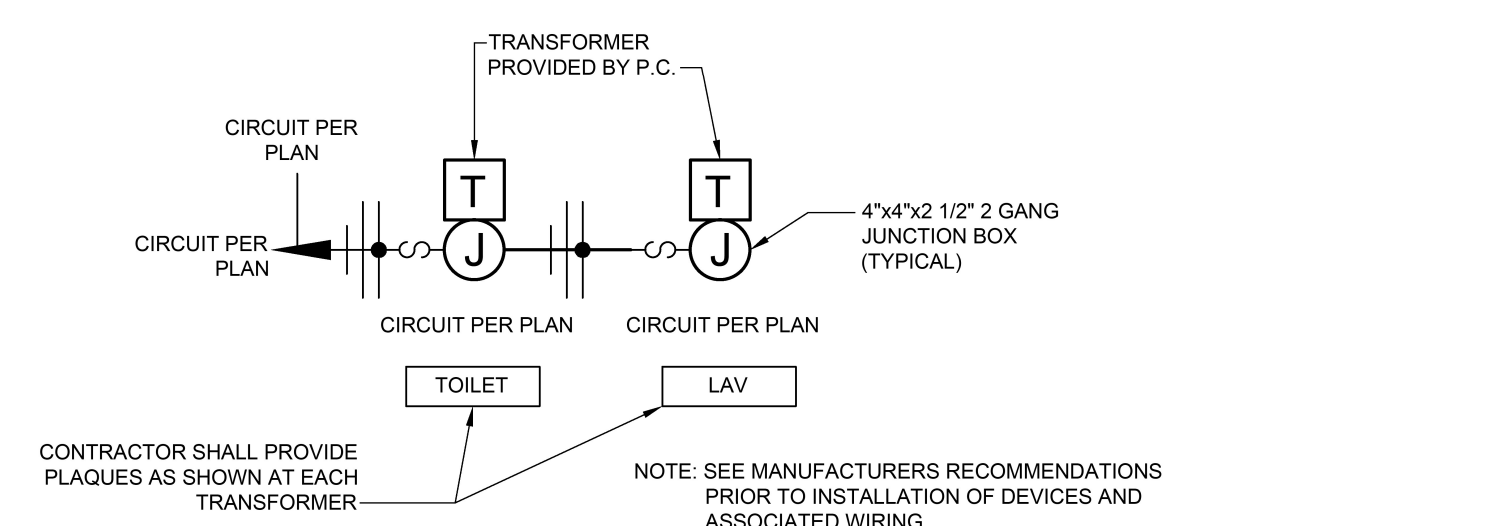


TYPICAL WALL MOUNT TELE/DATA RACK 'IDF-RB' DETAIL
NO SCALE

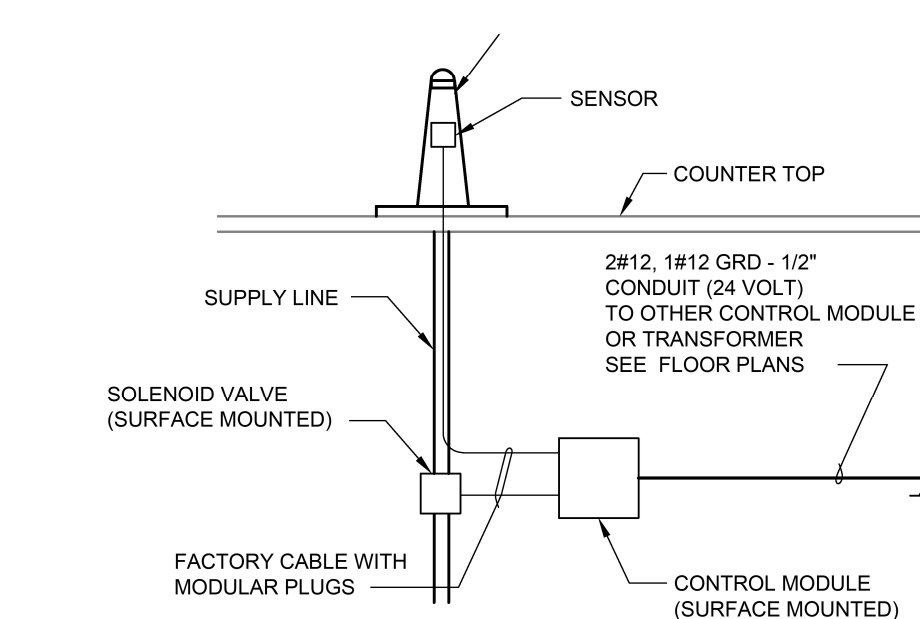


PATCH PANEL DETAIL
NO SCALE

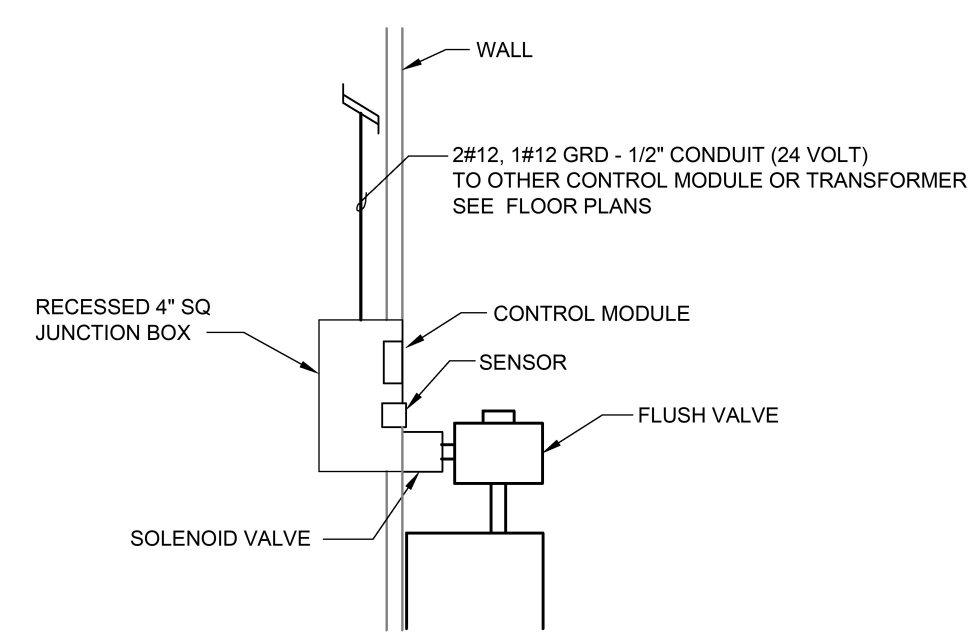
NOTE: CAMERAS, WIRELESS ACCESS POINTS, & INTERCOM DEVICES POINTS SHALL BE TERMINATED IN SEPARATE PATCH PANELS. CONTACT SCHOOL DISTRICT (BILL NIEMEYER) FOR LOCATION WITHIN THE RACK AND LABELING SCHEMES.



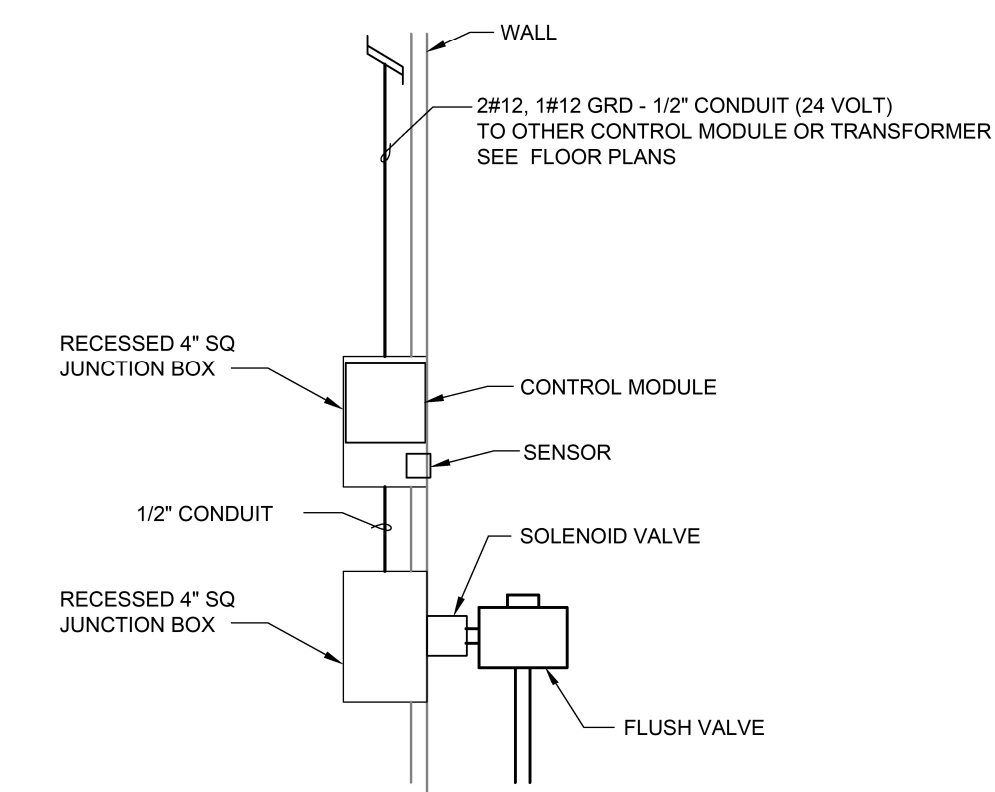
TYPICAL LOW VOLTAGE TRANSFORMER DIAGRAM FOR SENSOR OPERATED (INFRARED) FAUCETS AND FLUSH VALVES
NO SCALE



INFRA-RED SENSOR FAUCET DETAIL
VERIFY REQUIREMENTS WITH MANUFACTURER



INFRA-RED SENSOR URINAL DETAIL
VERIFY REQUIREMENTS WITH MANUFACTURER



INFRA-RED SENSOR TOILET DETAIL
VERIFY REQUIREMENTS WITH MANUFACTURER



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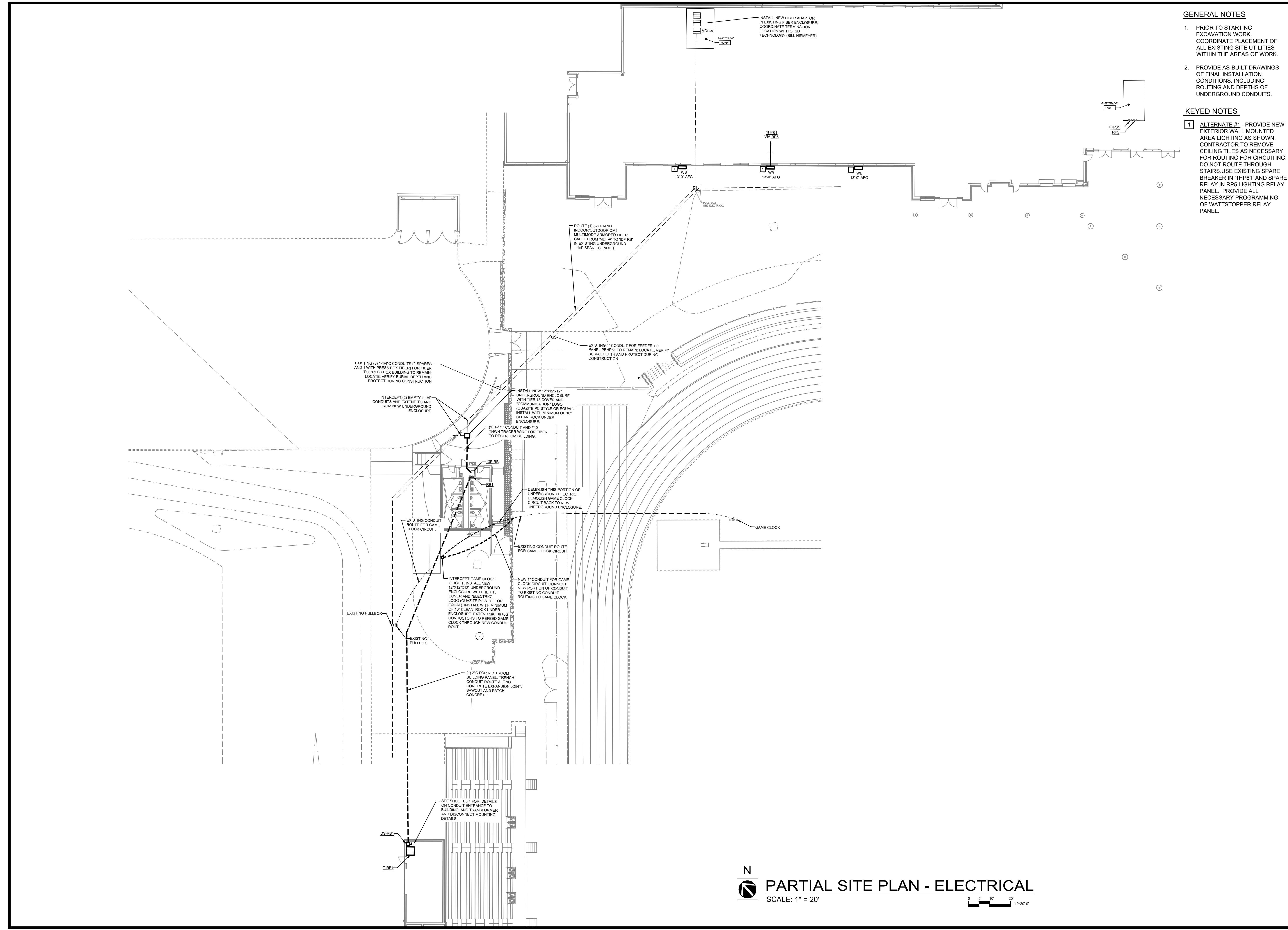
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E0.5



GENERAL NOTES

1. PRIOR TO STARTING EXCAVATION WORK, COORDINATE PLACEMENT OF ALL EXISTING SITE UTILITIES WITHIN THE AREAS OF WORK.
2. PROVIDE AS-BUILT DRAWINGS OF FINAL INSTALLATION CONDITIONS, INCLUDING ROUTING AND DEPTHS OF UNDERGROUND CONDUITS.

KEYED NOTES

1. ALTERNATE #1 - PROVIDE NEW EXTERIOR WALL MOUNTED AREA LIGHTING AS SHOWN. CONTRACTOR TO REMOVE CEILING TILES AS NECESSARY FOR ROUTING FOR CIRCUITING. DO NOT ROUTE THROUGH STAIRS. USE EXISTING SPARE BREAKER IN '1HP61' AND SPARE RELAY IN RP5 LIGHTING RELAY PANEL. PROVIDE ALL NECESSARY PROGRAMMING OF WATTSTOPPER RELAY PANEL.

PARTIAL SITE PLAN - ELECTRICAL
 SCALE: 1" = 20'



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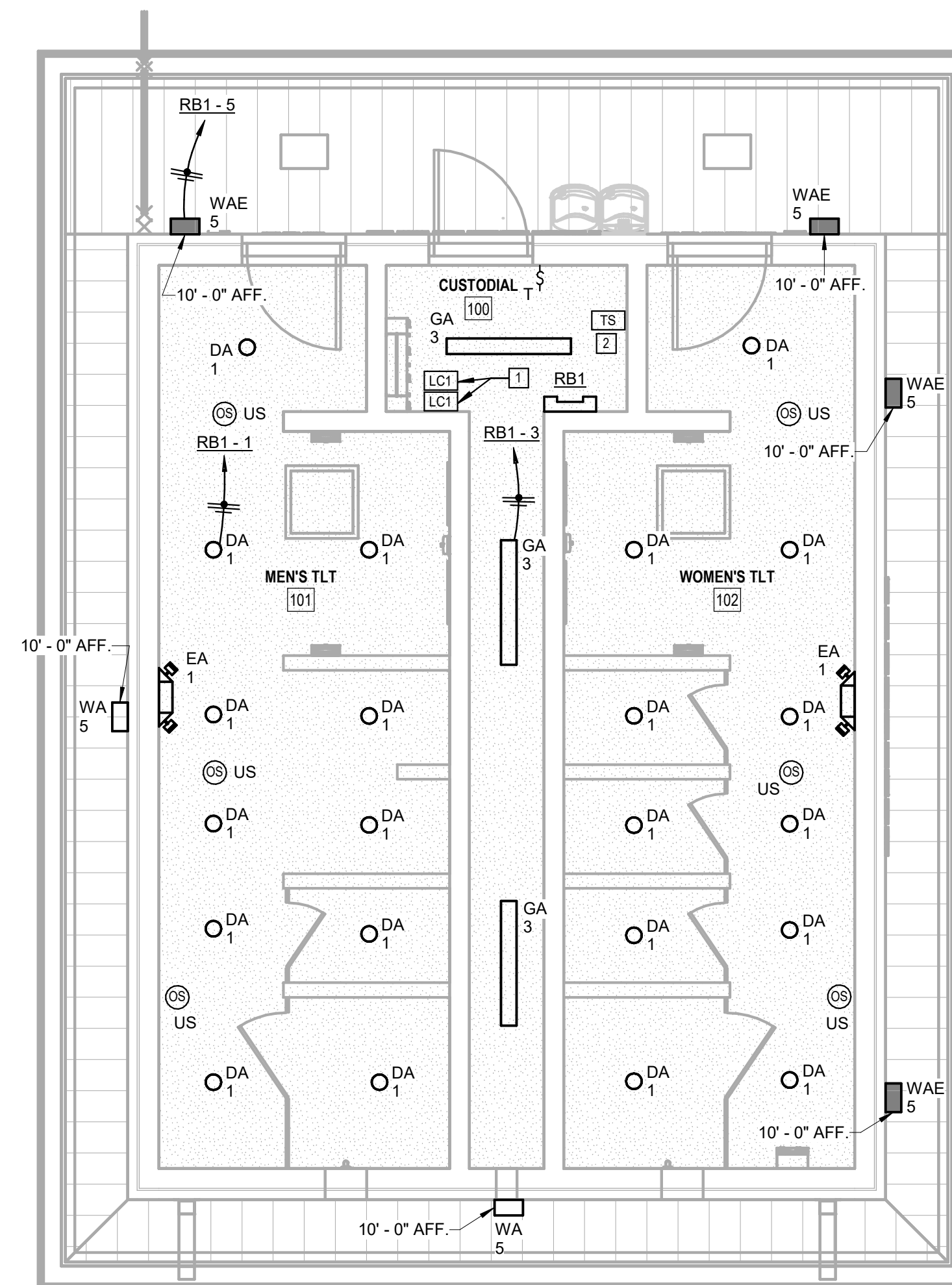
E1.0

GENERAL NOTES

- SEE E0.2 SERIES SHEETS FOR LUMINAIRE SCHEDULE, LIGHTING CONTROL MATRIX, RELAY SCHEDULES, LIGHT FIXTURE MOUNTING DETAILS, AND LIGHTING CONTROL DIAGRAMS.
- ELECTRICAL PANELBOARD DIRECTORIES SHALL BE LABELED WITH FINAL ROOM NUMBERS.
- INSTALL 0-10V DIMMING CONTROL WIRING FROM DIMMING CONTROLS TO CORRESPONDING LIGHT FIXTURES. ALL CONTROL WIRES TO BE PLENUM RATED.
- ELECTRICAL CONTRACTOR SHALL PROGRAM AND MASK OCCUPANCY SENSORS FOR DESIRED OPERATION.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ARCHITECT AND LIGHTING DESIGNER IN AIMING ADJUSTABLE LIGHTS AND PROGRAMMING SETTINGS FOR LIGHTING CONTROLS.
- E.C. SHALL COORDINATE WITH OTHER TRADES, AND ADJUST LIGHTING LOCATIONS, MOUNTING HEIGHTS, AND MOUNTING METHODS TO PROVIDE A GOOD GENERAL LIGHTING LAYOUT/COVERAGE WITHIN MECHANICAL SPACES.

KEYED NOTES

- LIGHTING CONTROLLERS FOR MEN'S AND WOMEN'S TOILET; MOUNT AT +84" AFF.
- ASTRONOMICAL DIGITAL TIME SWITCH (WATTSTOPPER RT-200 OR EQUAL) FOR BUILDING EXTERIOR MOUNTED LIGHT FIXTURES.



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



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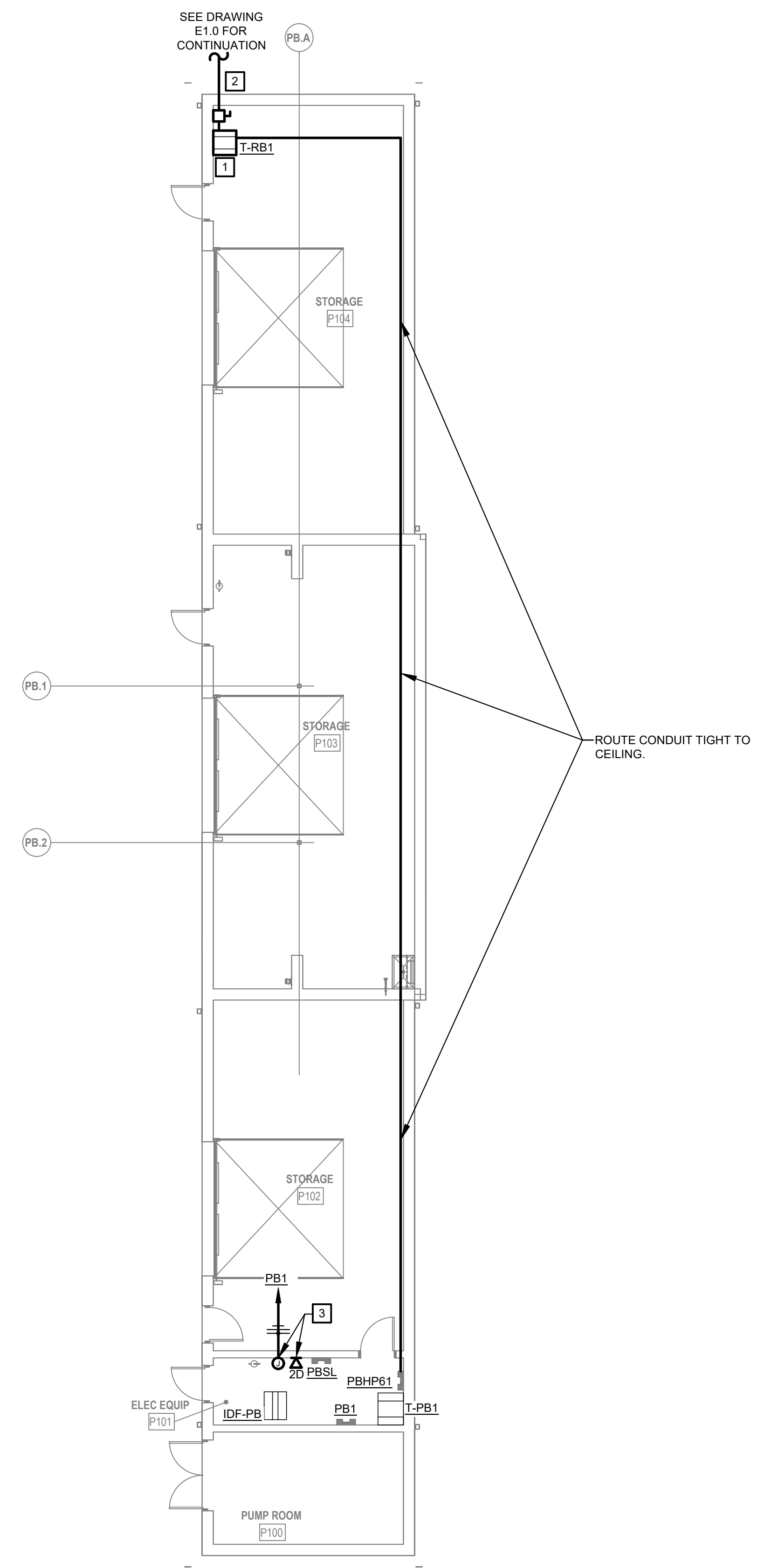
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E2.0

KEYED NOTES

- 1 WALL MOUNT TRANSFORMER AND DISCONNECT SO BOTTOM OF THEM IS AT 7'-0" AFF.
- 2 ROUTE CONDUIT DOWN INTERIOR WALL IN STORAGE AND PENETRATE WALL AT 24" AFF. ON EXTERIOR SIDE OF PENETRATION, INSTALL LB CONDUIT FITTING AND TRANSITION TO UNDERGROUND CONDUIT FOR ROUTING TO RESTROOM BUILDING. SEAL WALL PENETRATION WATER TIGHT. EXPOSED EXTERIOR CONDUIT TO BE GALVANIZED RIGID STEEL.
- 3 POWER AND DATA FOR TEMPERATURE CONTROL PANEL. USE EXISTING SPARE BREAKER IN 'PB1' FOR NEW CIRCUIT.



PRESS BOX - LOWER LEVEL - POWER
 SCALE: 1/8" = 1'



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E3.1