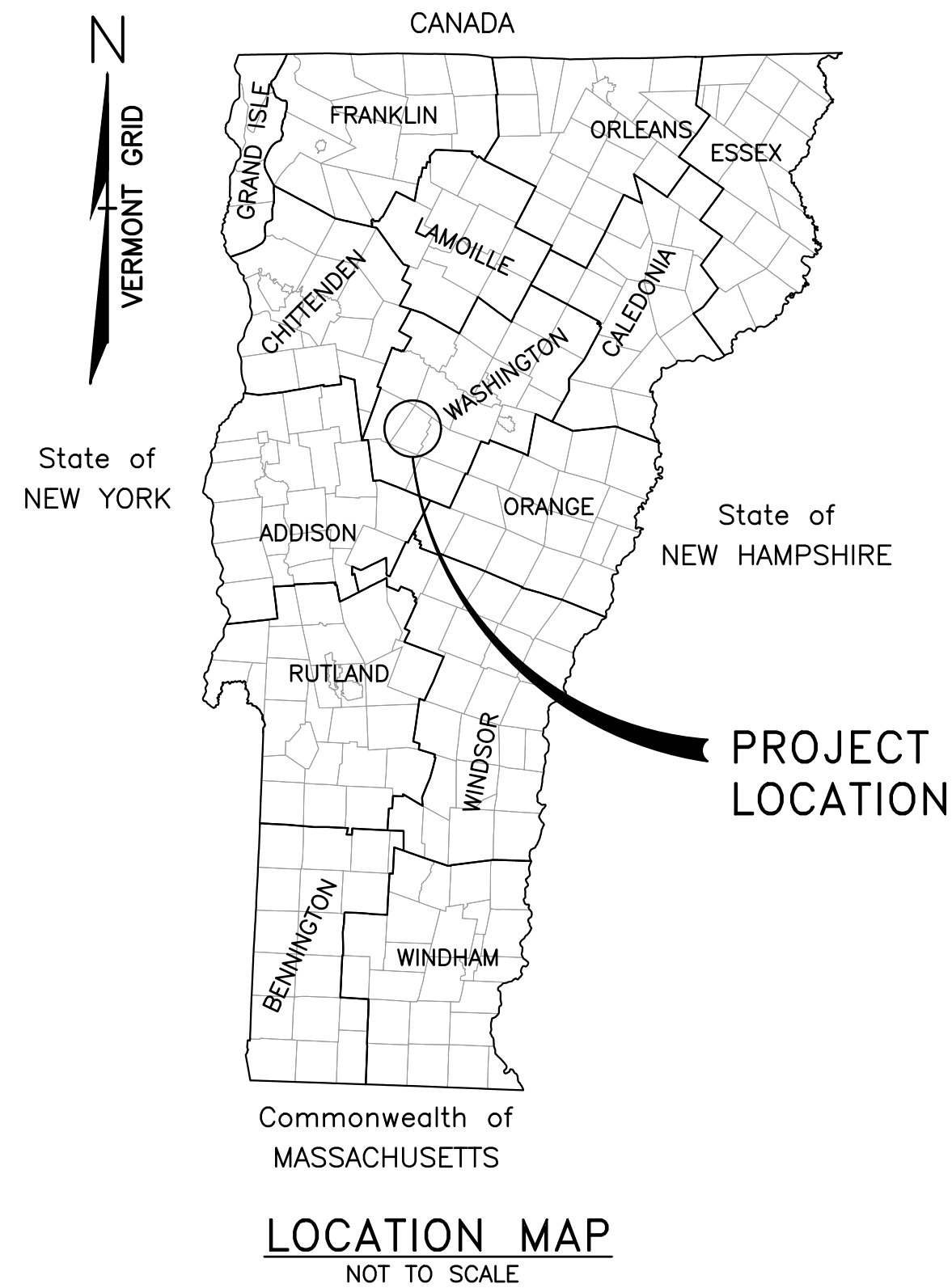
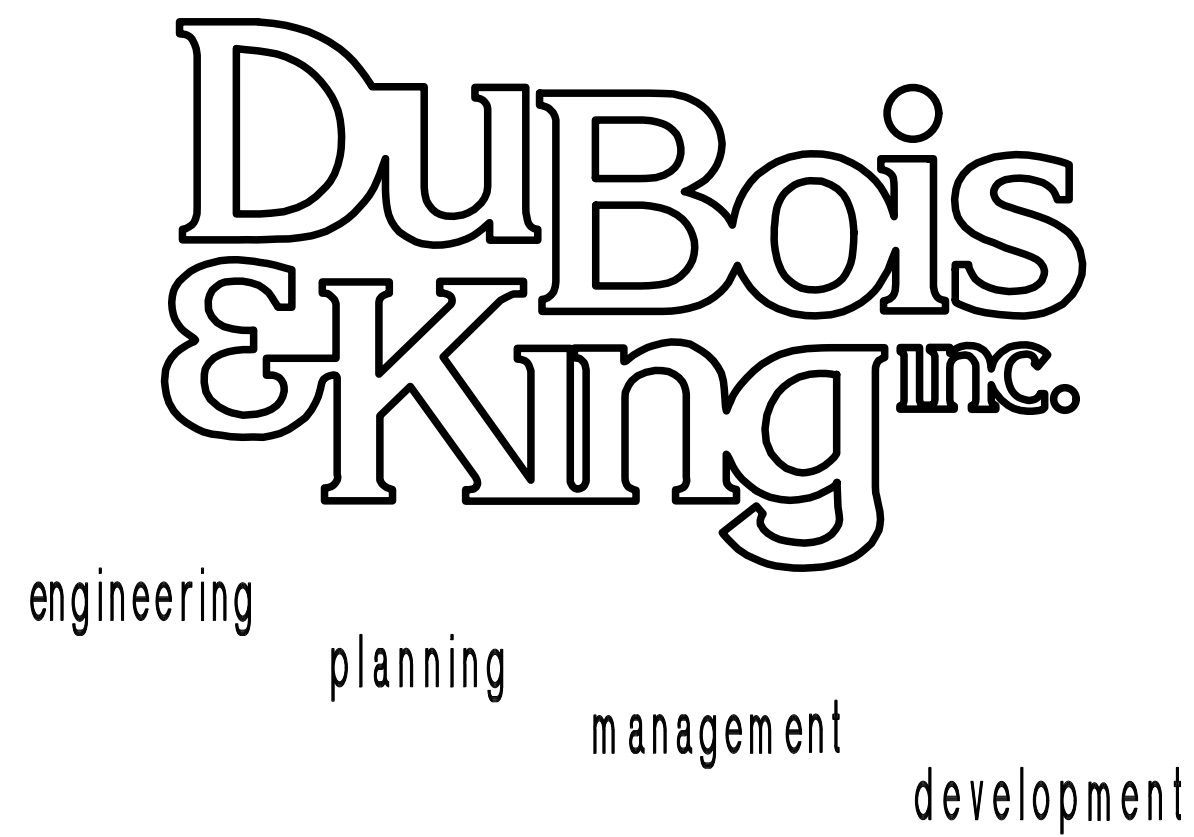
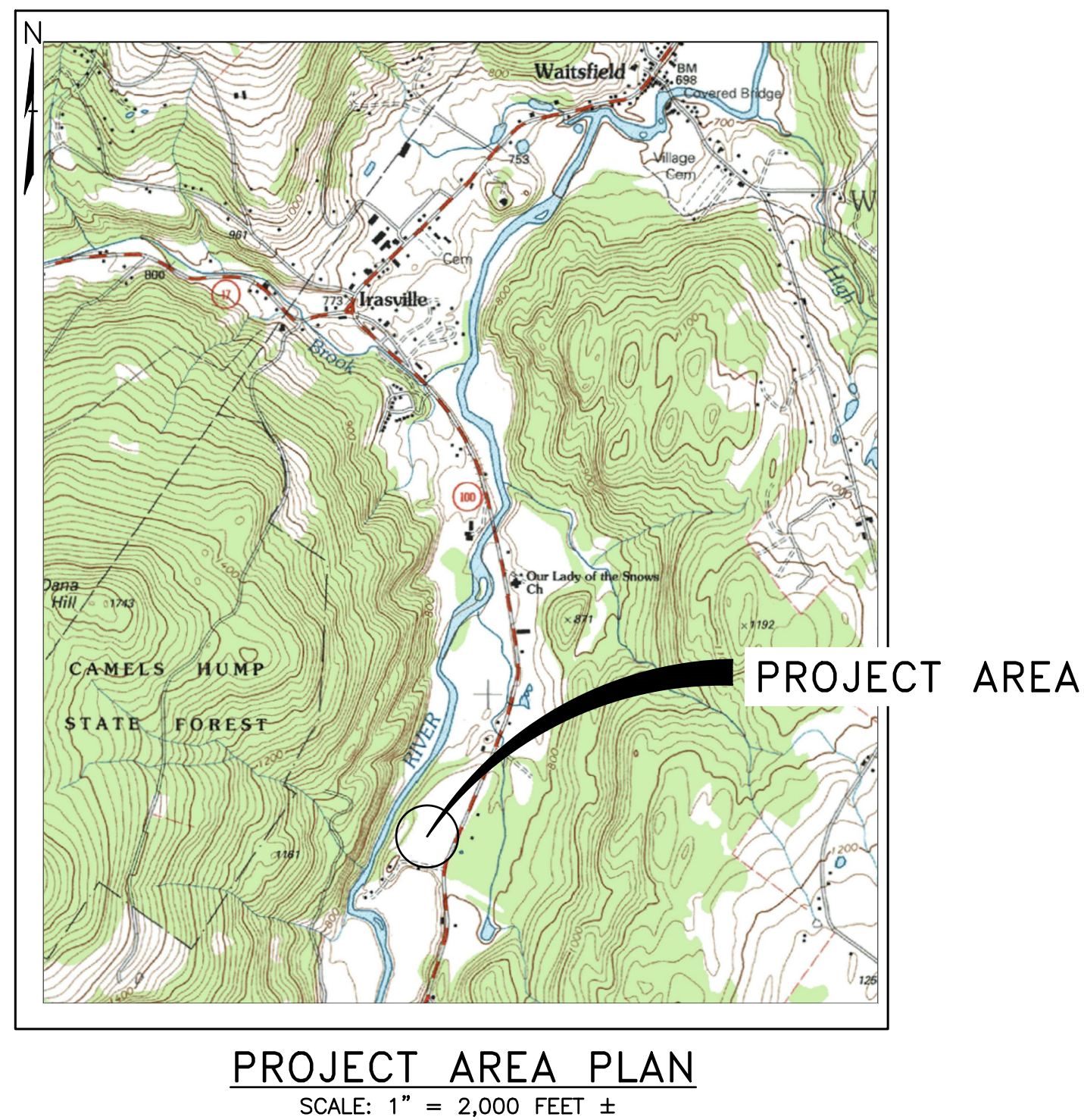




TOWN OF WAITSFIELD WAITSFIELD, VERMONT

WASTEWATER TREATMENT FACILITY

CONTRACT NO. 1



REVISIONS	REVISION DESCRIPTION	DATE	NUMBER	BY

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
FACILITY
PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE
CONTRACT NO. 1
TITLE SHEET

D&K PROJECT # 227947	PROJ. ENG. JBA
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DATE
JULY 2026

SHEET NUMBER
G1

EXISTING

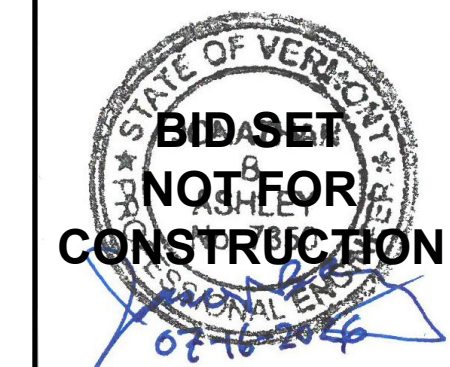
	MAJOR CONTOUR
	MINOR CONTOUR
	EDGE OF PAVEMENT
	EDGE OF GRAVEL
	PARCEL BOUNDARY
	RIGHT OF WAY
	TREE LINE
	UNDER GROUND ELECTRICAL
	UNDER GROUND CABLE
	WATER MAIN
	SEWER
	STORM DRAIN
	FENCE
	STONE WALL
	WETLAND
	WETLAND BUFFER
	RIVER CORRIDOR
	ZONE A FLOOD ZONE
	ZONE AE FLOOD ZONE
	ZONE X FLOOD ZONE
	BUILDING
	LEDGE OUTCROP
	BENCH MARK
	CATCH BASIN
	TELEPHONE MANHOLE
	SEWER MANHOLE
	MANHOLE
	GAS MANHOLE
	ELECTRICAL MANHOLE
	WELL
	UTILITY POLE
	CONTROL POINT
	LIGHT POLE
	SIGN (2 POST)
	SIGN (1 POST)
	GAS VALVE
	HYDRANT
	IRON PIPE FOUND
	WATER SHUT OFF
	GAS SHUT OFF
	TREE
	GUY WIRE
	STONE BOUND
	MAILBOX
	BORING
	TEST PIT
	MONITORING WELL
	HAZARDOUS WASTE SITE
NEW	
	SEWER MAIN
	SEWER SERVICE
	FORCE MAIN
	FORCE MAIN SERVICE
	WATER SERVICE
	SEWER MANHOLE
	VALVE VAULT
	AIR RELEASE
	FORCE MAIN VALVE
	ONE WAY CLEANOUT
	TWO WAY CLEANOUT
	SEWER SERVICE
	WATER SERVICE
	DIRECTIONAL DRILL
	UNDERGROUND SIGNAL
	UNDERGROUND ELECTRICAL AND SIGNAL
	UNDERGROUND ELECTRICAL AND FIBER
	SILT FENCE
	STABILIZED CONSTRUCTION ENTRANCE
	PROJECT DEMARCATION FENCE
	PERMANENT EASEMENT
	TEMPORARY EASEMENT
	WELL PROTECTION ZONE
	LIMIT OF DISTURBANCE

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TITLE SHEET
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GENERAL NOTES
PRESSURE AND LEAKAGE TESTING NOTES
HYDRAULIC PROFILE
PROCESS FLOW SCHEMATIC
WWTF SITE CONTROL BUILDING EXISTING CONDITIONS
WWTF SITE FIELDS EXISTING CONDITIONS
WWTF SITE CONTROL BUILDING
WWTF SITE FIELDS
WWTF SITE CONTROL BUILDING SITE PLAN
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FLOOR PLAN
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PROCESS DETAILS
CHEMICAL SCHEMATICS AND DETAILS
DISPOSAL FIELD VALVE VAULT
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SITE DETAILS
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LANDSCAPING BUILDING SITE
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GENERAL NOTES & ABBREVIATIONS
LIFE SAFETY CODE SUMMARY & PLANS
ENERGY CODE COMPLIANCE
BASEMENT PLAN
FIRST FLOOR PLAN
EQUIPMENT PLATFORM PLAN
ROOF PLAN
REFLECTED CEILING PLANS
EXTERIOR ELEVATIONS
BUILDING SECTIONS
WALL SECTIONS
EXTERIOR DETAILS
EXTERIOR DETAILS
INTERIOR ELEVATIONS
INTERIOR DETAILS
SCHEDULES

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G3	3 OF 85		TYPICAL DETAILS
G4	4 OF 85		FOUNDATION PLAN
G5	5 OF 85		FLOOR PLAN
G6	6 OF 85		MEZZANINE FLOOR PLAN
C1	7 OF 85		ROOF FRAMING PLAN
C2	8 OF 85		FOUNDATION SECTIONS AND DETAILS
C3	9 OF 85		FOUNDATION SECTIONS AND DETAILS
C4	10 OF 85		SBR TANK SECTIONS AND DETAILS
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P12	23 OF 85		PLUMBING PLAN – BASEMENT
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A0.2	27 OF 85		ELECTRICAL LEGENDS & NOTES
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A2.1	29 OF 85		FIRST FLOOR ELECTRICAL PLAN
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WAITSFIELD
WASTEWATER
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PROJECT ADDRESS
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SHEET TITLE

CONTRACT NO.

LIST OF SHEETS

LEGEND

D&K PROJECT # 227947	PROJ. ENG. JBA
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DATE
JULY 2026

G2

SHEET: 2 of 85

BID SET
NOT FOR CONSTRUCTION

CONSTRUCTION NOTES

1. CONTRACTOR TO BE RESPONSIBLE FOR MAINTAINING FUNCTION OF EXISTING UTILITIES (WATER, SEWER AND STORM DRAIN SYSTEMS) DURING INSTALLATION OF NEW UTILITIES, AND UNTIL NEW UTILITIES ARE INSTALLED, TESTED, ACCEPTED AND PLACED INTO SERVICE. THE COST ASSOCIATED WITH MAINTAINING EXISTING UTILITY FUNCTION SHALL BE PART OF THE UNIT PRICE OF UTILITY INSTALLED.
2. CONTRACTOR SHALL PROVIDE NEW GRAVEL AND CRUSHED GRAVEL AS SPECIFIED WITH THE TRENCH RESTORATION PRIOR TO PLACING TEMPORARY PAVEMENT.
3. ALL LAWNS AND WALKS SHALL BE REPAIRED BY THE CONTRACTOR AS PART OF THE UNIT PRICE OF UTILITY INSTALLED.
4. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR TEMPORARY SUPPORT OF UTILITY POLES.
5. THE CONTRACTOR MUST PROVIDE A MINIMUM OF ONE LANE OF TRAFFIC ALONG ALL ROADWAYS FOR THE DURATION OF THE PROJECT.
6. CONTRACTOR SHALL REPLACE PAVEMENT STRIPING REMOVED DURING INSTALLATION OF UTILITY IMPROVEMENTS.
7. CONTRACTOR RESPONSIBLE FOR MAINTAINING ALL NECESSARY SEPARATIONS FROM SEPTIC AND SEWER PROVIDING PROPER MITIGATION WHEN SEPARATION DISTANCES CANNOT BE ACHIEVED. SEE SPECIFICATIONS FOR DETAILS.
8. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES BEFORE CONSTRUCTION AND BEFORE ORDERING ANY PRECAST STRUCTURES.

MATERIAL SPECIFICATIONS:

1. SEE SPECIFICATIONS SECTION.

GENERAL NOTES

1. GENERAL NOTES APPLY TO ALL DRAWINGS IN THE CONTRACT DOCUMENTS, AND DRAWING NOTES APPLY ONLY TO THOSE DRAWINGS ON WHICH THEY APPEAR.
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION PROCEDURES, SCHEDULES, TRAFFIC CONTROL, AND EQUIPMENT WITH THE OWNER. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION SCHEDULE WITH ANY AND ALL AFFECTED UTILITIES IN ORDER TO PREVENT UNNECESSARY DELAYS IN THE WORK, AND/OR INTERRUPTION OF SERVICE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PAVEMENT AND ROADWAYS OUTSIDE THE WORK AREA. THE CONTRACTOR SHALL REPAIR, AT NO COST TO THE OWNER, ALL DAMAGED AREAS RESULTING FROM THEIR OPERATIONS OR THEIR SUB-CONTRACTORS. ANY AREAS OUTSIDE THE WORK AREA DISTURBED BY THE OPERATIONS OF THE CONTRACTOR SHALL BE RESTORED TO ORIGINAL CONDITIONS, REGARDLESS OF WHETHER THE RESTORATION IS SHOWN ON THE DRAWINGS.
4. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND MAINTAIN TRAFFIC IN A SAFE MANNER THROUGHOUT THE CONSTRUCTION ACTIVITIES.
5. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE.
6. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
7. CONTRACTORS SHALL COORDINATE WITH DIG-SAFE (1-888-344-7233) A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION. DIG-SAFE SHALL BE NOTIFIED "FOR EXCAVATION ACTIVITIES CONDUCTED WITHIN 100 FEET OF AN UNDERGROUND UTILITY FACILITY." CONTRACTOR SHALL "PREMARK PROPOSED EXCAVATION AREAS BEFORE CALLING DIG-SAFE."
8. ALL AREAS BEYOND THE LIMITS OF CONSTRUCTION WHICH ARE DISTURBED OR DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR AT NO COST TO THE OWNER.
9. ANY PROPERTY LINES SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY, AND SHOWN ONLY FOR REFERENCE.
10. BEARINGS ARE BASED ON VERMONT STATE PLANE GRID NORTH.
11. TOPOGRAPHIC INFORMATION DEVELOPED FROM SURVEY PERFORMED ON 9/5/25, BY DUBOIS AND KING INC.
12. ELEVATIONS ARE BASED ON NAVD88 DATUM. HORIZONTAL POSITIONS ARE BASED ON NAD83 DATUM
13. THE PROPERTY LINES, EASEMENTS, AND OTHER REAL PROPERTY DESCRIPTIONS PROVIDED IN THESE PLANS DO NOT DEFINE LEGAL RIGHTS OR MEET LEGAL REQUIREMENTS FOR A LAND SURVEY AND SHALL NOT BE USED IN LIEU OF A SURVEY AS THE BASIS OF ANY LAND TRANSFER OR ESTABLISHMENT OF ANY PROPERTY RIGHT.

ELECTRICAL GENERAL NOTES

1. COORDINATE ALL ELECTRICAL SITE WORK WITH THE SITE TRADES FOR EXCAVATION AND BACKFILL OF TRENCHES ASSOCIATED WITH ALL UNDERGROUND CONDUITS.
2. THE DISTANCE BETWEEN HANDHOLES SHALL NOT EXCEED THREE HUNDRED FEET. ALL CONDUIT SWEEPS TURNED UP IN EQUIPMENT SLABS SHALL BE INSTALLED AS RIGID STEEL GALVANIZED CONDUIT. GROUND STEEL CONDUITS IN ACCORDANCE WITH APPLICABLE CODES.
3. ALL EMPTY CONDUITS SHALL CONTAIN A NYLON PULL ROPE AND BE CAPPED AT BOTH ENDS.
4. PROVIDE HANDHOLE BOXES AND EXTENSIONS TO ALLOW FOR CONDUIT BURIAL DEPTHS AND CONDUIT/BOX FILL CODE REQUIREMENTS.
5. ALL CONDUITS INSTALLED BELOW GRADE SHALL BE SCHEDULE 80 PVC MINIMUM, UNLESS OTHERWISE NOTED OR SHOWN ON THE DRAWINGS.
6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PRE-CAST CONCRETE, PULL BOXES AND HANDHOLES PROCUREMENT AND INSTALLATION.
7. SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

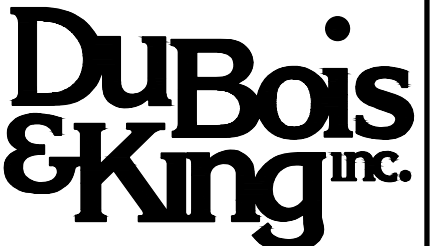
SOIL EROSION & SEDIMENTATION CONTROL

1. THIS PROJECT SHALL FOLLOW THE LOW RISK SITE HANDBOOK (2025) AT A MINIMUM.
2. CONTRACTOR SHALL CONSTRUCT TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL FACILITIES PRIOR TO THE COMMENCEMENT OF EARTHWORK OPERATIONS. EROSION CONTROL MEASURES SHALL INCLUDE, BUT ARE NOT LIMITED TO, ITEMS IDENTIFIED WITHIN THIS PLAN SET OR WITHIN THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION (VTDEC) BEST MANAGEMENT PRACTICES (BMP'S) FOR EROSION CONTROL. SEE EROSION AND SEDIMENTATION CONTROL PLAN AND EROSION SEDIMENTATION CONTROL NOTES & DETAIL SHEET.
3. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN EROSION AND SEDIMENTATION CONTROL DEVICES THROUGHOUT THE PROJECT SITE FOR THE DURATION OF ALL CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL (DAILY OR AS REQUIRED BASIS) INSPECT AND RECORD FINDINGS OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES TO ENSURE THAT ALL ITEMS ARE IN STABLE CONDITION. IN THE EVENT THAT SAID ITEMS ARE DETERMINED TO BE IN UNSATISFACTORY CONDITION, THE CONTRACTOR SHALL RECORD THE UNSATISFACTORY ISSUE, THE DATE OF THE UNSATISFACTORY FINDING, THE APPROPRIATE CORRECTIVE MEASURE AND THE DATE THE CORRECTIVE MEASURE WAS COMPLETED.
4. ALL DISTURBED AREAS SHALL NOT BE LEFT BARE FOR MORE THAN 7 DAYS, SHALL BE STABILIZED IN A MANNER TO MITIGATE EROSION OR SEDIMENTATION FROM EXITING THE LIMIT OF WORK AND SHALL BE RESTORED IN-KIND UPON COMPLETION OF THE PROJECT. THE MAXIMUM AREA ALLOWED TO BE DISTURBED AND LEFT UNSTABILIZED IS ONE ACRE PER DRAINAGE AREA.
5. ALL SLOPES GREATER THAN 1V:3H SHALL BE PROTECTED FROM EROSION WITH EROSION CONTROL BLANKETS OR OTHER APPROPRIATE SLOPE STABILIZATION CONTROL MEASURES PRIOR TO LOAMING, SEEDING AND MULCHING WITHIN 72 HOURS OF COMPLETION. CONTRACTOR SHALL MAINTAIN EROSION CONTROL PROTECTION UNTIL VEGETATION GROWTH HAS BEEN ESTABLISHED. ALL SLOPE STABILIZATION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND VERMONT BEST MANAGEMENT PRACTICES.
6. ALL SWALES AND DITCHES WITH SLOPES EXCEEDING 5% SLOPE SHALL BE PROTECTED FROM EROSION WITH MATTING. ALL MATTING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. ALL SWALES AND DITCHES SHALL BE PROPERLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
7. THE CONTRACTOR SHALL NOT PLACE PERMANENT PLANTING AND SEEDING PRIOR TO MAY 1st AND AFTER SEPTEMBER 1st. TEMPORARY SEEDING SUCH AS WINTER RYE MAY BE USED OUTSIDE OF THIS PERIOD.
8. ALL WORK MUST BE DONE IN A MANNER WHICH MINIMIZES THE POTENTIAL FOR THE DISCHARGE OF SEDIMENT-LADEN WATER. CONTRACTOR IS RESPONSIBLE FOR DIVERTING, PUMPING, OR OTHERWISE CONTROLLING WATER AS NECESSARY.
9. ANY EPSC MEASURES NOT SHOWN IN THIS PLAN SET SHALL BE PERFORMED IN ACCORDANCE WITH THE VERMONT DEC LOW RISK SITE HANDBOOK FOR EROSION PREVENTION & SEDIMENT CONTROL.

CONSTRUCTION IN WETLAND/BUFFERS:

WHERE EARTHWORK IS CONDUCTED WITHIN WETLAND BUFFERS:

1. ENGINEER SHALL REVIEW SITE WORK PLAN WITH CONTRACTOR TO IDENTIFY LIMITATIONS FOR EQUIPMENT USE AND DISTURBANCE.
2. DELINEATE WETLAND BOUNDARIES IN THE PROPOSED WORK AREA AND MARK CONSTRUCTION LIMITS WITH SNOW FENCING.
3. PLACE APPROPRIATE EROSION CONTROL BARRIER (SILT FENCE OR APPROVED PERIMETER CONTROL) BETWEEN WORK AREA.
4. RESTORE DISTURBED AREAS TO PREVIOUS ELEVATION WITH INDIGENOUS MATERIAL AND RAKE SMOOTH. EXCESS MATERIAL SHALL BE REMOVED TO A NON-WETLAND AREA FOR DISPOSAL.
5. INSPECT RESTORED AREAS TO CONFIRM STABILITY, REPAIR AS REQUIRED.



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CLIENT NAME
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WASTEWATER
TREATMENT
FACILITY

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE

CONTRACT NO. 1

GENERAL NOTES

D&K PROJECT # 227947	PROJ. ENG. JBA
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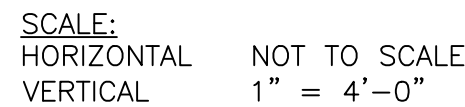
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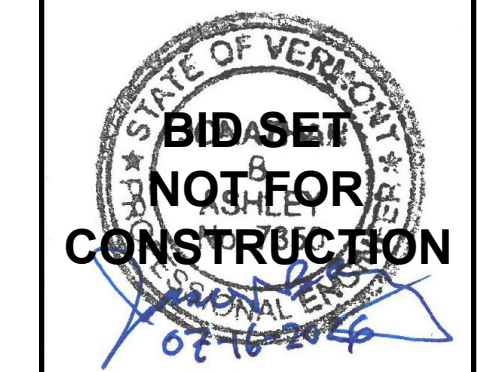
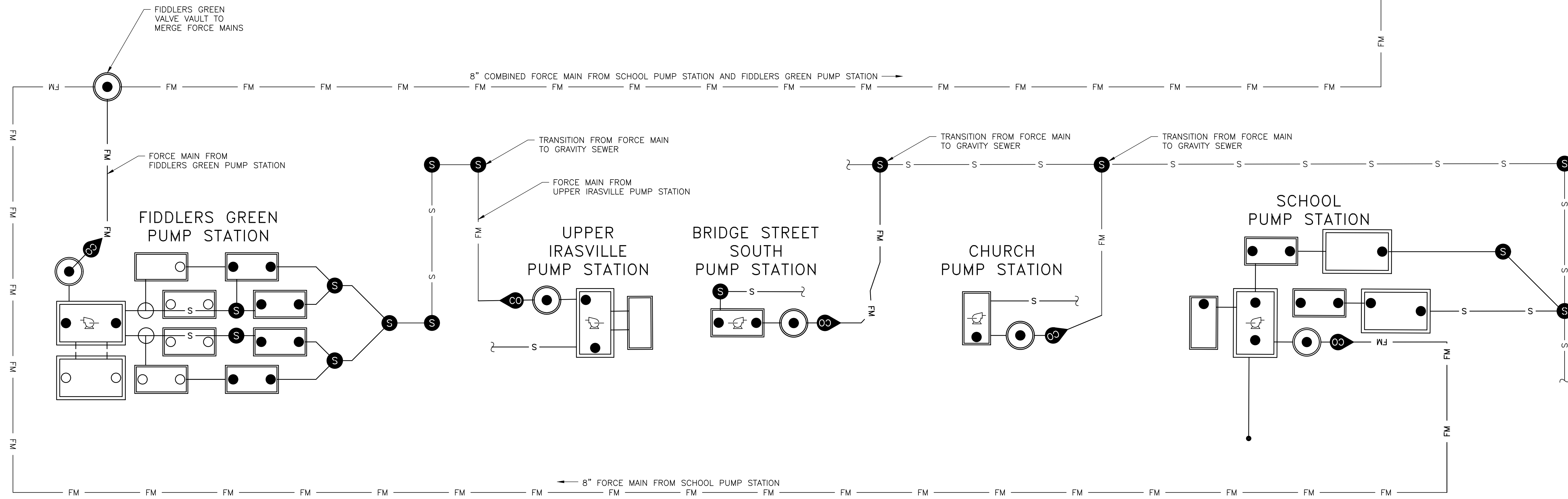
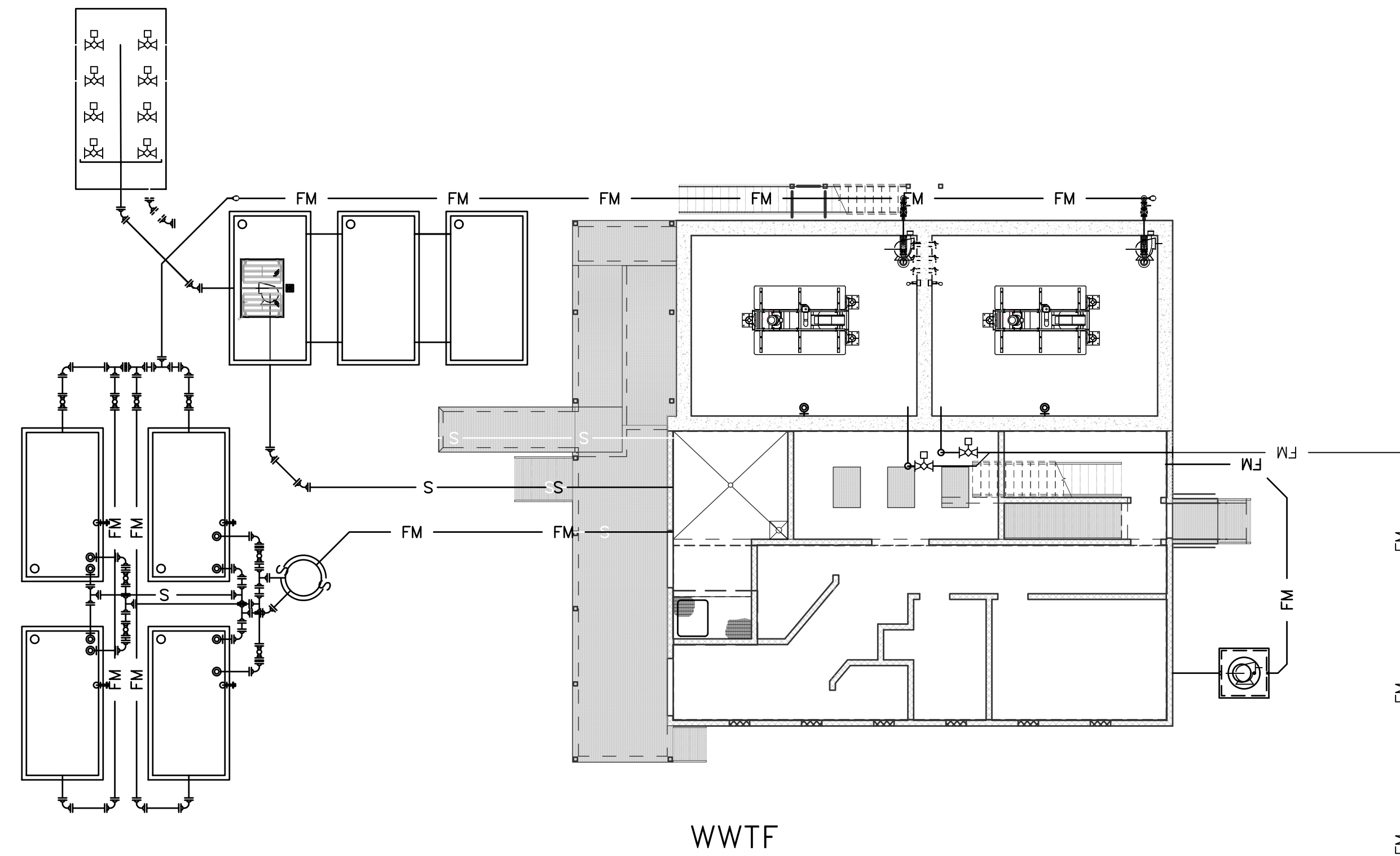
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SHEET: 3 of 85

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4144 MAIN STREET
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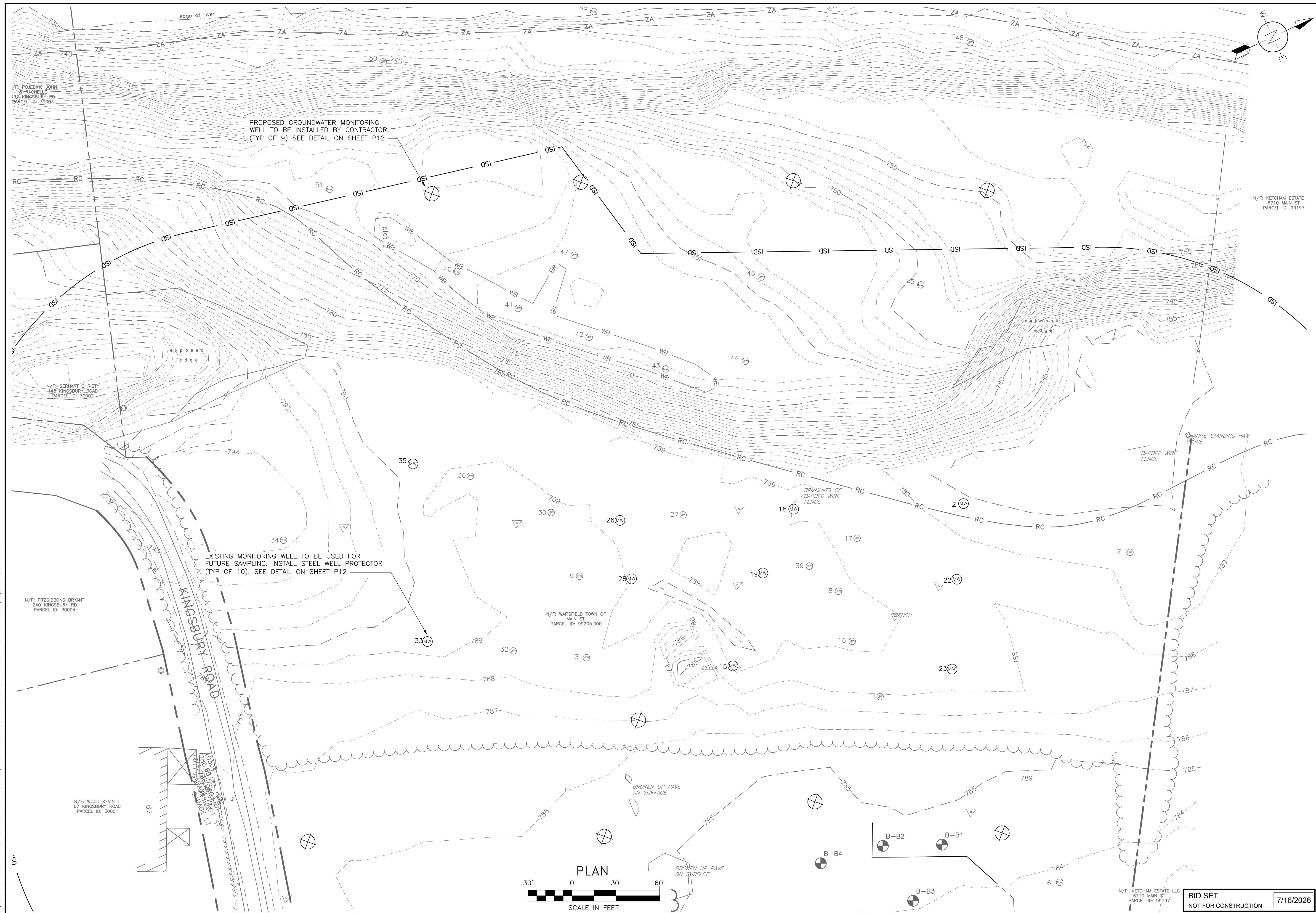
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CONTRACT NO. 1
SYSTEM FLOW
SCHEMATIC

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SHEET TITLE

CONTRACT NO. 1
LEACH FIELDS
EXISTING
CONDITIONS AND
MONITORING WELL
PLAN

D&K PROJECT #	PROJ. ENG.
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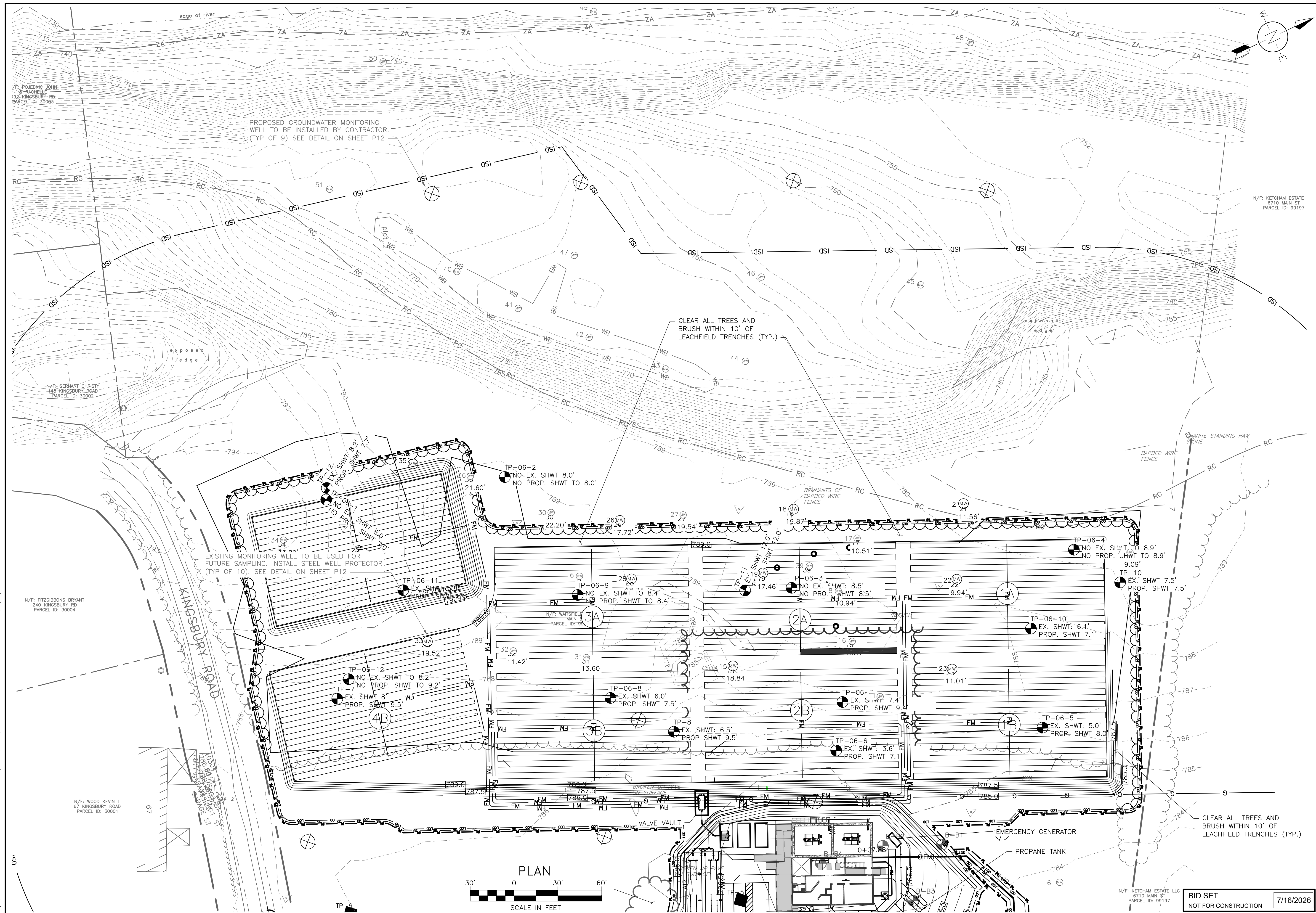
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SHEET TITLE

CONTRACT NO. 1

WWTF LEACH FIELDS
SITE

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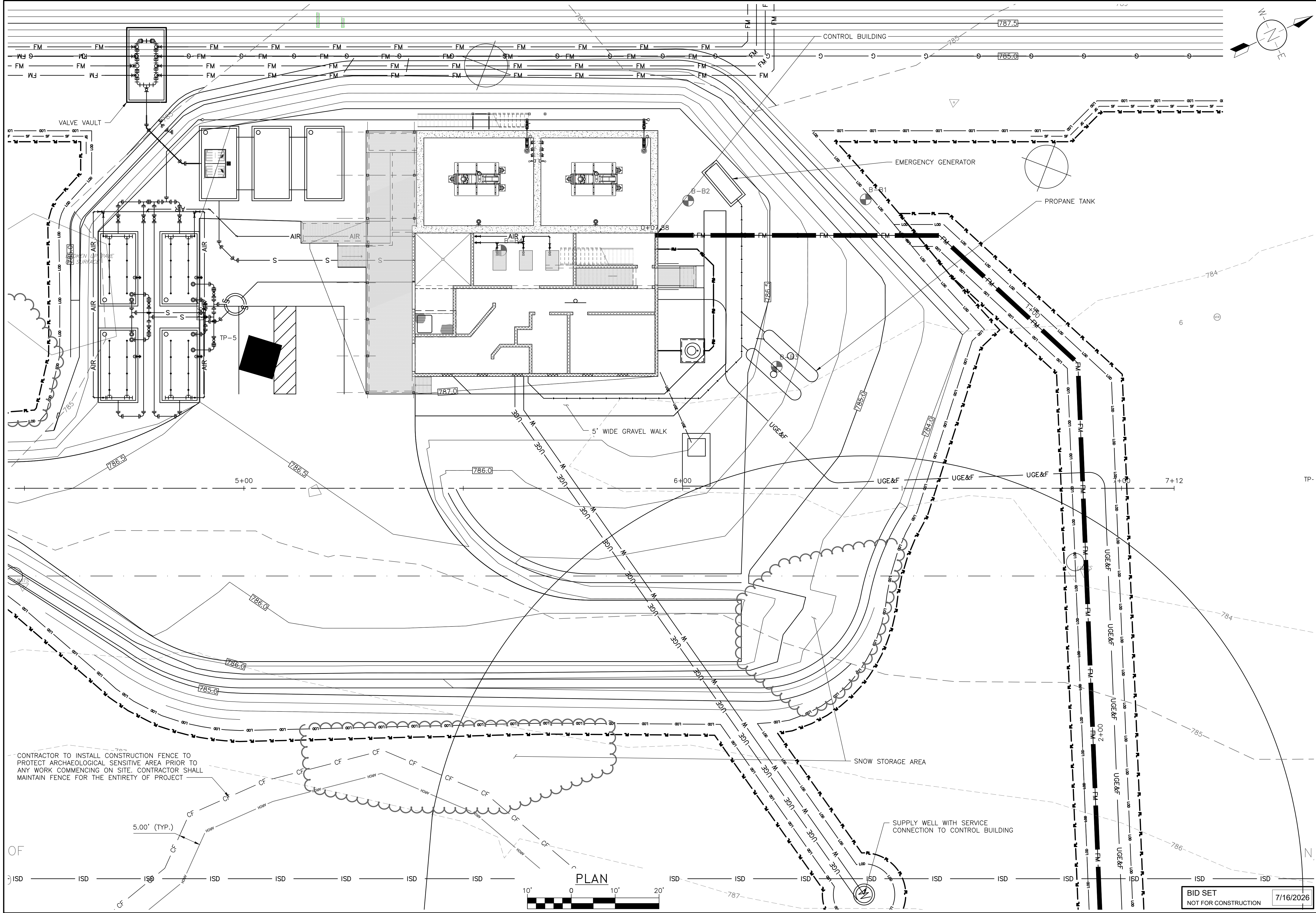
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WWTF SITE
CONTROL BUILDING
SITE PLAN

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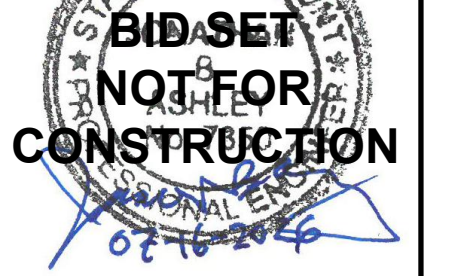
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SHEET TITLE

CONTRACT NO. 1

FLOOR PLAN
LOWER LEVEL

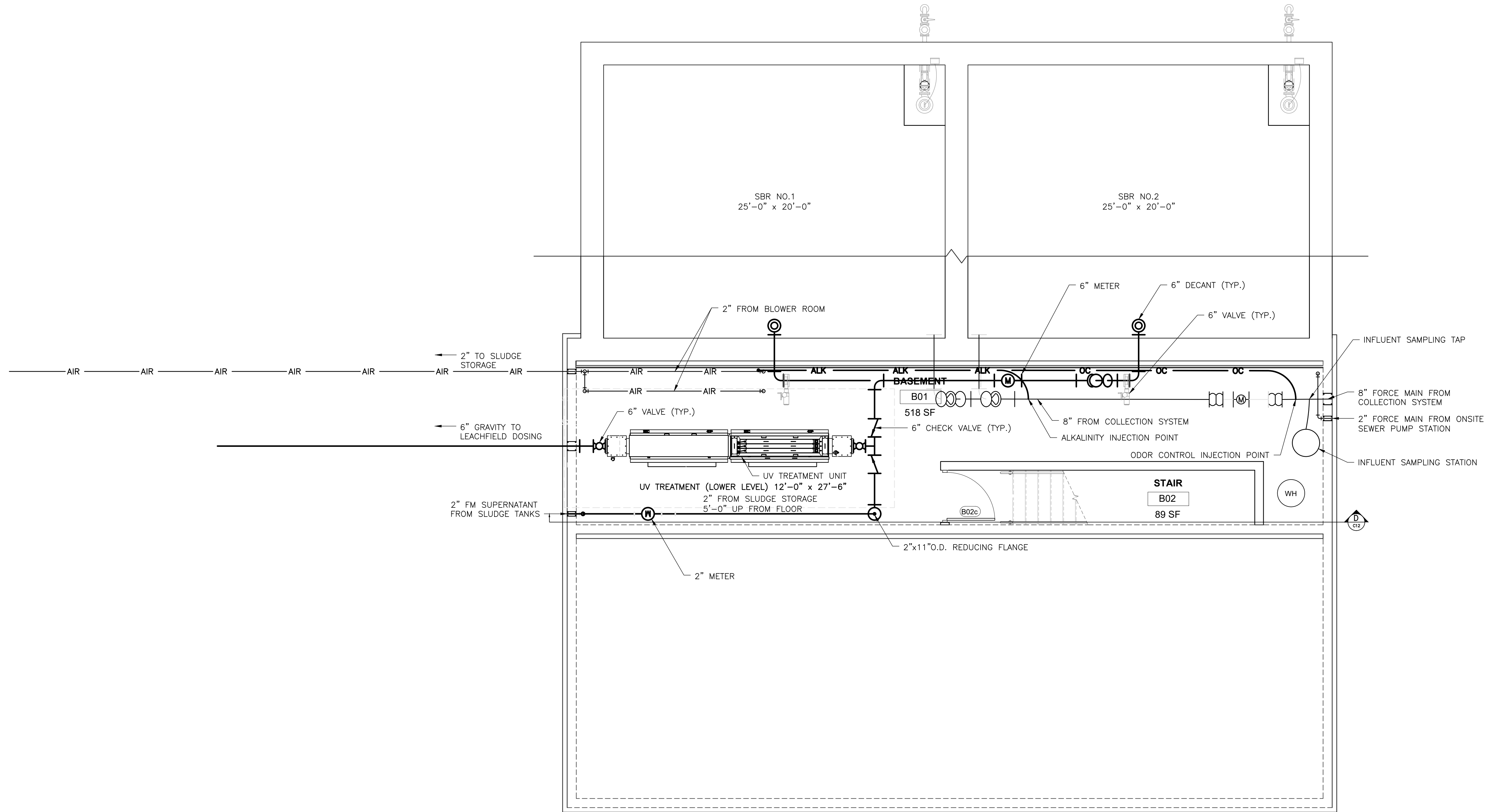
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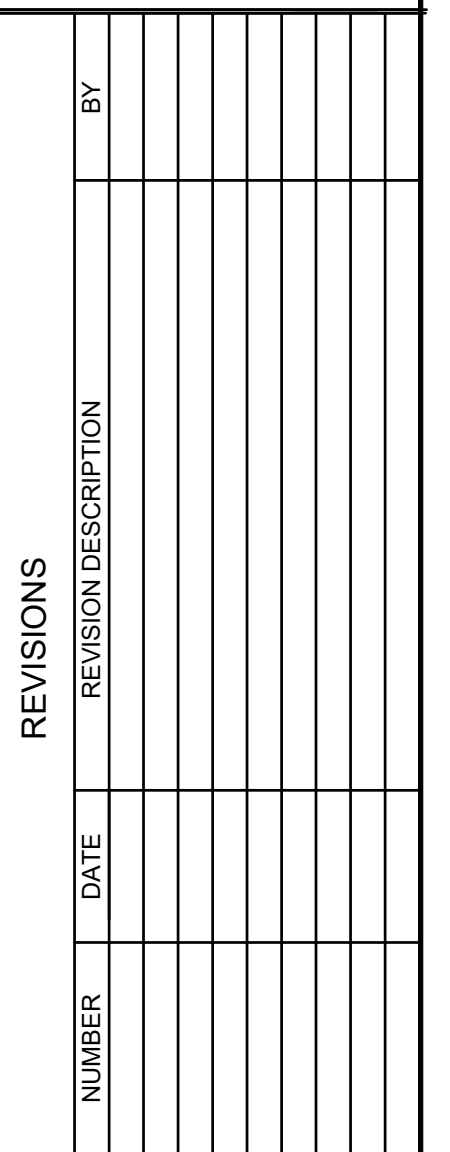
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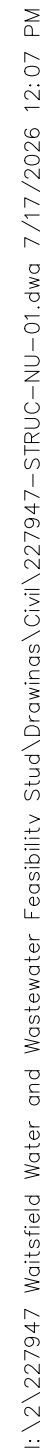


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WAITSFIELD
WASTEWATER
TREATMENT
FACILITY

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE

CONTRACT NO. 1

FLOOR PLAN UPPER
LEVEL

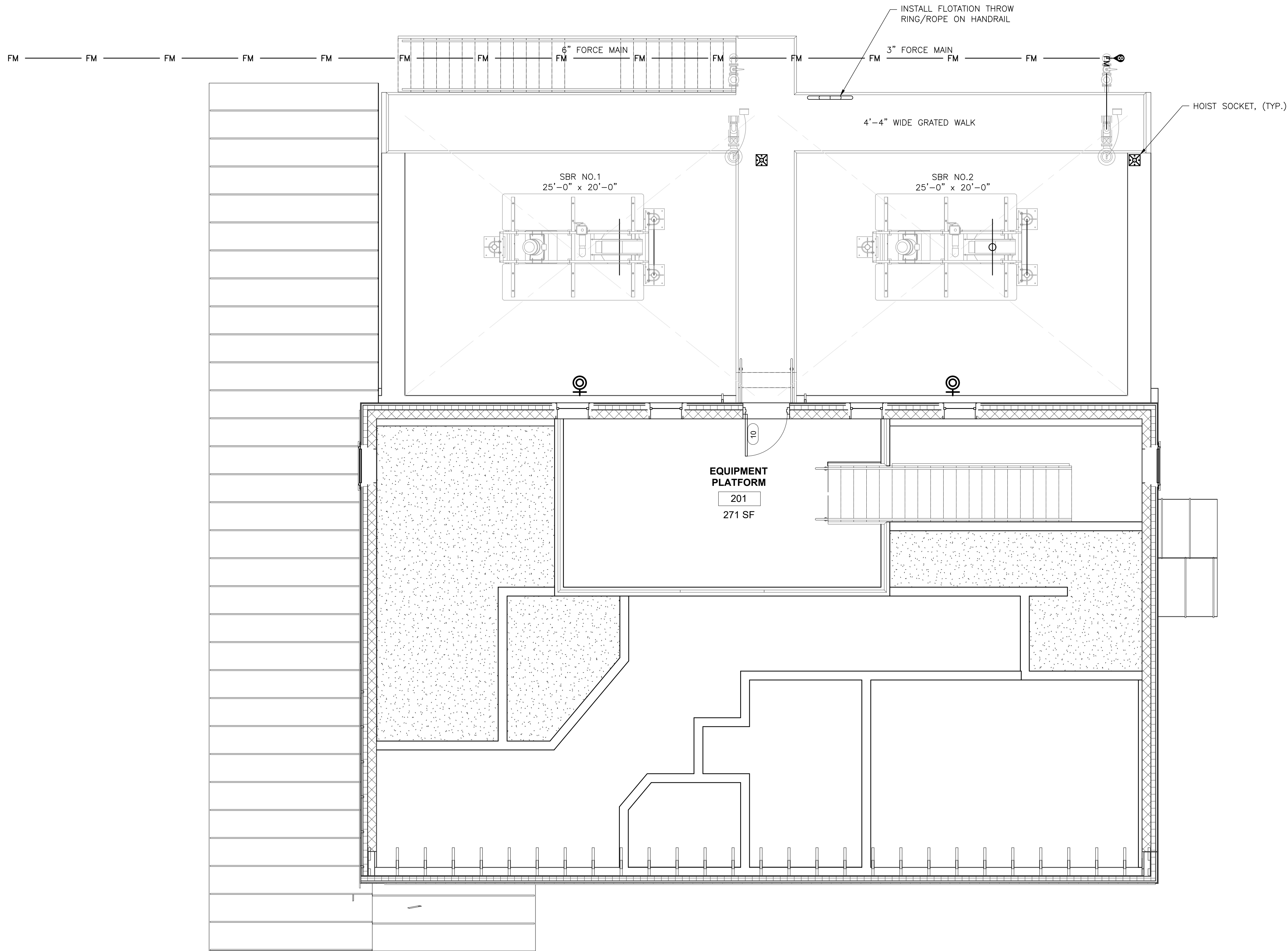
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DRAWN BY EBS	CHECKED BY DDC

DATE JULY 2026

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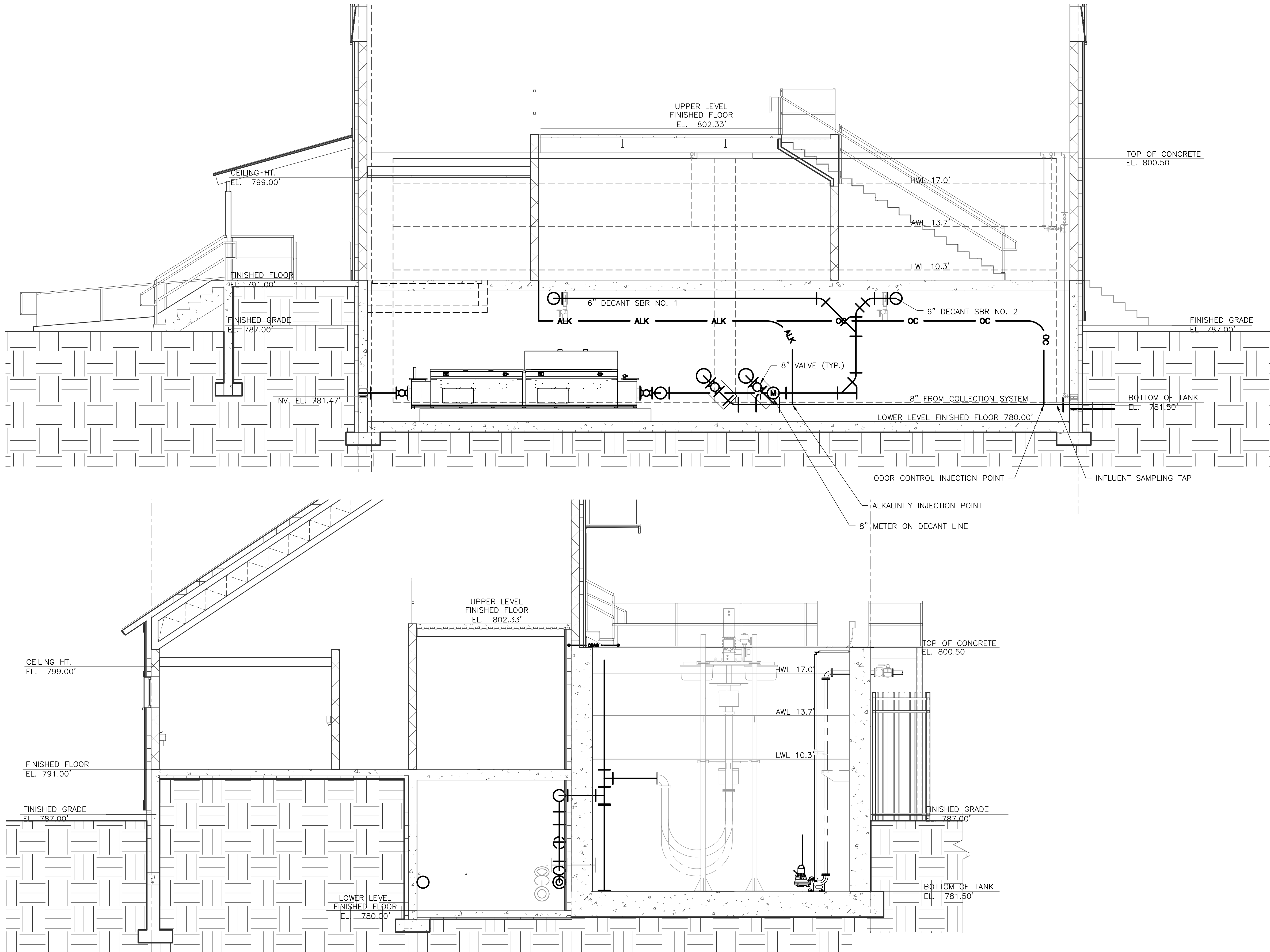
P3

SHEET: 14 of 85



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7/16/2026

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WASTEWATER
TREATMENT
FACILITY
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WAITSFIELD, VERMONT 05673

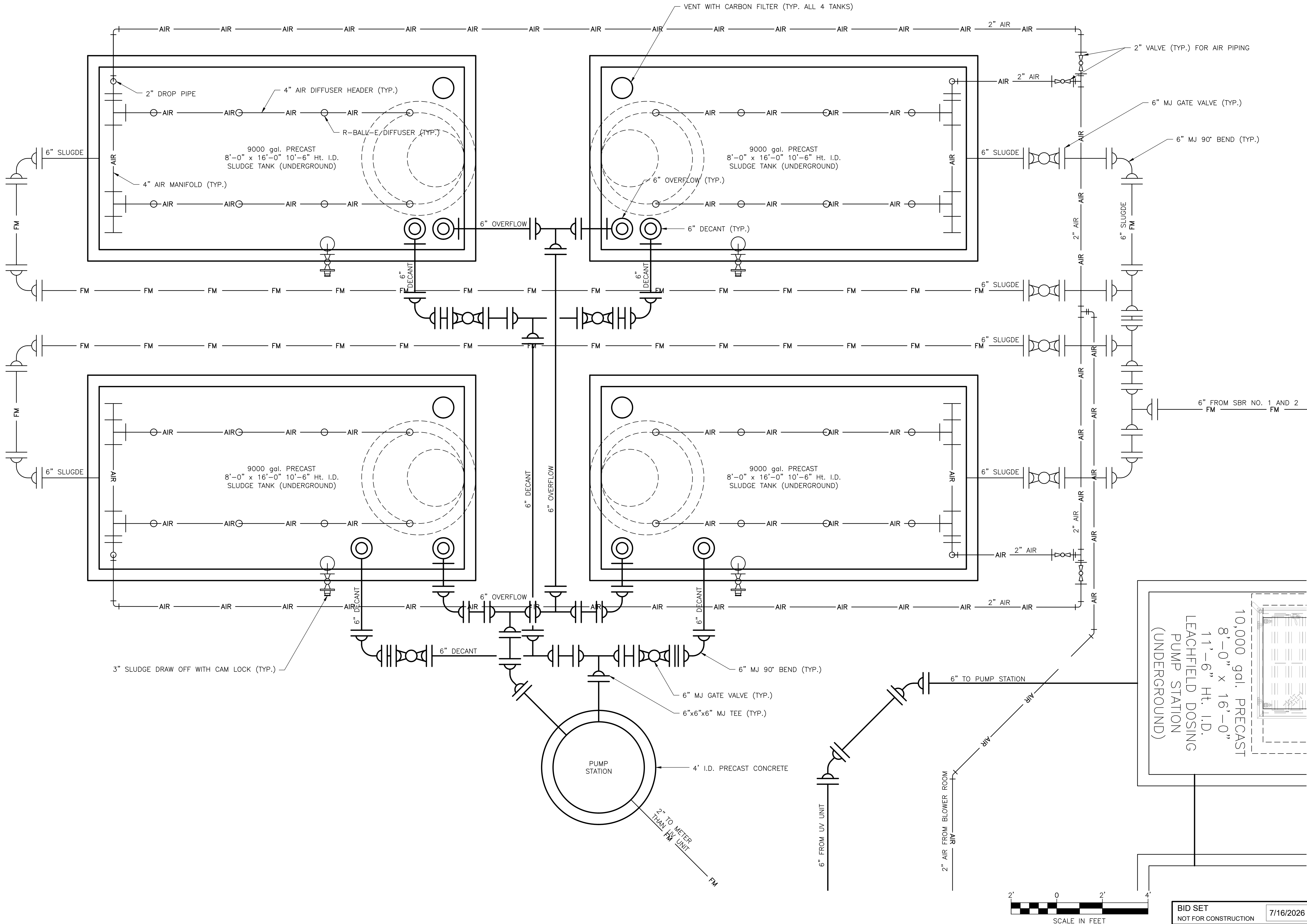
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CONTRACT NO. 1
SECTIONS

D&K PROJECT # 227947	PROJ. ENG. JBA
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JULY 2026

SHEET NUMBER
P4
SHEET: 15 of 85

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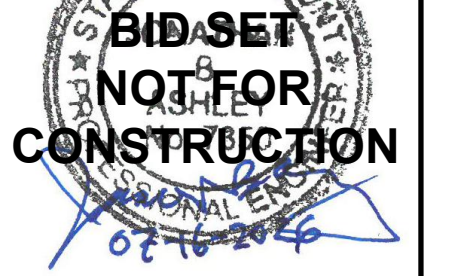
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FACILITY
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SHEET TITLE
CONTRACT NO. 1
SLUDGE TANKS

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DATE JULY 2026	
SHEET NUMBER P6	

SHEET: 16 of 85

[illegible]

CLIENT NAME
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TREATMENT
FACILITY

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE
CONTRACT NO. 1
SLUDGE TANKS
SECTION

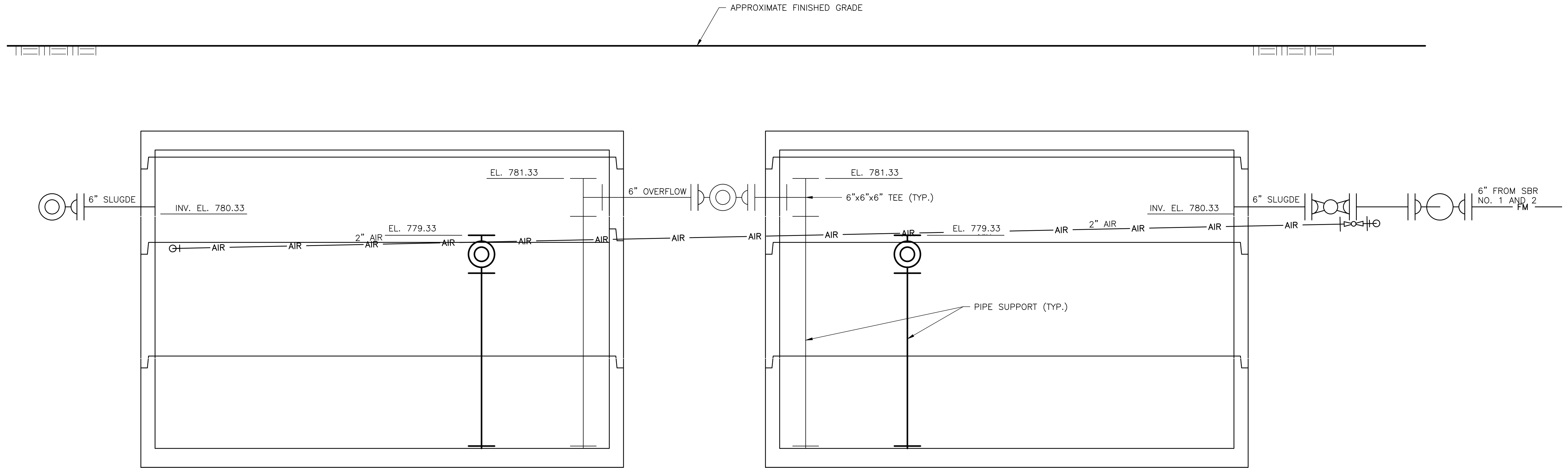
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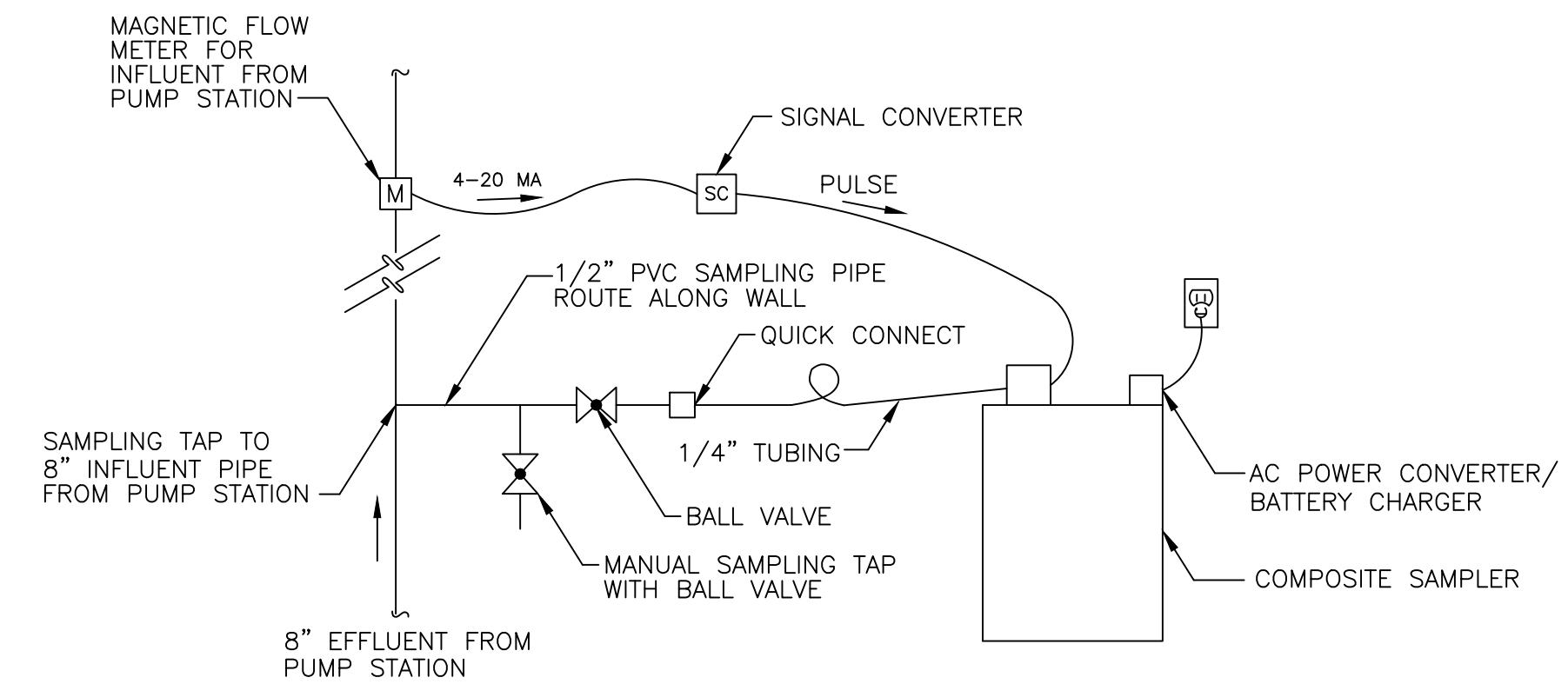
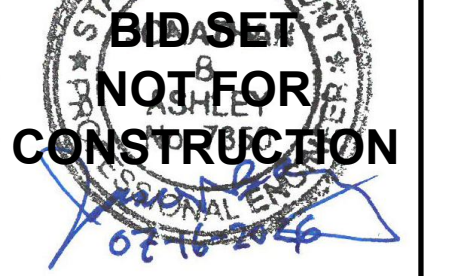
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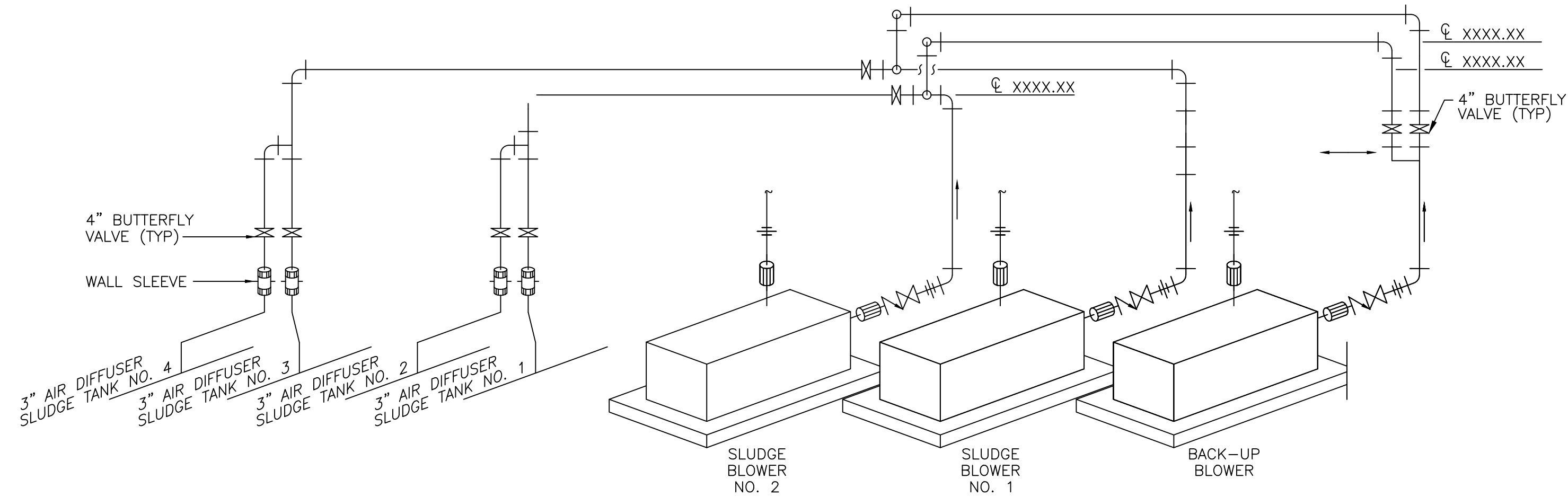
SHEET: 17 of 85



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INFLUENT SAMPLING STATION
NOT TO SCALE



BLOWER SCHEMATIC
NOT TO SCALE

[illegible]

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WASTEWATER
TREATMENT
FACILITY

PROJECT ADDRESS
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RAITSFIELD, VERMONT 05673

SHEET TITLE

CONTRACT NO. 1

PROCESS DETAILS

D&K PROJECT # 227947	PROJ. ENG. JBA
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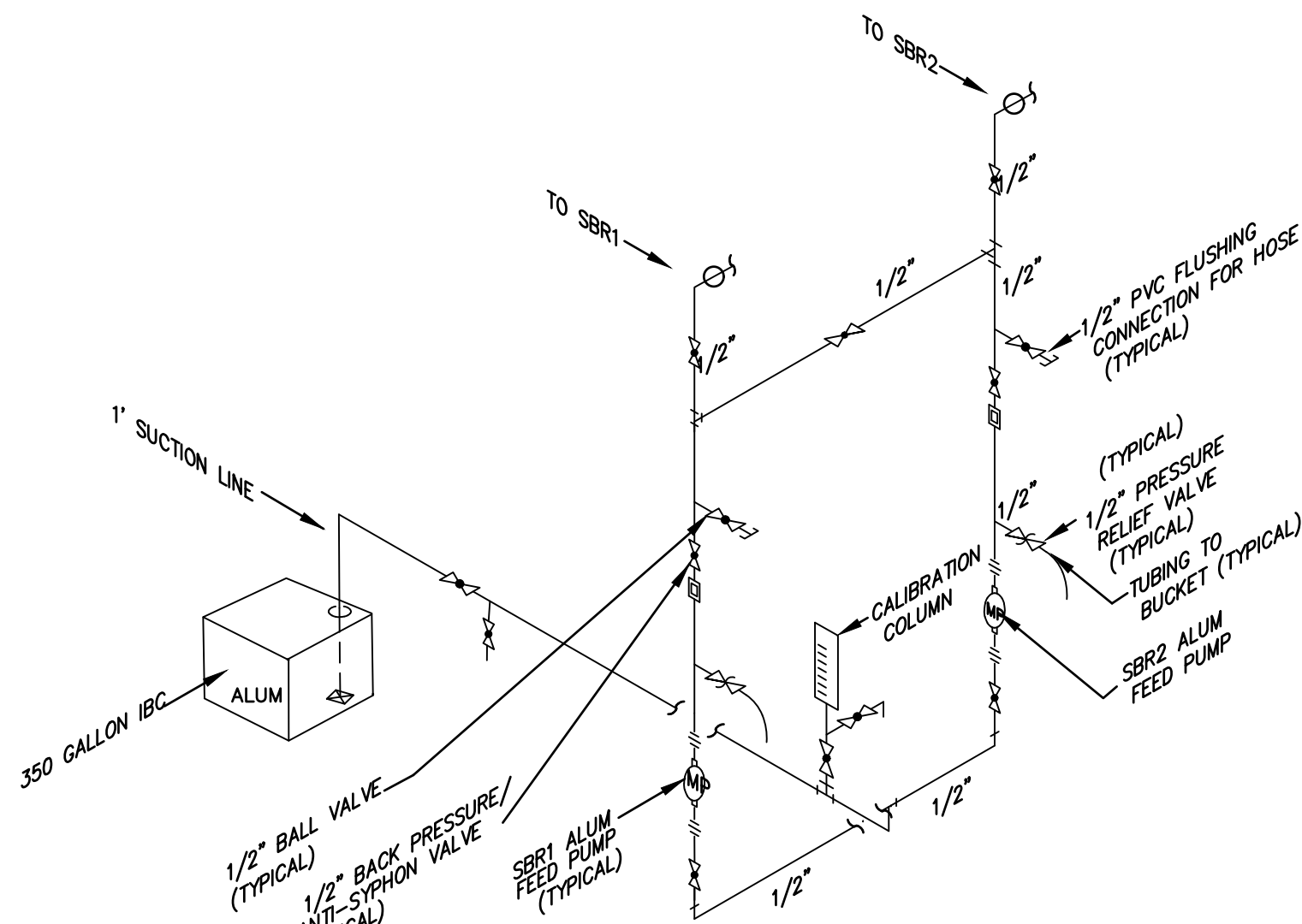
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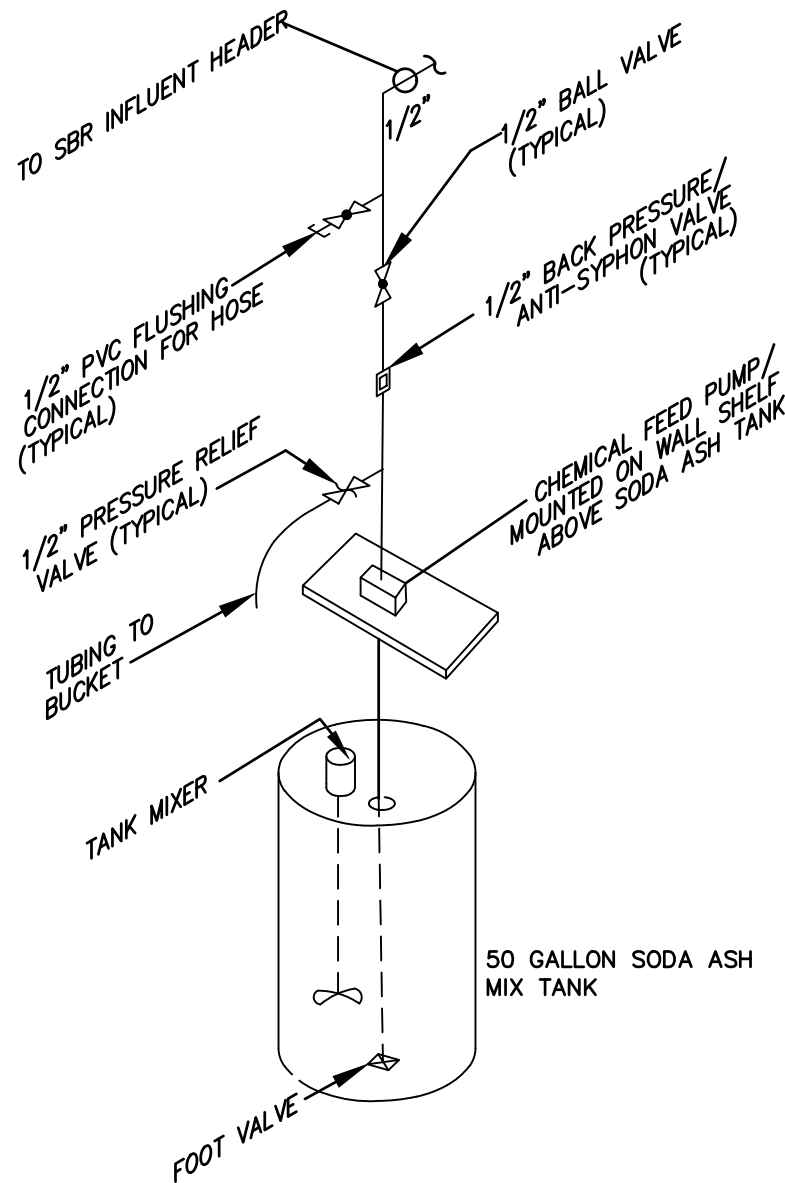
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HEET: 18 of 85

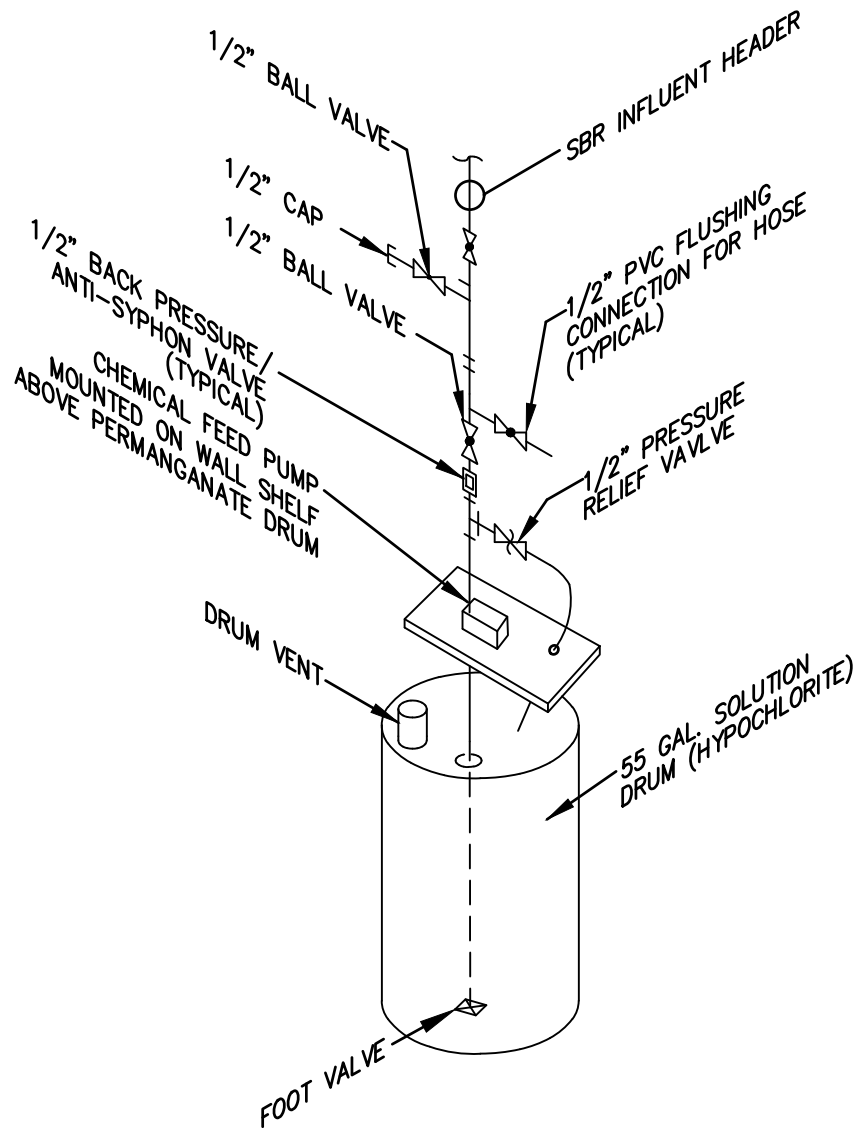
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PAC FEED SYSTEM SCHEMATIC
NOT TO SCALE

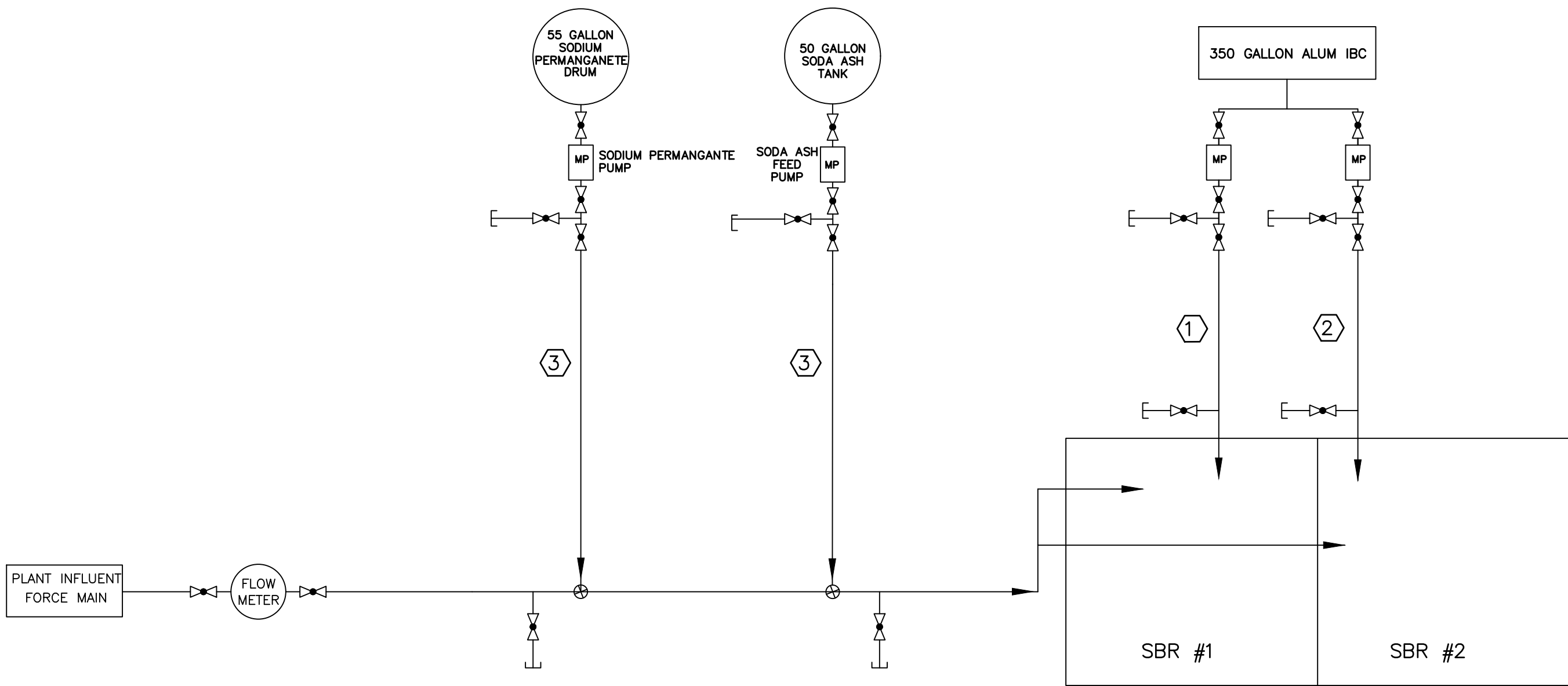


SODA ASH FEED SYSTEM
NOT TO SCALE

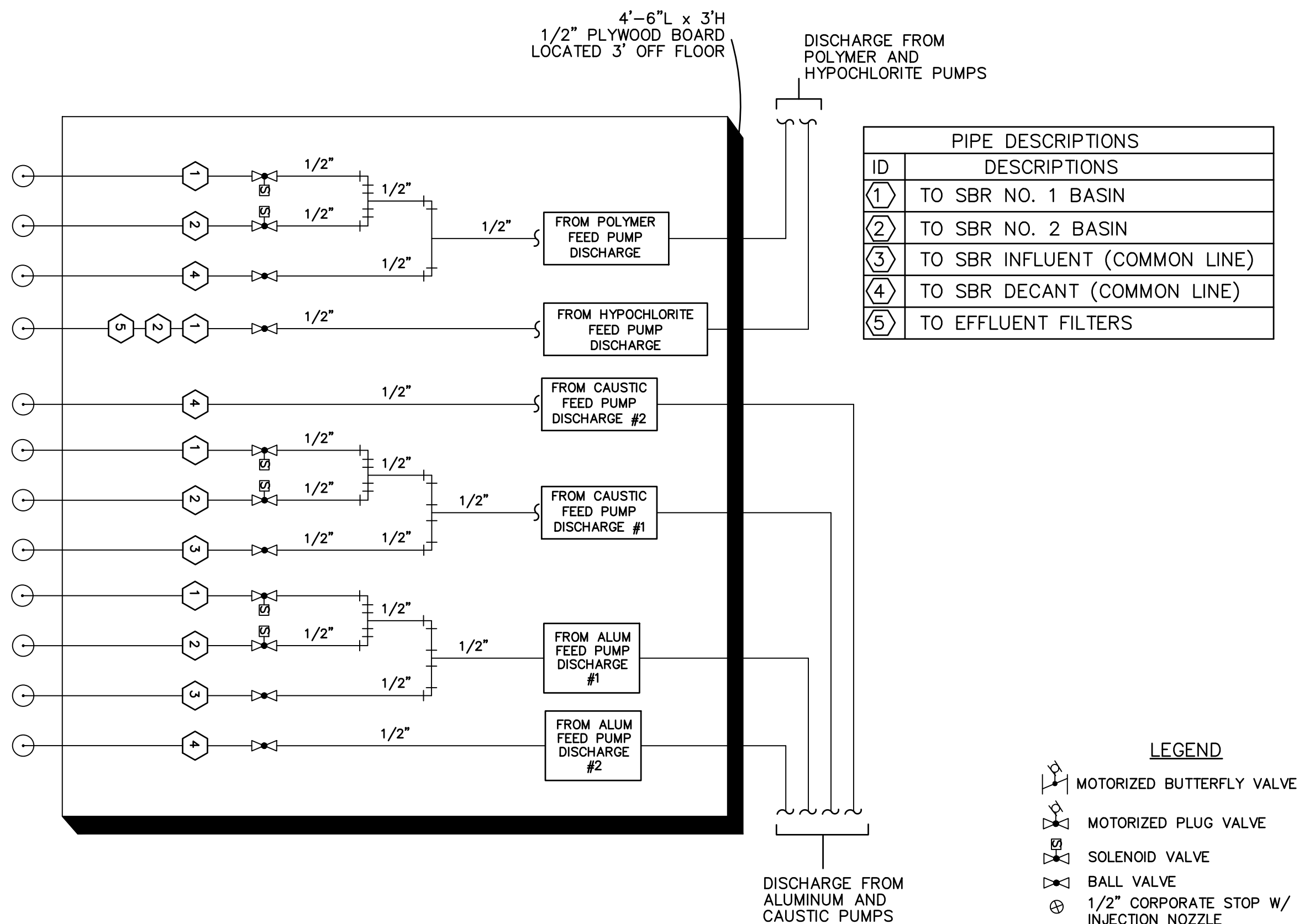


SODIUM PERMANGANATE FEED SCHEMATIC
NOT TO SCALE

PIPE DESCRIPTIONS	
ID	DESCRIPTIONS
①	TO SBR NO. 1 BASIN
②	TO SBR NO. 2 BASIN
③	TO SBR INFLUENT (COMMON LINE)
④	TO SBR DECANT (COMMON LINE)



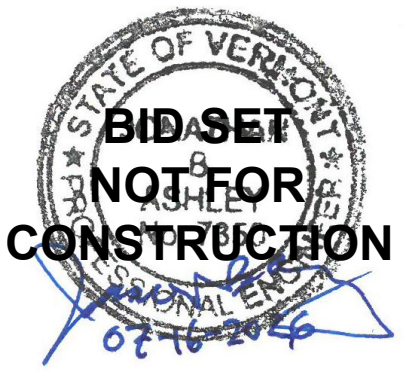
CHEMICAL FEED PROCESS FLOW SCHEMATIC
NOT TO SCALE



CHEMICAL DISTRIBUTION BOARD DETAIL
NOT TO SCALE

- LEGEND**
- MOTORIZED BUTTERFLY VALVE
 - MOTORIZED PLUG VALVE
 - SOLENOID VALVE
 - BALL VALVE
 - 1/2" CORPORATE STOP W/ INJECTION NOZZLE
 - CHEMICAL PIPING WITH FLOW DIRECTION
 - PROCESS PIPING

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SHEET TITLE
CONTRACT NO. 1
**CHEMICAL
SCHEMATICS AND
DETAILS**

D&K PROJECT # 227947 PROJ. ENG. JBA

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DATE JULY 2026

SHEET NUMBER

P8

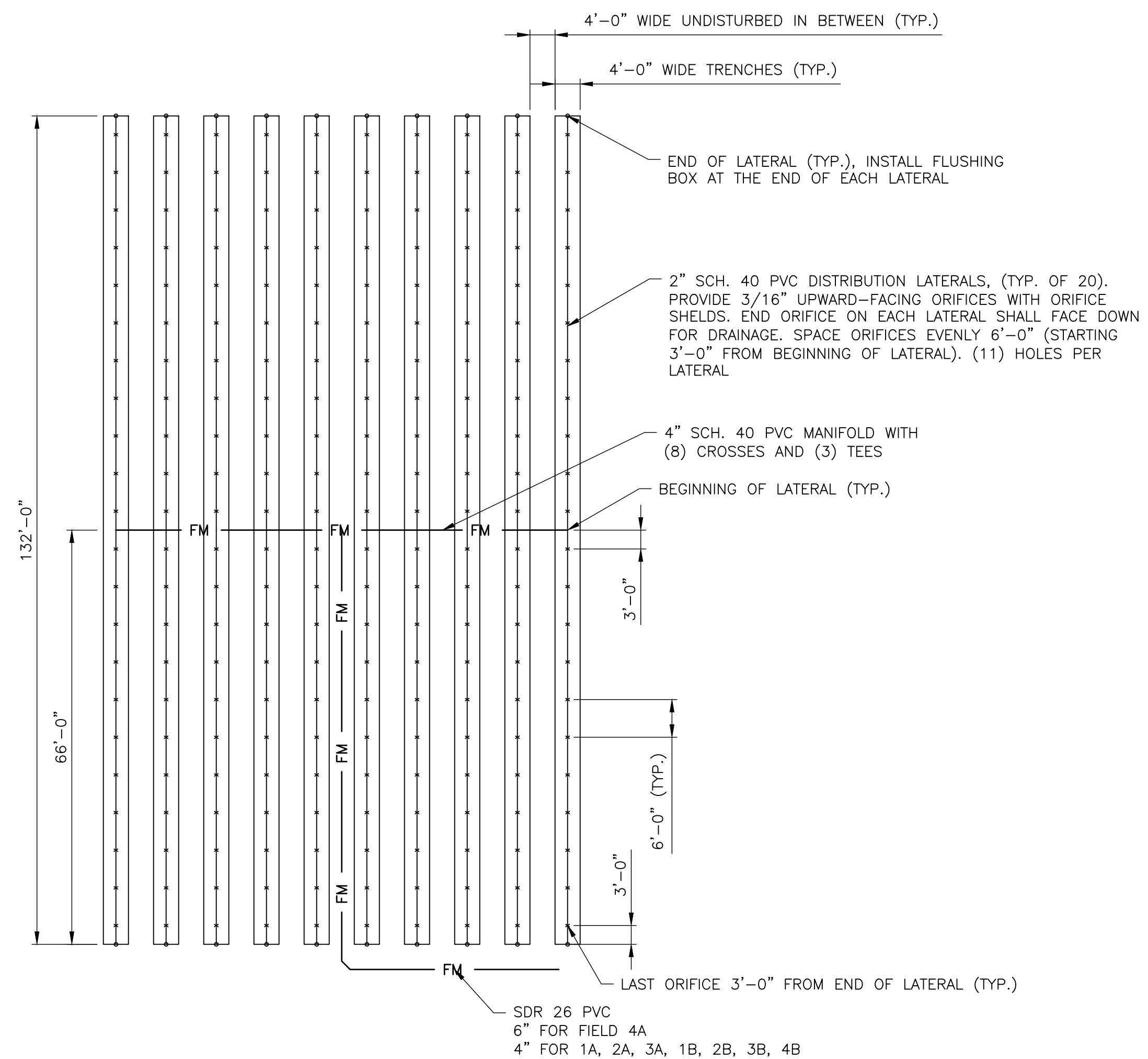


Diagram illustrating a Disposal Field Valve Vault Section. The vault contains two valves, each with a cleanout. The vault is connected to the field lines (FM) and the disposal field. The diagram shows the internal components of the vault, including the valves and cleanouts, and the external connections to the field lines and the disposal field.

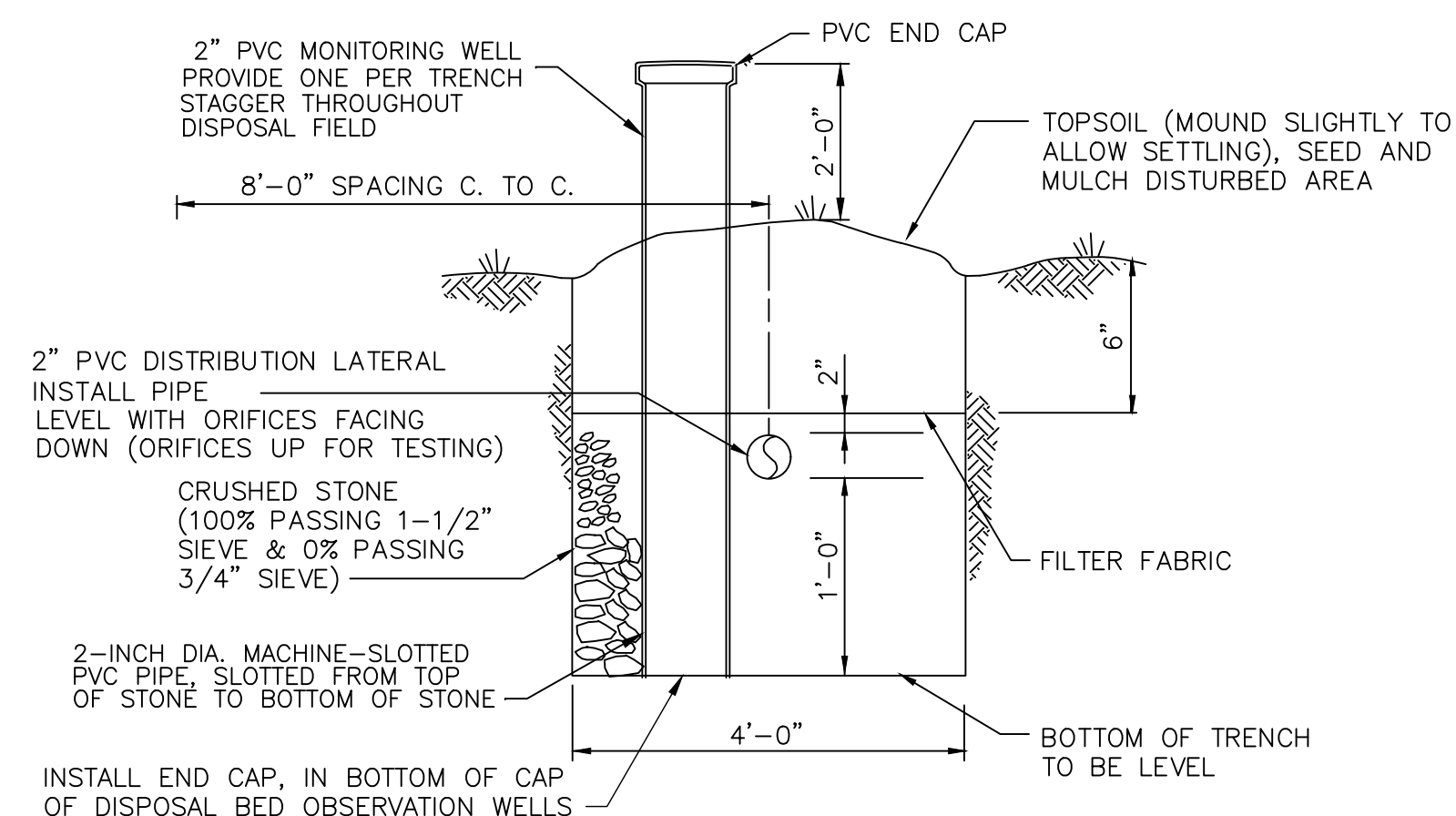
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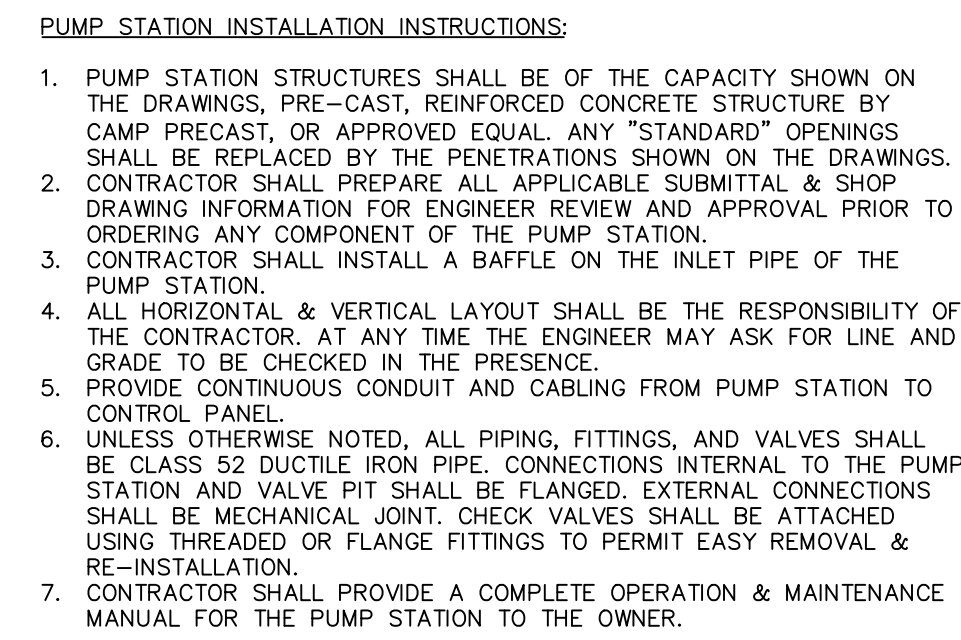
- FINISHED GRADE
- CLEANOUT
- TO FIELD FM
- FM TO FIELD
- VALVE ELECTRICALLY ACTUATED (TYP.)

Scale: 2' 0' 2' 4'

SCALE IN FEET

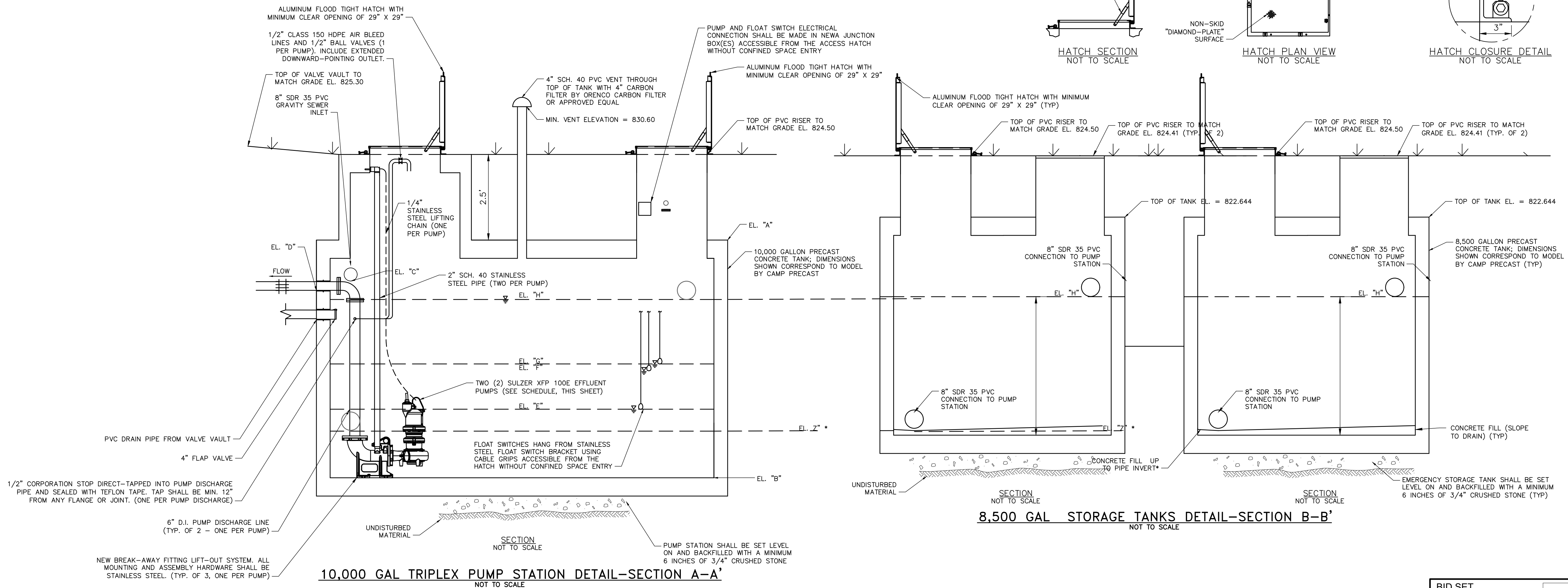
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PUMP SCHEDULE						
SULZER XFP100E						
FLOW	HEAD	VOLTS	AMPS	PHASE	Hz	TYPE
455	39 FEET	460	13.8	3	60	PE2

PUMP STATION ELEVATION	SCHEDULE
TOP OF SLAB EL "A"	782.81
BOTTOM OF WET WELL EL "B"	770.64
INVERT INLET EL "C"	781.12
INVERT OUTLET EL "D"	776.50
PUMPS ON EL "E"	772.13
PUMPS OFF EL "F"	778.71
ALARM ON EL "G"	780.62
ALARM ON EL "H"	781.62

[illegible]

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CONTRACT NO. 1

PUMP STATION DETAILS

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227947	JBA
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JULY 2026

SHEET NUMBER

SHEET NUMBER

Discussion

D10

P10

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DATE	24	1	25
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SHEET: 21 of 85



THRUST BLOCK TABLE NOTES

1. FIGURES BASED ON 300 PSI.
2. FOR PIPE SIZES NOT LISTED USE NEXT LARGER PIPE SIZE.
3. WHEN MORE THAN ONE SOIL TYPE IS ENCOUNTERED, THE ONE WITH LEAST BEARING CAPACITY SHALL BE USED.
4. RETAINING RODS OR RESTRAINED JOINT PIPE, AS APPROVED BY THE ENGINEER, SHALL BE USED IN PLACE OF THRUST BLOCKS WHEN MUCK IS ENCOUNTERED.
5. CONTRACTOR MAY PROPOSE SMALLER THRUST BLOCKS BASED ON PIPE SIZES AND MAXIMUM PRESSURES.



3" AGGREGATE SURFACE COURSE

18" CRUSHED STONE BASE

GEOTEXTILE FOR ROAD BED SEPARATOR

GRAVEL DRIVE SECTION

NOT TO SCALE



BID SET
NOT FOR CONSTRUCTION



STEEL WELL PROTECTOR FOR EXISTING MONITORING WELLS

NOT TO SCALE

PROVIDE KEYED ALIKE LOCKS FOR ALL MONITORING WELLS WITH 10 SETS OF KEYS

EXTEND EXISTING PVC WELL CASING TO WITHIN 2 TO 4 INCHES OF PROPOSED WELL PROTECTOR CAP. PROVIDE WATERTIGHT EXPANSION PLUG FOR PVC WELL.

PERMANENT RIGID COUPLING

EXISTING PVC MONITORING WELL RISER — HEIGHT ABOVE GRADE VARIES

EXISTING GRADE

12-INCH MIN. DIAMETER X 12-INCH MIN. THICK CONCRETE COLLAR BURIED 12 INCHES BELOW GRADE

59.5"

6.375"

1.625"

3.5"

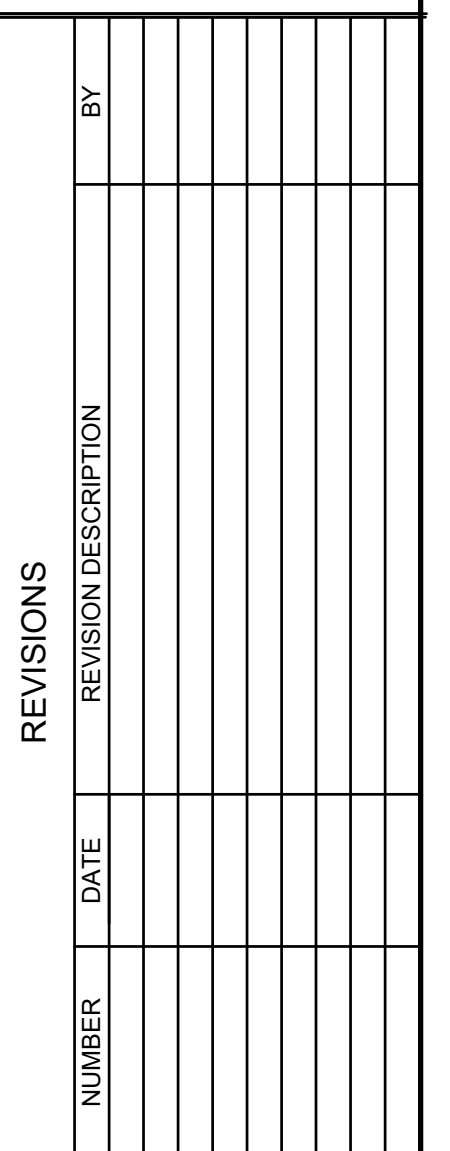
.1" WALL

4.36"

4.5"

24"



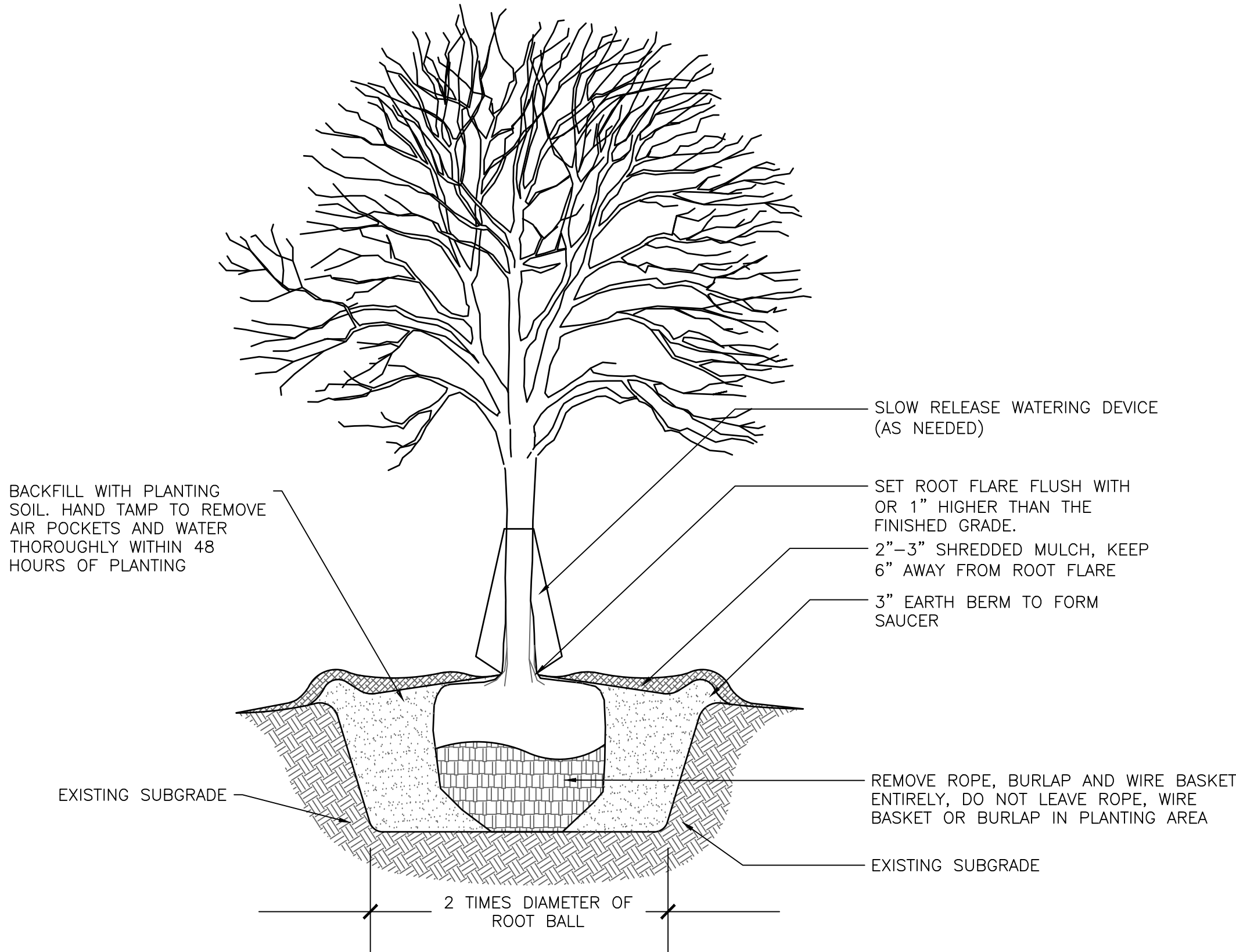


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SHEET: 24 of 85



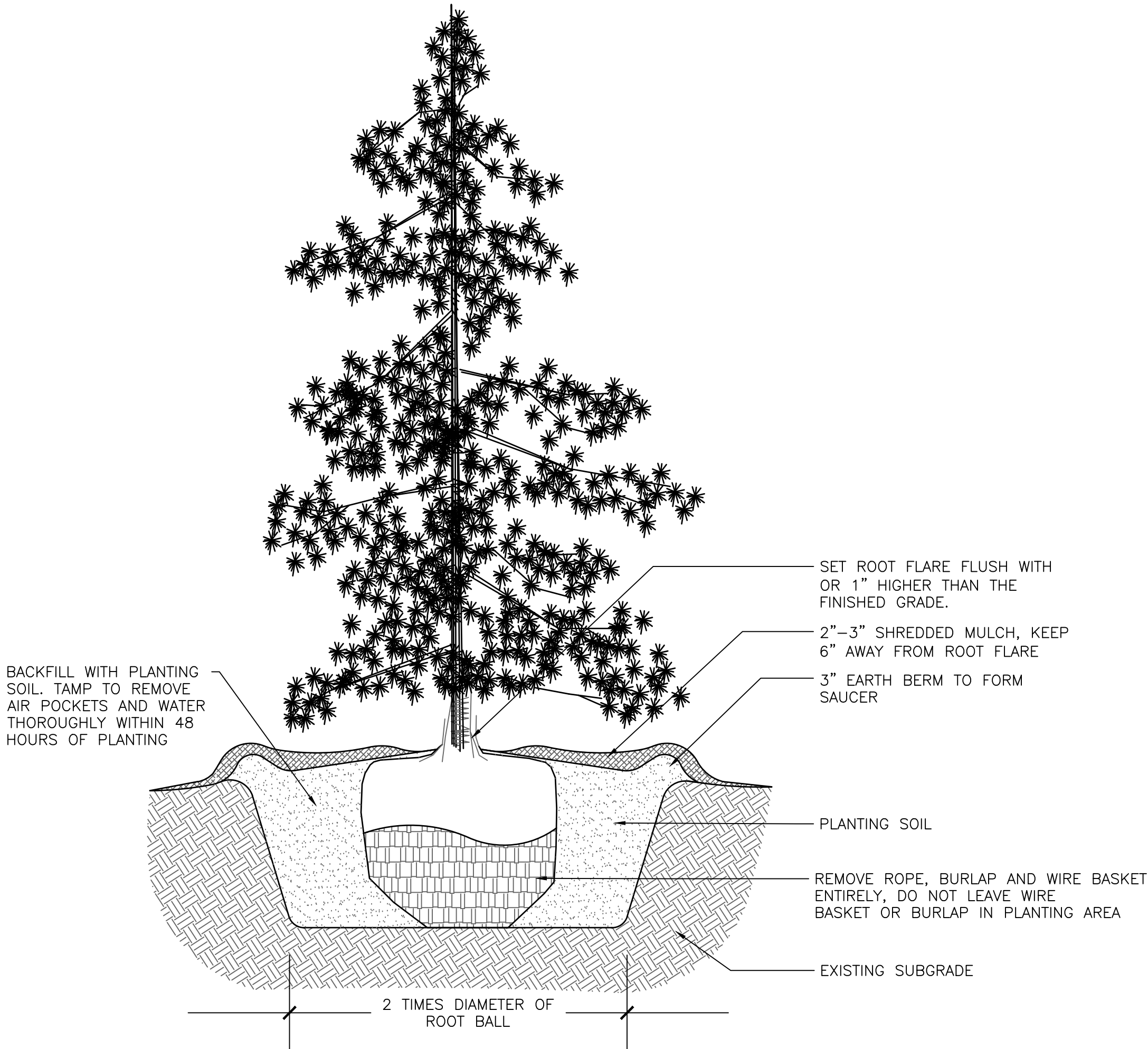
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NOTES:

1. ALL NURSERY TAGS, TAPE, AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED.
2. IF SURROUNDING SOIL IS COMPACTED, AN AREA UP TO 5 TIMES THE DIAMETER OF THE ROOT BALL MAY BE EXCAVATED OR ROTOTILLED TO A 1 FOOT DEPTH AND SOIL SHALL BE AMENDED.
3. PRUNE ONLY DEAD, DECAYING, BROKEN, CROSSING OR INWARD GROWING BRANCHES. NEVER DAMAGE OR CUT LEADER.

TREE PLANTING DETAIL
NOT TO SCALE



NOTES:

1. ALL NURSERY TAGS, TAPE, AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED.
2. IF SURROUNDING SOIL IS COMPACTED, AN AREA UP TO 5 TIMES THE DIAMETER OF THE ROOT BALL MAY BE EXCAVATED OR ROTOTILLED TO A 1 FOOT DEPTH AND SOIL SHALL BE AMENDED.
3. PRUNE ONLY DEAD, DECAYING, BROKEN, CROSSING OR INWARD GROWING BRANCHES. NEVER DAMAGE OR CUT LEADER.

EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE



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SHEET TITLE
CONTRACT NO. 1
LANDSCAPE
DETAILS

D&K PROJECT # 227947	PROJ. ENG. JBA
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DATE
JULY 2026

SHEET NUMBER
L2
SHEET: 25 of 85

	NUMBER OF POUNDS
&	AND
=	EQUAL
@	AT
A/C	AIR CONDITIONING
A/E	ARCHITECT/ENGINEER
ABV	ABOVE
AC	ACOUSTICAL
ACT	ACOUSTIC CEILING TILE
AD	ACCESS DOOR or AREA DRAIN
ADD	ADDITIONAL
ADJ	ADJACENT
ADJT	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ALT	ALTERNATE
ALUM	ALUMINUM
ANCH	ANCHOR
ANCH B	ANCHOR BOLT
ANOD	ANODIZED
AP	ACCESS PANEL
APPROX	APPROXIMATELY
ARCH	ARCHITECT/ARCHITECTURAL
ASB	ASBESTOS
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	AUDIO VISUAL
AVG	AVERAGE
B	BOLT
BC	BRICK COURSE
BD	BOARD
BEL	BELOW
BET	BETWEEN
BIT	BITUMINOUS
BL	BLANKET
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM, BENCH MARK
BN	BULL NOSE
BO	BOTTOM OF
BOS	BOTTOM OF STEP
BOT	BOTTOM
BRCG	BRACING
BRG	BEARING
BRK	BRICK
BRKT	BRACKET
BS	BOTH SIDES
BSMT	BASEMENT
BUR	BUILT UP ROOFING
BW	BOTH WAYS
CAB	CABINET
CB	CATCH BASIN
CEM	CEMENT
CER	CERAMIC
CF	CUBIC FEET
CG	CORNER GUARD
CH	CEILING HEIGHT
CHAM	CHAMFER
CIR	CIRCLE
CIRC	CIRCUMFERENCE
CJ	CONTROL JOINT or CONSTRUCTION JOINT
CL	CENTER LINE
CLF	CHAIN LINK FENCE
CLNG	CEILING
CLOS	CLOSET
CLR	CLEAR
CLS	CLOSURE or CLOSER
CM	CONSTRUCTION MANAGER
CMU	CEMENT MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPRESSIBLE
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
COR	CORRUGATED
CORR	CORRIDOR
CPT	CARPET
CR	CHAIR RAIL
CRS	COURSE
CSMT	CASEMENT
CT	CERAMIC TILE
CTR	CENTER
CTSK	COUNTERSUNK
CU	CUBIC
CUH	CABINET UNIT HEATER
CW	COLD WATER
CYL	CYLINDER
D	DEEP or DEPTH
DB	DECIBELS
DBL	DOUBLE
DEM	DEMOLISH
DEPT	DEPARTMENT
DET	DETAIL
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIFF	DIFFUSER
DIM	DIMENSION
DISP	DISPENSER
DMT	DEMOUNTABLE
DN	DOWN
DP	DAMP PROOFING
DR	DOOR OR DRAIN
DS	DOWN SPOUT
DWG	DRAWING

EA	EAST
EJ	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
ENAM	ENAMEL
ENCL	ENCLOSURE
ENG	ENGINEER
ENT	ENTRANCE
EOS	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
EW	EACH WAY
EWC	ELEC. WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXIST	EXISTING
EXP	EXPANSION
EXPD	EXPANDED
EXPO	EXPOSED
EXT	EXTERIOR
EXTR	EXTRUDED
FA	FIRE ALARM
FAS	FASTENER
FB	FACE BRICK OR FLAT BAR
FC	FLEXIBLE CONNECTION
FD	FLOOR DRAIN or FIRE DAMPER
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CAB
FGL	FINISHED FLOOR ELEVATION
FGE	FIBERGLASS
FHC	FIRE HOSE CABINET
FIN	FINISHED
FIX	FIXTURE
FLASH	FLASHING
FLEX	FLEXIBLE
FLOUR	FLUORESCENT
FLR	FLOOR
FLRG	FLOORING
FOW	FACE OF WALL
FP	FIRE PROOFING
FR	FIRE RATED
FRM	FRAME
FRP	FIBERGLASS REINF. PANELING
FRT	FIRE RET. TREATED
FT	FOOT OR FEET
FTG	FOOTING
FTR	FIN TUBE RADIATION
FUR	FURRED OR FURRING
FURN	FURNISHED
FUT	FUTURE
FXD	FIXED
GA	GAUGE
GALV	GALVANIZE(D)
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GD	GRADE
GDR	GUARDRAIL
GEN	GENERAL
GL	GLASS
GRD	GROUND
GS	GRAVEL STOP
GT	GROUT
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HB	HOSE BIB
HBD	HARDBOARD
HC	HOLLOW CORE or HANDICAP ACCESSIBLE
HDR	HANDRAIL
HDW	HARDWARE
HDWD	HARDWOOD
HM	HOLLOW METAL
HOR	HORIZONTAL
HP	HIGH PRESSURE
HR	HOUR
HT	HEIGHT
HTG	HEATING
HTR	HEATER
HVAC	HEATING, VENT. & A/C
HW	HOT WATER
ID	INSIDE DIAMETER
IN	INCH
INCL	INCLUDED/ING
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
INTER	INTERMEDIATE
JAN	JANITOR
JB	JUNCTION BOX
JC	JANITOR'S CLOSET
JST	JOIST
JT	JOINT
K PL	KICK PLATE
KD	KNOCK DOWN
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LF	LINEAL FEET
LF F	LIGHT FIXTURE
LFLI	LANDLORD FURNISHED LANDLORD INSTALLED
LFLI	LANDLORD FURNISHED TENANT INSTALLED
LIQ	LIQUID
LOC	LOCATION
LIGHT	LIGHT

LTG	LIGHTING
LTL	LINTEL
LVR	LOUVER
LW	LONG WAY
MACH	MACHINE
MAINT	MAINTENANCE
MAS	MASONRY
MAT	MATERIAL
MAX	MAXIMUM
MCF	METAL FURRING CHANNEL
MD	METAL DECKING
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBER
MFR	MANUFACTURER
MH	MANHOLE
MHO	MAGNETIC HOLD OPEN
MIN	MINIMUM OR MINUTE
MIRR	MIRROR
MISC	MISCELLANEOUS
MLD	MOLDING
MO	MASONRY OPENING
MOV	MOVABLE
MR	MOISTURE RESISTANT
MTD	MOUNTED
MTL	METAL
MULL	MULLION
N	NORTH
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFE	OWNER FURNISHED EQUIPMENT
OFF	OFFICE
OFI	OWNER FURNISHED AND INSTALLED
OH	OVERHEAD
OHD	OVER HEAD DOOR
OPNG	OPENING
OPP	OPPOSITE
OPPH	OPPOSITE HAND
OZ	OUNCE
PART	PARTITION
PC	PRECAST OR PIECE
PED	PEDESTAL
PERF	PERFORATED
PERIM	PERIMETER
PN	PREFINISHED
PH	PARTIAL HEIGHT
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLUM	PLUMBING
PLWD	PLYWOOD
PNL	PANEL
PORC	PORCELAIN
PREFAB	PREFABRICATED
PRESS	PRESSURE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PAINT OR POINT
PTD	PAINTED
PVC	POLY VINYL CHLORIDE
PVMT	PAVEMENT
PVR	PAVER
QTY	QUANTITY
R	RADIUS/RISER
RA	RETURN AIR
RAD	RADIATION
RD	ROOF DRAIN, ROAD
REBAR	REINFORCING BAR
REC	RECESSED
REF	REFERENCE
REFL	REFLECTED
REFR	REFRIGERATOR
REG	REGISTER
REINF	REINFORCED
REM	REMOVE
REQD	REQUIRED
RES	RESISTANT
RESIL	RESILIENT
RET	RETAINING
REV	REVISION/REVERSE
RF	ROOF
RFG	ROOFING
RM	ROOM OR ROOF MEMBRANE
RO	ROUGH OPENING
RSL	RESILIENT FLOORING
S	SOUTH
SAT	SUSPENDED ACOUSTICAL TILE
SAWM	SELF ADHERED WATERPROOF MEMBRANE
SC	SOLID CORE
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FEET
SHLV	SHELVING
SHT	SHEET
SIM	SIMILAR
SLDG	SLIDING
SLNT	SEALANT
SPCG	SPACING
SPEC	SPECIFICATION
SPKR	SPEAKER
SPKR HD	SPRINKLER HEAD

QK	SQUARE
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SURF	SURFACE
SUSP	SUSPENDED
SV	SHEET VINYL
SYM	SYMBOL
SYS	SYSTEM
T	TREAD, TILE
T&G	TONGUE AND GROOVE
TBD	TACK BOARD
TEL	TELEPHONE
TEMP	TEMPORARY, TEMPERATURE
TFI	TENANT FURNISHED LANDLORD INSTALLED
TFI	TENANT FURNISHED or TENANT INSTALLED
THERM	THERMOMETER
THK	THICK
THR	THRESHOLD
THRU	THROUGH
TK BD	TACK BOARD
TLT	TOILET
TOC	TOP OF CURB
TOF	TOP OF FOOTING
TOS	TOP OF STEEL
TOW	TOP OF WALL
TR	TRENCH
TRT	TREATED
TYP	TYPICAL
UC	UNDER CUT
UH	UNIT HEATER
UL	UNDERWRITER'S LABORATORIES
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
UTIL	UTILITY
VAC	VACUUM
VAR	VARIABLE
VB	VAPOR BARRIER
VCT	VINYL COMPOSITE TILE
VEH	VEHICLE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VNR	VENEER
VOL	VOLUME
VP	VENT PIPE
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
W/O	WITH OUT
WC	WATER CLOSET
WD	WOOD
WF	WIDE FLANGE
WG	WIRE GLASS
WIN	WINDOW
WP	WATER PROOF
WR	WATER RESISTANT
WS	WATER STOP
WT	WEIGHT
WWF	WELED WIRE FABRIC

WALL TAG



WINDOW TAG **WINDOW TYPE**

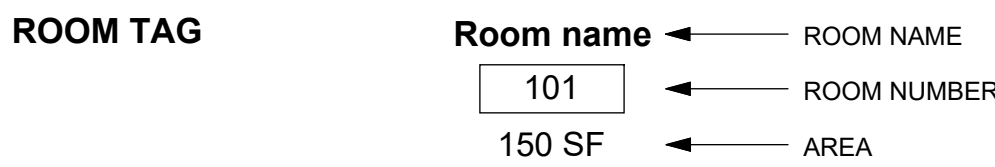


DOOR TAG ← DOOR NUMBER



ROOM TAG

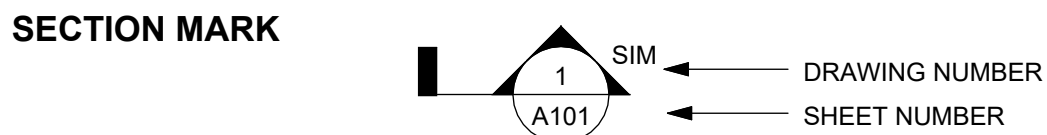
	Room name	←	ROOM NAME
	101	←	ROOM NUMBER
	150 SF	←	AREA



SECTION MARK

DRAWING NUMBER

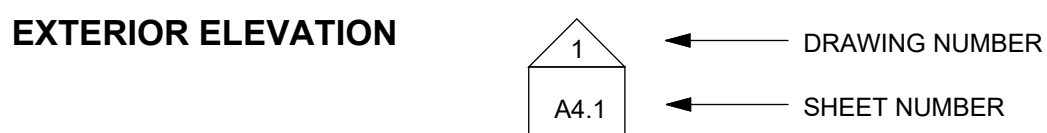
SHEET NUMBER



EXTERIOR ELEVATION

 ← DRAWING NUMBER

← SHEET NUMBER



INTERIOR ELEVATION

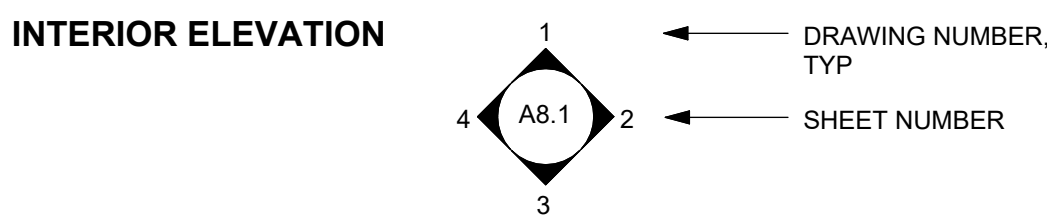
1 ← DRAWING NUMBER
TYP

2 ← SHEET NUMBER

4

3

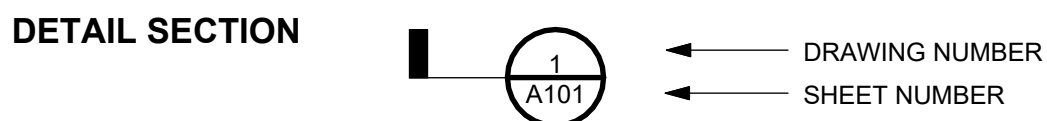
A8.1



DETAIL SECTION

← DRAWING NUMBER

← SHEET NUMBER



FLOOR FINISH TAG

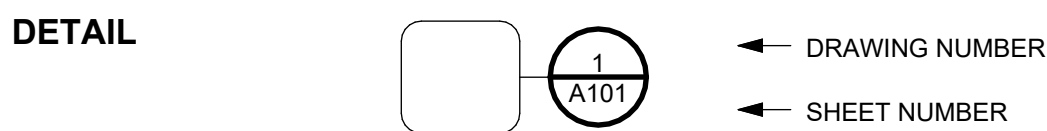
Floor Material Floor Material ← FLOORING TRANSITION



DETAIL

← DRAWING NUMBER

← SHEET NUMBER



3'-4" MAX

MIRROR OVER SINK
(DIM. TO REFLECT SURF.)

4'-0"

PAPER TOWEL DISPENSER

3'-6"

SOAP DISPENSER

2'-0" 7'-9"

TOILET PAPER DISPENSER

4'-0"

COAT HOOKS

3'-6"

S.S. SHELF

3'-0"

FIRE EXTINGUISHER CABINET

7'-0"

TACK/ WHITE/ CHALK BOARD

7'-0"

CLOCK

7'-0"

FAN

1. GENERAL CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO STARTING ANY WORK.
2. DIMENSIONS TO NEW CONSTRUCTION SHALL BE TO FACE OF CMU, UNLESS OTHERWISE NOTED OR INDICATED.

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 SCOTT + PARTNERS ARCHITECTURE 7 CARMICHAEL ST., ESSEX, VT 05452 P 802.879.5153 SCOTTPARTNERS.COM			
REVISONS	REVISION DESCRIPTION	BY	
		DATE	
NUMBER			
CLIENT NAME TOWN OF WAITSFIELD			
PROJECT NAME WAITSFIELD WASTEWATER TREATMENT CENTER			
PROJECT ADDRESS 4144 MAIN ST WAITSFIELD, VT 05673			
SHEET TITLE CONTRACT NO. 1 GENERAL NOTES & ABBREVIATIONS			
D&K PROJECT # 227947	PROJ. ENG. JBA		
DRAWN BY JLG	CHECKED BY -		
DATE JULY 16, 2026			
SHEET NUMBER A0.1			
SHEET 26 OF 85			

Project Name: Waitsfield Wastewater Treatment Facility
Address:

Construction of new waste processing and filtration facility. **Industrial** processes take up most of the facility with a small office/control/lab area. The structure is a single-story with mezzanine, and partial full basement

Number of stories above grade: 1
Number of stories: 1
Building Square Footage: 1,867 SF
Conditioned Square Footage: 1,867 SF

Act 250 (Y/N): YES Act 250 Permit #: Permit Application is Pending

Compliance Method:

X **Option 1a: Chapter 5-Plus-Credits** (see CBES for full requirements each point option)

Option 1b: ASHRAE 90.1-2016 (with CBES amendments C401.2.1) Plus-Credits

Must select option 1a, 1b, 2a, 2b or 3) - Compliance Documentation required: COMcheck™ Software Vermont 2020 CBES Version

Credits achieved: 6 Occupancy Group: F/I (See Table C406.1 for credits and groups)

1. More efficient HVAC performance	3	3
2.1. Reduced lighting power: Option 1	2	
2.2. Reduced lighting power: Option 2	4	
3. Enhanced lighting controls	1	
4. On-site supply of renewable energy	3	3
5. Dedicated outdoor air system	3	
6.1. High-efficiency service water heating	3	
6.2. High-efficiency service water heating	2	2
6.3. Heat pump water heating equipment	2	
7. Enhanced envelope	3	
8. Reduced air infiltration	N/A	3
9. Efficient kitchen appliances	N/A	
10. Controlled Receptacles	N/A	

	POINTS AVAILABLE	POINTS ACHIEVED
Option 2a: ASHRAE/IESNA Standard 90.1-2016 Energy Cost Budget Method		
Compliance documentation requirements as noted in Section 11.7		

Option 2b: ASHRAE/IESNA Standard 90.1-2016 Appendix G -Performance Rating Method (Review CBES amendments C401.2.1) Compliance documentation requirements as noted in Appendix G

Option 3: Above Code Program
Contact Vermont PSD for approval of Above Code Program and documentation requirements

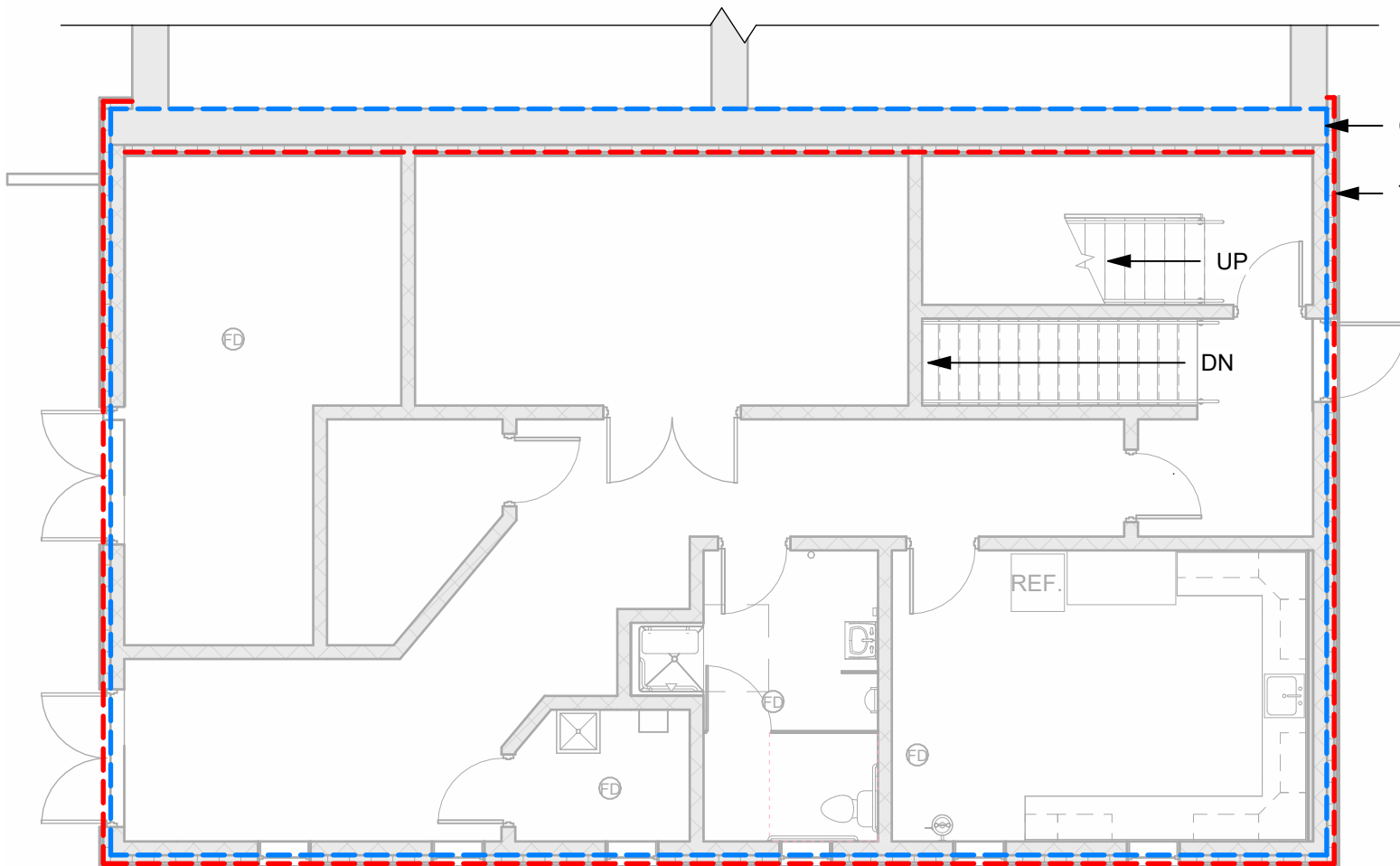
Air Leakage Thermal Envelope method of compliance:

 X Air Barrier Performance Testing: Blower Door Test minimum requirement 0.25 CFM75/sq ft of building shell (6 sides) or

 X Continuous Air Barrier Commissioning

Other Requirements Where applicable:

EV charging requirement: 2 # Total Parking Spaces: 1 Total EVSE Equipped Parking Spaces: 1 # Total EVSE Ready Parking Spaces



FLOOR PLAN

2020 CBES ENVELOPE REQUIREMENTS		
COMPONENT	MINIMUM R VALUE	PROPOSED R-VALUE
ROOF - INSULATION ENTIRELY ABOVE DECK	R-40 ci	R-40 ci
WALLS, ABOVE GRADE - MASS	R-19 ci	R-20 ci
WALLS, BELOW GRADE	R-15 ci	R-20 ci
FLOORS, SLAB ON GRADE (UNHEATED)	R-10 entire slab	R-10 entire slab
DOORS, SWINGING	U-0.37	U-0.37
FENESTRATION, OPERABLE	U-0.33	U-0.33
FENESTRATION, FIXED	U-0.37	U-0.37
FENESTRATION, ENTRANCE DOORS	U-0.68	U-0.68
SHGC - E/W ORIENTATION, $0.2 \leq PF < 0.5$	U-0.48	U-0.48

CERTIFICATES AND AFFIDAVITS

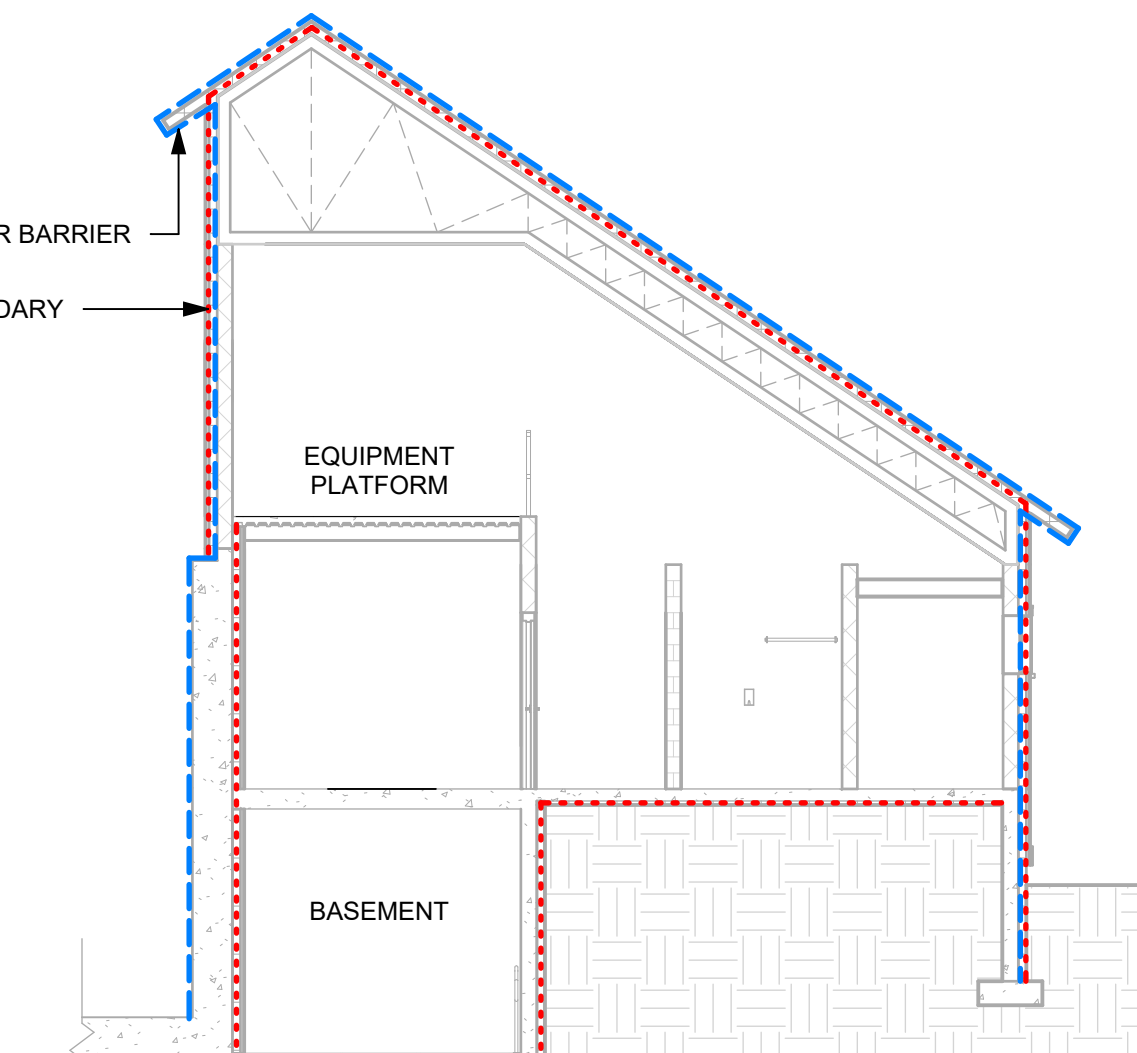
THE GENERAL CONTRACTOR OR CM IS RESPONSIBLE FOR FILLING OUT AND FILLING ALL THE CBES CERTIFICATE AND AFFIDAVITS. THEY SHALL ALSO BE RESPONSIBLE FOR REMOTELY INSTALLING THEM ON THE WALL OF THE MECHANICAL OR ELECTRICAL ROOM

Copies of the signed certification documents shall be included in the construction files for the project, shall be sent to the local town clerk for recording in the land records, and shall be sent to the Vermont Public Service Department. The certificate shall include the following

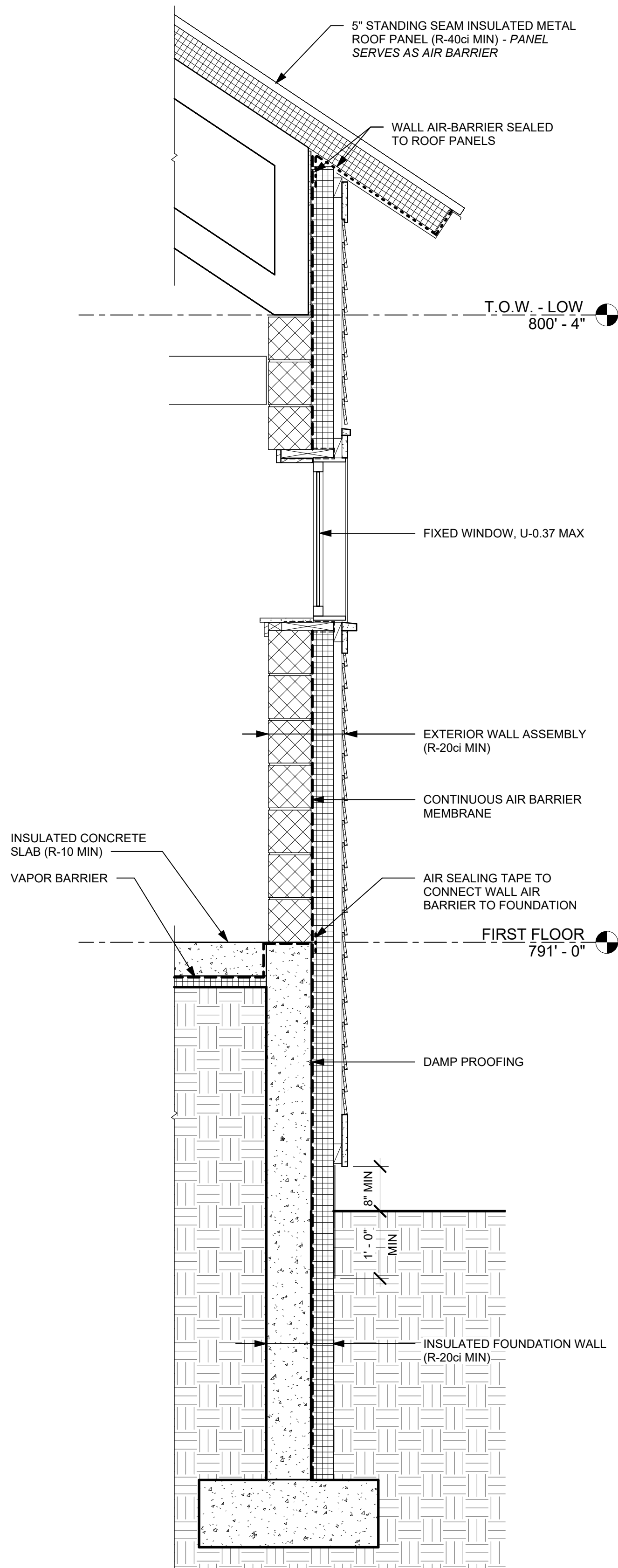
1. Compliance Method
 2. Thermal envelope details, including:
 - a. R-values of insulation installed in or on ceilings, roofs, walls, foundations and slabs, basement walls, crawl space walls and floors, and ducts outside of conditioned spaces.
 - b. U-factors and solar heat gain coefficients (SHGC) of fenestration's
 3. Results from any building envelope air leakage testing performed on the building.
 4. An indication of the solar-ready zone and other requirements of Section C402.5.
- When there is more than one value for any component of the building envelope, the certificate shall indicate the area-weighted average value where available. If the area-weighted average is not available, the certificate shall list each value that applies to 10 percent or more of the total component area.

INSULATION AND AIR SEALING NOTES:

1. GENERAL AIR SEALING MEASURES WILL BE INSTALLED THROUGH THE USE OF INDUSTRY STANDARD MATERIALS AND TECHNIQUES, INCLUDING: USE OF MINIMUM EXPANDING FOAM AND RIGID MATERIALS TO SEAL CRACKS CAPS AND VOIDS, AND USE OF PRESSURE DIFFERENTIAL DIAGNOSTIC TECHNIQUES TO LOCATE AIR LEAKAGE PATHS. GC IS TO PROVIDE A MINIMUM OF ONE BLOWER DOOR TEST PRIOR TO INSTALLATION OF DRYWALL AND ONE BLOWER DOOR TEST AFTER DRYWALL INSTALLATION OR AS MANY TESTS ARE REQUIRED UNTIL APPROVED AIR LEAKAGE RATES ARE MET. BLOWER DOOR CONTRACTOR IS TO BE A TRAINED AND QUALIFIED TECHNICIAN FROM AN INDEPENDENT TESTING ORGANIZATION APPROVED BY THE OWNER AND ARCHITECT.
2. AIR SEALING WILL INVOLVE (BUT NOT LIMITED TO) EFFECTIVE SEALING WITH APPROPRIATE PRODUCTS IN THE FOLLOWING AREAS.
 - a. ALL PLUMBING, ELECTRICAL, ELECTRICAL BOX OR BATH FAN DUCT PENETRATIONS IN EXTERIOR WALLS WITH CAULK OR MINIMALLY EXPANDING FOAM.
 - b. METAL BATH FAN HOUSINGS SEALED TO SHEET ROCK WITH CAULK OF MINIMALLY EXPANDING FOAM.
 - c. AROUND WINDOW AND DOOR ROUGH OPENING, MINIMALLY EXPANDING FOAM WITH BEAD SIZE TO SEAL WINDOW FRAME TO ROUGH OPENING, DO NOT TRY TO FILL DEPTH OF GAP.
 - d. INSULATING CONTRACTOR SHOULD COORDINATE AIR SEALING WORK WITH GENERAL CONTRACTOR. THE GC IS TO ENSURE COMPLETE AND THOROUGH AIR SEALING.



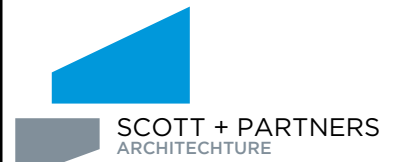
 **BUILDING SECTION**
1/8" = 1'-0"



2
A0.3

TYPICAL WALL SECTION

3/4" = 1'-0"



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[illegible]

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
ENERGY CODE
COMPLIANCE

D&K PROJECT #	PROJ. ENG.
227947	JBA

DRAWN BY JLG	CHECKED BY -
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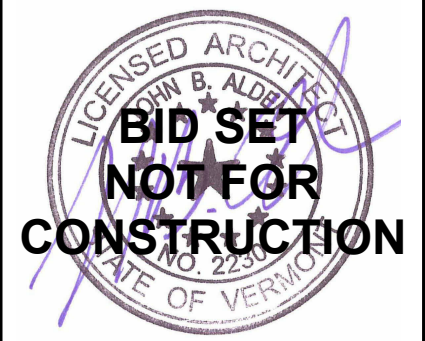
DATE JULY 16, 2026

SHEET NUMBER

A0.3

SHEET 28 OF 85

JULY 16, 2026



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REVISIONS	BY	REVISION DESCRIPTION	DATE	NUMBER

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
BASEMENT PLAN

D&K PROJECT #	PROJ. ENG.
227947	JBA

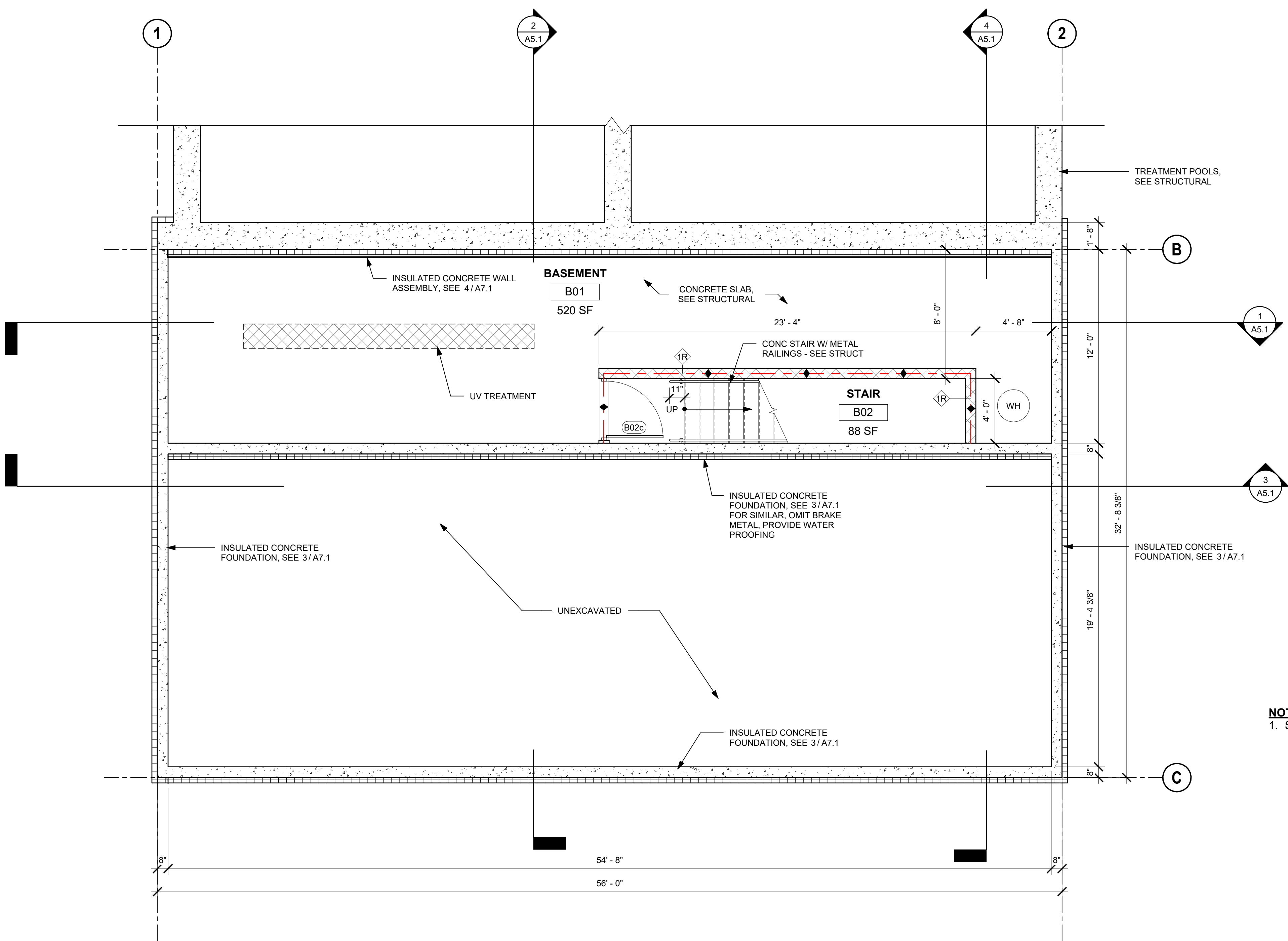
DRAWN BY	CHECKED BY
JLG	-

DATE
JULY 16, 2026

SHEET NUMBER

A2.1

SHEET 29 OF 85



NOTES:
1. SEE STRUCTURAL FOR ALL C.I.P. CONCRETE

NOTE:
ALL MATERIALS AND PRODUCTS LISTED ARE BASIS OF DESIGN.
APPROVED EQUAL SUBSTITUTIONS ARE ACCEPTABLE PER THE
SUBSTITUTION REQUIREMENTS IN THE PROJECT MANUAL.

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JULY 16, 2026

1 BASEMENT
A2.1 1/4" = 1'-0"

REVISIONS	BY	REVISION DESCRIPTION	DATE	NUMBER

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
FIRST FLOOR PLAN

D&K PROJECT #
227947

PROJ. ENG.
JBA

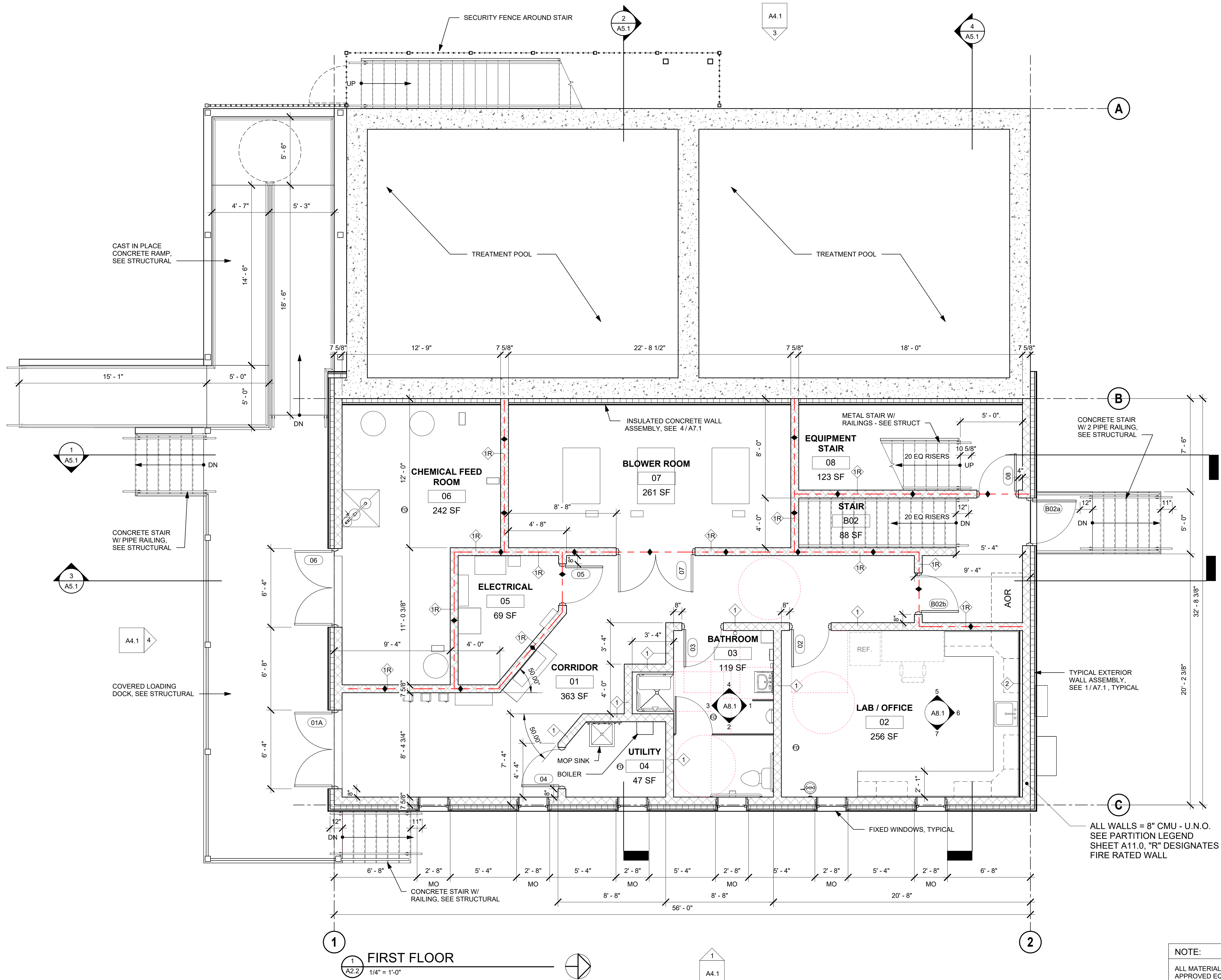
DRAWN BY
JLG

CHECKED BY
-

DATE
JULY 16, 2026

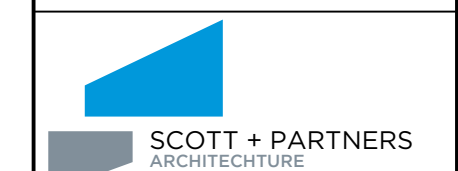
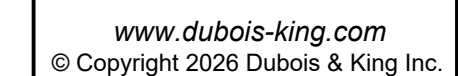
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A2.2

SHEET 30 OF 85



NOTE:
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CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE CONTRACT NO. 1 EQUIPMENT PLATFORM PLAN
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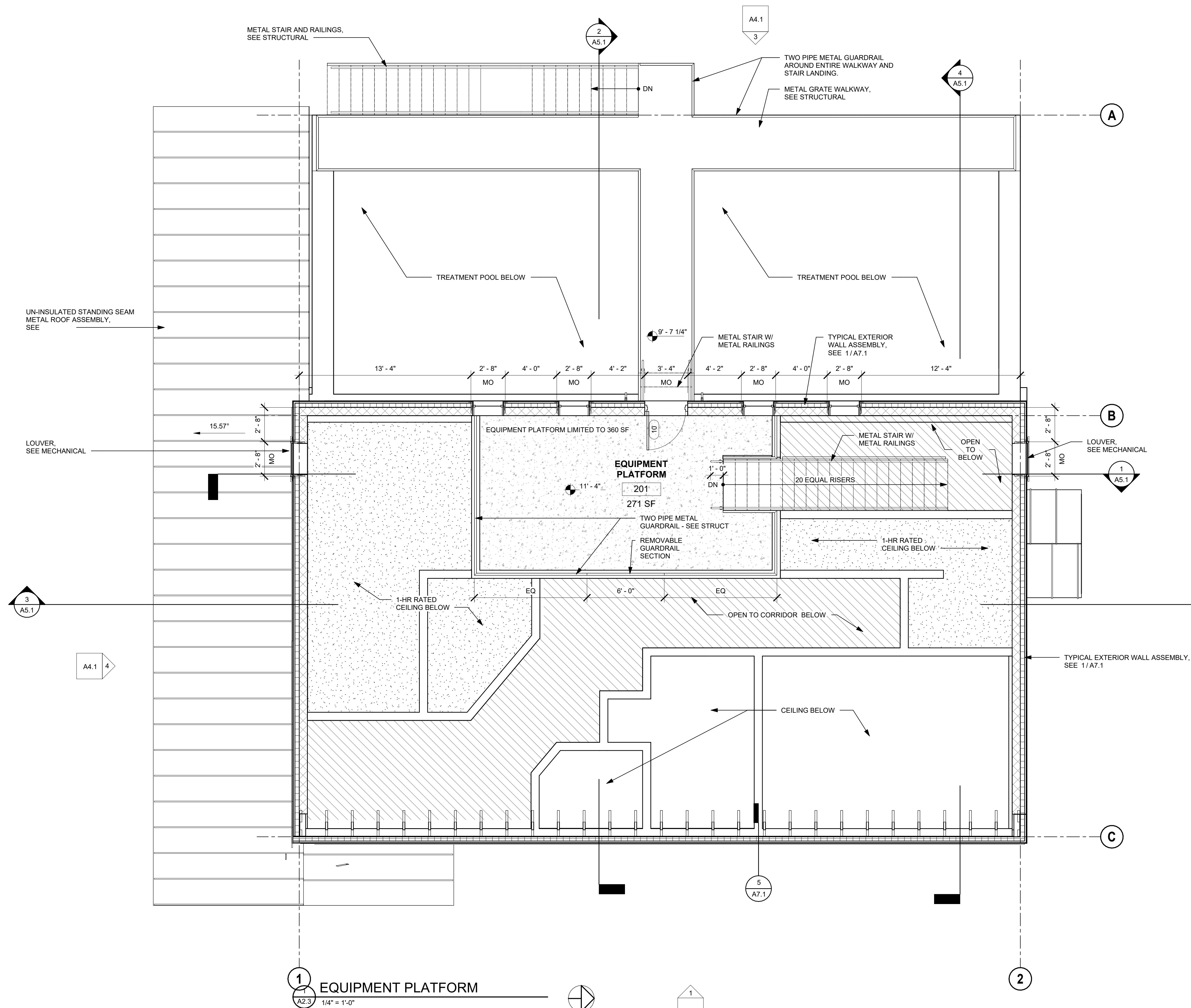
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DRAWN BY JLG	CHECKED BY -

DATE	JULY 16, 2026
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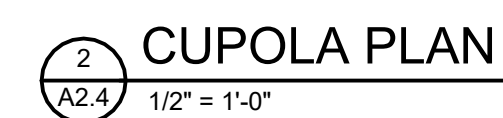
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SHEET 31 OF 85

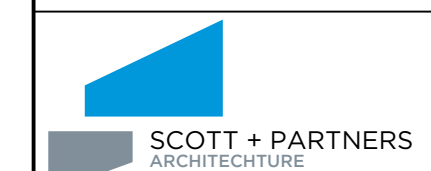
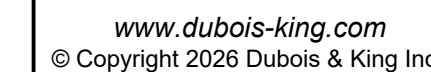


NOTE:
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CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
REFLECTED CEILING
PLANS

D&K PROJECT #	PROJ. ENG.
227947	JBA

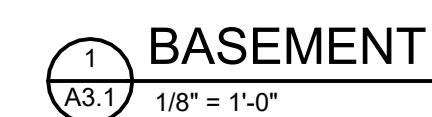
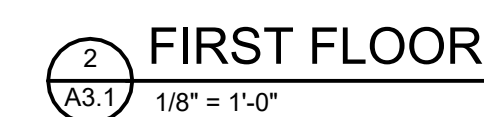
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DATE JULY 16, 2026

SHEET NUMBER

A3.1

SHEET 33 OF 85



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BID SET
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REVISIONS	BY
REVISION DESCRIPTION	
DATE	
NUMBER	

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
EXTERIOR
ELEVATIONS

D&K PROJECT #
227947

PROJ. ENG.
JBA

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JLG

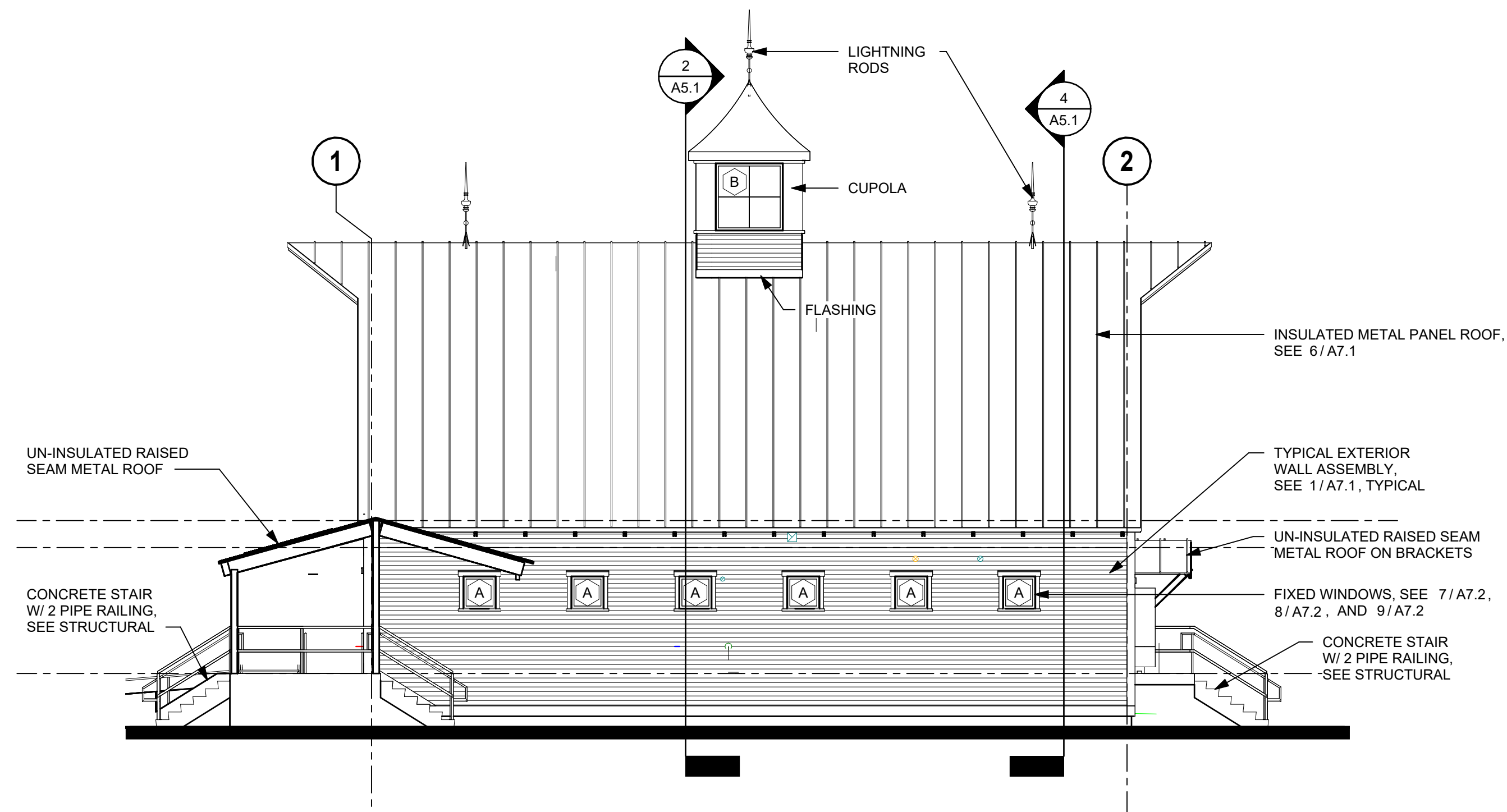
CHECKED BY
-

DATE
JULY 16, 2026

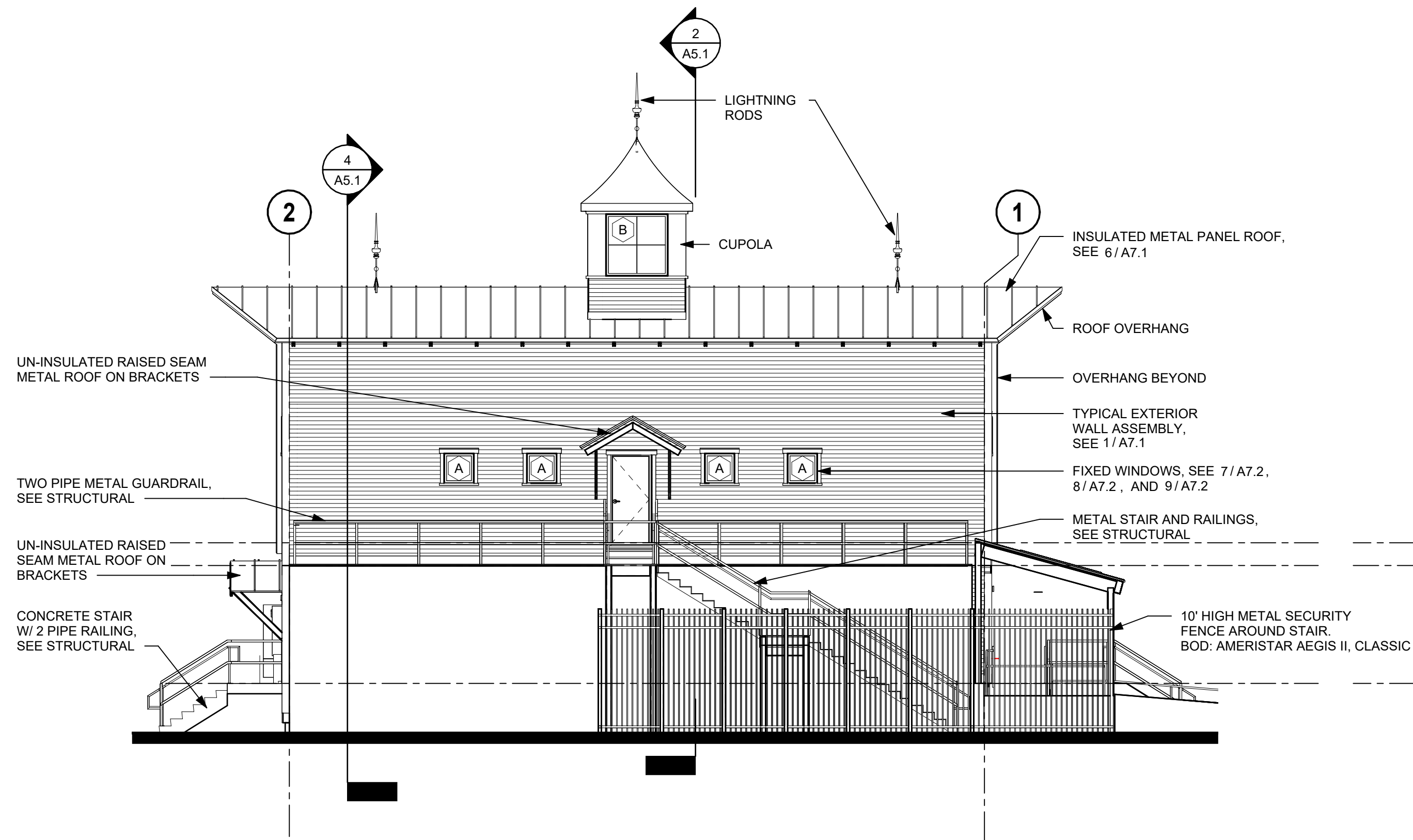
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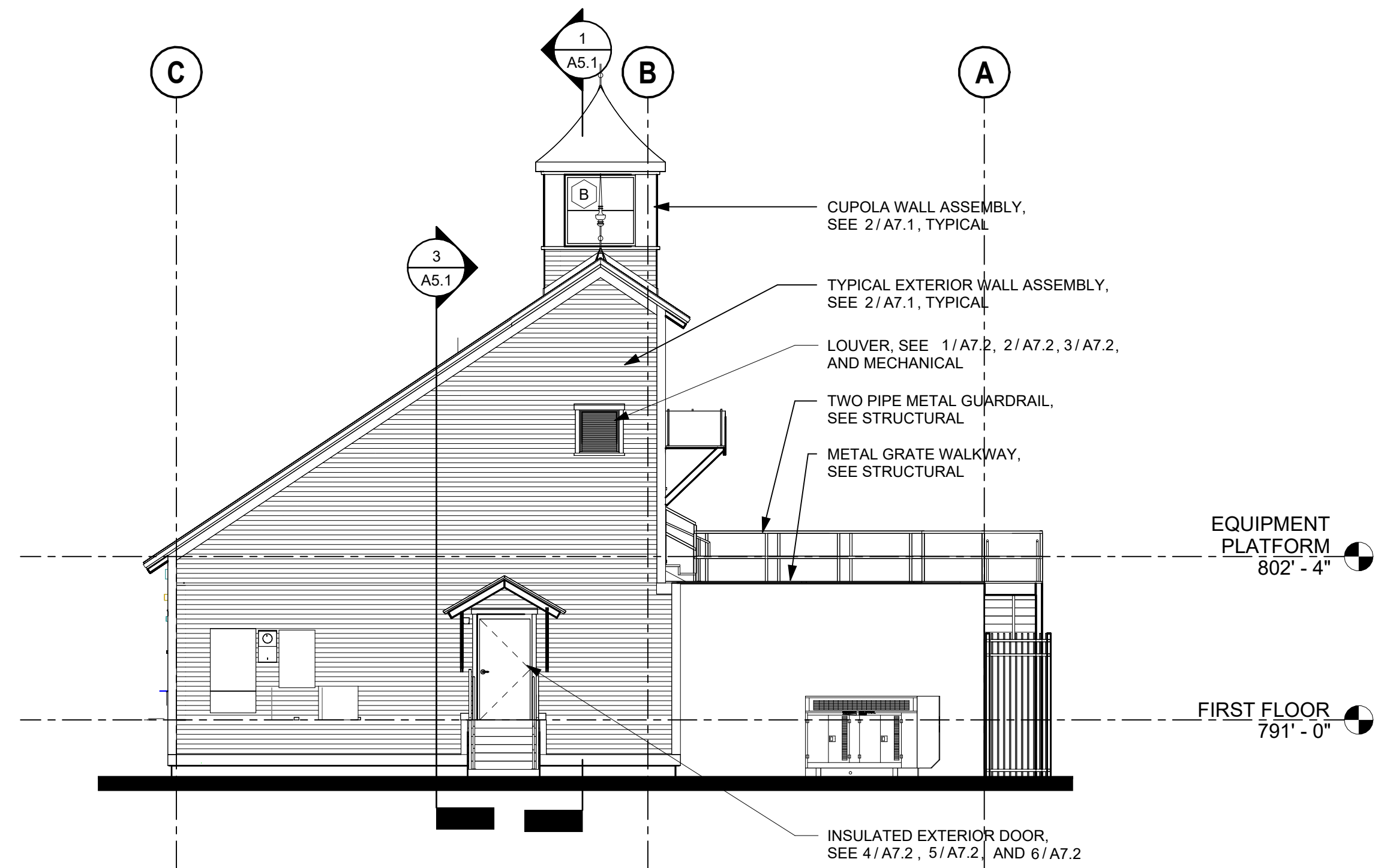
SHEET 34 OF 85



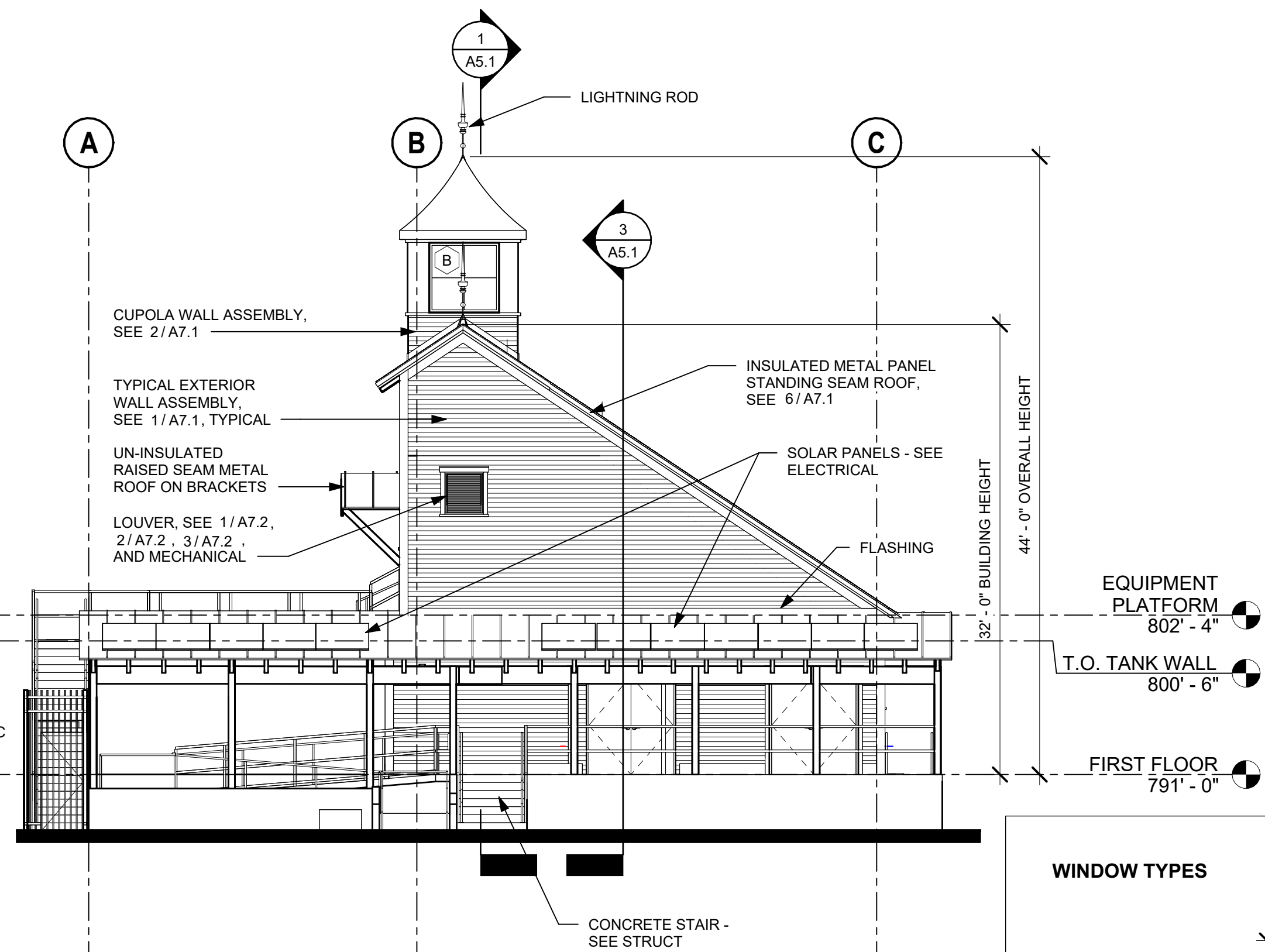
1 EAST ELEVATION
A4.1 1/8" = 1'-0"



3 WEST ELEVATION
A4.1 1/8" = 1'-0"

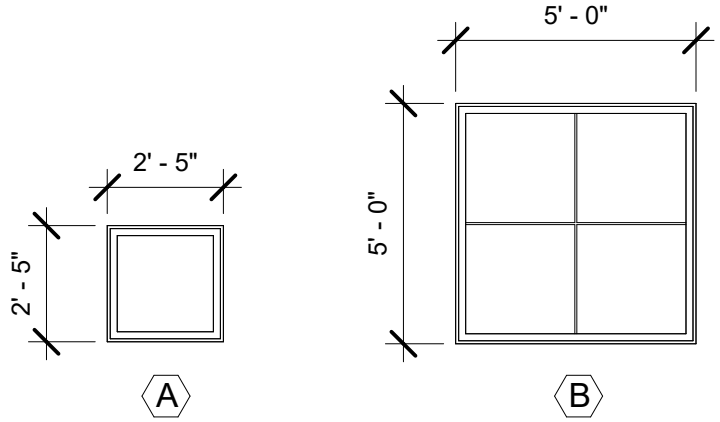


2 NORTH ELEVATION
A4.1 1/8" = 1'-0"



4 SOUTH ELEVATION
A4.1 1/8" = 1'-0"

WINDOW TYPES



NOTE:
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SUBSTITUTION REQUIREMENTS IN THE PROJECT MANUAL.

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JULY 16, 2026

[illegible]

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
BUILDING SECTIONS

D&K PROJECT #	PROJ. ENG.
227947	JBA

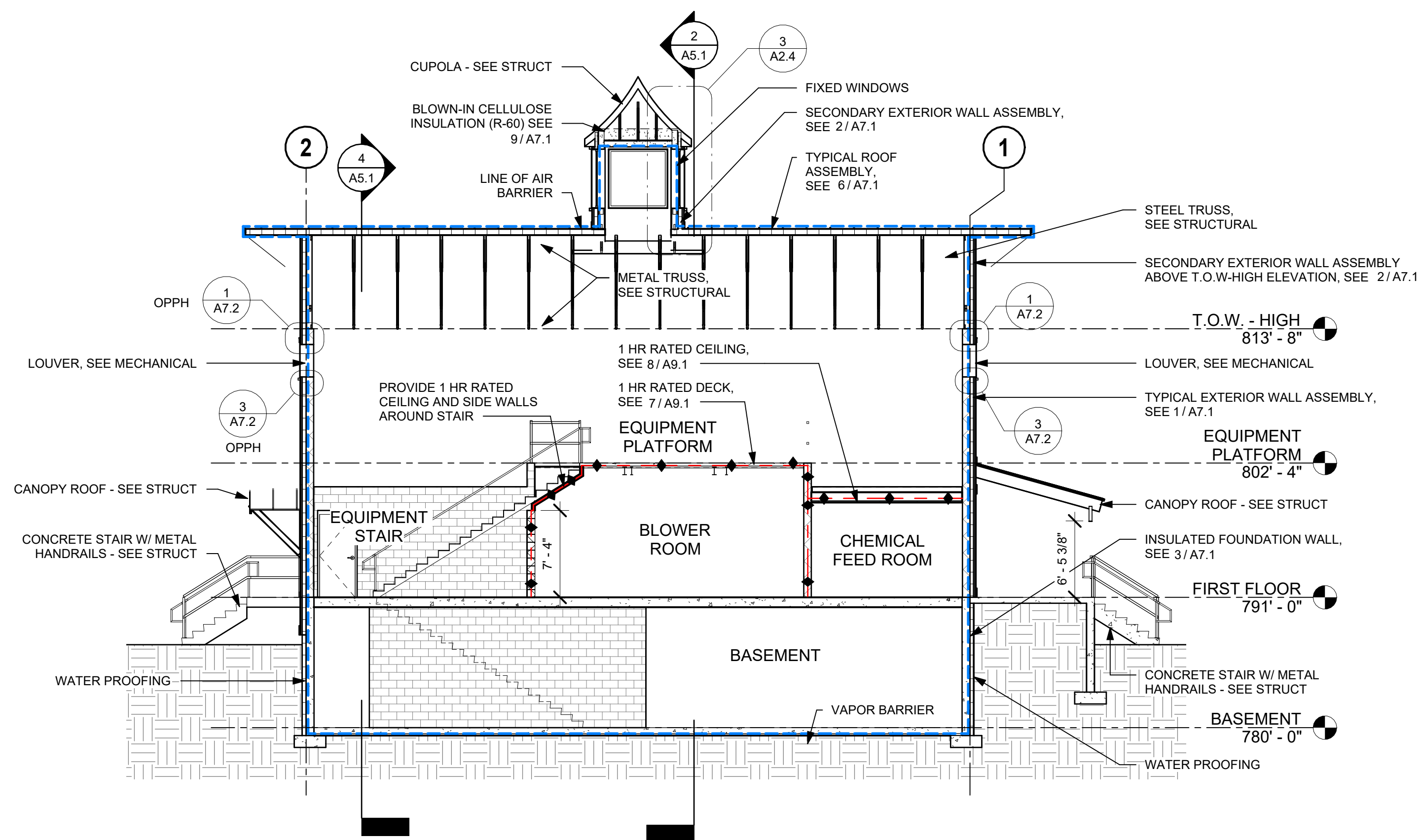
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DATE JULY 16, 2026

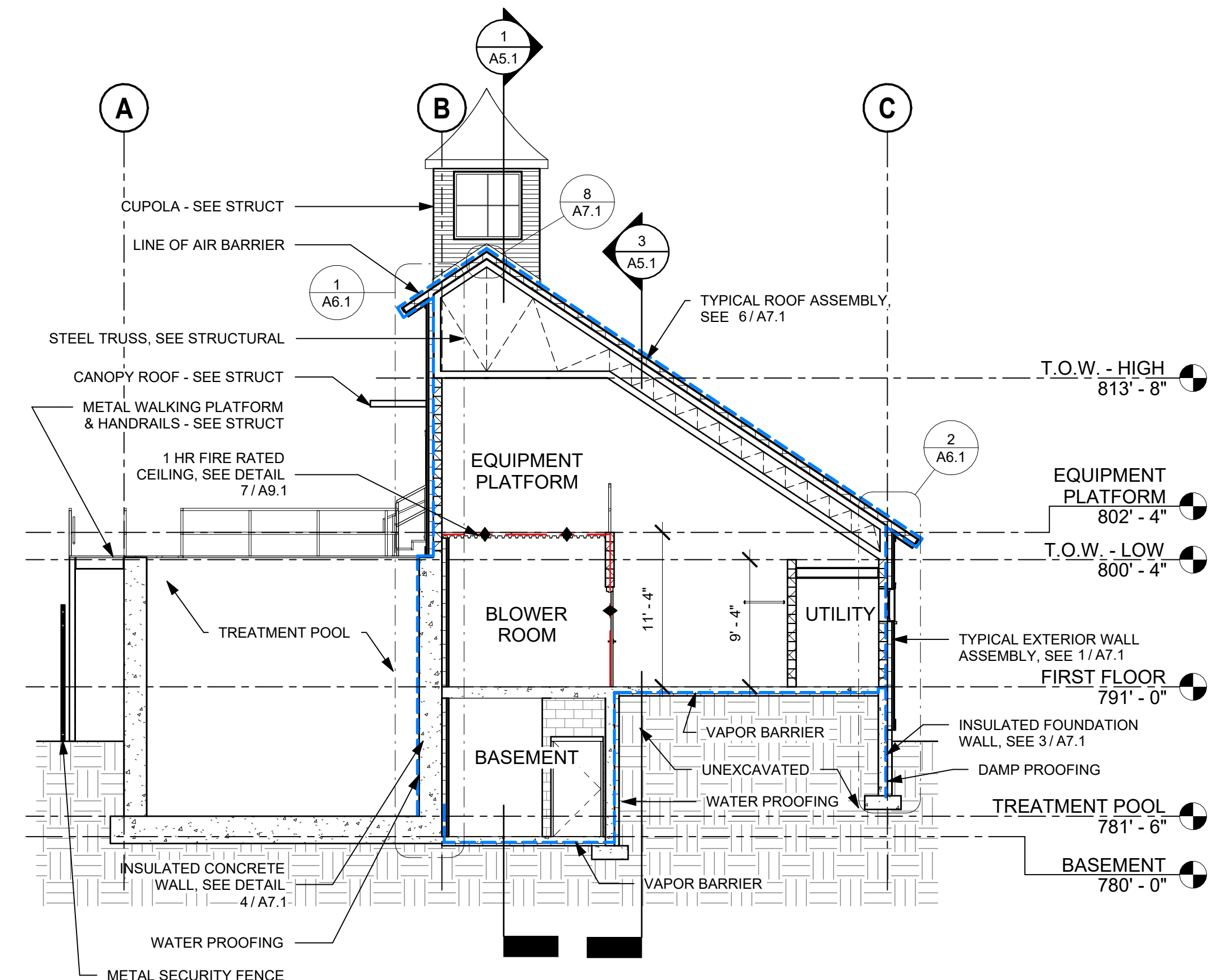
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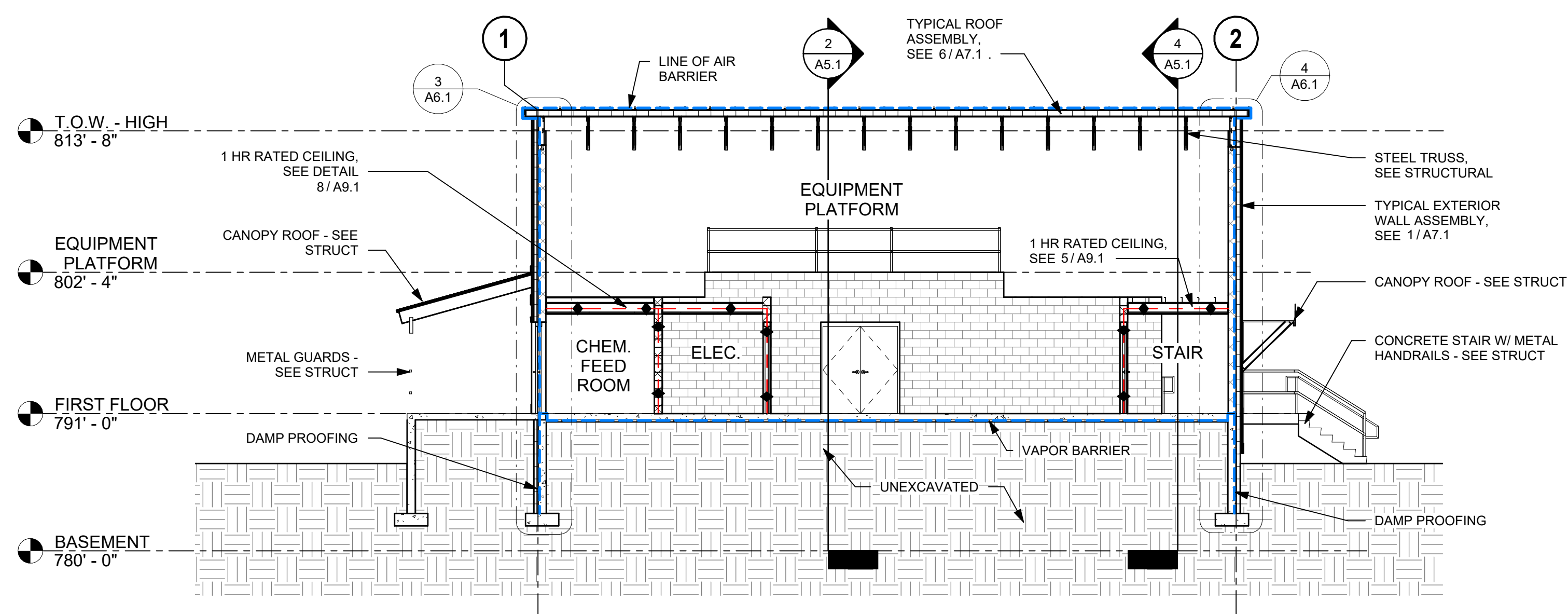
SHEET 35 OF 85



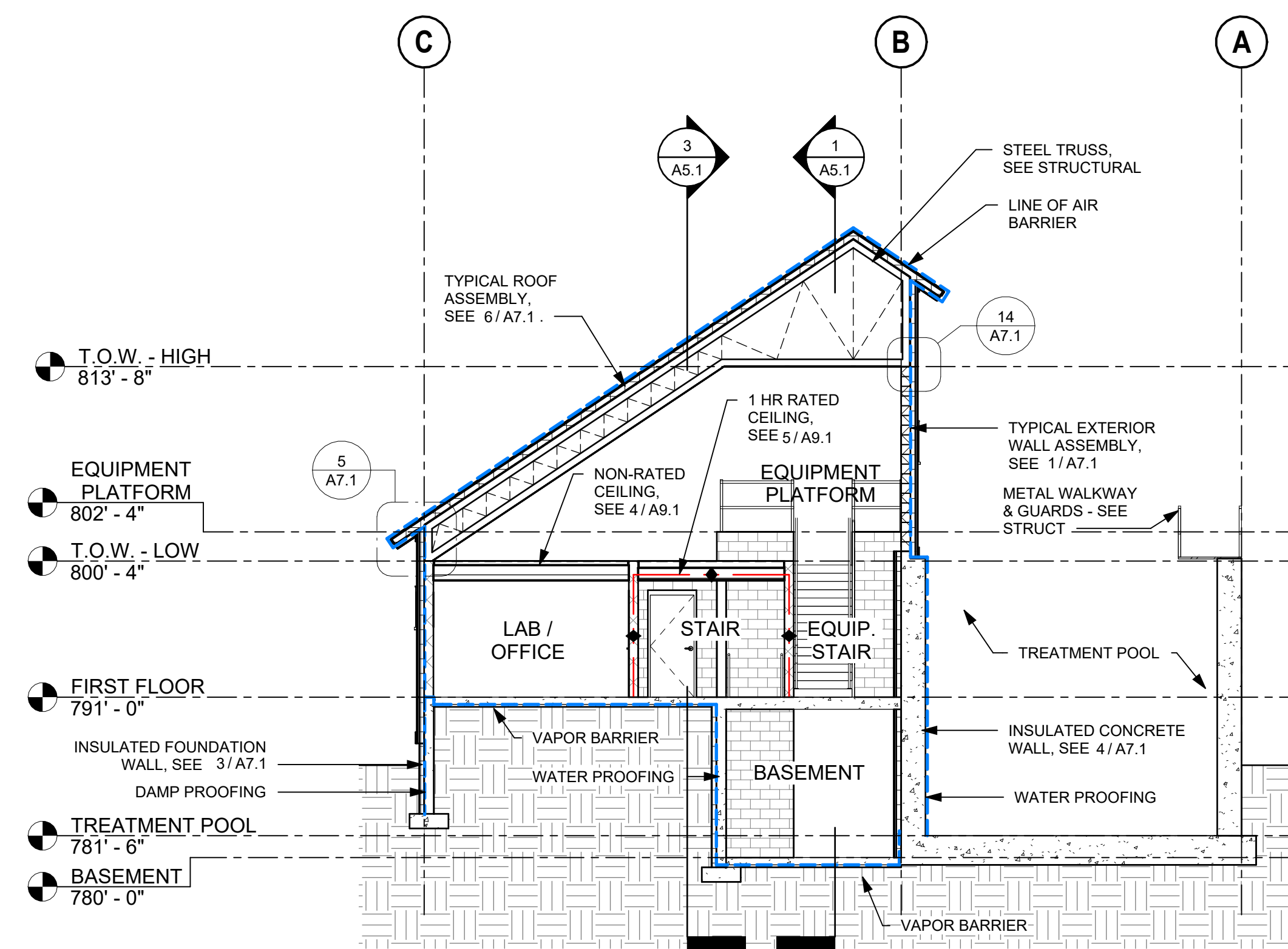
1 NORTH-SOUTH SECTION LOOKING EAST
A5.1 1/8" = 1'-0"



2 EAST-WEST SECTION LOOKING NORTH
A5.1 1/8" = 1'-0"



3 NORTH-SOUTH SECTION LOOKING WEST
A5.1 1/8" = 1'-0"



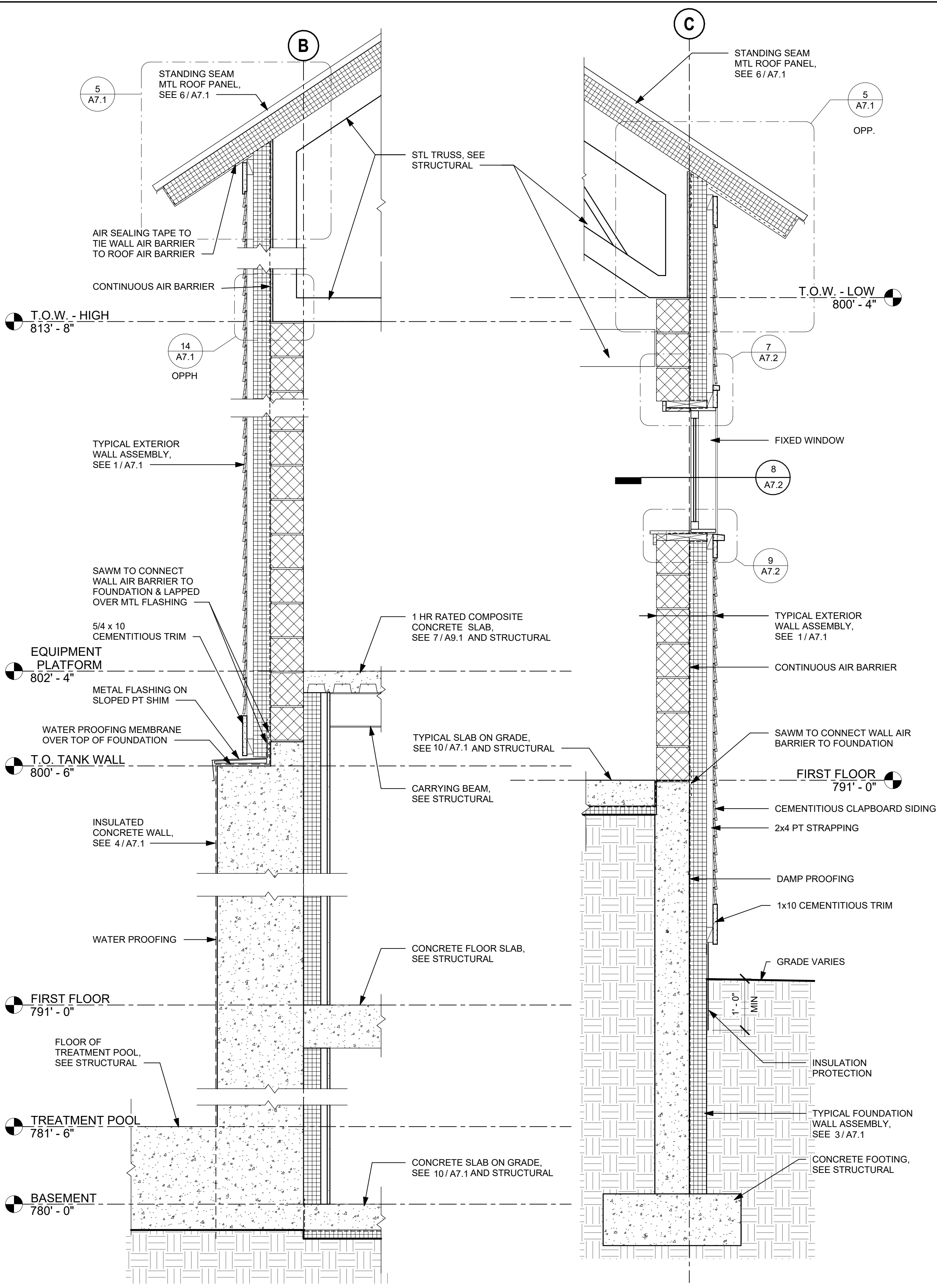
4 EAST-WEST SECTION LOOKING SO
A5.1 $1/8'' = 1'-0''$

NOTE:

ALL MATERIALS AND PRODUCTS LISTED ARE BASIS OF DESIGN.
APPROVED EQUAL SUBSTITUTIONS ARE ACCEPTABLE PER THE
SUBSTITUTION REQUIREMENTS IN THE PROJECT MANUAL.

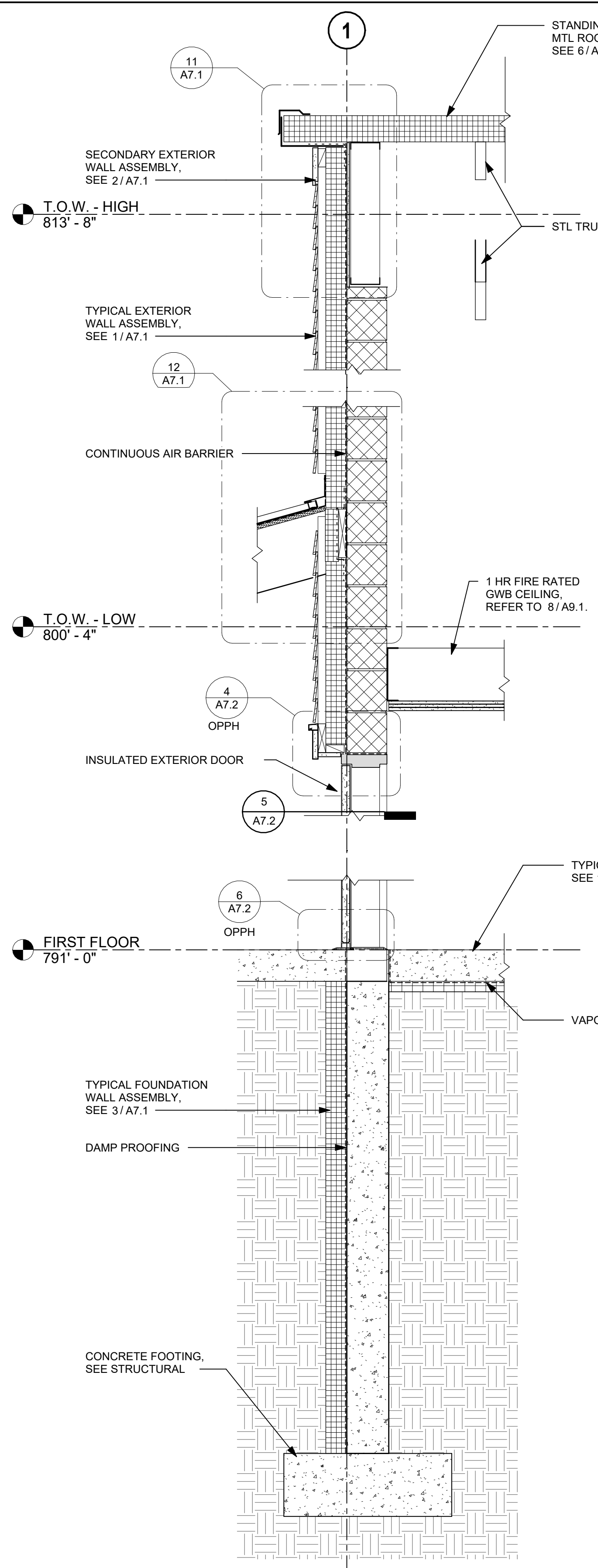
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JULY 16, 2026

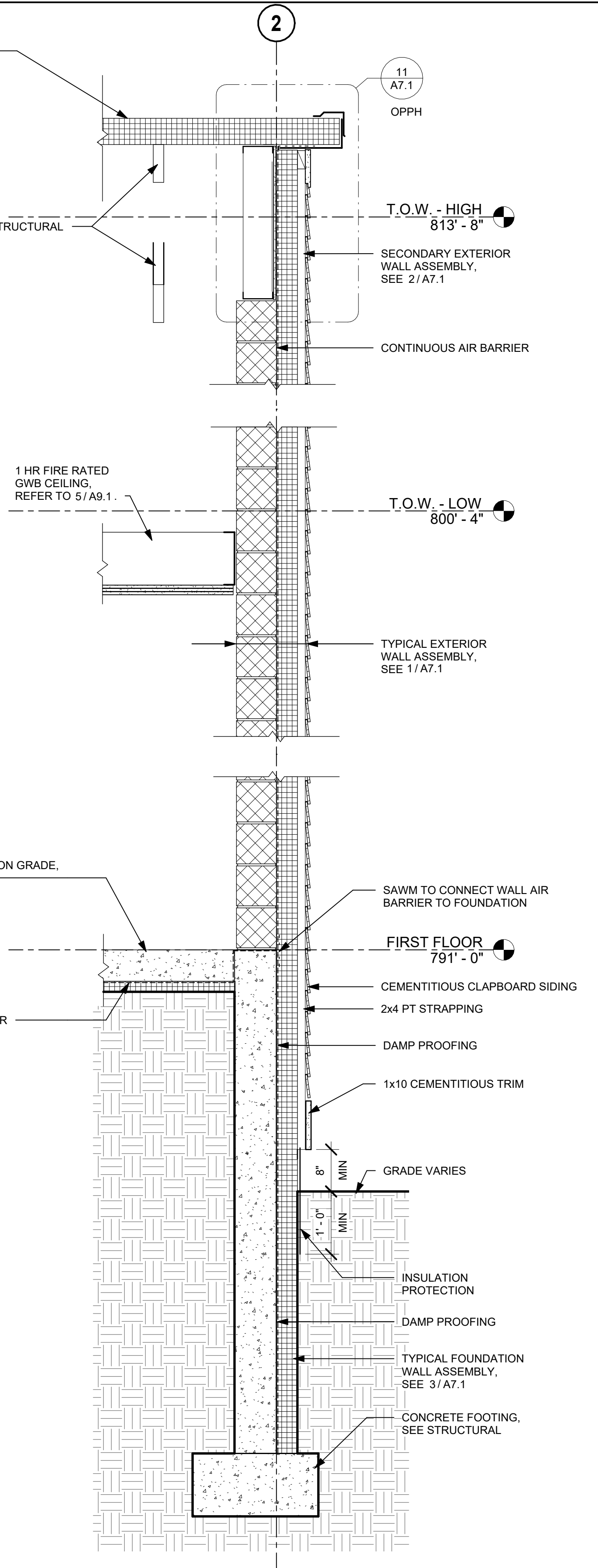


1 WALL SECTION AT EAVE - HIGH END
A6.1 3/4" = 1'-0"

2 WALL SECTION AT EAVE - LOW END
A6.1 3/4" = 1'-0"



3 SOUTH GABLE END WALL SECTION
A6.1 3/4" = 1'-0"



4 NORTH GABLE END WALL SECTION
A6.1 3/4" = 1'-0"

NOTE:
ALL MATERIALS AND PRODUCTS LISTED ARE BASIS OF DESIGN.
APPROVED EQUAL SUBSTITUTIONS ARE ACCEPTABLE PER THE
SUBSTITUTION REQUIREMENTS IN THE PROJECT MANUAL.

BID SET
NOT FOR CONSTRUCTION
JULY 16, 2026

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LICENSED ARCHITECT
BID SET
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STATE OF VERMONT

SCOTT + PARTNERS
ARCHITECTURE
7 CARMICHAEL ST, ESSEX, VT 05452
P 802.879.5153 SCOTTPARTNERS.COM

REVISIONS	BY	REVISION DESCRIPTION	DATE	NUMBER

CLIENT NAME
TOWN OF WAITSFIELD

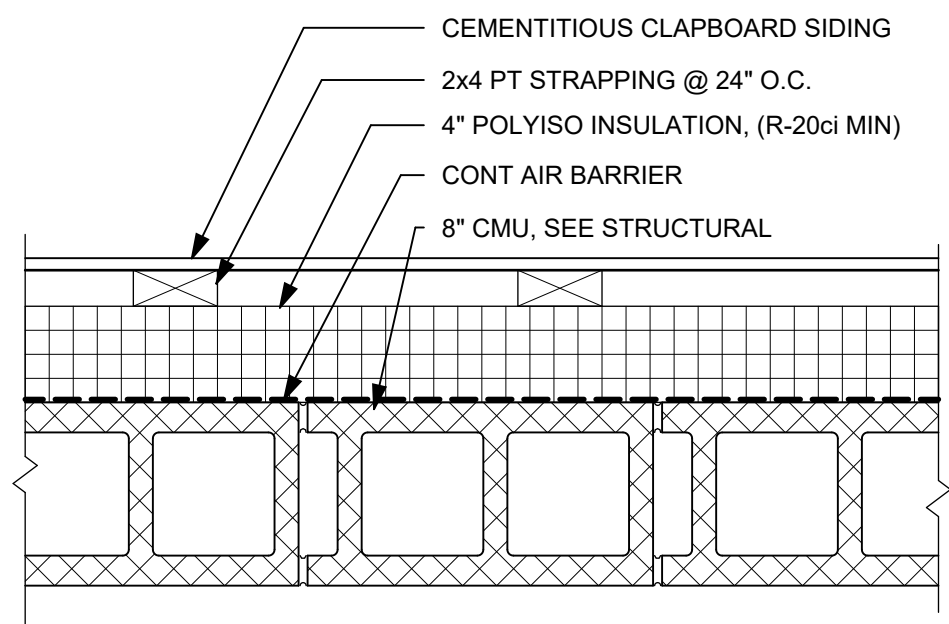
PROJECT NAME
WAITSFIELD WASTEWATER TREATMENT CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
WALL SECTIONS

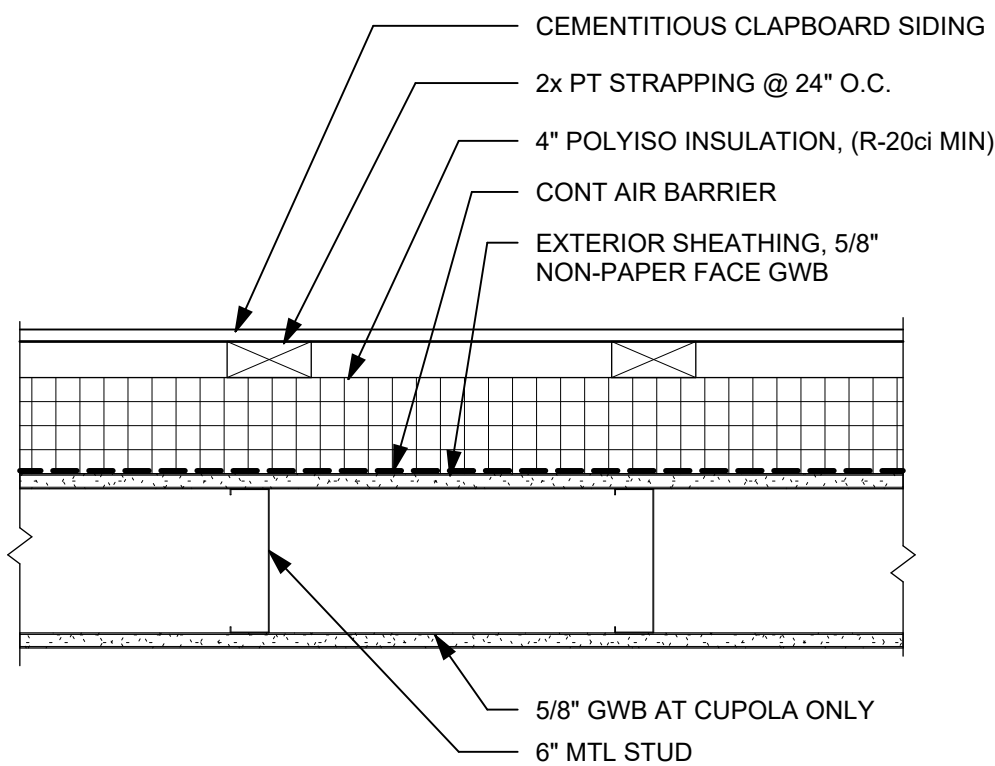
D&K PROJECT #
227947
PROJ. ENG.
JBA
DRAWN BY
JLG
CHECKED BY
-
DATE
JULY 16, 2026

SHEET NUMBER
A6.1
SHEET 36 OF 85



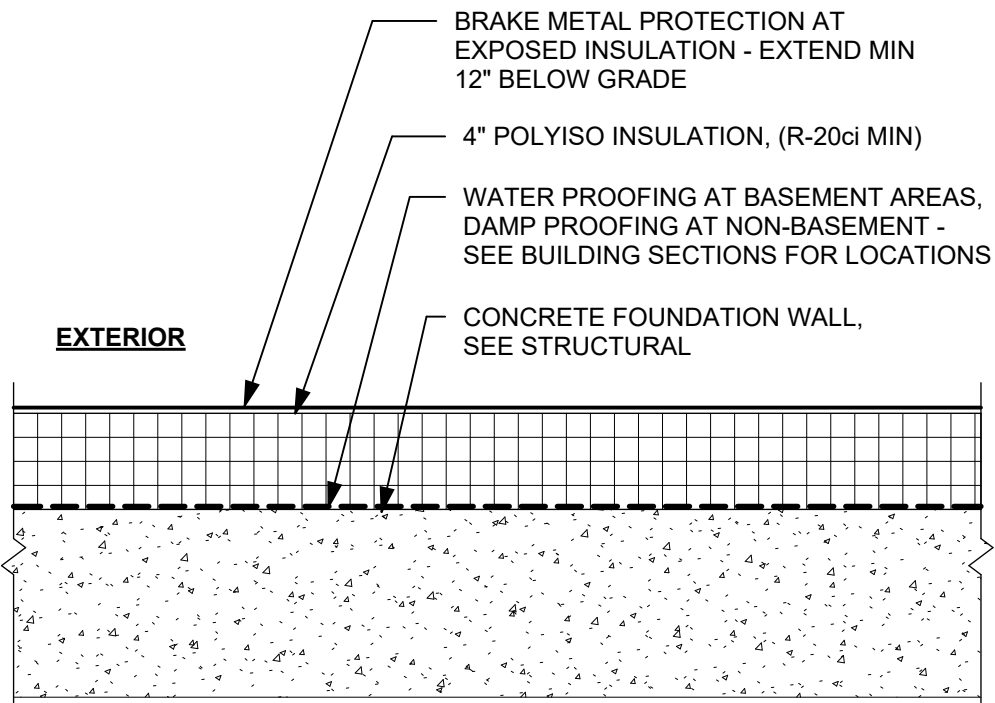
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A7.1
1 1/2" = 1'-0"

TYPICAL EXTERIOR WALL ASSEMBLY



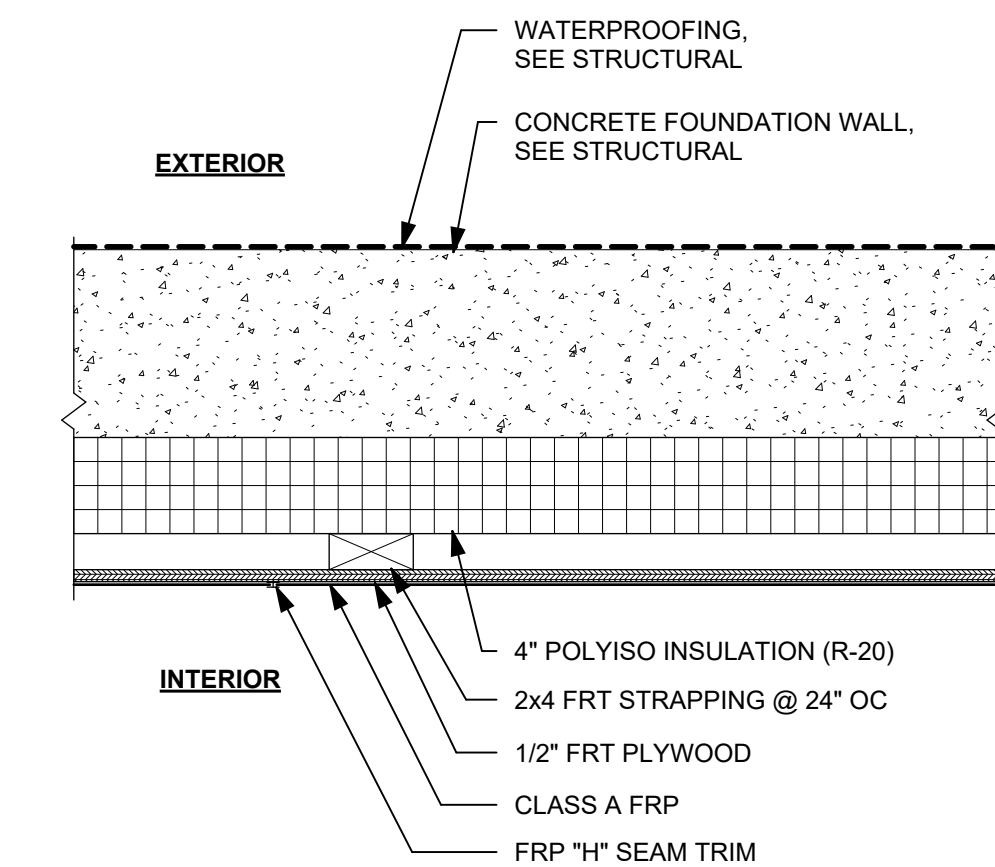
2
A7.1
1 1/2" = 1'-0"

SECONDARY EXTERIOR WALL ASSEMBLY



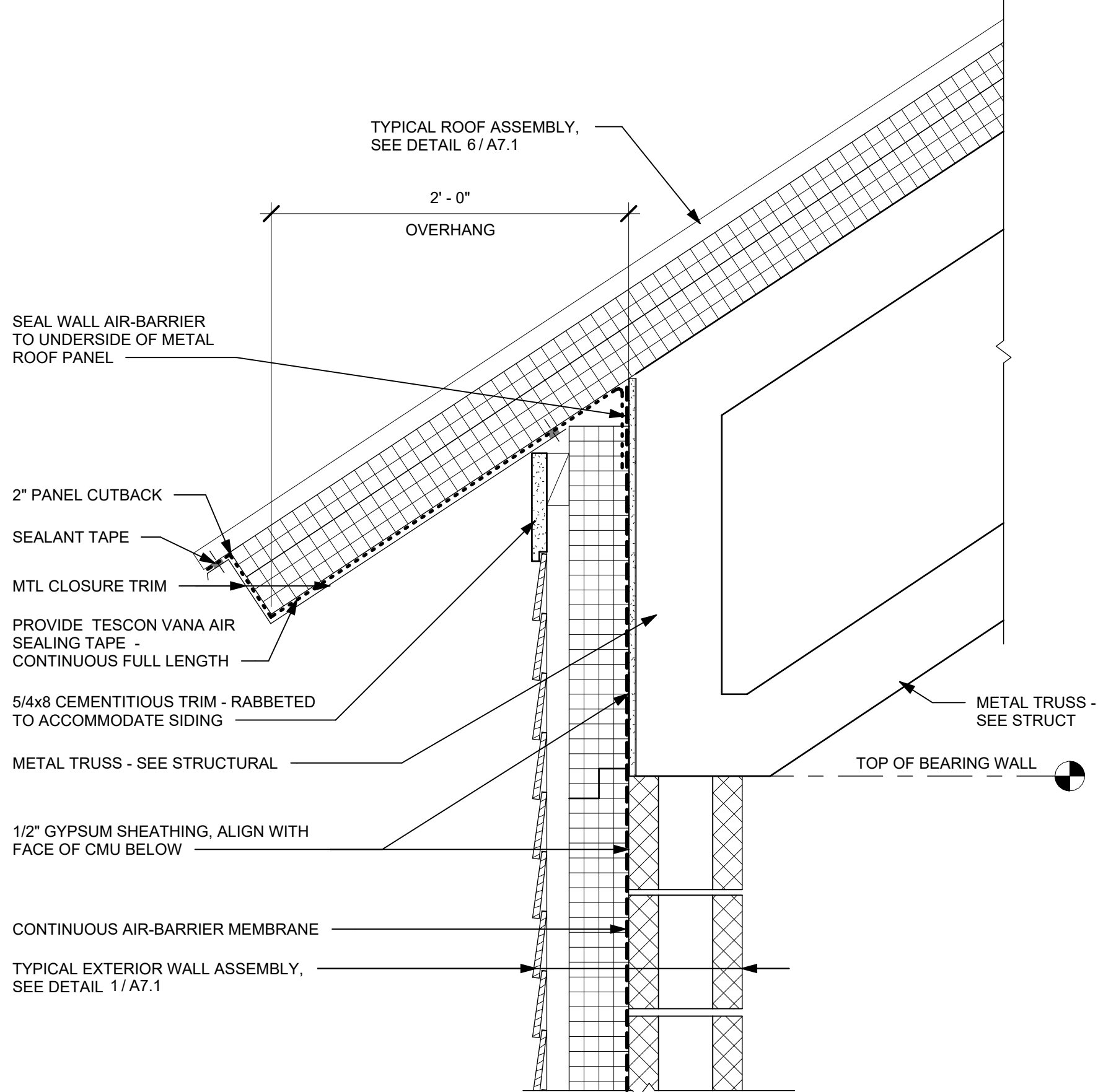
3
A7.1
1 1/2" = 1'-0"

FOUNDATION WALL ASSEMBLY



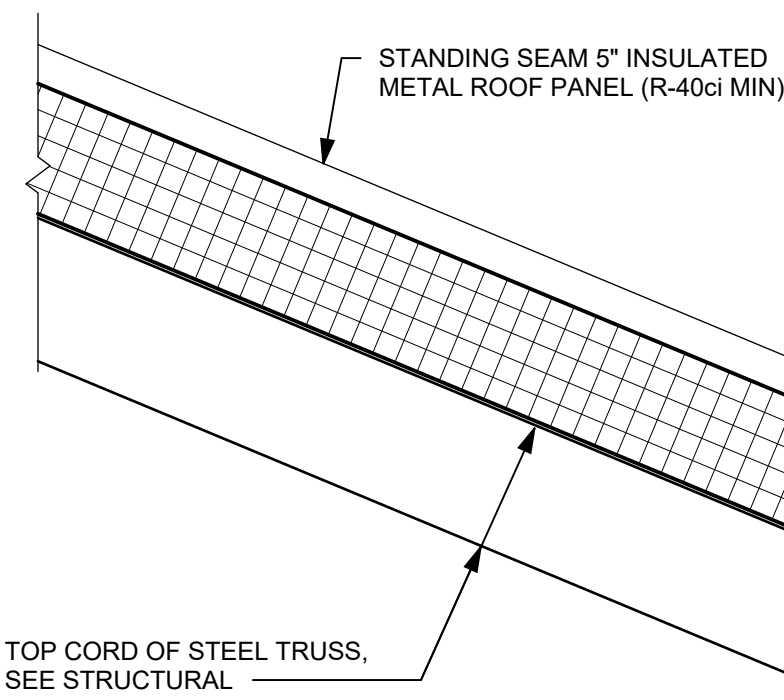
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A7.1
1 1/2" = 1'-0"

SECONDARY FOUNDATION WALL ASSEMBLY



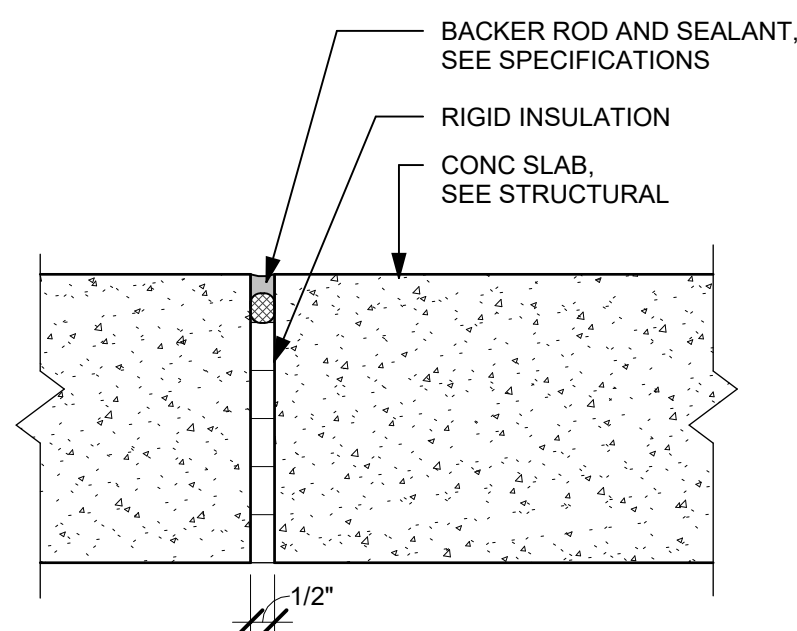
5
A7.1
1 1/2" = 1'-0"

TYPICAL EAVE DETAIL



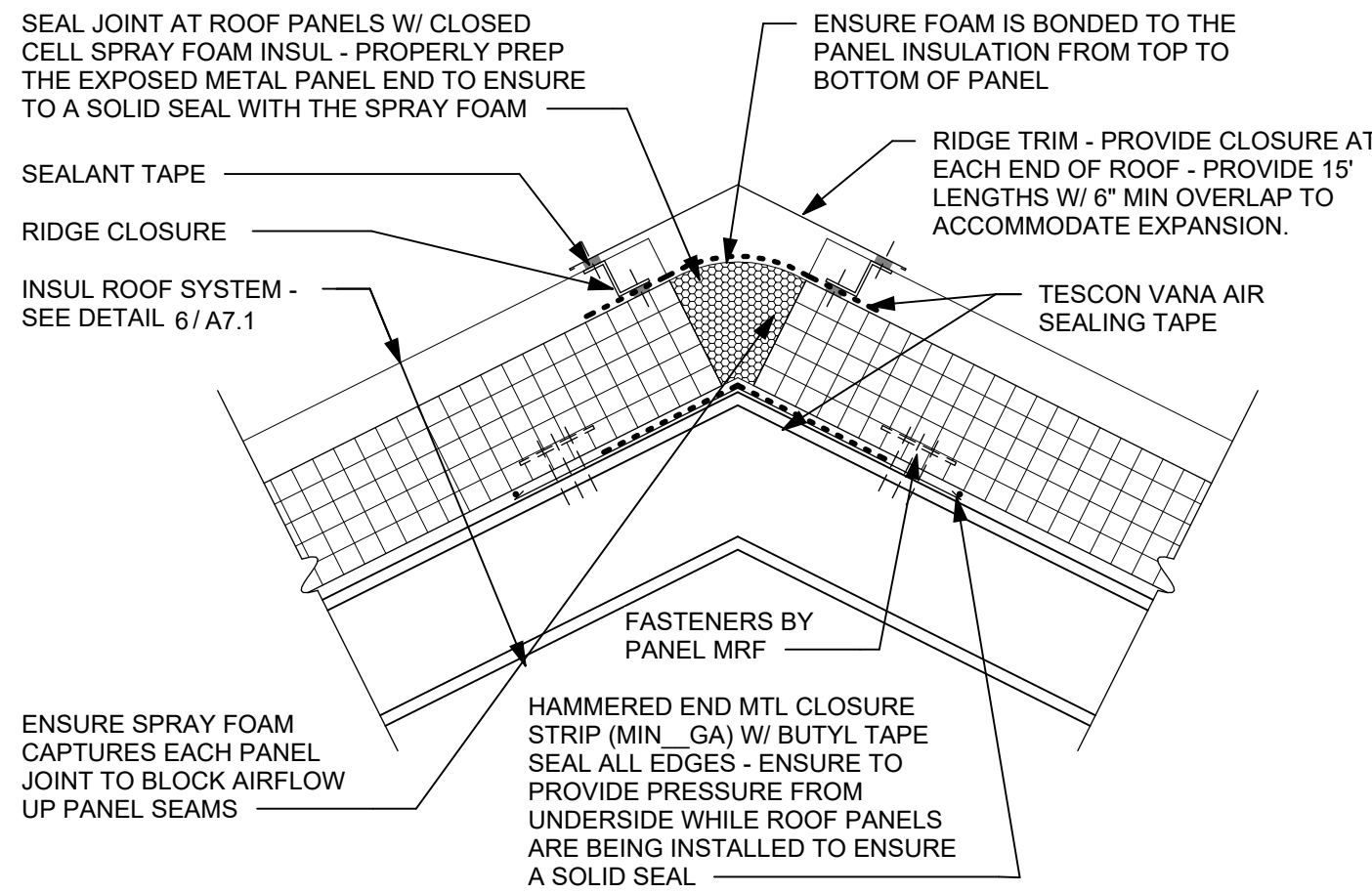
6
A7.1
1 1/2" = 1'-0"

TYPICAL ROOF ASSEMBLY



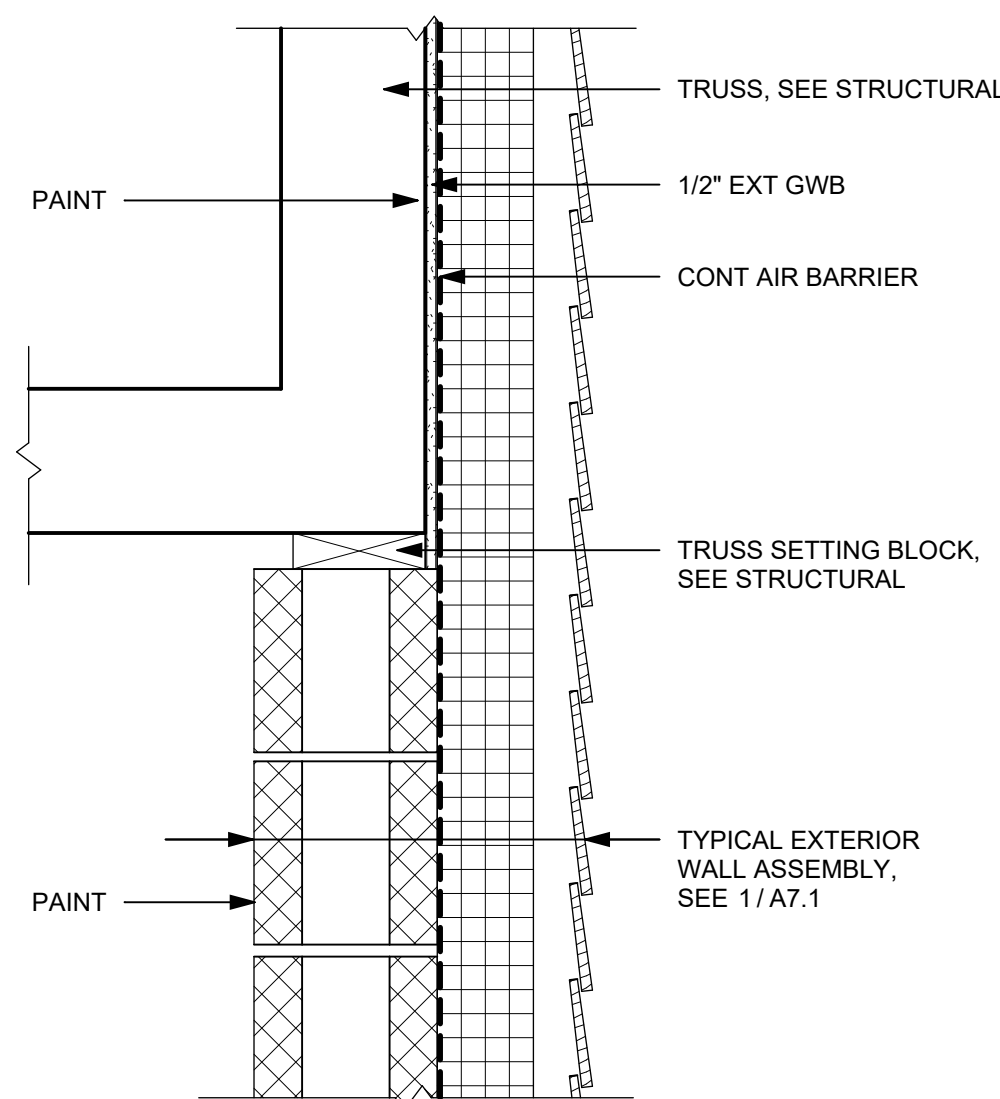
7
A7.1
3" = 1'-0"

JOINT FILLER AT STRUCTURAL SLAB



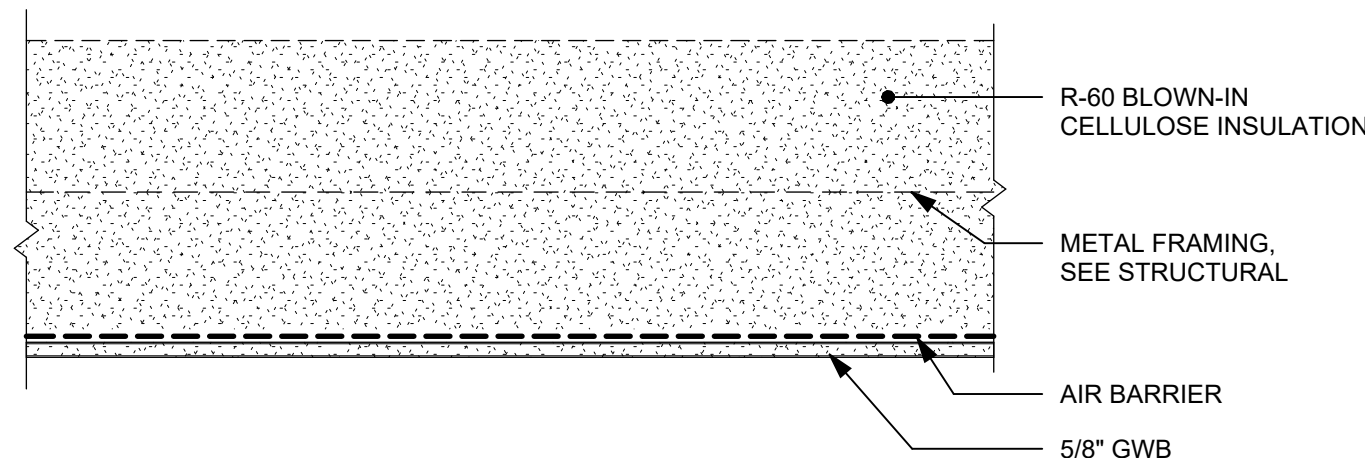
8
A7.1
1 1/2" = 1'-0"

RIDGE DETAIL



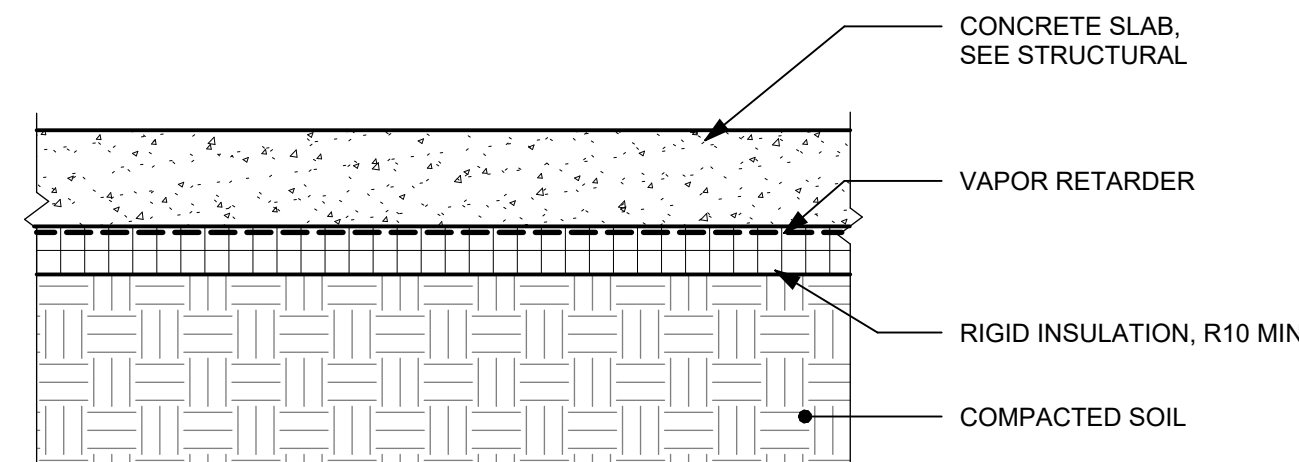
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A7.1
1 1/2" = 1'-0"

TRANSITION FROM TYP EXT WALL TO SECONDARY



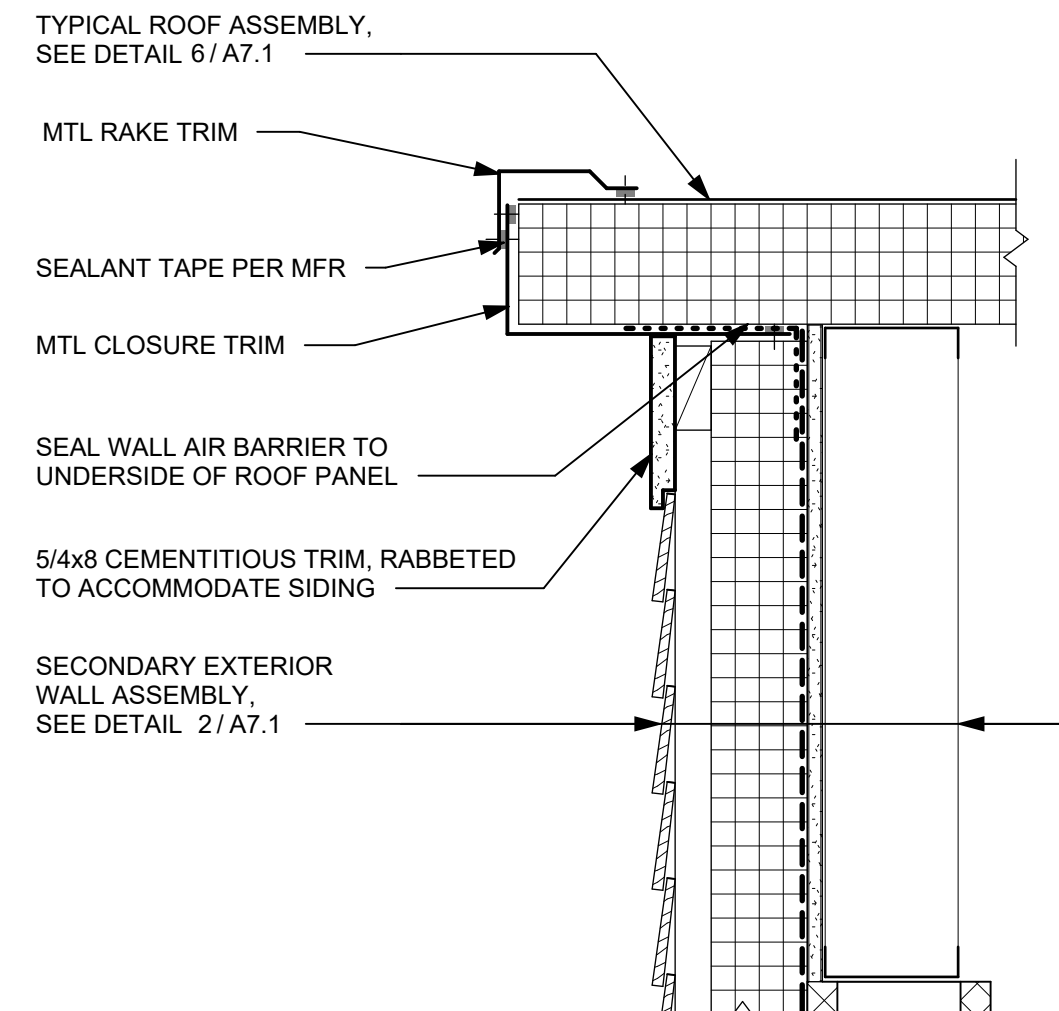
9
A7.1
1 1/2" = 1'-0"

CUPOLA CEILING



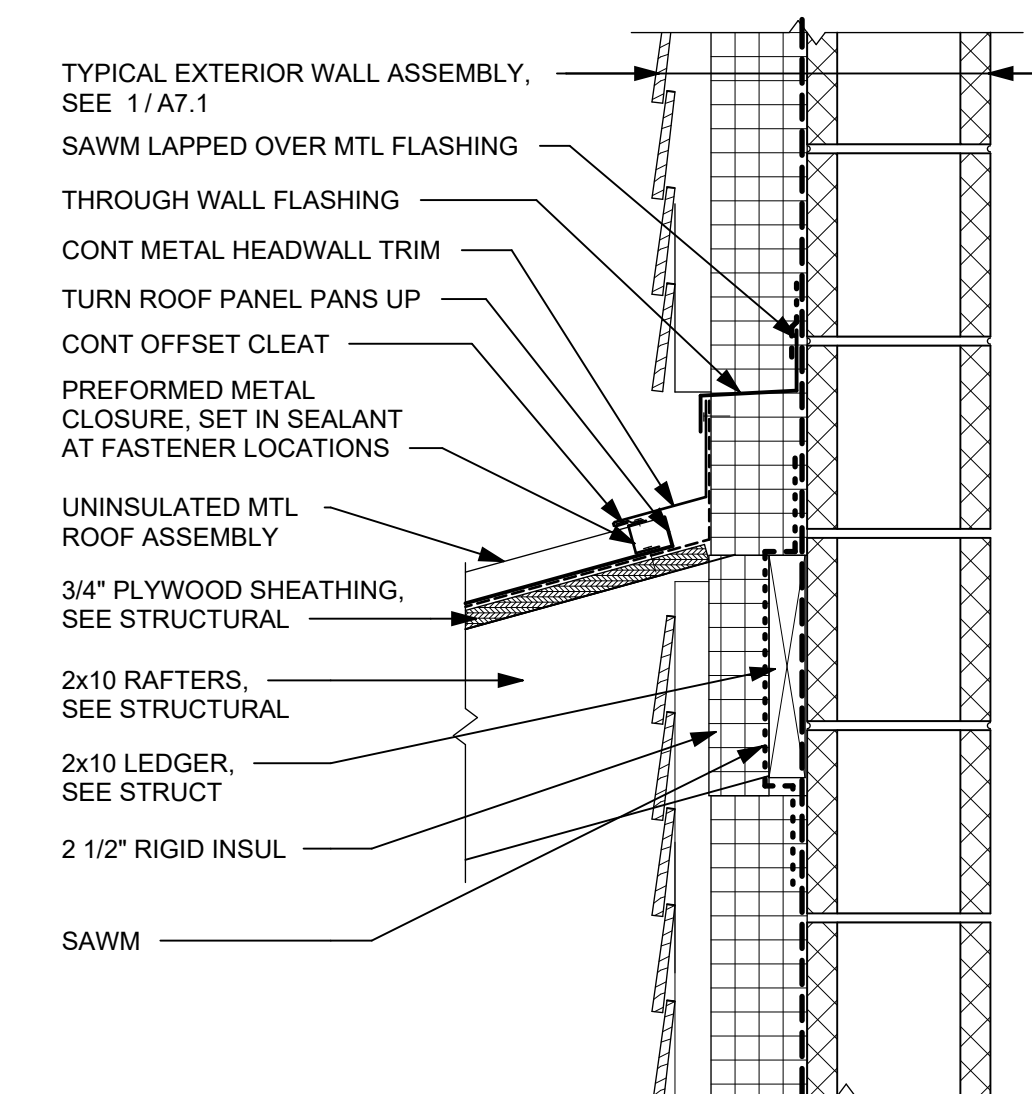
10
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1 1/2" = 1'-0"

TYPICAL SLAB ON GRADE



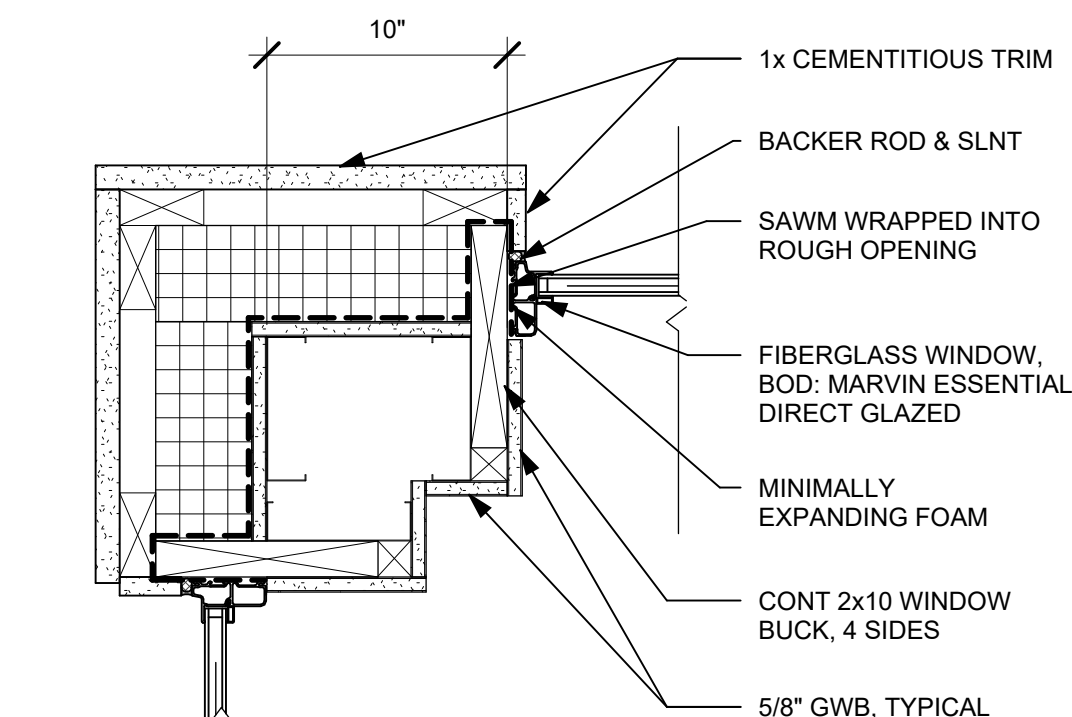
11
A7.1
1 1/2" = 1'-0"

TYPICAL RAKE DETAIL



12
A7.1
1 1/2" = 1'-0"

SHED ROOF TO EXT WALL



13
A7.1
1 1/2" = 1'-0"

CUPOLA CORNER PLAN

NOTE:
ALL MATERIALS AND PRODUCTS LISTED ARE BASIS OF DESIGN. APPROVED EQUAL SUBSTITUTIONS ARE ACCEPTABLE PER THE SUBSTITUTION REQUIREMENTS IN THE PROJECT MANUAL.

BID SET
NOT FOR CONSTRUCTION

JULY 16, 2026

REVISIONS	BY	REVISION DESCRIPTION	DATE	NUMBER

CLIENT NAME
TOWN OF WAITSFIELD

PROJECT NAME
WAITSFIELD WASTEWATER TREATMENT CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
EXTERIOR DETAILS

D&K PROJECT #
227947

PROJ. ENG.
JBA

DRAWN BY
JLG

CHECKED BY
-

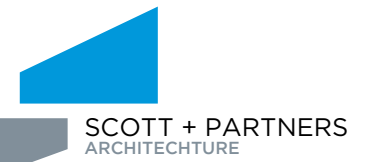
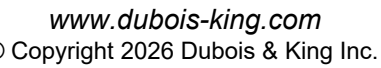
DATE
JULY 16, 2026

SHEET NUMBER
A7.1

SHEET 37 OF 85



JULY 16, 2026



CARMICHAEL ST, ESSEX, VT 05452

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[illegible]

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
INTERIOR
ELEVATIONS

WORK PROJECT #	PROJ. ENG.
227947	JBA

DRAWN BY JLG	CHECKED BY -
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JULY 16, 2026

SHEET NUMBER

A8.1

SHEET 39 OF 85

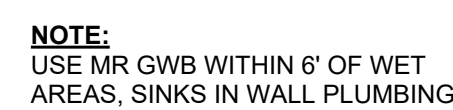


NOTE:

ALL MATERIALS AND PRODUCTS LISTED ARE BASIS OF DESIGN.
APPROVED EQUAL SUBSTITUTIONS ARE ACCEPTABLE PER THE
SUBSTITUTION REQUIREMENTS IN THE PROJECT MANUAL.

BID SET
NOT FOR CONSTRUCTION

JULY 16, 2026



SHEET 40 OF 85

GENERAL

1. USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS AND ARCHITECTURAL, ELECTRICAL, MECHANICAL AND SITE DRAWINGS.
2. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, STANDARDS, AND REGULATIONS.
3. DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.
4. DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
5. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AND REPORT DISCREPANCIES TO ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. IN CASE OF DISCREPANCIES BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE DRAWINGS GOVERN.

SHOP DRAWINGS AND PRODUCT DATA

1. SHOP DRAWINGS: SUBMIT ELECTRONICALLY TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS WILL BE PROCESSED AND RETURNED ELECTRONICALLY.
 - A. DESIGN SUBMITTALS INCLUDE BUT NOT LIMITED TO THE FOLLOWING:
 - a. COLD FORMED STEEL TRUSSES
 - b. COLD FORMED METAL JOISTS
 - c. FRP GRATING
 - B. REFER TO SPECIFICATIONS FOR ALL SUBMITTAL REQUIREMENTS
2. PRODUCT DATA: SUBMIT ELECTRONICALLY TO THE ENGINEER, MARKING TO INDICATE ACTUAL PRODUCT TO BE PROVIDED. PRODUCT DATA WILL BE PROCESSED AND RETURNED ELECTRONICALLY.

EARTHWORK

3. SUBMITTALS: SUBMIT TEST REPORTS ON BORROW MATERIAL, VERIFICATION OF FOOTING SUBGRADE MATERIAL, IN-PLACE SOIL DENSITY TEST AND OPTIMUM MOISTURE-MAXIMUM DENSITY CURVES.
2. EXISTING UTILITIES: LOCATE BY HAND EXCAVATION AND PROVIDE PROTECTION FROM DAMAGE. COOPERATE WITH OWNER AND UTILITY COMPANIES FOR MAINTAINING SERVICES.
3. PROTECTIONS: PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES IN AREAS OF WORK. BARRICADE OPEN EXCAVATIONS AND PROVIDE WARNING LIGHTS. SLOPE SIDES OF EXCAVATIONS AS REQUIRED FOR SAFE WORKING CONDITIONS. COMPLY WITH REGULATIONS OF AUTHORITIES HAVING JURISDICTION INCLUDING OSHA REGULATIONS FOR ALL EXCAVATION AND BACKFILLING WORK.
4. CRUSHED STONE: WASHED, HARD, DURABLE ROCK MEETING THE REQUIREMENTS CALLED OUT FOR ITEM 704.028 3/4 INCH STONE IN THE LATEST SECTION OF THE VERMONT AGENCY OF TRANSPORTATION (VTRANS) STANDARD SPECIFICATION FOR CONSTRUCTION.
5. EXCAVATION: REMOVE AND DISPOSE OF MATERIAL ENCOUNTERED TO OBTAIN REQUIRED SUBGRADE ELEVATIONS. USE SMOOTH-EDGE BUCKET FOR FINAL CUTS.
6. DEWATERING: PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT AND DAMAGE BY RAIN OR WATER ACCUMULATION. IF GROUNDWATER IS ENCOUNTERED WITHIN THE EXCAVATION ZONE OF FOOTINGS, ALL EXPOSED FOUNDATION BEARING MATERIALS WITHIN THE EXCAVATED GROUNDWATER ZONE SHALL BE OVER-EXCAVATED BY TWO (2) FEET AND RETURNED TO THE PLANNED ELEVATION THROUGH PLACEMENT OF CRUSHED STONE WRAPPED IN A NON-WOVEN GEOTEXTILE FABRIC.
7. BACKFILL AND FILL: PLACE SATISFACTORY BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 6 INCHES IN LOOSE DEPTH, COMPACTING EACH LAYER TO REQUIRED MAXIMUM DENSITY. DO NOT PLACE MATERIALS ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN ICE OR FROST.
8. COMPACTION: COMPACT EACH LAYER OF BACKFILL AND FILL SOIL MATERIALS TO 95 PERCENT MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557. CRUSHED STONE SHOULD BE COMPACTED WITH MINIMUM 3 TO 5 PASSES OF A VIBRATORY PLATE COMPACTOR HAVING A STATIC WEIGHT OF AT LEAST 500 POUNDS. NATIVE SOILS AT THE FOUNDATION EXCAVATION DEPTHS SHALL BE PROOF ROLLED/COMPACTED IN PLACE TO 95 PERCENT MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557. SUBGRADE TO BE INSPECTED BY QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO BACKFILLING. IF GEOTECHNICAL ENGINEER DETERMINES EXISTING SUBGRADE IS UNSUITABLE, SITE MAY REQUIRE OVER-EXCAVATION AS DIRECTED BY GEOTECHNICAL ENGINEER TO BE BACKFILLED WITH COMPACTED CRUSHED STONE.
9. TESTING: OWNER WILL ENGAGE SOILS TESTING AND INSPECTION SERVICE FOR QUALITY CONTROL TESTING DURING EARTHWORK OPERATIONS. TYPE AND QUANTITY OF TESTS SHALL BE AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
10. SEPARATION GEOTEXTILE: NON-WOVEN GEOTEXTILE FABRIC, MANUFACTURED FOR SEPARATION APPLICATIONS, COMPLYING WITH VTRANS SPECIFICATION ITEM 649.31 GEOTEXTILE UNDER STONE FILL.
11. FOOTINGS: PLACE FOOTINGS ON 12 INCHES MINIMUM OF COMPACTED CRUSHED STONE PLACED OVER SUBGRADE CAPABLE OF SUPPORTING AN ALLOWABLE BEARING PRESSURE OF 1,500 POUNDS PER SQUARE FOOT. SEPARATE CRUSHED STONE FROM OTHER SOIL TYPES WITH NON-WOVEN SEPARATION GEOTEXTILE.
12. FOUNDATION DESIGN BASED ON RECOMMENDATIONS CONTAINED IN GEOTECHNICAL REPORT PREPARED BY DUBOIS & KING, INC. DATED FEBRUARY 28, 2025. SUBGRADE TO BE INSPECTED BY QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO FOOTING INSTALLATION. EARTHWORK CONTRACTOR SHALL REVIEW AND FOLLOW RECOMMENDATIONS MADE IN GEOTECHNICAL REPORT INCLUDING BUT NOT LIMITED TO THOSE REGARDING SITE AND SUBGRADE PREPARATION, EXCAVATION, BLASTING, DEWATERING, AND WEATHER CONSIDERATIONS.

CONCRETE

1. ALL CONCRETE SHALL CONFORM TO REQUIREMENTS AND RECOMMENDATIONS OF ACI 318 "BUILDING CODE REQUIREMENTS OF REINFORCED CONCRETE" AND ACI FIELD REFERENCE MANUAL MNL-15.
2. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS," EXCEPT AS MODIFIED OR SUPPLEMENTED BELOW.
3. SHOP DRAWINGS AND DATA: SUBMIT SHOP DRAWINGS COMPLYING WITH ACI MNL-66 "ACI DETAILING MANUAL" AND PRODUCT DATA FOR ACCESSORIES, ADMIXTURES AND CURING COMPOUNDS.
4. CONCRETE COMPRESSIVE DESIGN STRENGTHS AND MIX PROPORTIONS SHALL BE AS OUTLINED BELOW. MIX PROPORTIONS AND DESIGNS SHALL BE SUBMITTED FOR APPROVAL. LIMIT MAXIMUM WATER-SOLUBLE CHLORIDE ION CONTENT IN CONCRETE BY WEIGHT OF CEMENT FOR CAST-IN-PLACE CONCRETE TO 0.3 FOR INTERIOR CONCRETE AND 0.15 FOR EXTERIOR CONCRETE.

CONCRETE USAGE	CONCRETE CLASS	COMPRESSIVE STRENGTH	MAX W/CM RATIO	AIR
FOOTINGS AND WALLS	F2, S0, W0, C1	4,500 PSI AT 28 DAYS	0.45	6% +/- 1.5%
INTERIOR SLABS ON GRADE	F0, S0, W0, C0	3,500 PSI AT 28 DAYS	0.50	< 3%
EXTERIOR SLABS ON GRADE	F3, S0, W0, C2	5,000 PSI AT 28 DAYS	0.40	6% +/- 1.5%

5. STEEL REINFORCEMENT INSTALLATION (INCLUDING WELDED WIRE REINFORCEMENT): COMPLY WITH CRSI "MANUAL OF STANDARD PRACTICE" FOR FABRICATING, PLACING, AND SUPPORTING REINFORCEMENT. CLEAN REINFORCEMENT OF LOOSE RUST AND MILL SCALE, EARTH, ICE, AND OTHER FOREIGN MATERIALS THAT REDUCE BOND TO CONCRETE. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT AGAINST DISPLACEMENT. BEFORE AND DURING CONCRETE PLACEMENT OPERATIONS.
6. REINFORCING STEEL: ASTM A 615 GRADE 60.
7. ALL CONCRETE SHALL BE READY-MIX CONCRETE CONFORMING TO ASTM C 94 EXCEPT THAT ADDITION OF WATER WILL NOT BE PERMITTED.
8. ALL REINFORCING MARKED CONTINUOUS (CONT.) SHALL BE LAPPED 64 BAR DIAM. AT SPLICES AND CORNERS AND SHALL BE HOOKED OR EXTENDED 48 BAR DIAM. AT NON-CONTINUOUS ENDS.
9. REINFORCEMENT SHALL BE SECURELY TIED IN ITS PROPER PLACE BEFORE AND DURING CONCRETE PLACEMENT OPERATIONS USING APPROVED CHAIRS AND SPACERS AS REQUIRED.
10. SLABS ON GRADE SHALL BE PLACED OVER A REQUIRED 12 INCH LAYER OF COMPACTED CRUSHED STONE (MINIMUM), UNLESS OTHERWISE SHOWN ON PLANS. PROVIDE #3 AT 16 INCHES ON CENTER EACH WAY PLACED 1 1/2 INCHES CLEAR FROM THE TOP OF SLABS IN ALL SLABS ON GRADE UNLESS OTHERWISE SHOWN. SLABS SHALL BE PLACED IN ALTERNATE STRIPS, EACH STRIP NOT TO EXCEED 40 FEET WIDE BY 160 FEET LONG. SAWCUT LENGTHS IN PANELS NOT TO EXCEED 20 FEET IN LENGTH OR WIDTH. SAW CUTTING SHALL BE DONE WITH "SOFF-CUT" SAWS. JOINTS TO BE LOCATED TO CONFORM TO BAY SPACING WHENEVER POSSIBLE (AT COLUMN CENTERLINES, HALF BAYS, THIRD BAYS). SLAB PANEL LENGTH TO WIDTH RATIO NOT TO EXCEED 1.5.
11. THE CONCRETE CONTRACTOR SHALL INSTALL OR GIVE OTHER TRADES AMPLE OPPORTUNITY TO INSTALL ALL ANCHORS, BOLTS, PLATES, NAILERS, SLOTS, CHASES, PIPE SLEEVES, ETC., AS REQUIRED BY THESE TRADES. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE SETTING SCREEDS AND FORMS.

CONCRETE (CONT'D)

12. FOUNDATION WALLS SHALL BE PLACED IN ALTERNATE LENGTHS. CONSTRUCTION OR CONTROL JOINTS SHALL BE PLACED NOT MORE THAN 60 FEET APART NOR MORE THAN 30 FEET FROM A CORNER. NO HORIZONTAL JOINTS SHALL BE PERMITTED EXCEPT AS SHOWN ON PLANS. FOUNDATION WALLS SHALL BE BRACED UNTIL ADJOINING FLOOR CONSTRUCTION IS IN PLACE.
13. EPOXY-COATED REINFORCING STEEL: ASTM A615 GRADE 60 DEFORMED BARS, EPOXY COATED PER ASTM 934, WITH LESS THAN 2 PERCENT DAMAGED COATING IN EACH 12" BAR LENGTH.
14. PROVIDE CLEARANCES FROM FACES OF CONCRETE TO REINFORCEMENT AS FOLLOWS (UNLESS NOTED OTHERWISE):
 - CONCRETE CAST AGAINST EARTH: 3" (ALL BARS)
 - CONCRETE EXPOSED TO EARTH OR WEATHER
 - #6 AND LARGER: 2"
 - #5 AND SMALLER: 1-1/2"
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
 - SLABS, WALLS AND JOISTS: 3/4" (#11 AND SMALLER)
 - BEAMS AND COLUMNS (MAIN STEEL AND TIES): 1-1/2" (ALL BARS)
15. ALL CONCRETE SHALL BE CONSOLIDATED USING MECHANICAL VIBRATING EQUIPMENT.
16. FORMED CONCRETE NOT EXPOSED TO VIEW SHALL RECEIVE A ROUGH FORM FINISH; FORMED CONCRETE EXPOSED TO VIEW SHALL RECEIVE A SMOOTH FORM FINISH.
17. CONCRETE SLABS SHALL BE WET CURED, USE OF MEMBRANE-FORMING CURING COMPOUND IS PROHIBITED.
18. CONCRETE SLABS SHALL RECEIVE A TROWELED FINISH FOR INTERIOR CONCRETE AND A BROOM FINISH FOR EXTERIOR CONCRETE.
19. COATINGS: REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS FOR COATING SYSTEMS FOR INTERIOR SLAB ON GRADE SLABS.
20. TESTING: THE OWNER WILL EMPLOY A TESTING LABORATORY TO PERFORM TESTS FOR QUALITY CONTROL DURING PLACEMENT AS DIRECTED BY THE ENGINEER.
21. COMPRESSION TEST: ACI 318, PREPARE 4 CYLINDERS PER TEST SET FOR EACH COMPOSITE SAMPLE. (3) CYLINDERS SHALL BE TESTED AT 28 DAYS
 1. AT LEAST ONCE A DAY.
 2. AT LEAST ONCE FOR EACH 150 CUBIC YARDS OF CONCRETE
 3. AT LEAST ONCE FOR EACH 5,000 SQUARE FEET OF SURFACE AREA FOR SLABS OR WALLS.

WOOD FRAMING

1. ALL WOOD CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "NATIONAL SPECIFICATION FOR WOOD CONSTRUCTION" BY THE NATIONAL FOREST PRODUCTS ASSOCIATION AND TO LOCAL BUILDING CODES.
2. ALL WOOD MEMBERS SHALL BE SPRUCE-PINE-FIR NO. 2 GRADE AND BETTER UNLESS NOTED OTHERWISE.
3. ALL PRESERVATIVE TREATED WOOD MEMBERS SHALL BE NO. 2 GRADE AND BETTER SOUTHERN PINE. ALL METAL CONNECTORS, ANCHORS AND FASTENERS USED FOR PRESERVATIVE TREATED WOOD SHALL BE STAINLESS OR GALVANIZED AS RECOMMENDED BY THE CONNECTOR, ANCHOR OR FASTENER MANUFACTURER.
4. SECURELY ATTACH WOOD FRAMING BY FASTENING AS INDICATED. LOCATIONS NOT SPECIFIED TO BE ATTACHED FOLLOWING ICC INTERNATIONAL BUILDING CODE CHAPTER 23 TABLE TITLE "FASTENING SCHEDULE."
5. CONNECTION HARDWARE SHALL BE AS NOTED, OR APPROVED EQUIVALENT.

STEEL DECKING

1. CODES AND STANDARDS: AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS," AISC "STRUCTURAL WELDING CODE," SDI "DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS AND ROOF DECKS," COMPLY WITH APPLICABLE PROVISIONS EXCEPT AS OTHERWISE INDICATED.
2. FM LISTING: PROVIDE METAL ROOF DECK UNITS WHICH HAVE BEEN EVALUATED BY FACTORY MUTUAL SYSTEM AND ARE LISTED IN "FACTORY MUTUAL APPROVAL GUIDE" FOR "CLASS I" FIRE-RATED CONSTRUCTION.
3. SHOP DRAWINGS AND DATA: SHOW COMPLETE DETAILS AND SCHEDULES (IF REQUIRED) FOR LAYOUT AND TYPES OF DECK PANELS, ANCHORAGE, SUPPLEMENTARY FRAMING, CUT OPENINGS, AND ACCESSORIES.
4. STEEL: GALVANIZED UNITS - ASTM A 446, GRADE A.
5. SHOP FINISH: MANUFACTURER'S STANDARD BAKED-ON RUST-INHIBITIVE PAINT FOR PAINTED UNITS AND ASTM A 525, G90 FOR GALVANIZED UNITS.
6. FABRICATION: FORM DECK UNITS IN LENGTHS TO SPAN AT LEAST 3 SUPPORTS; NESTED 2 INCHES END LAPS; NESTED SIDE LAPS, UNLESS OTHERWISE INDICATED.
7. ROOF DECK: COMPLY WITH SDI "ROOF DECK SPECIFICATIONS," OF METAL THICKNESS, WIDTH AND DEPTH INDICATED COMPLYING WITH AND APPROVED BY FACTORY MUTUAL FOR SPANS INDICATED ON PLANS. DECK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ACCEPTED STANDARD PRACTICE. ROOF DECK SHALL BE WELDED TO ALL SUPPORTS WITH 5/8 INCH DIAMETER FUSION WELDS SPACED 12 INCHES ON CENTER. SIDE LAPS SHALL BE MECHANICALLY FASTENED AT MIDSPAN WITH #10 SELF-TAPPING SHEET METAL SCREWS. ALL EDGES OF DECK SHALL BE PROPERLY SUPPORTED.
8. ACCESSORIES: PROVIDE COVER PLATES, CLOSURE STRIPS, ROOF SUMP PANS, CANT STRIPS, AS REQUIRED; USE DECK MANUFACTURER'S STANDARD UNLESS OTHERWISE SHOWN.
9. INSTALLATION: PLACE DECK UNITS AND SECURE TO ADJACENT FRAMING BY 5/8" DIAMETER FUSION WELDING 12" O.C. TO SUPPORTS, WITH A MINIMUM OF 2 WELDS AT EACH SUPPORT, UNLESS OTHERWISE INDICATED. FASTEN SIDE LAPS AT MIDSPAN WITH #10 SCREWS.
10. REINFORCE OPENING AS FOLLOWS: FOR OPENINGS LESS THAN 15" IN ANY DIMENSION, ADD A 20 GA. STEEL SHEET AT LEAST 12" LONGER AND WIDER THAN OPENING. CENTER STEEL SHEET OVER OPENING IN DECK. FASTEN TO DECK WITH #12 SELF-TAPPING SCREWS AT 6" O.C. AT ALL EDGES AND AT CORNERS. FOR OPENINGS OVER 15" IN ANY DIMENSION, ADD AN L3 x 3 x 1/4 STEEL FRAME TO SUPPORT DECK DIRECTLY FROM JOISTS OR BEAMS.
11. TOUCH-UP SHOP PAINT AFTER INSTALLATION. CLEAN FIELD WELDS AND ABRADED AREAS, AND APPLY SAME TYPE PAINT AS USED IN SHOP.

MISCELLANEOUS METALS:

1. REFER TO SPECIFICATIONS ALUMINUM GRATING, RAILINGS AND METAL FABRICATIONS REQUIREMENTS.
2. ALL STEEL TO BE G60 GALVANIZED (UNLESS NOTED AS G90).
3. ALL ALUMINUM TO BE ASTM 6061 T6.
4. STEEL GRATING TO BE GALVANIZED AND BANDED AFTER FABRICATION.
5. ALUMINUM GRATING TO HAVE SWAGED CROSS BARS.
6. THE STAIRS, LANDINGS, HANDRAILS AND GUARDRAILS ON THE PROJECT ARE NOTED IN THREE METHODS:
 - A. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS WHERE "PUBLIC" ACCESS IS REQUIRED. THIS INCLUDES AT THE RAMP AND LOADING DOCK AREA, AND MEZZANINE LEVEL. UNLESS NOTED, USE GALVANIZED STEEL.
 - B. REFER TO STRUCTURAL DRAWINGS FOR DETAILS WHERE MAINTENANCE ACCESS IS REQUIRED. THIS INCLUDES AT THE SBR TANKS. UNLESS NOTED, USE ALUMINUM WITH STAINLESS STEEL FASTENERS.
 - C. THE ALUMINUM ACCESS STAIR TO THE TOP OF THE SBR TANKS IS TO BE DESIGNED BY THE STAIR FABRICATOR.
7. ALL SHOP DRAWINGS ARE TO BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION.

MASONRY:

1. CONCRETE MASONRY CONSTRUCTION SHALL CONFORM TO THE LATEST EDITIONS OF THE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5)", "SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6)" AND TO THE NATIONAL CONCRETE MASONRY ASSOCIATION "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY" (TR758).
2. MATERIAL STRENGTH SHALL BE AS FOLLOWS:
 - A. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C-90 NORMAL WEIGHT, COMPRESSIVE STRENGTH ON NET AREA = 1,900 PSI PER ASTM C-90.
 - B. MORTAR SHALL CONFORM TO ASTM C-270 TYPE S. 1 PART CEMENT, 1/4 TO 1/2 LIME, 2-1/4 TO 3 SAND (ASTM C270).
 - C. GROUT SHALL CONFORM TO ASTM C-476 FINE OR COARSE. 1 PART CEMENT, 0 TO 1/10 LIME, 2-1/4 TO 3 SAND (ASTM C476), PLUS COARSE AGGREGATE.
3. PRIOR TO GROUTING CELLS, BARS AND CELLS MUST BE INSPECTED BY THE ENGINEER.
4. THE BASE OF EACH CELL IN WHICH A BAR IS PLACED MUST HAVE A CLEANOUT HOLE.
5. REINFORCED MASONRY WALLS SHALL HAVE #9 GA. WIRE (LADDER TYPE) AT 16" O.C. HORIZONTAL REINFORCEMENT.
6. PLACE HORIZONTAL REINFORCING BARS CONTINUOUSLY THROUGH EXPANSION JOINTS. WRAP MASTIC TAPE ON TWO #5 HORIZONTAL BOND BEAM BARS FOR 18" ON SIDE OF JOINT.
7. MASONRY OPENINGS MORE THAN 16" WIDE REQUIRE APPROVED LINTELS.
8. MASONRY OPENINGS FOR UTILITIES ARE TO BE CLOSED UP WITH NEW MASONRY WORK AROUND THE UTILITY.
9. FILL THREE COURSES OF CONCRETE BLOCKS UNDER ALL BEARING PLATES WITH GROUT FOR A WIDTH EQUAL TO THREE TIMES THE BEARING PLATE LENGTH.
10. REINFORCING BARS SHALL BE CONTINUOUS FULL HEIGHT AND SPLICED 2'-0" ABOVE EACH FLOOR LEVEL. AT OPENINGS THAT INTERRUPT BARS, ADD AN ADDITIONAL BAR TO EACH SIDE OF THE OPENING FOR EACH INTERRUPTED BAR.
11. PROVIDE ONE 1-#7 (MIN.) VERTICALLY GROUTED SOLID ON EACH SIDE OF CONTROL AND EXPANSION JOINTS AND OPENINGS AND EXTEND 24" BEYOND EACH SIDE OF OPENING.
12. PROVIDE 1-#7 (MIN) AT EACH SIDE OF ALL DOOR AND WINDOW OPENINGS AND EXTEND FULL HEIGHT OF WALL.
13. MASONRY BLOCK CELLS CONTAINING VERTICAL REINFORCING SHALL BE GROUTED SOLID. FILLING CELLS WITH MORTAR IS UNACCEPTABLE. THE COMPRESSIVE STRENGTH OF GROUT AT THE END OF 28 DAYS SHALL BE 3000PSI MINIMUM.
14. REINFORCED MASONRY WALLS SHALL HAVE BOND BEAMS AT EACH FLOOR LEVEL. BOND BEAM REINFORCING BARS SHALL BE EXTENDED INTO AND BE CONTINUOUS WITH ALL INTERSECTING BOND BEAMS.
15. BONDING METHODS, TIES, LINTELS, AND ACCESSORIES SHALL BE APPROVED BY THE ENGINEER.
16. INSTALL LINTELS FOR ALL OPENINGS IN ACCORDANCE WITH THE DETAILS ON THE DRAWINGS.

COLD-FORMED METAL FRAMING:

1. THE COLD-FORMED METAL TRUSSES AND CEILING JOISTS SHALL BE DESIGNED BY THE COLD-FORMED METAL MANUFACTURER.
2. ALL SHOP DRAWINGS ARE TO BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION
3. ALL COLD-FORMED METAL FRAMING STRUCTURAL PROPERTIES OF JOISTS AND DESIGN SHALL BE IN ACCORDANCE WITH AMERICAN IRON AND STEEL INSTITUTE (AISI) "SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" USE QUALIFIED WELDERS AND COMPLY WITH AMERICAN WELDING SOCIETY (AWS) D1.3, "STRUCTURAL WELDING CODE - SHEET STEEL."
4. ALL JOISTS AND ACCESSORIES SHALL BE OF THE TYPE, SIZE, GAUGE AND SPACING SHOWN ON THE DRAWINGS. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
5. ALL FRAMING MEMBERS SHALL BE FORMED FROM THE CORROSION-RESISTANT STEEL CORRESPONDING TO THE REQUIREMENTS OF ASTM A446 WITH A MINIMUM YIELD STRENGTH OF 50 KSI FOR 16 GAUGE OR HEAVIER AND 33 KSI FOR 18 GAUGE OR LIGHTER. PROVIDE GALVANIZED FINISH COMPLYING WITH ASTM A653 660 COATING.

DESIGN CRITERIA

- | | |
|---|---|
| 1. CODES: | IBC 2021 AND ASCE 7-16, AS AMENDED BY
2025 VERMONT FIRE AND BUILDING SAFETY CODE |
| 2. BUILDING OR STRUCTURE RISK CATEGORY: | III |
| 3. ROOF LOADS (MAIN BUILDING) : | |
| DEAD AND LIVE LOAD: | REFER TO TRUSS LOADING DIAGRAM |
| GROUND SNOW LOAD (Pg): | 70 PSF |
| FLAT ROOF SNOW LOAD (Pf): | 52 PSF |
| SLOPED ROOF SNOW LOAD (Ps): | Cs x Pf |
| EXPOSURE FACTOR (Ce): | 1.0 |
| THERMAL FACTOR (Ct): | 1.0 |
| IMPORTANCE FACTOR (Is): | 1.1 |
| 4. ROOF LOADS (CANOPY) : | |
| DEAD LOAD: | 20 PSF (INCLUDES 5 PSF FOR FUTURE SOLAR PANELS) |
| GROUND SNOW LOAD (Pg): | 70 PSF |
| FLAT ROOF SNOW LOAD (Pf): | 65 PSF |
| SLOPED ROOF SNOW LOAD (Ps): | Cs x Pf |
| EXPOSURE FACTOR (Ce): | 1.0 |
| THERMAL FACTOR (Ct): | 1.2 |
| IMPORTANCE FACTOR (Is): | 1.1 |
| 5. FLOOR LIVE LOADS: | |
| 6" SLAB-ON-GRADE: | 250 PSF |
| 10" ELEVATED CONCRETE SLAB | 250 PSF |
| MEZZANINE: | 125 PSF |
| 6. WIND LOAD: | |
| ULTIMATE WIND SPEED (Vult): | 115 MPH |
| NOMINAL DESIGN WIND SPEED (Vasd): | 89 MPH |
| IMPORTANCE FACTOR (Iw): | 1.0 |
| WIND EXPOSURE: | C |
| INT. PRESSURE COEFFICIENT (GCpi): | +/- 0.18 |
| COMPONENTS/CLADDING: | ASCE 7-16 |
| 7. SEISMIC LOAD: | |
| IMPORTANCE FACTOR (Ie): | 1.25 |
| MAPPED SPECTRAL | |
| RESPONSE COEFFICIENTS: | Ss = 0.259 AND S1 = 0.075 |
| SITE CLASS: | E |
| SPECTRAL RESPONSE COEFFICIENTS: | Sd = 0.410 AND Sd1 = 0.210 |
| SEISMIC DESIGN CATEGORY: | D |
| SEISMIC FORCE-RESISTING SYSTEM: | SPECIAL REINFORCED MASONRY SHEAR WALLS |
| DESIGN BASE SHEARS: | |
| N-S DIRECTION: | V = 0.010W |
| E-W DIRECTION: | V = 0.010W |
| ANALYSIS PROCEDURE: | EQUIVALENT LATERAL FORCE METHOD |



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[illegible]

CLIENT NAME

TOWN OF
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WAITSFIELD
WASTEWATER
TREATMENT
FACILITY

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE

CONTRACT NO. 1
NOTES

D&K PROJECT #

PROJ. ENG.

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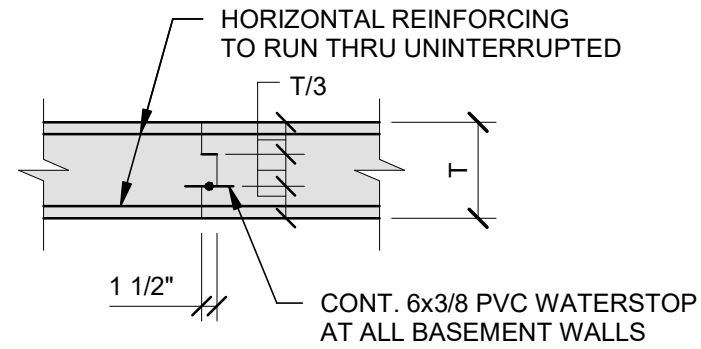
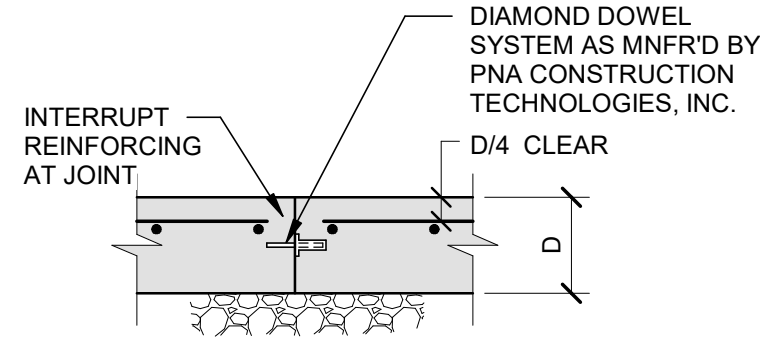
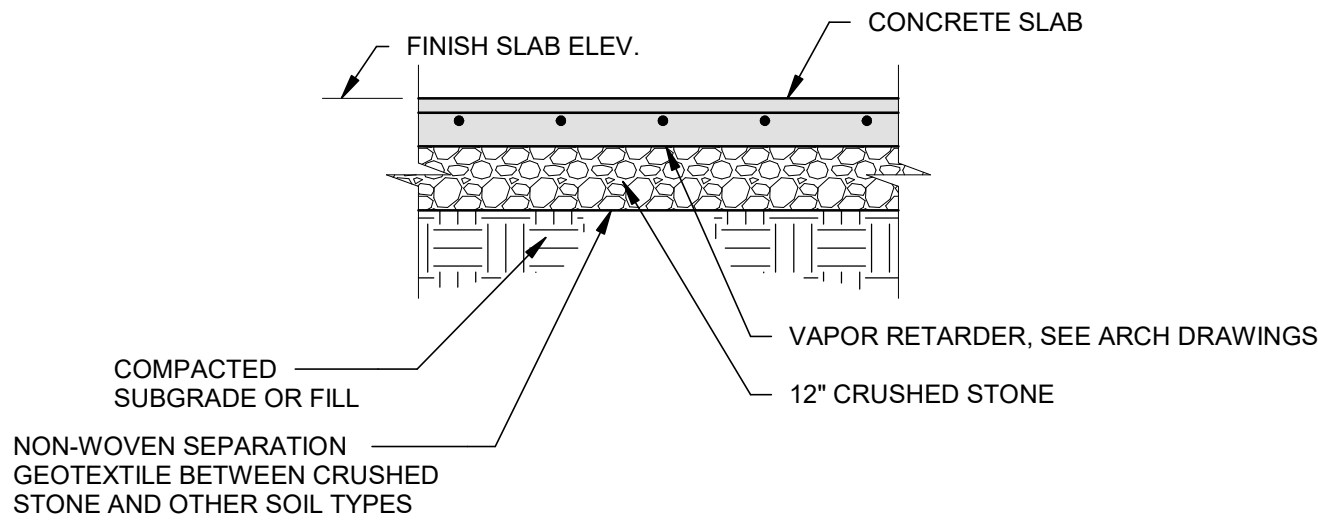
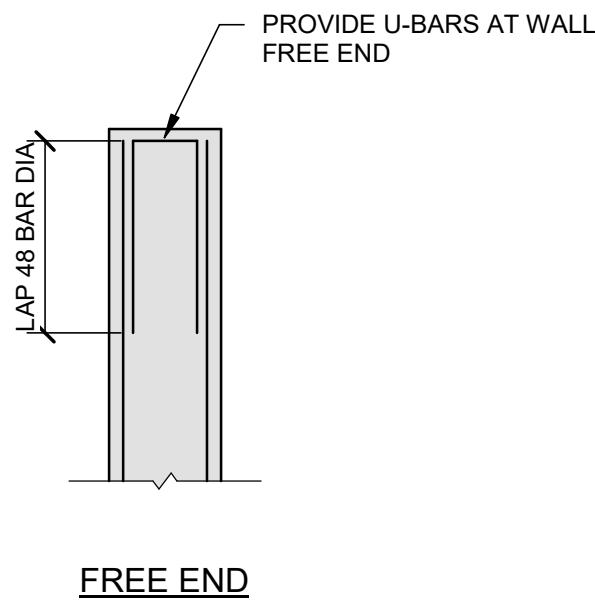
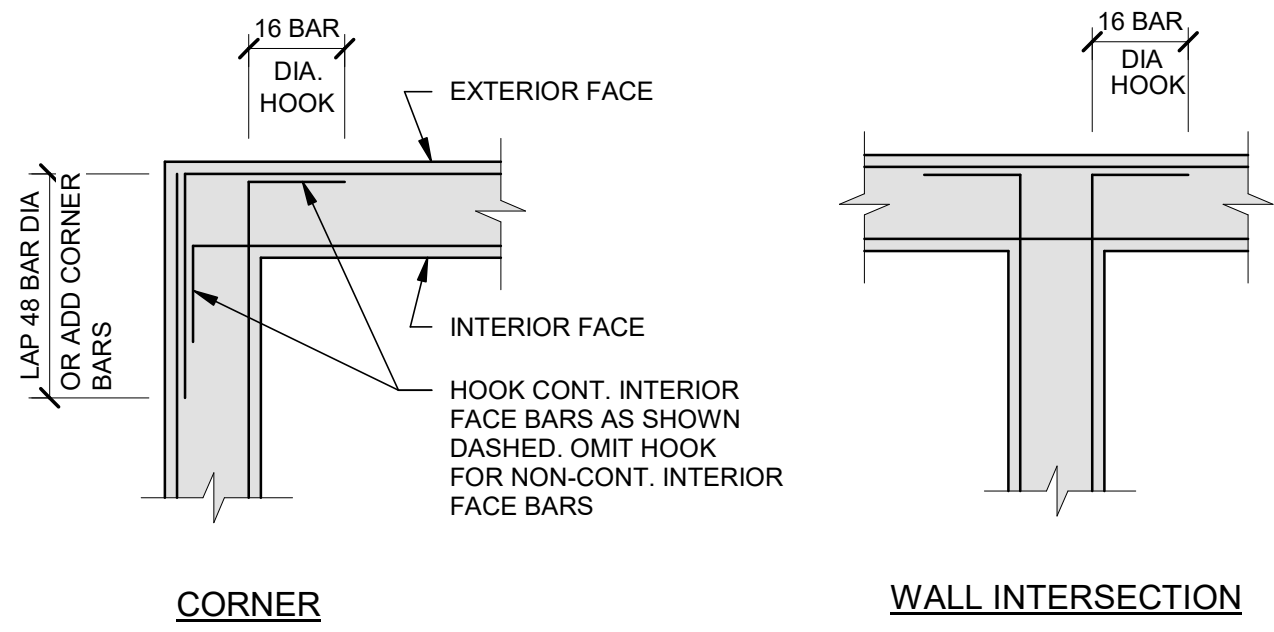
DATE
JULY 16, 2026

SHEET NUMBER

S0.1

SHEET 42 OF 85

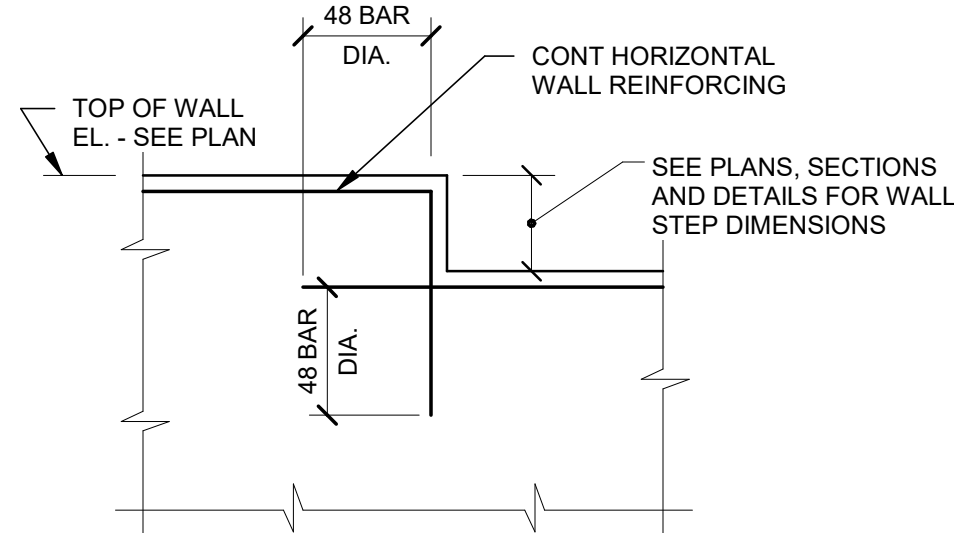
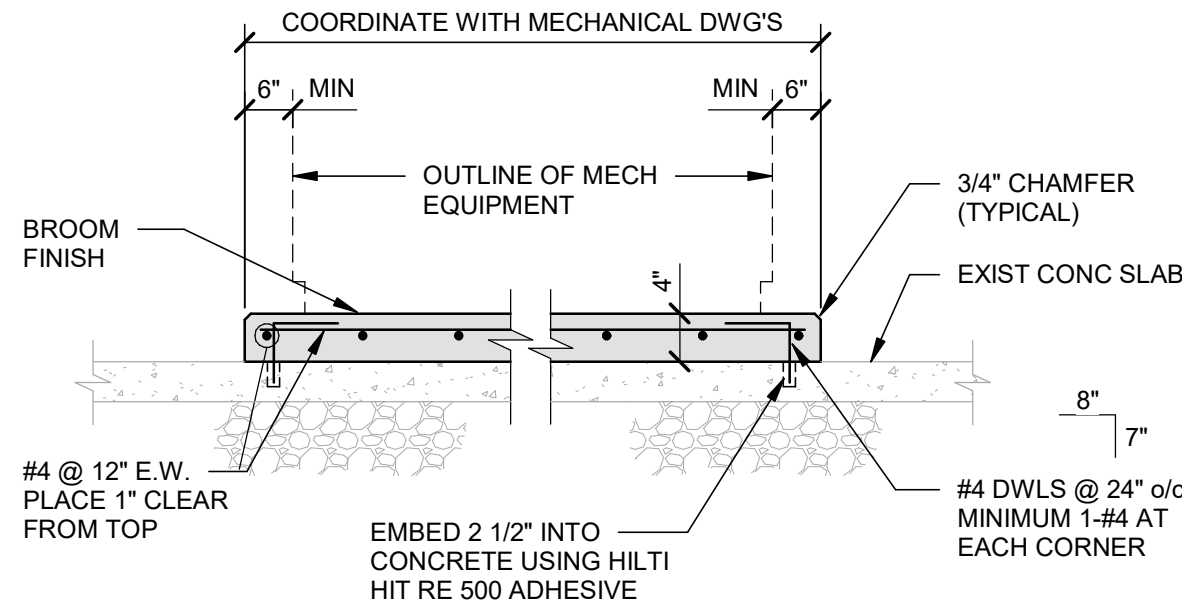
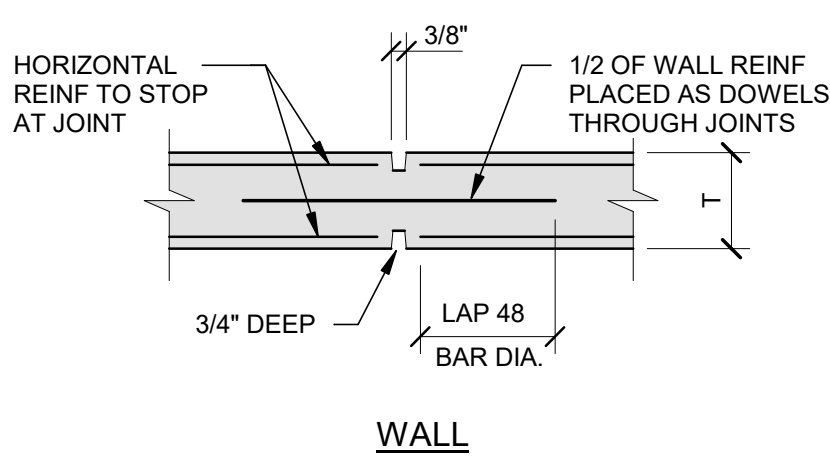
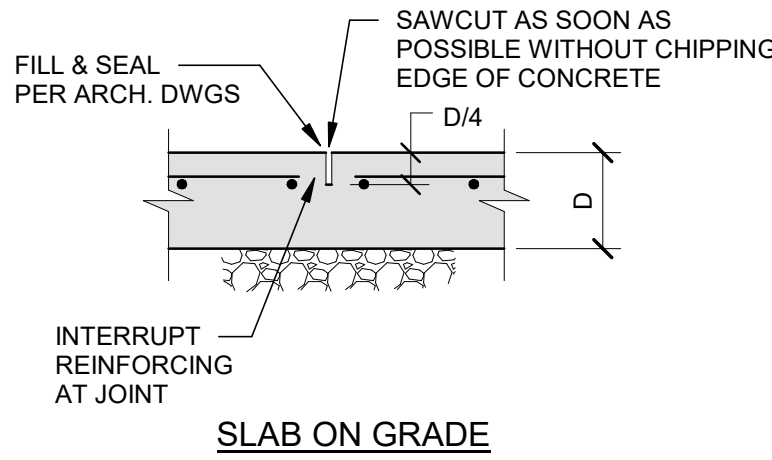
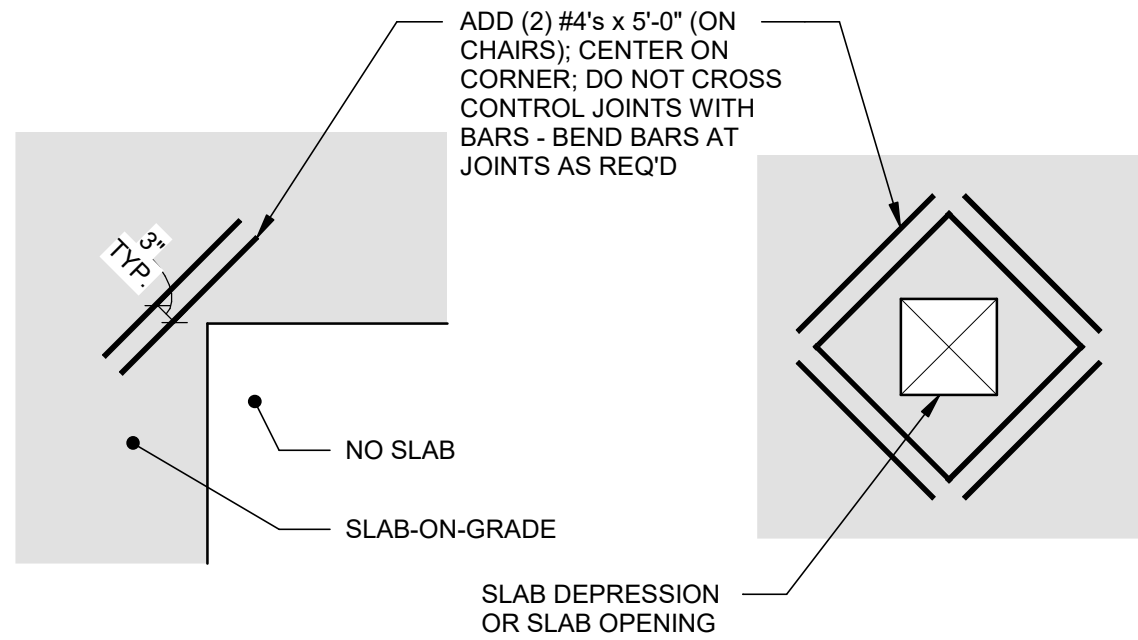
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1 TYPICAL REINFORCING AT CONCRETE WALL CORNERS
S0.2 NOT TO SCALE

2 TYPICAL SLAB/SUBGRADE PROFILE
S0.2 NOT TO SCALE

3 TYPICAL CONSTRUCTION JOINT DETAILS
S0.2 NOT TO SCALE

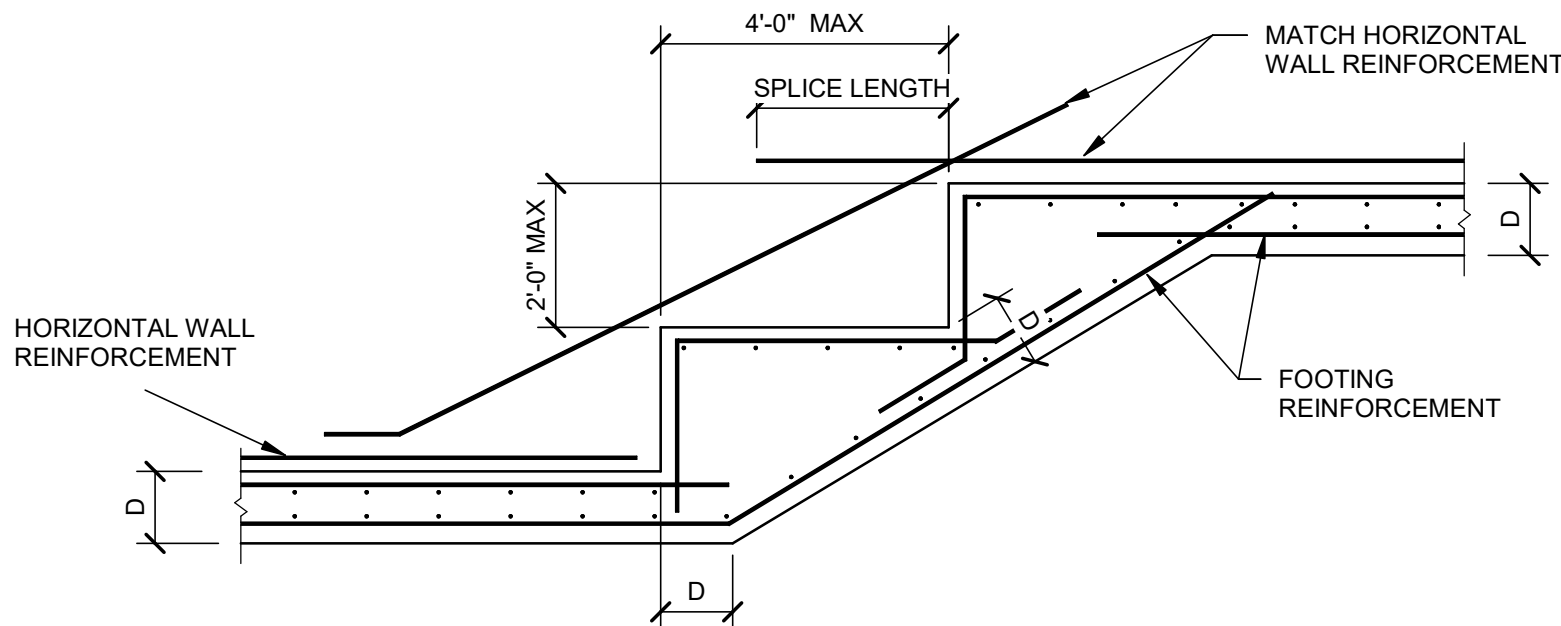
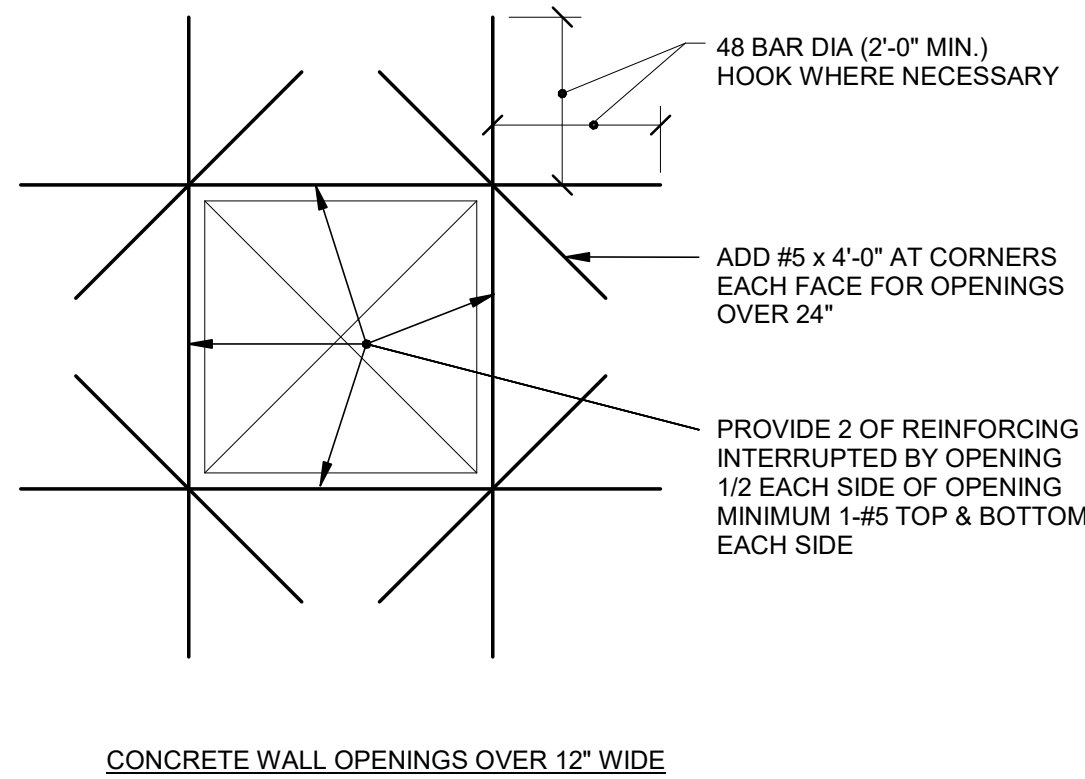
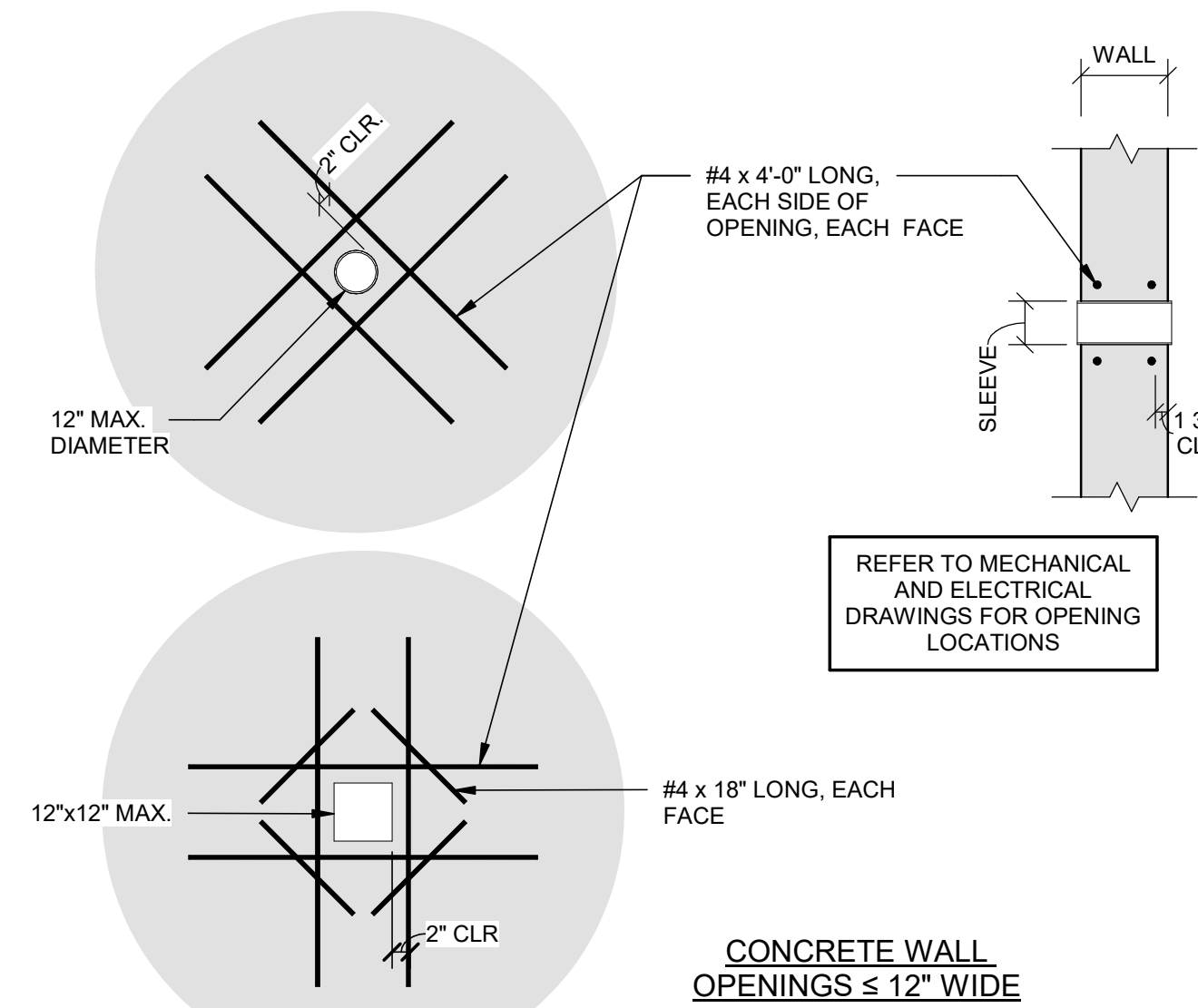


4 TYP. SLAB RE-ENTRANT CORNERS DETAIL
S0.2 1/2" = 1'-0"

5 TYPICAL CONTRACTION JOINT DETAIL
S0.2 NOT TO SCALE

6 TYPICAL INTERIOR EQUIPMENT PAD DETAIL
S0.2 NOT TO SCALE

7 TYPICAL WALL STEP DETAIL
S0.2 NOT TO SCALE



8 TYP. REINFORCING AT WALL OPENINGS
S0.2 1/2" = 1'-0"

9 TYP. REINF. AT CONCRETE WALL OPENINGS
S0.2 NOT TO SCALE

10 TYPICAL STEPPED FOOTING DETAIL
S0.2 3/8" = 1'-0"

REVISIONS	BY	REVISION DESCRIPTION	DATE	NUMBER

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SHEET TITLE
CONTRACT NO. 1
TYPICAL DETAILS

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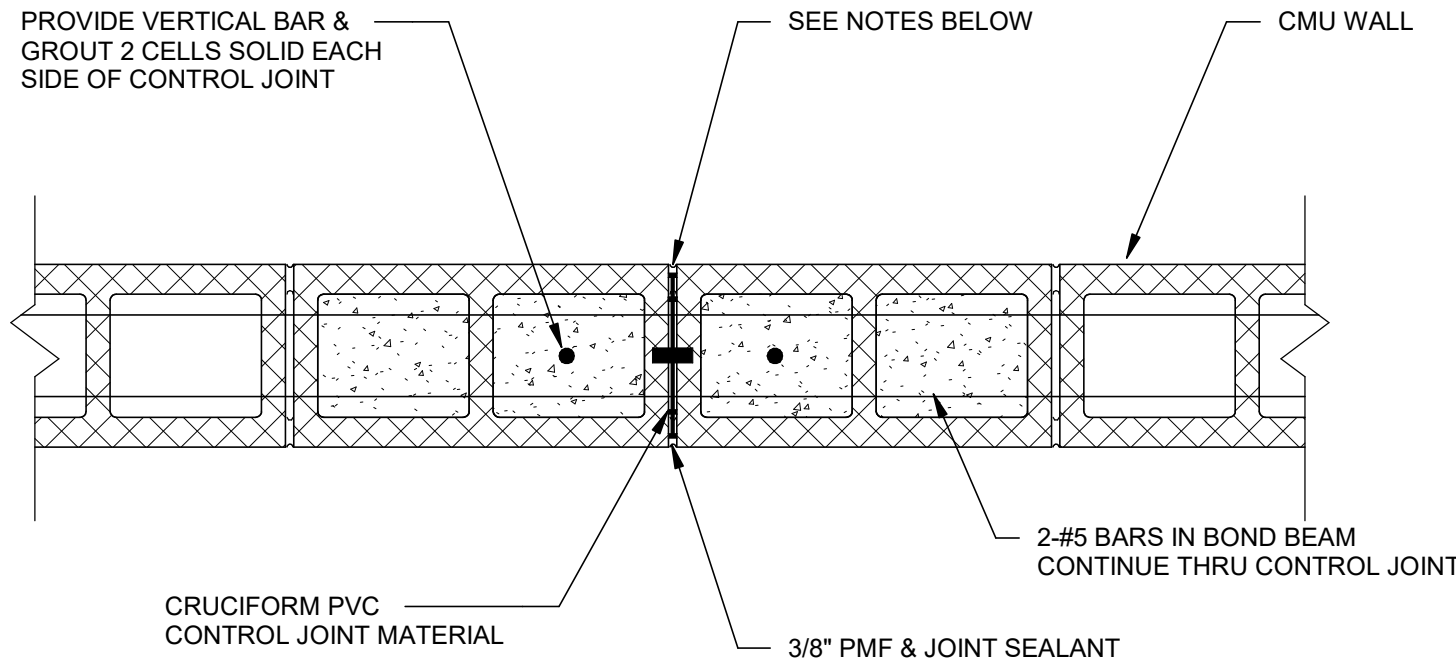
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SHEET NUMBER
S0.2

SHEET 43 OF 85

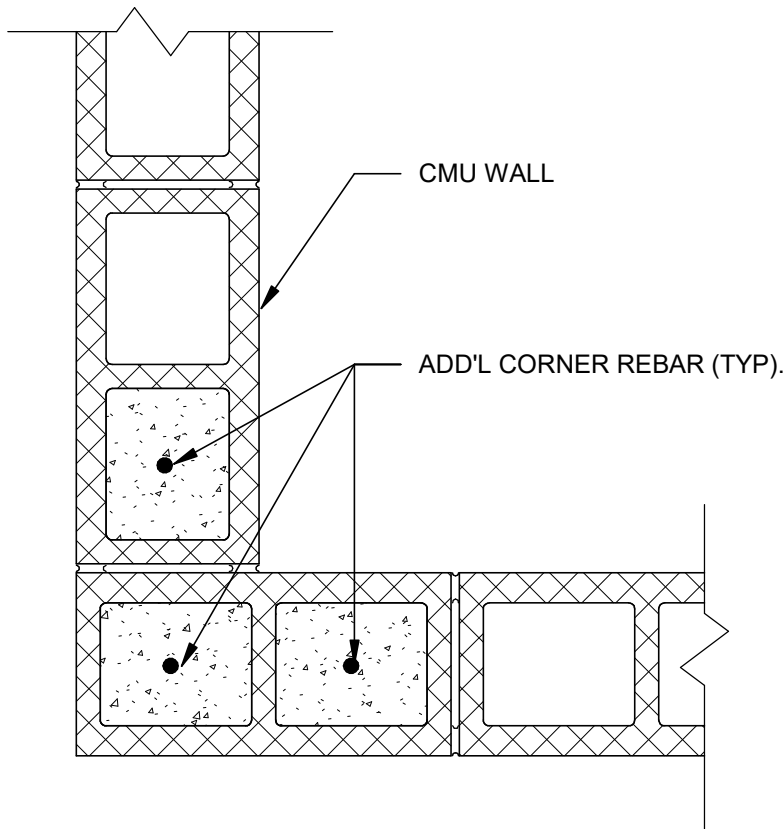


NOTES:

1. RAKE EXCESS MORTAR FROM CONTROL JOINT.
2. PROVIDE BACKER ROD AND CAULK JOINT FOR FINAL COMPLETION.
3. EXTEND CONTROL JOINT FULL HEIGHT OF WALL.
4. REFER TO ARCH. DRAWINGS FOR EXTERIOR WALL FINISH.

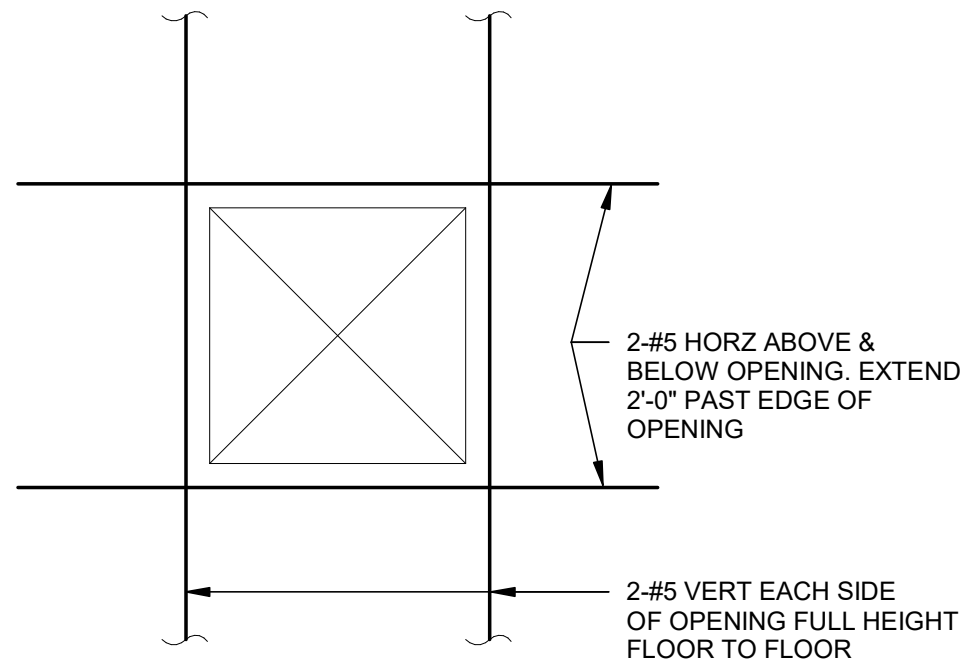
1 MASONRY CONTROL JOINT DETAIL

1 1/2" = 1'-0"



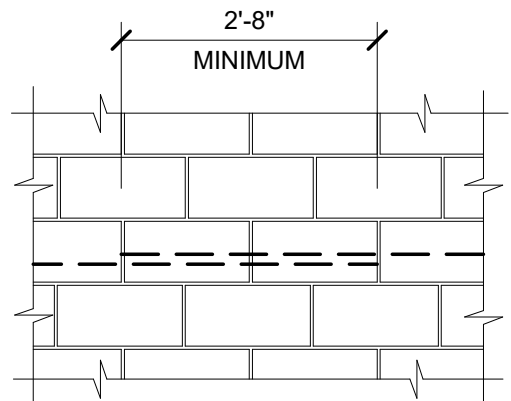
2 CMU CORNER DETAIL

1 1/2" = 1'-0"



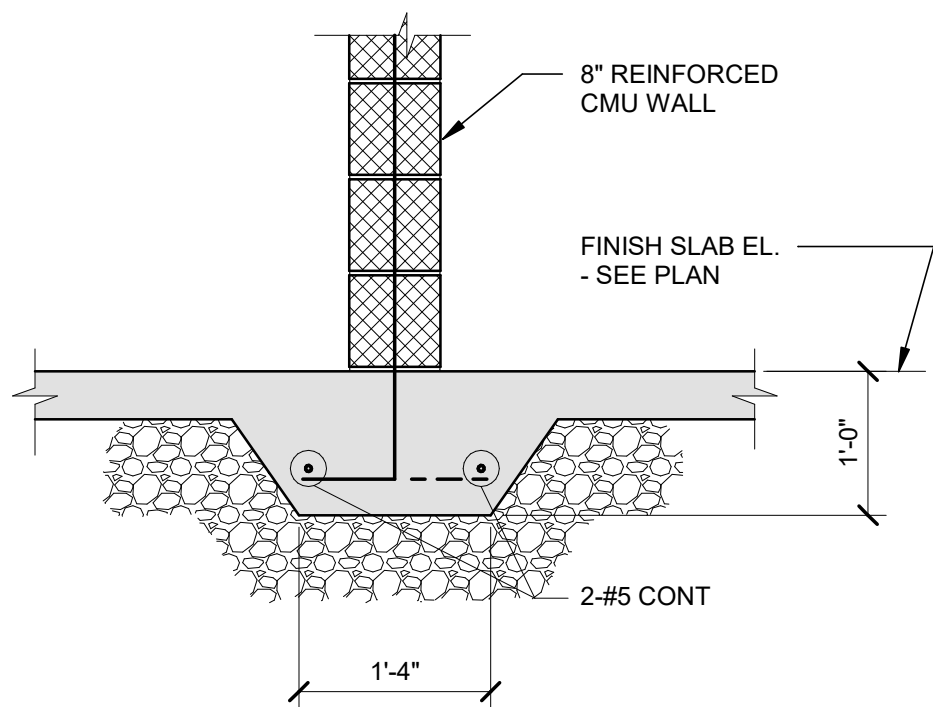
3 CMU WALL OPENING DETAIL

NOT TO SCALE



4 TYPICAL BOND BEAM SPLICE DETAIL

1/2" = 1'-0"



5 TYPICAL NON-LOAD BEARING CMU PARTITION DETAIL

NOT TO SCALE

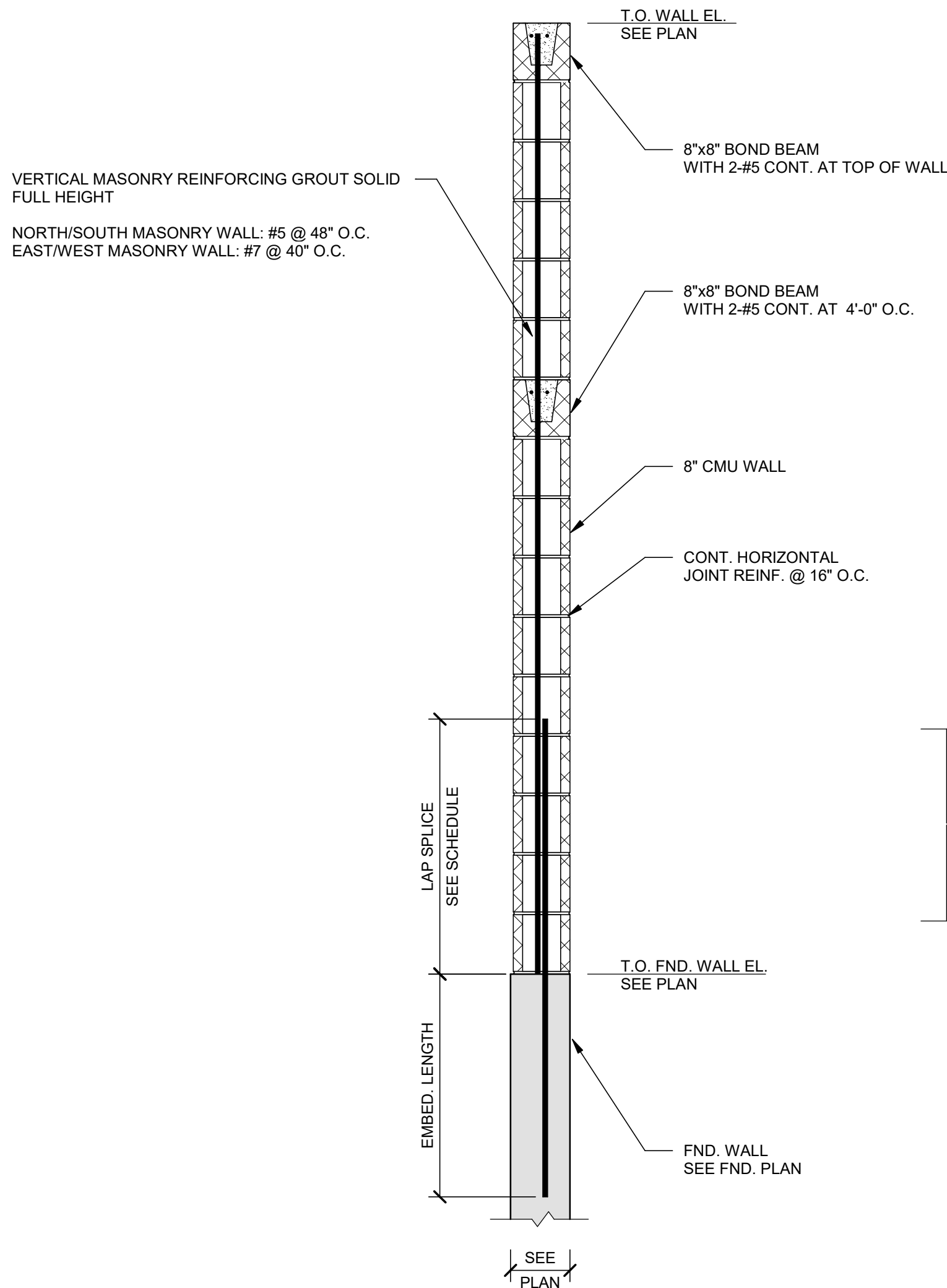
BAR SIZE DESIGNATION	MINIMUM SPLICE LENGTH (INCHES)	MINIMUM DEVELOPMENT LENGTH (INCHES) BASED ON BAR IN CENTER OF:			
		6" CMU	8" CMU	10" CMU	12" CMU
#3	27	16	16	16	16
#4	36	21	21	21	21
#5	45	32	26	26	26
#6	54	61 (3)	43	40	40
#7	63	NP (4)	60	46	46
#8	72	NP (4)	92	71	61
#9	82	NP (4)	NP (4)	91	74

NOTES:

1. THE MINIMUM REBAR SPLICE LENGTH SCHEDULE IS BASED ON F'm = 1,500 PSI AND Fy = 60,000 PSI. ADJUST FOR OTHER STRENGTHS USING ACI-530.
2. IF EPOXY COATED REBAR IS USED, INCREASE DEVELOPMENT LENGTH BY AN ADDITIONAL 50%.
3. PERMITTED ONLY IF MORTAR FINS ARE REMOVED FROM THE CELL TO BE GROUTED.
4. NP = NOT PERMITTED, BAR IS TOO LARGE FOR THIS WALL.
5. WHEN BARS OF DIFFERENT SIZE ARE LAP SPICED, THE SPLICE LENGTH SHALL BE THE LARGER OF EITHER THE DEVELOPMENT LENGTH OF THE LARGER BAR OR THE SPLICE LENGTH OF THE SMALLER BAR.

6 MASONRY REBAR SPLICE LENGTH SCHEDULE

1/2" = 1'-0"



7 TYPICAL 8" CMU WALL SECTION

3/4" = 1'-0"

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NUMBER										

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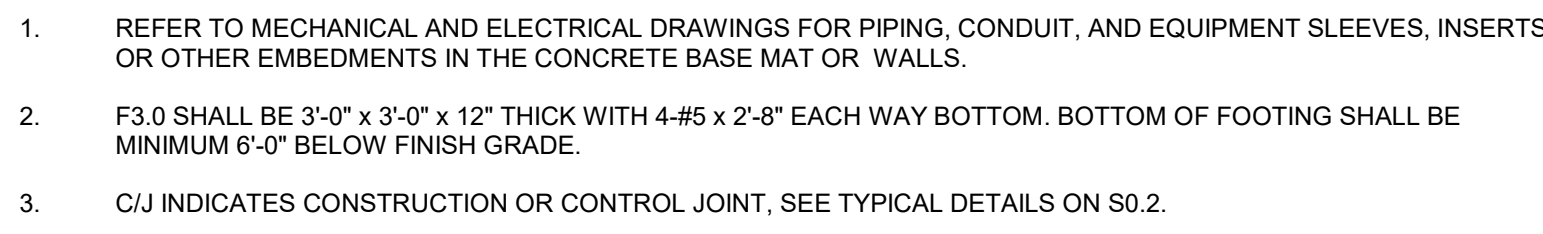
DATE
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SHEET 44 OF 85

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SHEET 45 OF 85

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SHEET TITLE
CONTRACT NO. 1
FLOOR PLAN

D&K PROJECT #
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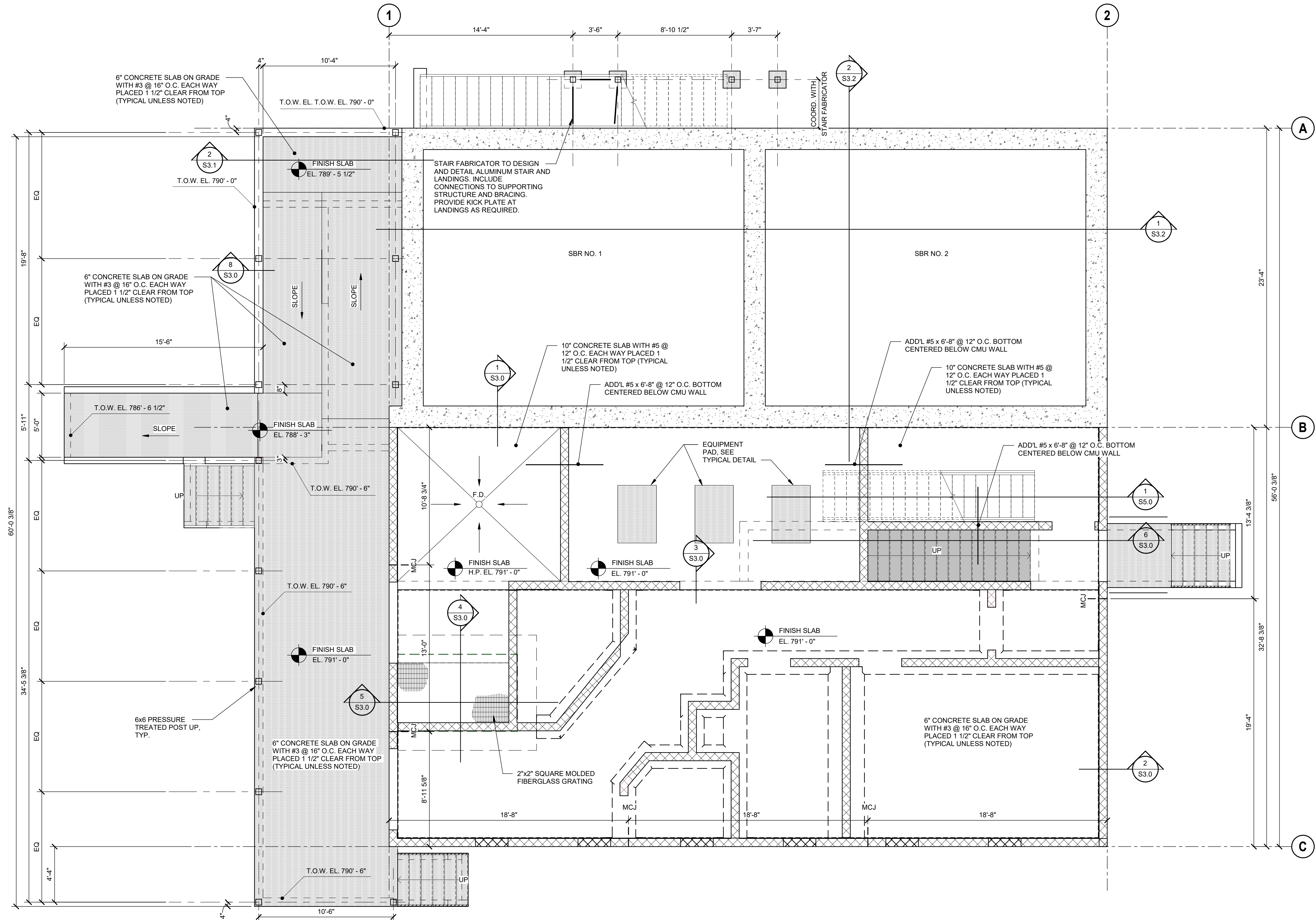
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JULY 16, 2026

SHEET NUMBER

S1.1

SHEET 46 OF 85



1 FLOOR PLAN
1/4" = 1'-0"

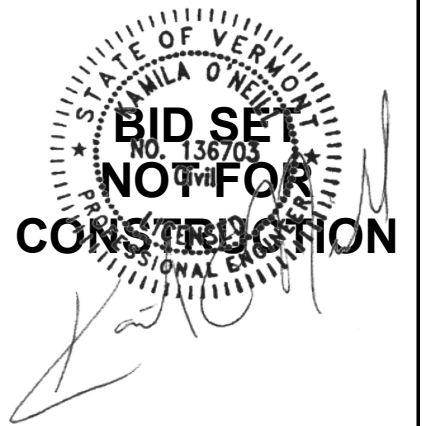
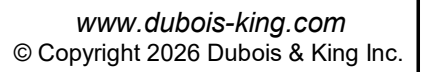
NOTES:

1. ALIGN FOUNDATION WALL CONCRETE CONSTRUCTION JOINTS WITH MASONRY CONTROL JOINTS.
2. WHERE MASONRY OPENINGS ARE SHOWN, ALL POSITIONS OF CMU WALLS ABOVE, BELOW AND BETWEEN SHALL BE GROUTED AND REINFORCED.
3. FOR WALL ISOLATION JOINTS, PROVIDE PREMOLDED FILLER WITH JOINT SEALANT. SEE TYP. DETAIL ON S0.3.

	EXTERIOR CMU WALL
	GROUTED CMU CELL
	GROUTED & REINFORCED CMU CELL
	MASONRY CONTROL JOINT
	NON-BEARING INTERIOR CMU WALL

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07-16-2026

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SHEET TITLE
CONTRACT NO. 1
EZZANINE FLOOR
PLAN

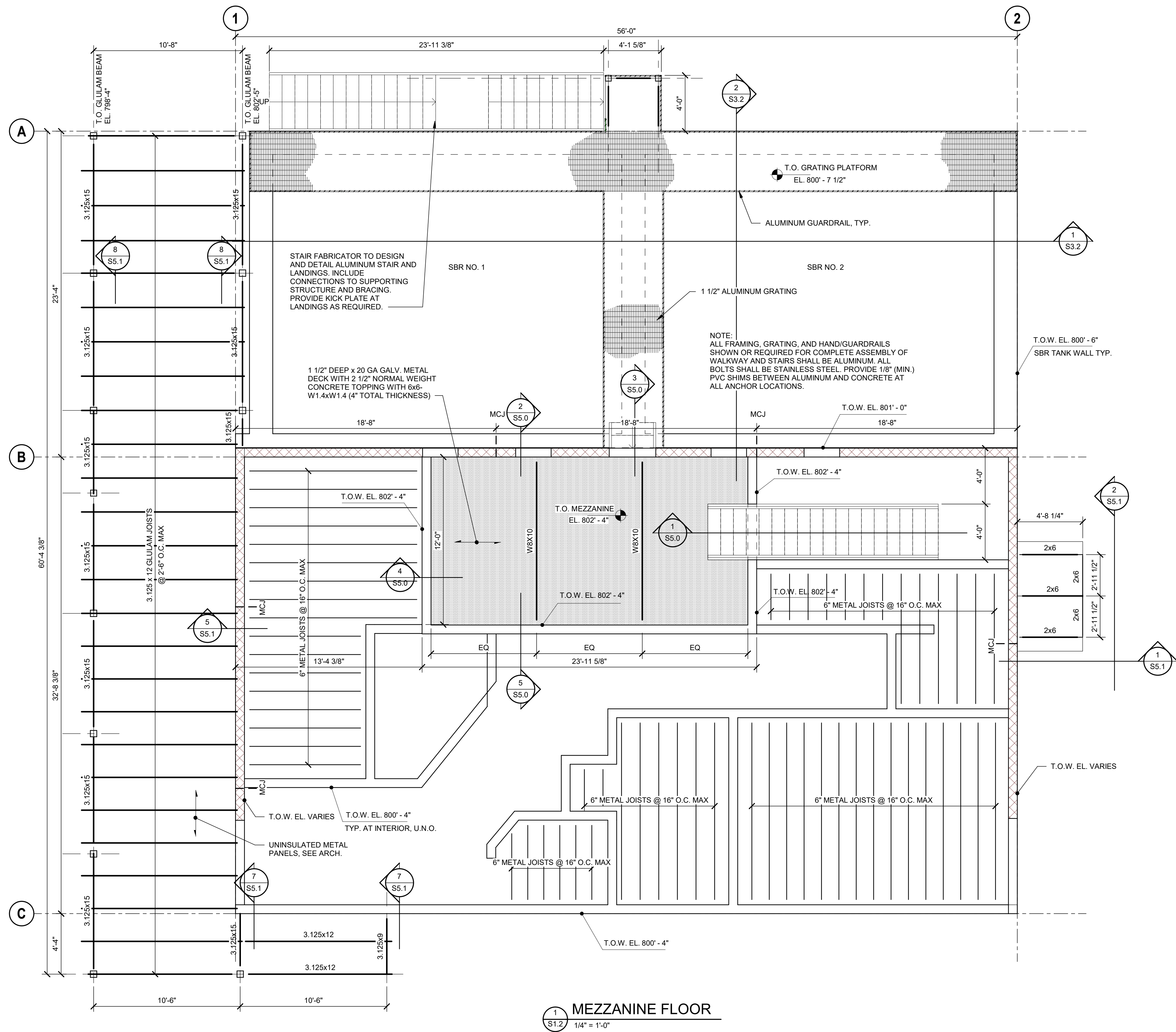
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APRIL 17, 2026

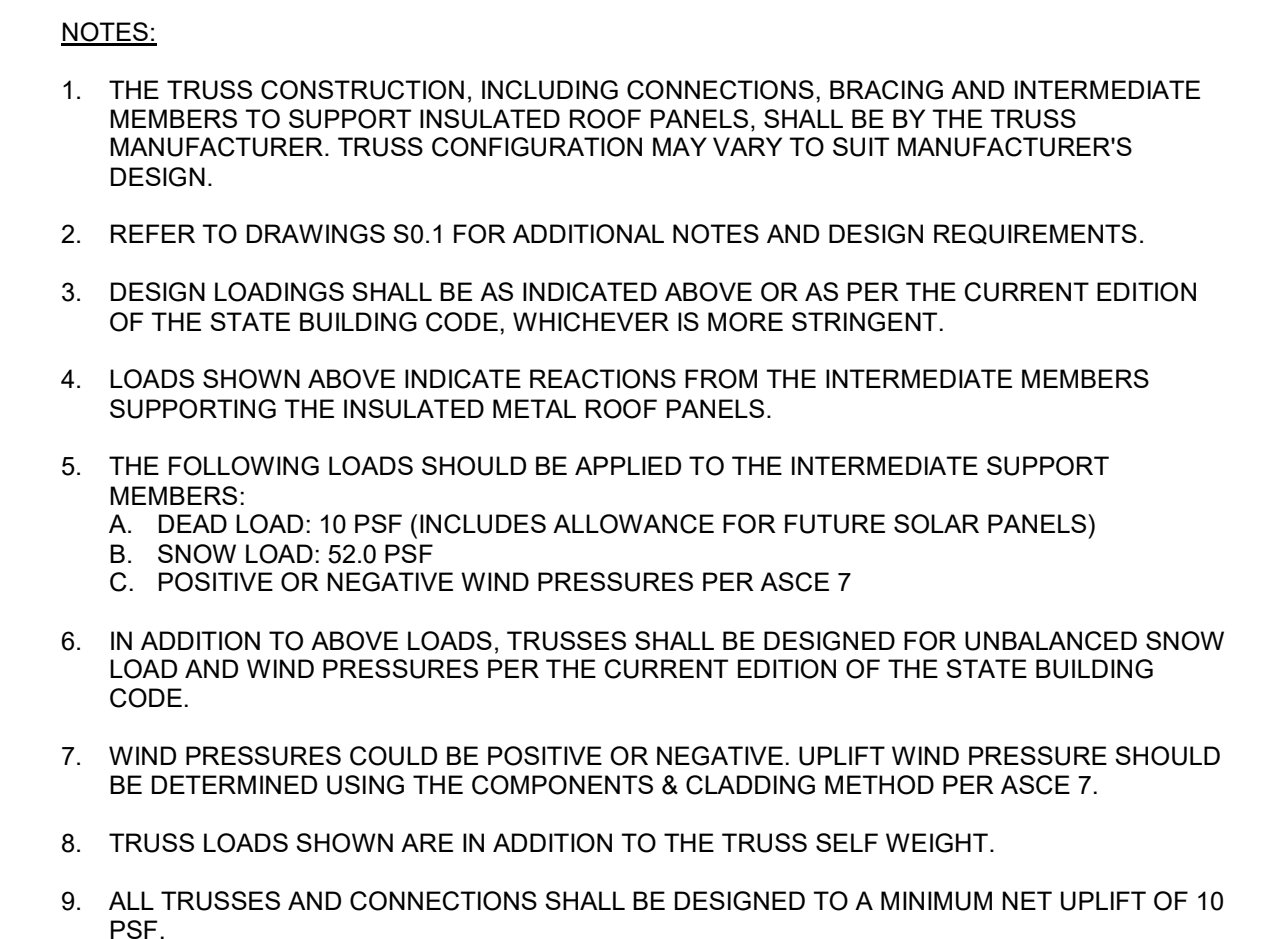
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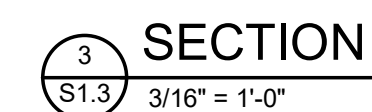
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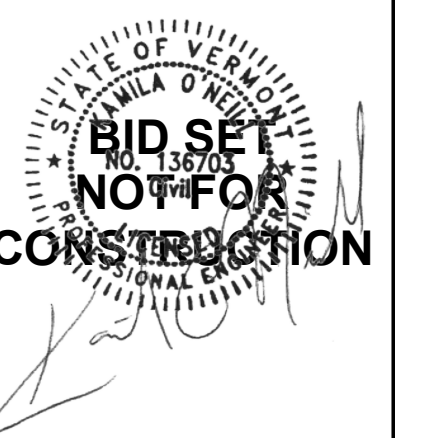
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2 TYPICAL LOADING FOR ROOF TRUSSES



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SHEET TITLE CONTRACT NO. 1 FOUNDATION SECTIONS AND DETAILS

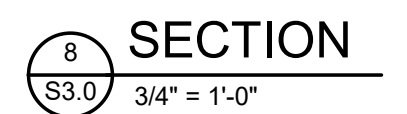
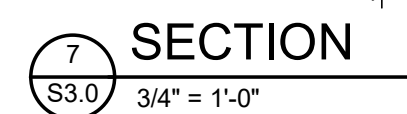
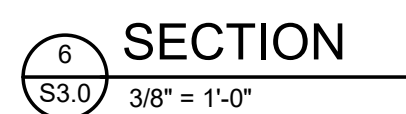
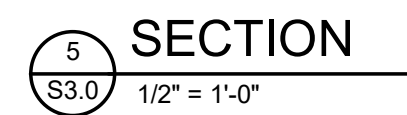
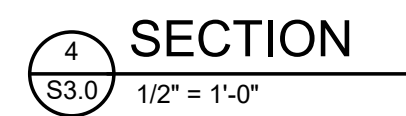
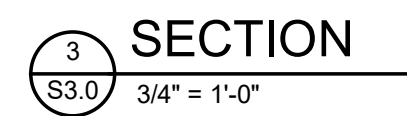
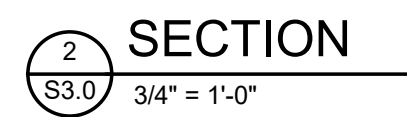
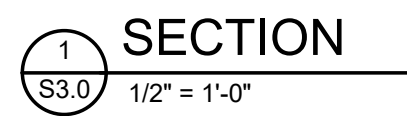
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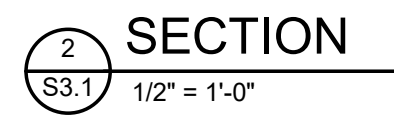
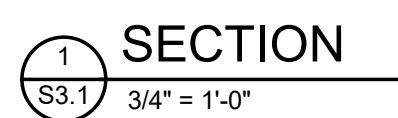
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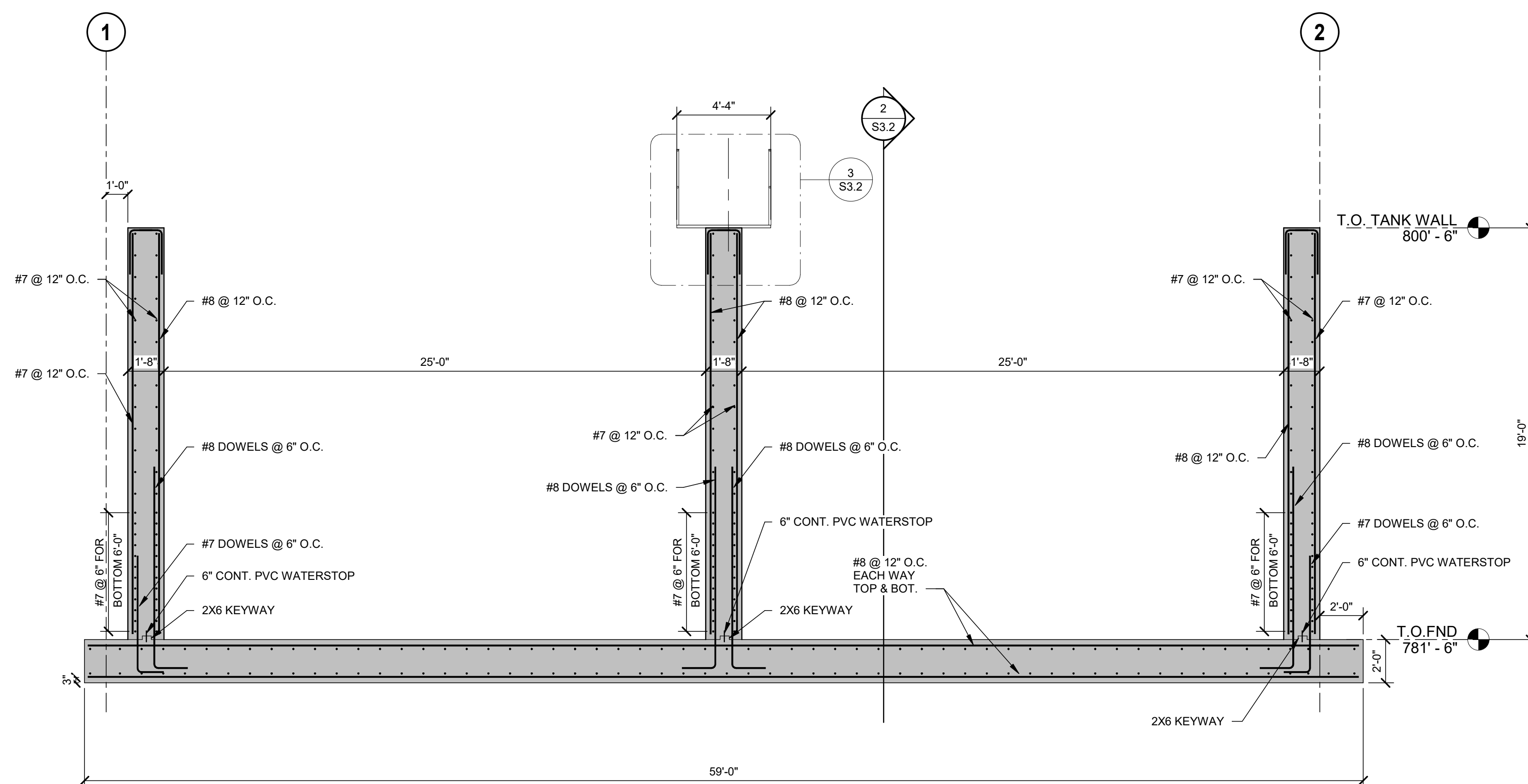
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SHEET 49 OF 85

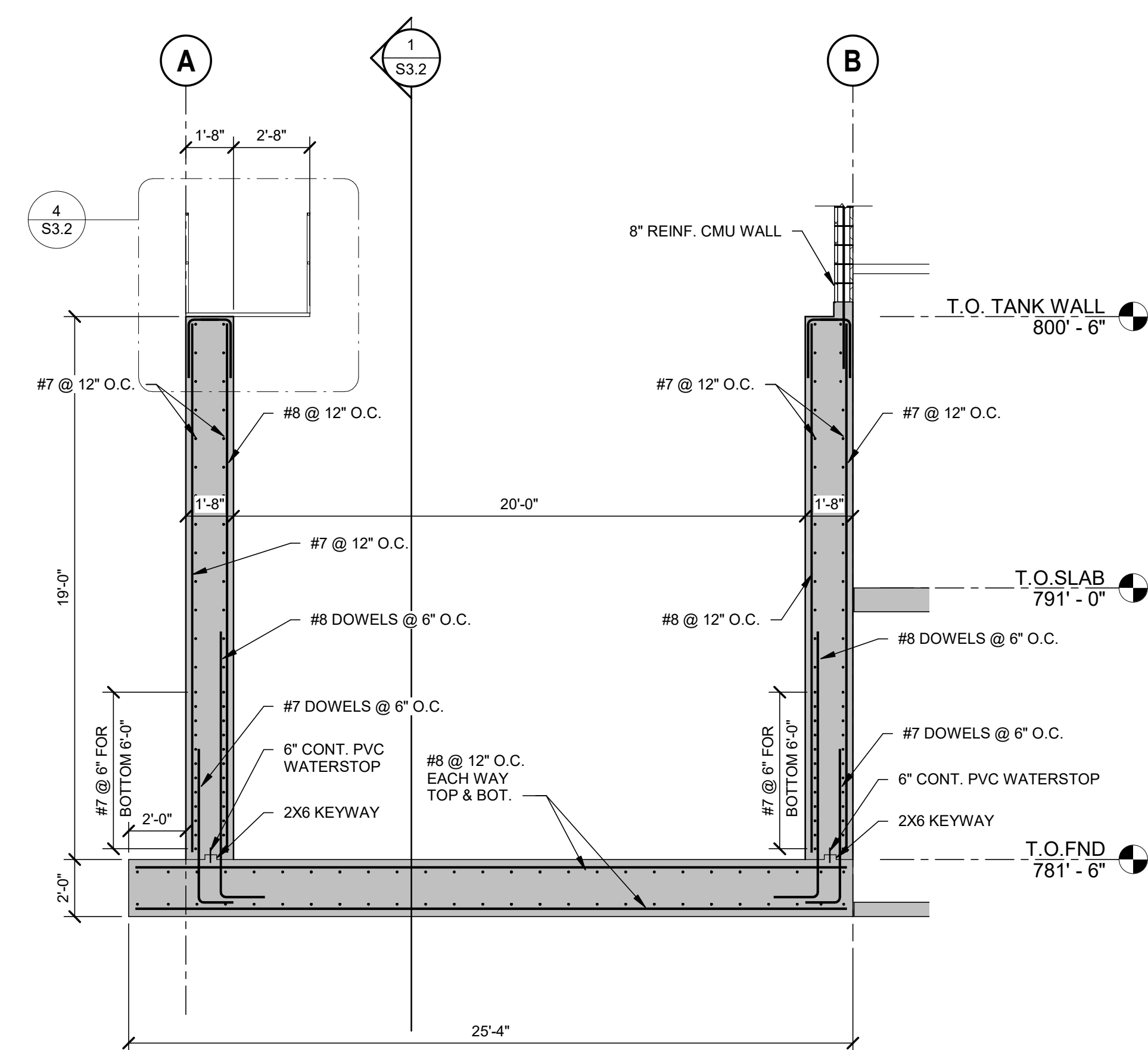


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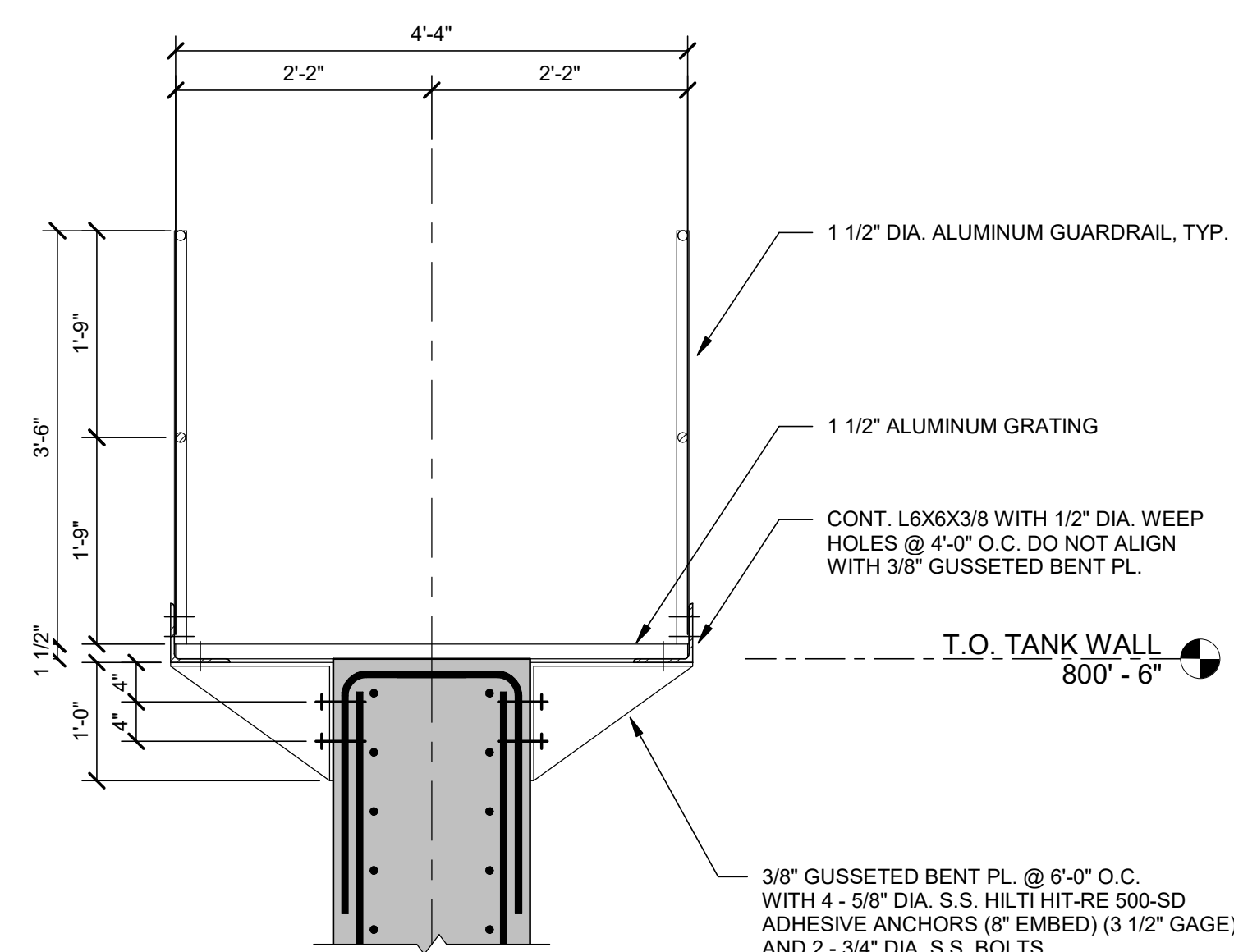




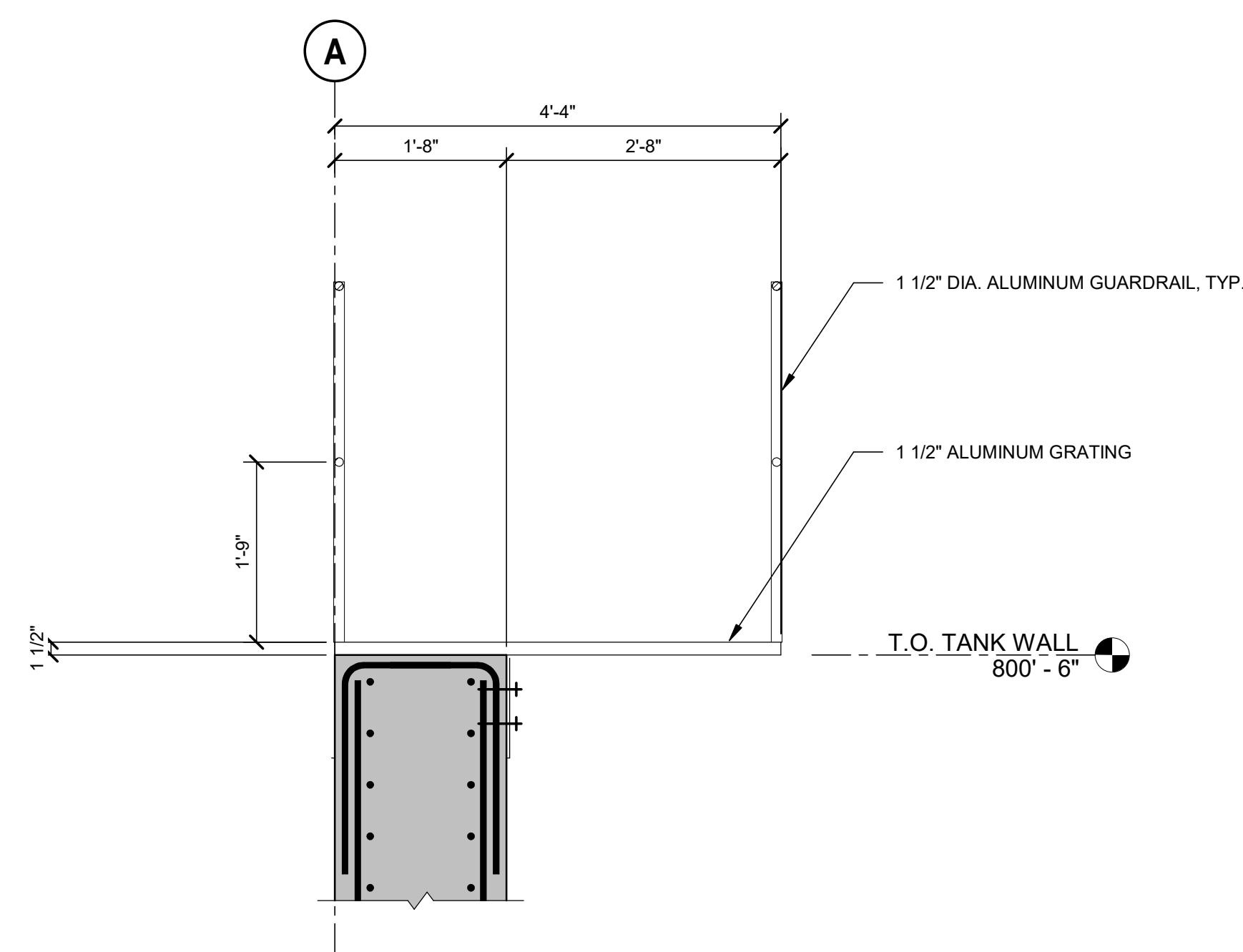
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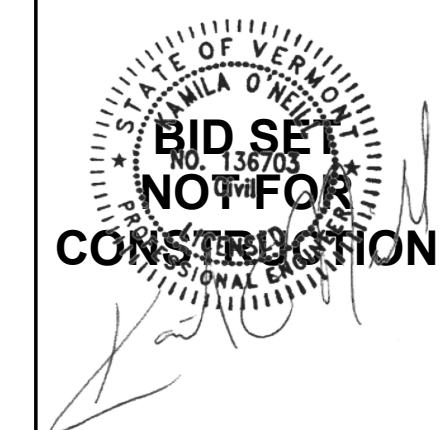
SECTION



SECTION
3/4" = 1'-0"



SECTION
4
S3.2 3/4" = 1'-0"

[illegible]

CLIENT NAME
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CONTRACT NO. 1
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SECTIONS AND
DETAILS

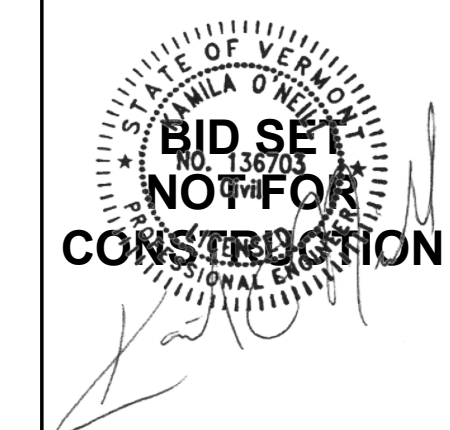
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S3.2

SHEET 51 OF 85



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SHEET TITLE
CONTRACT NO. 1
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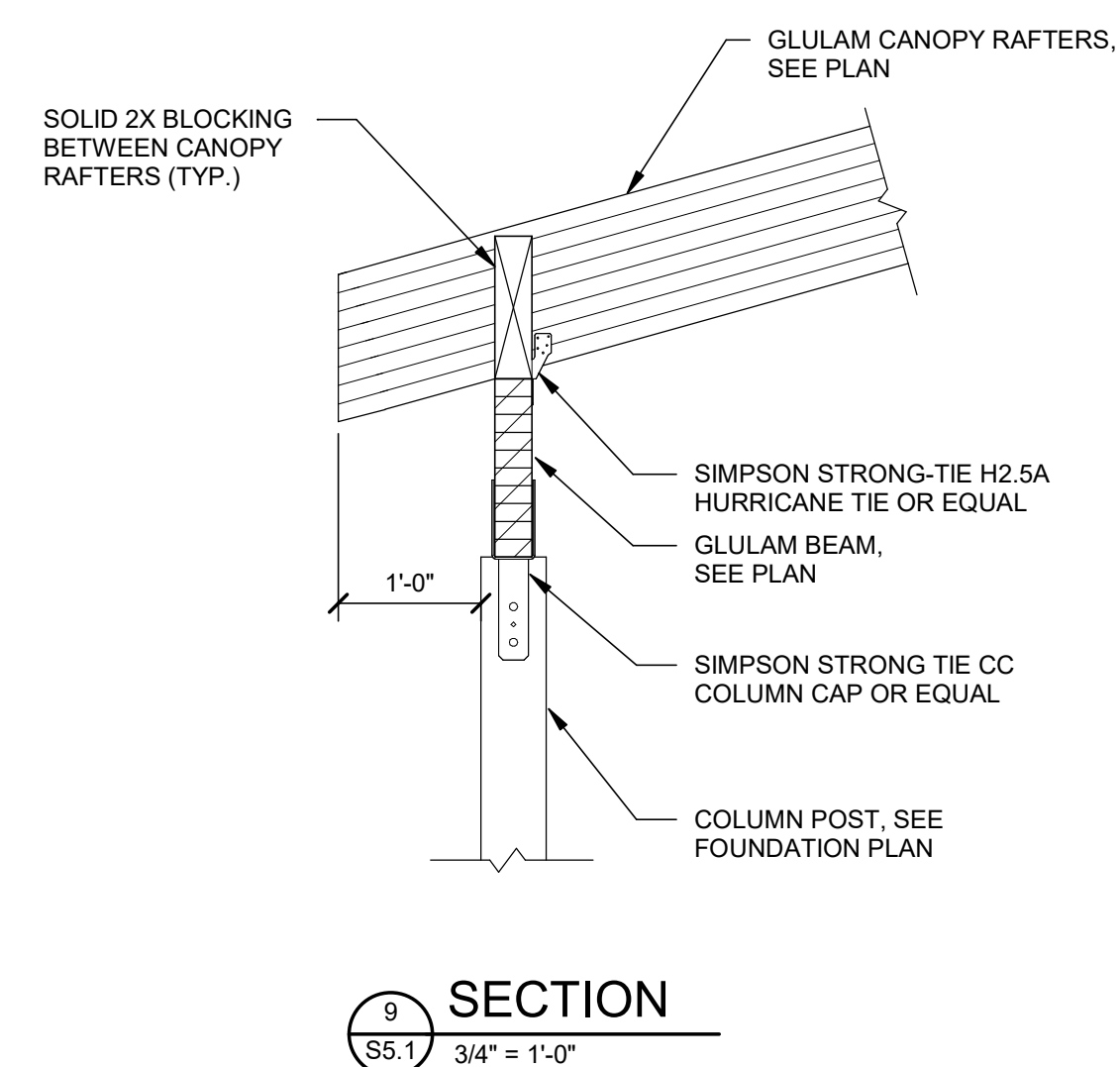
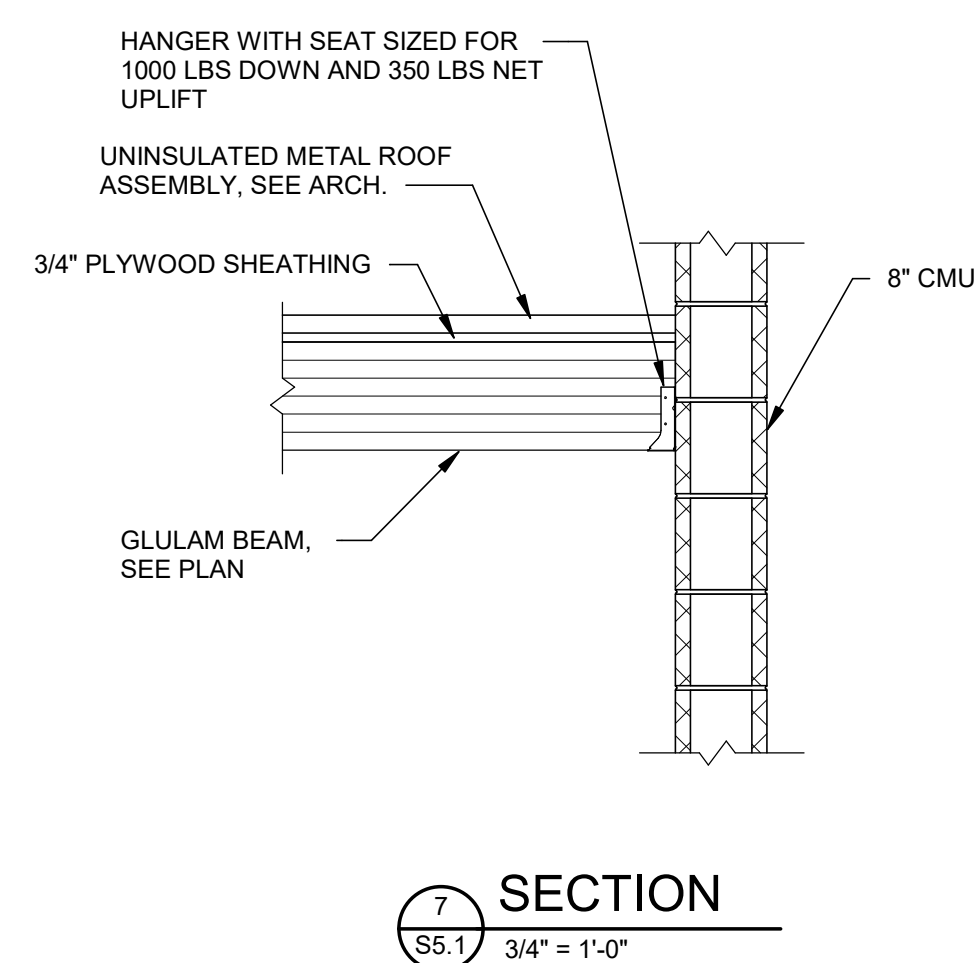
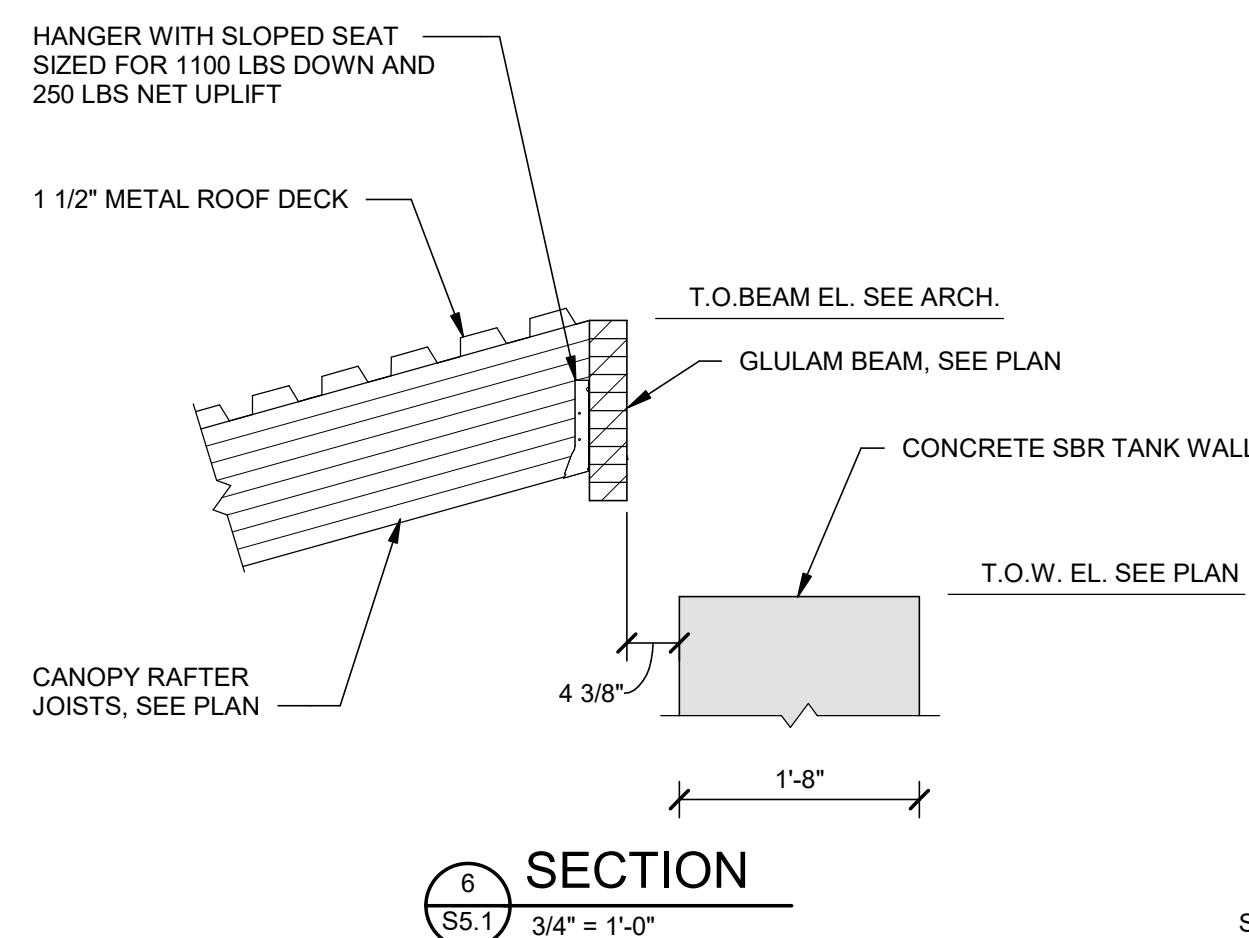
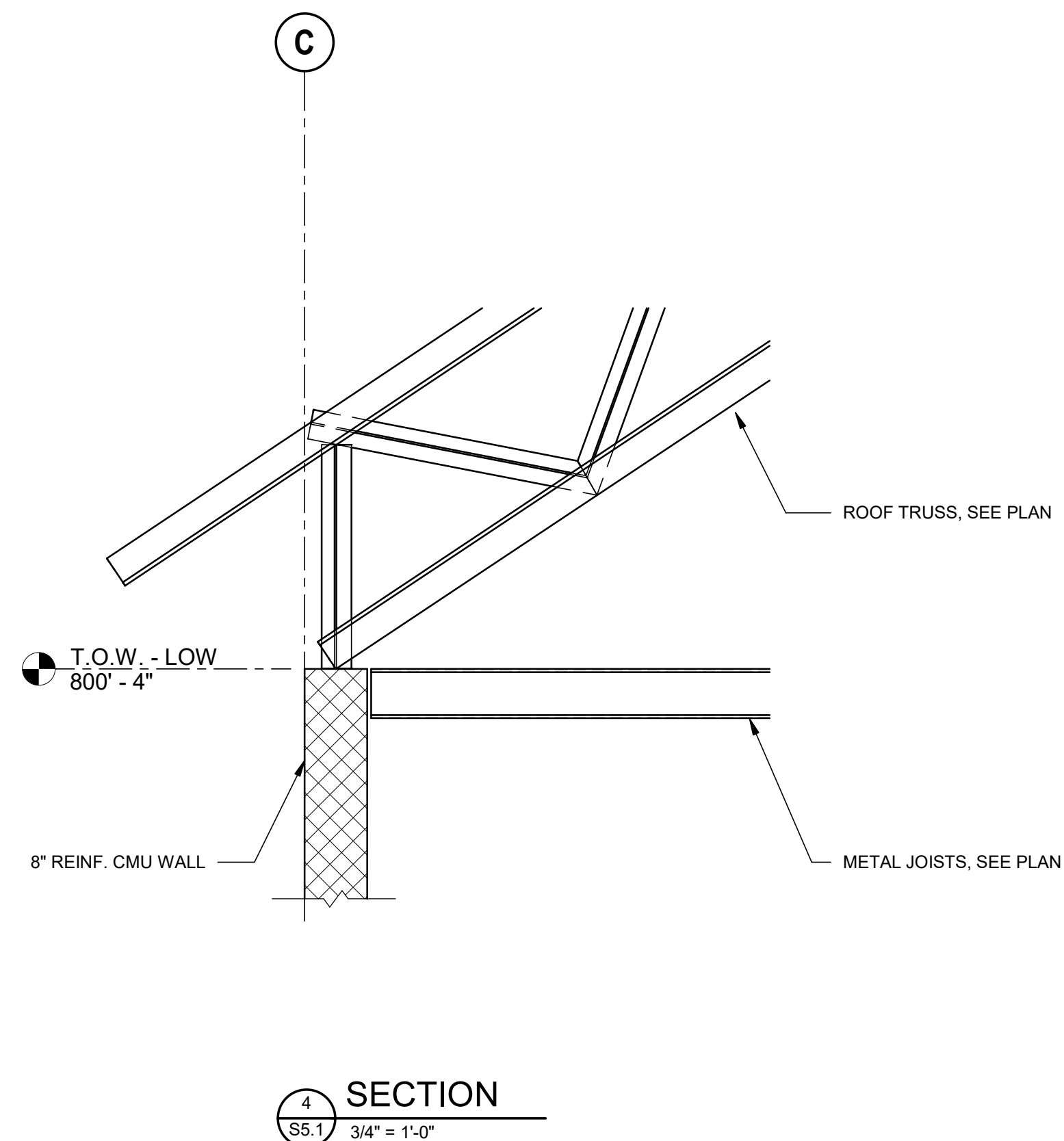
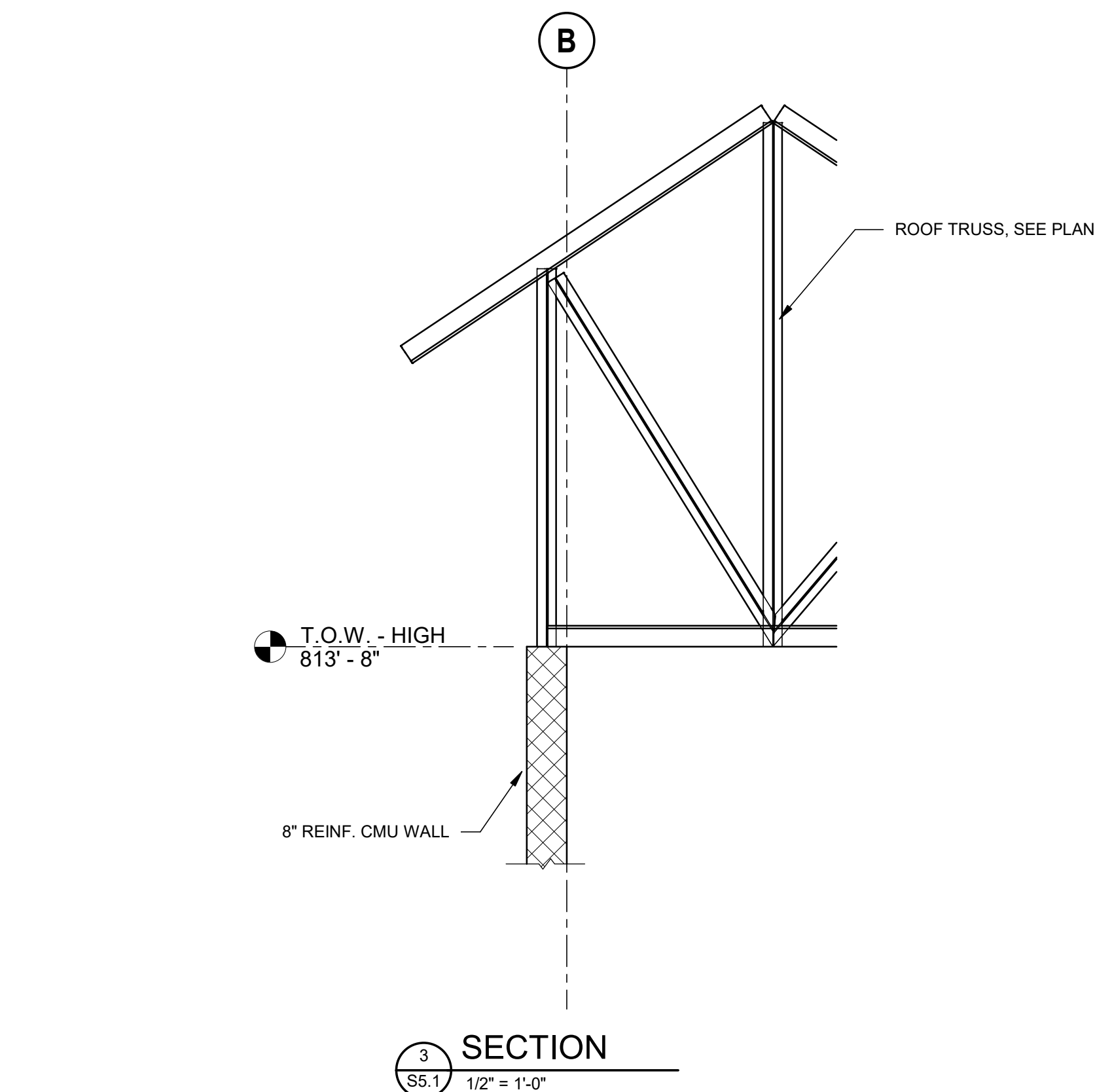
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S5.1

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DETAILS

D&K PROJECT #	PROJ. ENG.
227947	KO

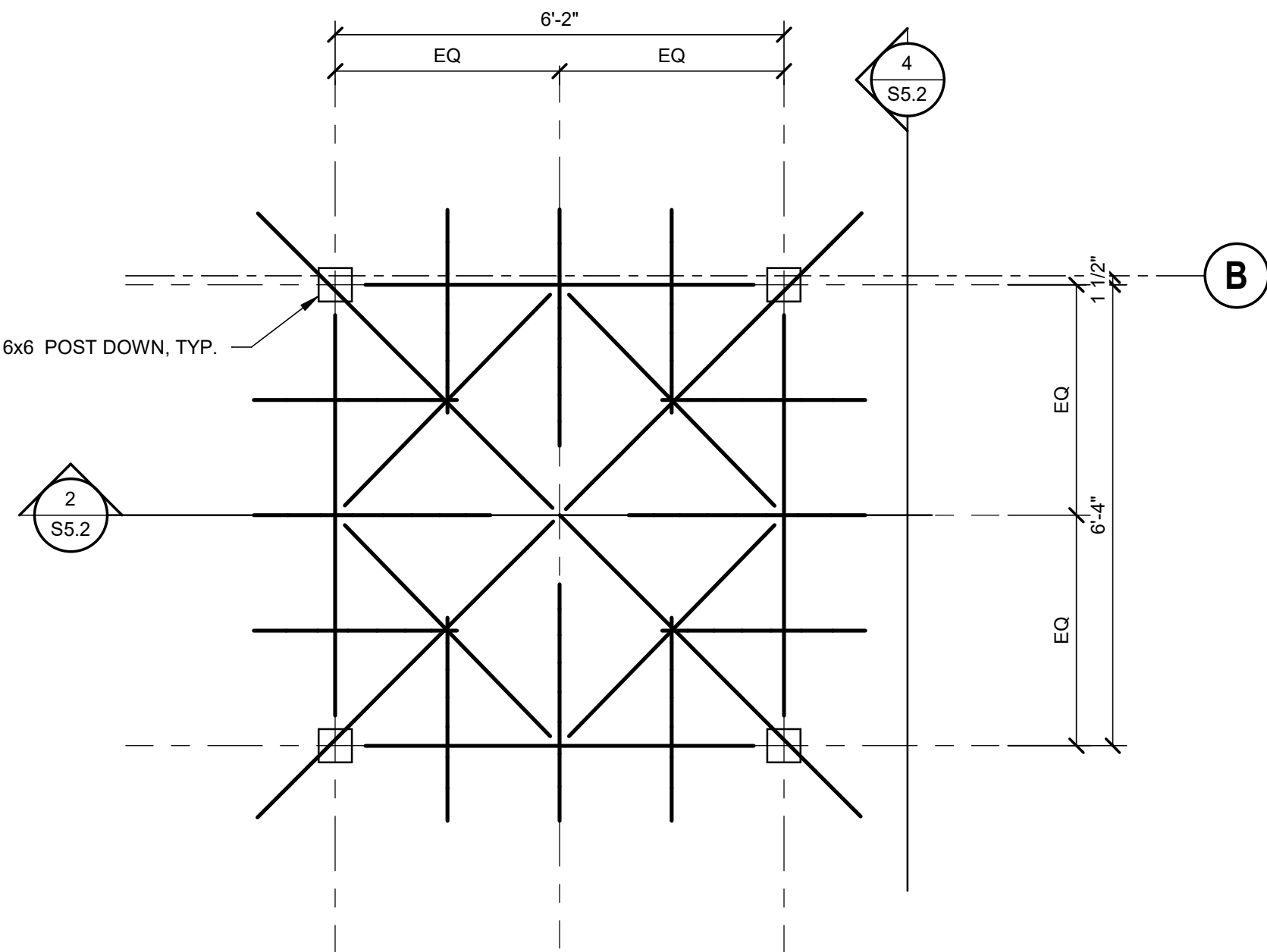
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DATE
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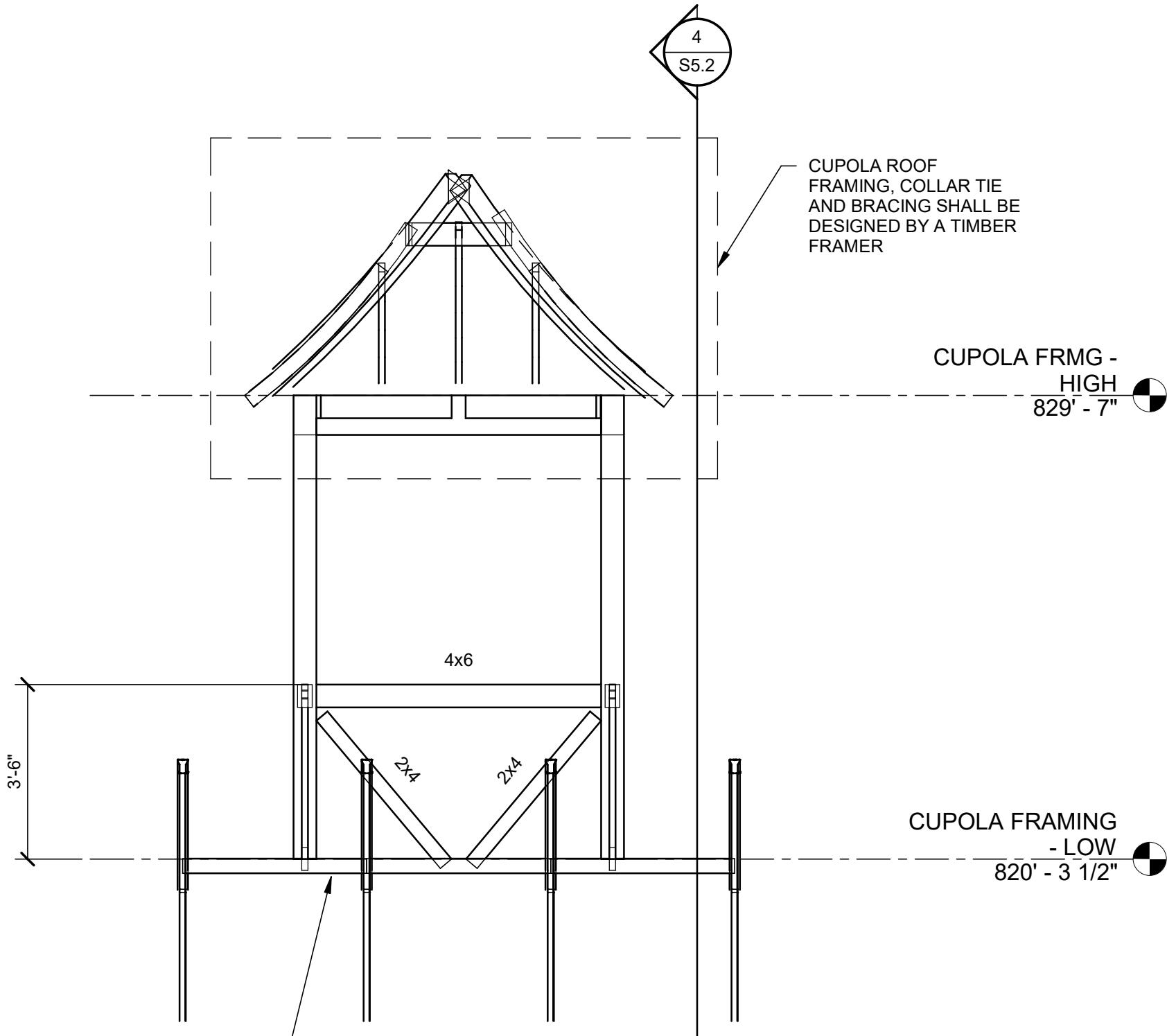
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SHEET 54 OF 85



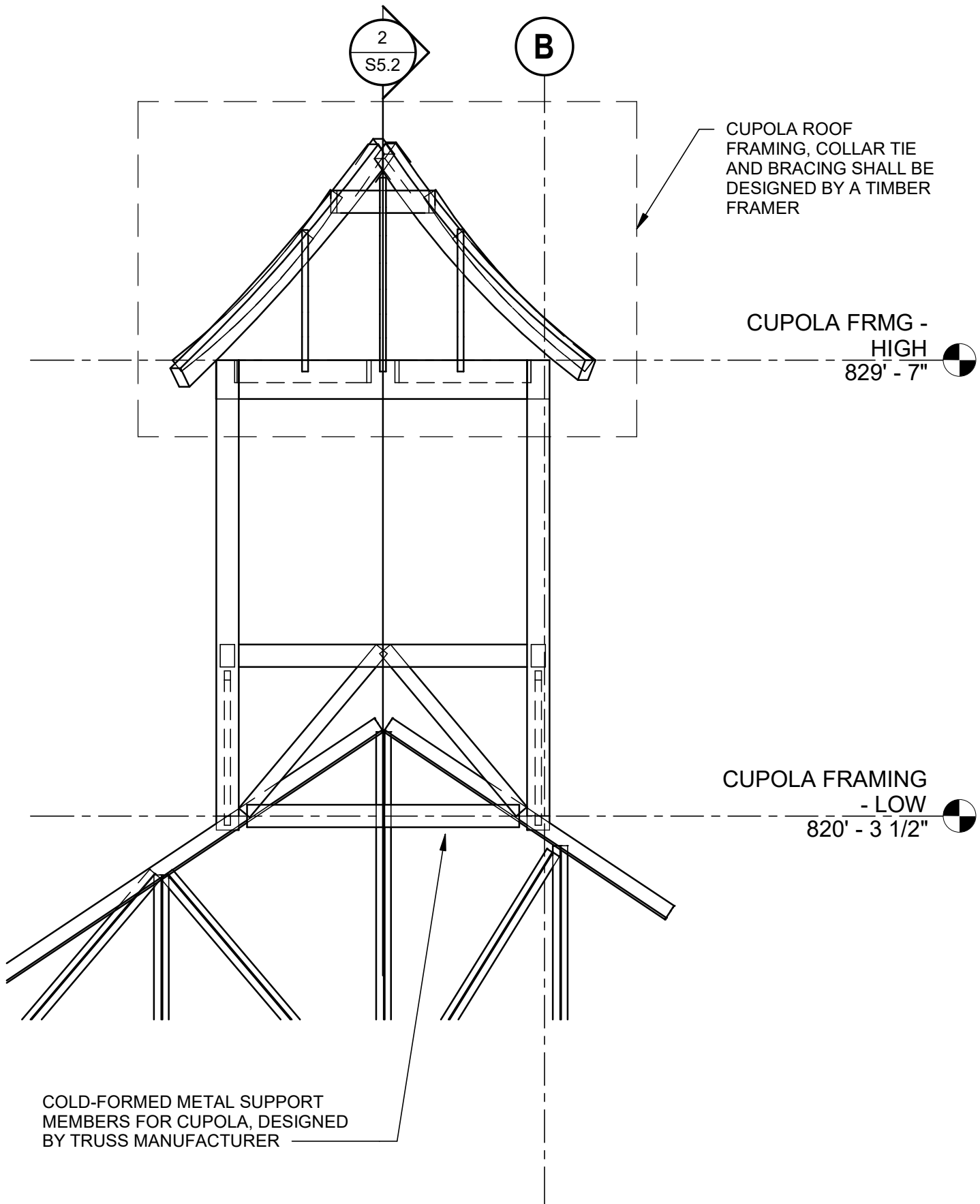
CUPOLA ROOF FRAMING, COLLAR TIE AND BRACING SHALL BE DESIGNED BY A TIMBER FRAMER

1 CUPOLA FRMG - HIGH
1/2" = 1'-0"



COLD-FORMED METAL SUPPORT
MEMBERS FOR CUPOLA, DESIGNED
BY TRUSS MANUFACTURER

2 SECTION
3/8" = 1'-0"

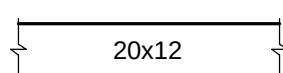
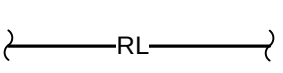
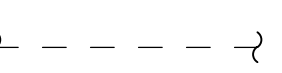
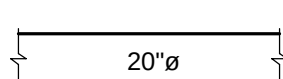
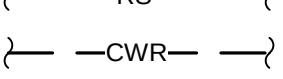
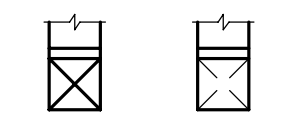
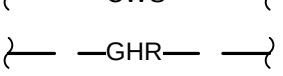
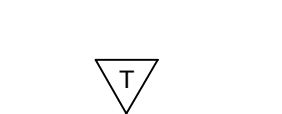
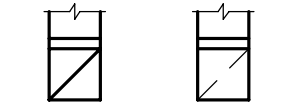
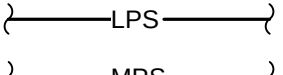
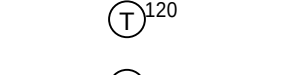
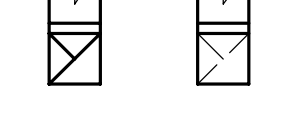
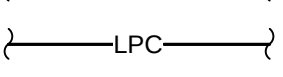
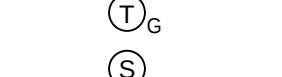
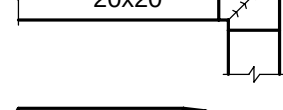
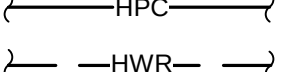
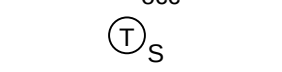
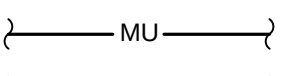
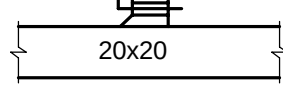
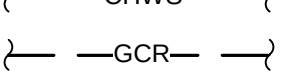
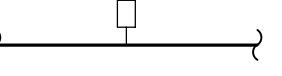
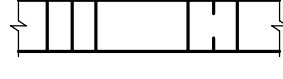
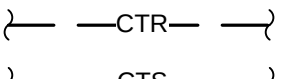
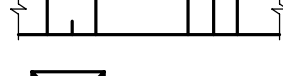
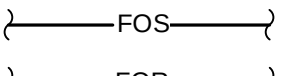
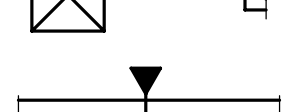
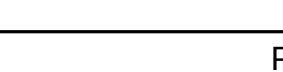
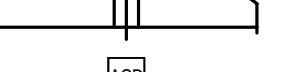
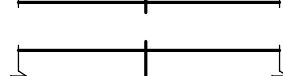
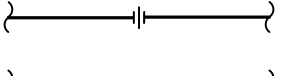
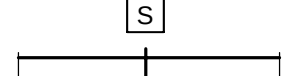
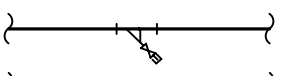
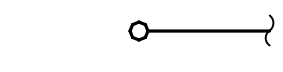
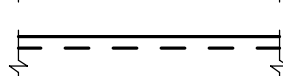
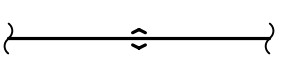
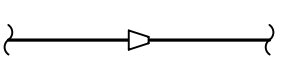
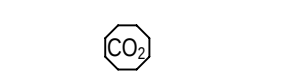
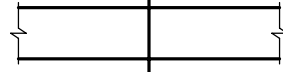
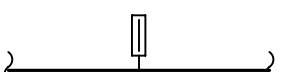
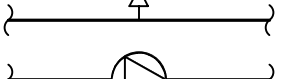
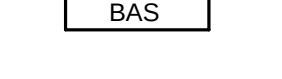
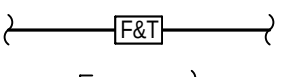
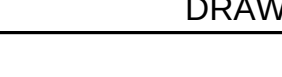
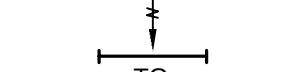
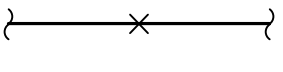
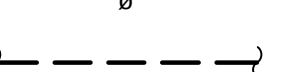
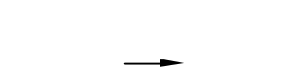
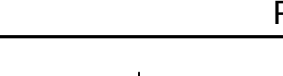
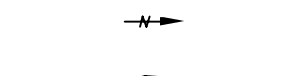
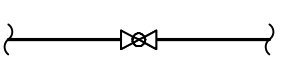
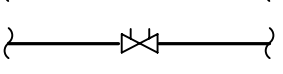
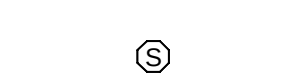
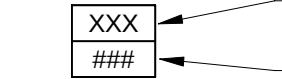
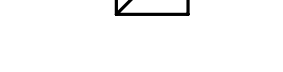
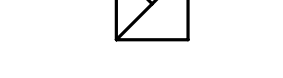


COLD-FORMED METAL SUPPORT
MEMBERS FOR CUPOLA, DESIGNED
BY TRUSS MANUFACTURER

4 SECTION
3/8" = 1'-0"

MECHANICAL LEGENDS & ABBREVIATIONS

NOTE: NOT ALL SYMBOLS/ABBREVIATIONS SHOWN IN THE LEGEND ARE USED IN THIS DRAWING SET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CONTENT SHOWN ON DRAWINGS.

DUCTWORK		PIPING SYSTEMS		CONTROLS & BALANCING		ABBREVIATIONS	
	RECTANGULAR DUCT, FIRST NUMBER IS DIMENSION IN VIEW OF DRAWING		REFRIGERANT LIQUID		CONTROLS WIRING	ø	DIAMETER
	ROUND RIGID DUCT		REFRIGERANT SUCTION		WALL MOUNTED THERMOSTAT, ARROW POINTS TO DEVICE CONTROLLED	A	AMPS/AMPERAGE
	SUPPLY/OUTSIDE AIR DUCT ELBOW UP/DOWN		CONDENSER WATER RETURN		UNIT MOUNTED THERMOSTAT	AA	ALL AROUND
	RETURN DUCT ELBOW UP/DOWN		CONDENSER WATER SUPPLY		THERMOSTAT, LINE VOLTAGE	ABV	AUTOMATIC BALANCE VALVE
	EXHAUST DUCT ELBOW UP/DOWN		GLYCOL HEATING RETURN		THERMOSTAT, REVERSE ACTING	ACV	MOTORIZED VALVE
	RECTANGULAR DUCT 90° MITERED ELBOW WITH TURNING VANES		GLYCOL HEATING SUPPLY		THERMOSTAT, WITH GUARD	AD	ACCESS DOOR
	TYPICAL LONG RADIUS ELBOW, RECTANGULAR/ROUND DUCT		LOW PRESSURE STEAM		THERMOSTAT	AFF	ABOVE FINISH FLOOR
	TYPICAL BRANCH DUCT 45° TAKE-OFF W/ VOLUME DAMPER		MEDIUM PRESSURE STEAM		THERMOSTAT, REVERSE ACTING	AI	ANALOG INPUT
	DUCT RISE		HIGH PRESSURE STEAM		THERMOSTAT, WITH GUARD	AO	ANALOG OUTPUT
	DUCT SET DOWN		LOW PRESSURE CONDENSATE		FAN SPEED CONTROL	APD	AIR PRESSURE DROP
	FLEXIBLE DUCT		MEDIUM PRESSURE CONDENSATE		OCCUPANCY SENSOR	ARCH	ARCHITECT (URL)
	FIRE DAMPER		HIGH PRESSURE CONDENSATE		THERMAL SENSOR	ATC	AUTOMATIC TEMPERATURE CONTROL
	SMOKE DAMPER		HEATING HOT WATER RETURN		AQUASTAT	AWT	AVERAGE WATER TEMPERATURE
	FIRE & SMOKE DAMPER		HEATING HOT WATER SUPPLY		PRESSURE TRANSMITTER	BAS	BUILDING AUTOMATION SYSTEM
	DUCT SMOKE DETECTOR		MAKE-UP WATER		FLOW SWITCH	BF	BOILER FEEDWATER
	DUCT SOUND ATTENUATION LINING		CHILLED WATER RETURN		BALANCING VALVE	BHP	BRAKE HORSEPOWER
	BACKDRAFT DAMPER		CHILLED WATER SUPPLY		DIFFERENTIAL PRESSURE SWITCH	BOD	BOTTOM OF DUCTWORK (ELEVATION)
	BAROMETRIC RELIEF DAMPER		CHILLED GLYCOL RETURN		MANUAL VOLUME DAMPER	BTU/H	BRITISH THERMAL UNITS PER HOUR
	FLEXIBLE DUCT CONNECTOR		CHILLED GLYCOL SUPPLY		AUTOMATIC CONTROL DAMPER	C	COMMON
	EQUIPMENT FLEX CONNECTOR		COOLING TOWER RETURN		MOTOR OPERATED DAMPER	CAP	CAPACITY
	TRANSFER GRILLE		COOLING TOWER SUPPLY		AIR FLOW SWITCH	CFM	CUBIC FEET PER MINUTE
	DIRECTION OF SUPPLY AIR FLOW		FUEL OIL SUPPLY		CARBON MONOXIDE GAS SENSOR	CKT	CIRCUIT
	DIRECTION OF RETURN OR EXHAUST AIR FLOW		FUEL OIL RETURN		CARBON DIOXIDE GAS SENSOR	CM	CONSTRUCTION MANAGER
	SUPPLY FAN ROOF MOUNTED				CONTROL PANEL	CONN.	CONNECTION
	EXHAUST FAN ROOF MOUNTED				BAS PANEL	COP	COEFFICIENT OF PERFORMANCE
	SMOKE DETECTOR					CP	CONTROL PANEL
	FAN (SCHEMATIC)					db	DRY BULB TEMPERATURE
	SUPPLY AIR DIFFUSER, REGISTER, OR GRILLE					DCW	DOMESTIC COLD WATER
	RETURN AIR REGISTER OR GRILLE					DDC	DIRECT DIGITAL CONTROL
	EXHAUST AIR REGISTER OR GRILLE					DI	DIGITAL INPUT
						DIA.	DIAMETER
						DN	DOWN
						DO	DIGITAL OUTPUT
						DR	DRAIN
						DWG	DRAWING
						DWV	DRAIN, WASTE, VENT
						DX	DIRECT EXPANSION
						<E>	EXISTING
						E/A	EXHAUST AIR
						EAT	ENTERING AIR TEMPERATURE
						EC	ELECTRICAL CONTRACTOR
						ECON	ECONOMIZER
						EDB	ENTERING DRY BULB
						EER	ENERGY EFFICIENCY RATIO
						EFF	EFFICIENCY
						ESP	EXTERNAL STATIC PRESSURE
						EWB	ENTERING WET BULB
						EWT	ENTERING WATER TEMPERATURE
						FA	FREE AREA
						FLA	FULL LOAD AMPS
						FOB	FLAT ON BOTTOM
						FOT	FLAT ON TOP
						FPI	FINS PER INCH
						FPM	FEET PER MINUTE
						FT	FEET
						FVNR	FULL VOLTAGE ON-REVERSING
						GAL	GALLON(S)
						GC	GENERAL CONTRACTOR
						GPM	GALLONS PER MINUTE
						HOA	HAND-OFF-AUTOMATIC
						HP	HORSEPOWER
						Hz	HERTZ
						ID	INSIDE DIAMETER
						in	INCH(ES)
						kW	KILOWATT(S)
						LAT	LEAVING AIR TEMPERATURE
						LDB	LEAVING DRY BULB
						LF	LINEAR FEET
						LRA	LOCKED ROTOR AMPS
						LWB	LEAVING WET BULB
						LWT	LEAVING WATER TEMPERATURE
						MAX	MAXIMUM
						MBH	1,000 BRITISH THERMAL UNITS PER HOUR
						MC	MECHANICAL CONTRACTOR
						MCA	MINIMUM CIRCUIT AMPACITY
						MCC	MOTOR CONTROL CENTER
						MEP	MECHANICAL, ELECTRICAL, PLUMBING
						MIN	MINIMUM
						MMBH	MILLIONS OF BTU/H
						MOC	MAXIMUM OVERCURRENT PROTECTION
						MOP	MOTOR OPERATED DAMPER
						MRE	MECHANICAL ROOM EQUIPMENT
						MTD	MOUNTED
						NC	NORMALLY CLOSED
						NIC	NOT IN CONTRACTOR
						NO	NORMALLY OPEN
						NO.	NUMBER
						NTS	NOT TO SCALE
						O/A	OUTDOOR AIR
						OAT	OUTSIDE AIR TEMPERATURE
						OD	OUTSIDE DIAMETER
						OED	OPEN ENDED DUCT
						OIT	OPERATOR INTERFACE TERMINAL
						P	PUMP
						PC	PLUMBING CONTRACTOR
						PD	PRESSURE DROP
						PH	ELECTRICAL PHASE
						PSI	POUNDS PER SQUARE INCH
						R/A	RETURN AIR
						RH	RELATIVE HUMIDITY
						RLA	RATED LOAD AMPS
						RPM	REVOLUTIONS PER MINUTE
						S/A	SUPPLY AIR
						SAT	SUPPLY AIR TEMPERATURE
						SF	SQUARE FEET
						SP	STATIC PRESSURE
						SS	STAINLESS STEEL
						TEMP	DEGREES FAHRENHEIT (°F) UNLESS OTHERWISE NOTED
						TSP	TOTAL STATIC PRESSURE
						TYP	TYPICAL
						UD	UNDERCUT DOOR
						VB	VACUUM BREAKER
						VFD	VARIABLE FREQUENCY DRIVE
						VIF	VERIFY IN FIELD
						WB	WET BULB TEMPERATURE
						WC	WATER COLUMN
						WG	WATER GAUGE
						WPD	WATER PRESSURE DROP

MECHANICAL GENERAL NOTES

A. <u>GENERAL</u>	C. <u>CODES/PERMITS</u>
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- A. GENERAL

 1. DO NOT SCALE DRAWINGS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS IN THE FIELD AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
 2. IT IS NOT INTENDED THAT THE DRAWINGS SHOW EVERY PIPE, FITTING OR MINOR DETAIL. SYSTEM & COMPONENTS SHALL BE INSTALLED ACCORDING TO THE INTENT AND MEANING OF CONTRACT DOCUMENTS AND IN ACCORDANCE WITH GOOD PRACTICE.
 3. CONTRACTOR IS RESPONSIBLE TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS WITH FACILITIES AND SERVICES TO MEET REQUIREMENTS INDICATED AND IN ACCORDANCE WITH APPLICABLE CODES AND ORDINANCES.
 4. EQUIPMENT AND COMPONENTS HAVING EQUAL PERFORMANCE CHARACTERISTICS BY OTHER MANUFACTURERS MAY BE CONSIDERED, PROVIDED DEVIATIONS IN DIMENSIONS, OPERATION AND OTHER CHARACTERISTICS DO NOT CHANGE DESIGN CONCEPT OR INTENDED PERFORMANCE AS JUDGED BY THE ENGINEER. BURDEN OF PROOF OF EQUALITY OF PRODUCTS IS ON THE CONTRACTOR.
 5. CONTRACTOR IS RESPONSIBLE FOR THE SAFEKEEPING OF HIS OWN PROPERTY ON THE JOB SITE. OWNER ASSUMES NO RESPONSIBILITY FOR THE PROTECTION OF PROPERTIES AGAINST FIRE, THEFT AND ENVIRONMENTAL CONDITIONS.
 6. CONTRACTOR IS RESPONSIBLE TO PROPERLY PROTECT OWNER'S PROPERTY AND EQUIPMENT FROM INJURY, AND DAMAGE TO SAME SHALL BE REPLACED BY CONTRACTOR.
 7. CONTRACTOR IS TO CLEAN JOB SITE DAILY AND REMOVE FROM THE PREMISES ANY DIRT AND DEBRIS CAUSED BY THE PERFORMANCE OF THE WORK INCLUDED IN THIS CONTRACT.
 8. ALL WORK TO BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER. CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION.
 9. INSTALLATE CONSTRUCT AREAS BY MEANS OF TEMPORARY PARTITIONS AND/OR TARPS TO KEEP DUST AND DIRT WITHIN WORK AREA.
 10. CONTRACTOR IS RESPONSIBLE TO PROPERLY SECURE AREAS OF CONSTRUCTION AT THE END OF EACH WORKING DAY.
 11. ALL OPENINGS TO BE CLOSED WITH TAMPER-PROOF SCREWS. NEW TOOLS SHALL BE USED AND KEPT AT ALL TIMES.
 12. ALL ROUGH OPENINGS THRU EXTERIOR WALLS SHALL BE SEALED/CAULKED WATERTIGHT WITH ELASTOMERIC SEALANT.
 13. FIRE AND MOISTURE SEAL ALL DUCT AND PIPE PENETRATIONS THRU GENERAL CONSTRUCTION IN ACCORDANCE WITH DIVISION 5.
 14. MOUNTING HEIGHTS FOR THERMOSTATS, EQUIPMENT ON/OFF SWITCHES, ETC., LOCATED IN HANDICAP ACCESSIBLE SPACES SHALL BE 48" TO TOP OF CONTROL UNLESS NOTED OTHERWISE BY ARCHITECT. REFER TO ARCHITECTURAL ELEVATIONS FOR FURTHER DETAILS.
 15. ALL WORK IN INTERIOR FINISHED SPACES EXCEPT WHERE INDICATED IS TO BE COMPLETED ABOVE CEILING. PROVIDE ALL NECESSARY CUTTING, PATCHING, REPAINTING AND/OR REPLACEMENT OF FINISHES AS REQUIRED. PERFORM PROPER COORDINATION WITH AFFECTED TRADES.

D. COORDINATION OF WORK

 1. WORK IS TO BE PERFORMED IN STRICT ACCORDANCE WITH STATE RECOGNIZED BUILDING CODES, NFPA, ASHRAE, UNDERWRITERS LABORATORIES AND ALL MUNICIPAL, STATE AND OTHER AUTHORITIES, PUBLIC AND PRIVATE, HAVING JURISDICTION. REPORT ALL DISCREPANCIES WITH SUCH REGULATIONS TO ENGINEER AND DO NOT PROCEED WITH ANY WORK UNTIL WRITTEN AUTHORIZATION IS RECEIVED FROM THE ENGINEER.
 2. ALL NECESSARY FEES, PERMITS, AND APPROVALS AS REQUIRED BY THE WORK OF THESE DRAWINGS AND SPECIFICATIONS IS TO BE OBTAINED AND PAID FOR BY THIS CONTRACTOR.
 3. NOTHING CONTAINED IN THE SPECIFICATIONS OR INDICATED ON THESE DRAWINGS IS TO BE CONSTRUED TO CONFLICT WITH APPLICABLE PORTIONS OF ANY LAWS, ORDINANCES, REGULATIONS, OR CODES.
 1. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, PLUMBING, AND ELECTRICAL WORK - NEW OR EXISTING.
 2. CONTRACTOR IS RESPONSIBLE TO PRODUCE FOR REVIEW AND APPROVAL COORDINATION DRAWINGS OF ALL TRADES BEFORE COMMENCEMENT OF INSTALLATION. ANY INSTALLATION WORK COMPLETED BEFORE REVIEW AND APPROVAL OF COORDINATION DRAWINGS IS AT CONTRACTORS OWN RISK AND CHANGE ORDERS SHALL NOT BE ENTERTAINED FOR ANY REQUIRED REWORK.
 3. WHEN MECHANICAL WORK (HVAC, PLUMBING, FIRE PROTECTION, ETC.) IS SUBCONTRACTED, IT IS TO BE THE MECHANICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE SUBCONTRACTORS AND THE ASSOCIATED CONTRACTS. WHEN DISCREPANCIES ARISE PERTAINING TO WHICH CONTRACTOR PROVIDES A PARTICULAR ITEM OF THE MECHANICAL CONTRACT OR WHICH CONTRACTOR PROVIDES FINAL CONNECTIONS FOR A PARTICULAR ITEM OF THE MECHANICAL CONTRACT, IT MUST BE BROUGHT TO THE ATTENTION OF THE MECHANICAL CONTRACTOR, WHOSE DECISION IS FINAL.
 4. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS ARE APPROXIMATE AND NOT DEFINITELY FIXED BY DIMENSIONS, THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS. CASES WHERE THERE ARE MAJOR CONFLICTS THE CONTRACTOR MUST NOTIFY THE ENGINEER FOR FIELD REVIEW. DO NOT SCALE THE DRAWINGS.
 5. PROVIDE LOCATIONS OF REQUIRED ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS TO SERVICE VALVES, DAMPERS, AND OTHER CONCEALED MECHANICAL EQUIPMENT. GENERAL CONTRACTOR IS TO FURNISH & INSTALL ACCESS PANELS. COORDINATE ACCESS DOOR LOCATIONS WITH ARCHITECT AND INTERIOR DESIGNER.
 6. COORDINATE LOCATIONS AND SIZES OF ALL FLOOR, WALL, AND ROOF OPENINGS WITH ALL OTHER TRADES INVOLVED. ALL OPENINGS IN FIRE WALLS, FLOORS AND RATED PARTITIONS FOR

B. QUALITY OF WORK

- B. QUALITY OF WORK
1. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS TO OBTAIN A COMPLETE AND SATISFACTORY INSTALLATION. AN ATTEMPT HAS BEEN MADE TO SEPARATE AND DEFINE THE WORK OF THE CONTRACTOR. DRAWINGS ARE DIAGRAMMATIC, BUT MUST BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION OF THE FACILITY AND WORK OF OTHER TRADES WILL PERMIT. THE DRAWINGS UTILIZE SYMBOLS AND SCHEMATIC DIAGRAMS TO INDICATE VARIOUS ITEMS OF WORK. THEREFORE, NO INTERPRETATION WILL BE MADE FROM THE LIMITATION OF SYMBOLS AND DIAGRAMS THAT ANY ELEMENTS NECESSARY FOR THE COMPLETE INSTALLATION ARE EXCLUDED. THE ENGINEER IS TO BE NOTIFIED OF ANY DISCREPANCIES, OMISSIONS, CONFLICTS, OR INTERFERENCE WHICH OCCUR BETWEEN VARIOUS DRAWINGS AND SPECIFICATIONS. IF SUCH NOTIFICATION IS NOT RECEIVED, THE INSTALLING CONTRACTOR(S) IS TO BE RESPONSIBLE FOR THEIR INTERPRETATIONS.
 2. "PROVIDE" MEANS "FURNISH AND INSTALL" AND MUST INCLUDE ALL EQUIPMENT THAT INCLUDE THE ACCESSORIES, SUPPORTS, FITTINGS AND OTHER INCIDENTAL MATERIAL NEEDED FOR THE EQUIPMENT), DEVICES, HARDWARE, MOUNTS, LABOR, RIGGING, SUBCONTRACTS, ETC., THAT RESULT IN A COMPLETE AND FUNCTIONAL PROJECT INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE. MINOR ITEMS TO FINISH THE WORK SUCH AS PATCHING, BLOCKING, TRIM, TOUCH-UP PAINT, ETC., SHALL BE PROVIDED WHETHER OR NOT INDICATED IN THE CONTRACT DOCUMENTS.
 3. LOCATE ALL TEMPERATURE, PRESSURE, AND FLOW MEASURING DEVICES IN ACCESSIBLE LOCATIONS IN STRAIGHT SECTIONS OF PIPE OR DUCT AS RECOMMENDED BY THE MANUFACTURER. NOTIFY ENGINEER FOR FIELD REVIEW IF CONFIGURATION WILL NOT ALLOW.
 4. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER IS TO BE USED.
 5. ALL WORKMANSHIP, MATERIALS, AND EQUIPMENT IS TO BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE OWNER.
 6. PROVIDE IDENTIFICATION LABELS FOR NEW EQUIPMENT. AFFIX PERMANENT IDENTIFYING TAGS OR LABELS TO FANS, TERMINAL UNITS, AIR HANDLERS ETC. IDENTIFY SYSTEMS ON PANELS AND DUCTWORK MAINS AND INDICATE DIRECTION OF FLOW ON PIPING. INDICATE THE CONTROLLED EQUIPMENT ON WALL MOUNTED CONTROLS.
- E. PIPING
1. SEE PIPING PLAN SHEETS FOR PIPING GENERAL NOTES.
- F. DUCTWORK
1. SEE DUCTWORK PLANS SHEETS FOR DUCTWORK GENERAL NOTES.
- G. WARRANTY
1. GUARANTEE ALL WORK PERFORMED AND MATERIALS AND EQUIPMENT INSTALLED TO THE FULL EXTENT REQUIRED BY THE DRAWINGS AND SPECIFICATIONS TO BE FREE FROM INHERENT DEFECTS OF MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.
 2. REPLACE ANY MATERIAL AND EQUIPMENT PRIOR TO THE FINAL ACCEPTANCE WHICH IS CORRODED OR OTHERWISE DAMAGED THROUGH THE MECHANICAL CONTRACTOR'S FAILURE TO PROPERLY OPERATE AND MAINTAIN THE INSTALLATION DURING CONSTRUCTION OR RETESTING.
 3. KEEP THE WORK IN REPAIR AND REPLACE ANY DEFECTIVE MATERIALS, EQUIPMENT, OR WORKMANSHIP UPON NOTICE FROM THE ENGINEER OR OWNER'S REPRESENTATIVE FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE.
- H. INSURANCE
1. THE CONTRACTOR MUST, DURING THE LIFE OF THE CONTRACT, MAINTAIN IN FORCE, SUCH INSURANCE AS IS REQUIRED OF THE PRIME CONTRACTOR IN THE GENERAL CONDITIONS OF THE CONTRACT; AND IS TO FURNISH THE PRIME CONTRACTOR AND THE OWNER WITH CERTIFICATION OF SUCH INSURANCE BEFORE BEGINNING WORK ON THIS SECTION OF CONTRACT.
- I. DOCUMENTATION
1. PROVIDE AN ENTIRE SET OF PROJECT CLOSE-OUT DOCUMENTS TO OWNER PER CONTRACT DOCUMENTS. PACKAGE MUST CONTAIN ENTIRE O&M MANUALS WITH PROJECT SUBMITTALS AND SUMMARY COMMENTS, TAB REPORTS, TEST REPORTS, AND RECORD DRAWINGS, PLUS ADMINISTRATIVE DOCUMENTS.

THE HVAC SYSTEM CONSISTS OF A LOW TEMPERATURE LP GAS CONDENSING HYDRONIC BOILER, UNIT HEATERS, CABINET HEATERS, FINTUBE RADIATION, AND HEATING COILS. AN ENERGY RECOVERY VENTILATOR SERVES THE LAB AREA. EXHAUST FANS, EXHAUST LOUVERS AND INTAKE LOUVERS ARE SIZED TO VENTILATE THE ROOMS AS FOLLOWS:

CHEMICAL FEED ROOM = 10 AIR CHANGES PER HOUR (ACH)
ELECTRICAL ROOM = 12 ACH
BLOWER ROOM = 10 ACH
BASEMENT = 6 ACH

AS THE FACILITY IS TYPICALLY UNMANNED THERMOSTATS WILL BE SET AT 55F IN MOST SPACES. LAB AREA AND CHEMICAL FEED ROOM THERMOSTATS WILL BE SET AT 68F.

BUILDING CODES AND STANDARDS:
2020 VERMONT COMMERCIAL BUILDING ENERGY STANDARDS
2025 VERMONT FIRE AND BUILDING SAFETY CODE
2025 VERMONT PLUMBING RULES

C. CODES/PERMITS

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 2. ALL NECESSARY FEES, PERMITS, AND APPROVALS AS REQUIRED BY THE WORK OF THESE DRAWINGS AND SPECIFICATIONS IS TO BE OBTAINED AND PAID FOR BY THIS CONTRACTOR.
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E. PIPING

- E. PIPING
1. SEE PIPING PLAN SHEETS FOR PIPING GENERAL NOTES.

F. DUCTWORK

- F. DUCTWORK
1. SEE DUCTWORK PLANS SHEETS FOR DUCTWORK GENERAL NOTES.

G. WARRANTY

- G. WARRANTY**
1. GUARANTEE ALL WORK PERFORMED AND MATERIALS AND EQUIPMENT INSTALLED TO THE FULL EXTENT REQUIRED BY THE DRAWINGS AND SPECIFICATIONS TO BE FREE FROM INHERENT DEFECTS OF MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.
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 3. KEEPS THE WORK IN REPAIR OR REPLACE ANY DEFECTIVE MATERIALS, EQUIPMENT, OR WORKMANSHIP UPON NOTICE FROM THE ENGINEER OR OWNER'S REPRESENTATIVE FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE.

H. INSURANCE

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[illegible]

CLIENT NAME

	PROJECT NAME WAITSFIELD WASTEWATER TREATMENT FACILITY

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE CONTRACT NO. 1 MECHANICAL LEGENDS & NOTES

D&K PROJECT # 227947	PROJ. ENG. JJC
DRAWN BY JJC	CHECKED BY JHP

DATE
JULY 16, 2026

MO.1

SHEET 55 OF 85



SHEET 56 OF 85

BID SET 07/16/2026
NOT FOR CONSTRUCTION

[illegible]

CLIENT NAME

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
FACILITY

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE CONTRACT NO. 1 HVAC PLAN - FIRST FLOOR

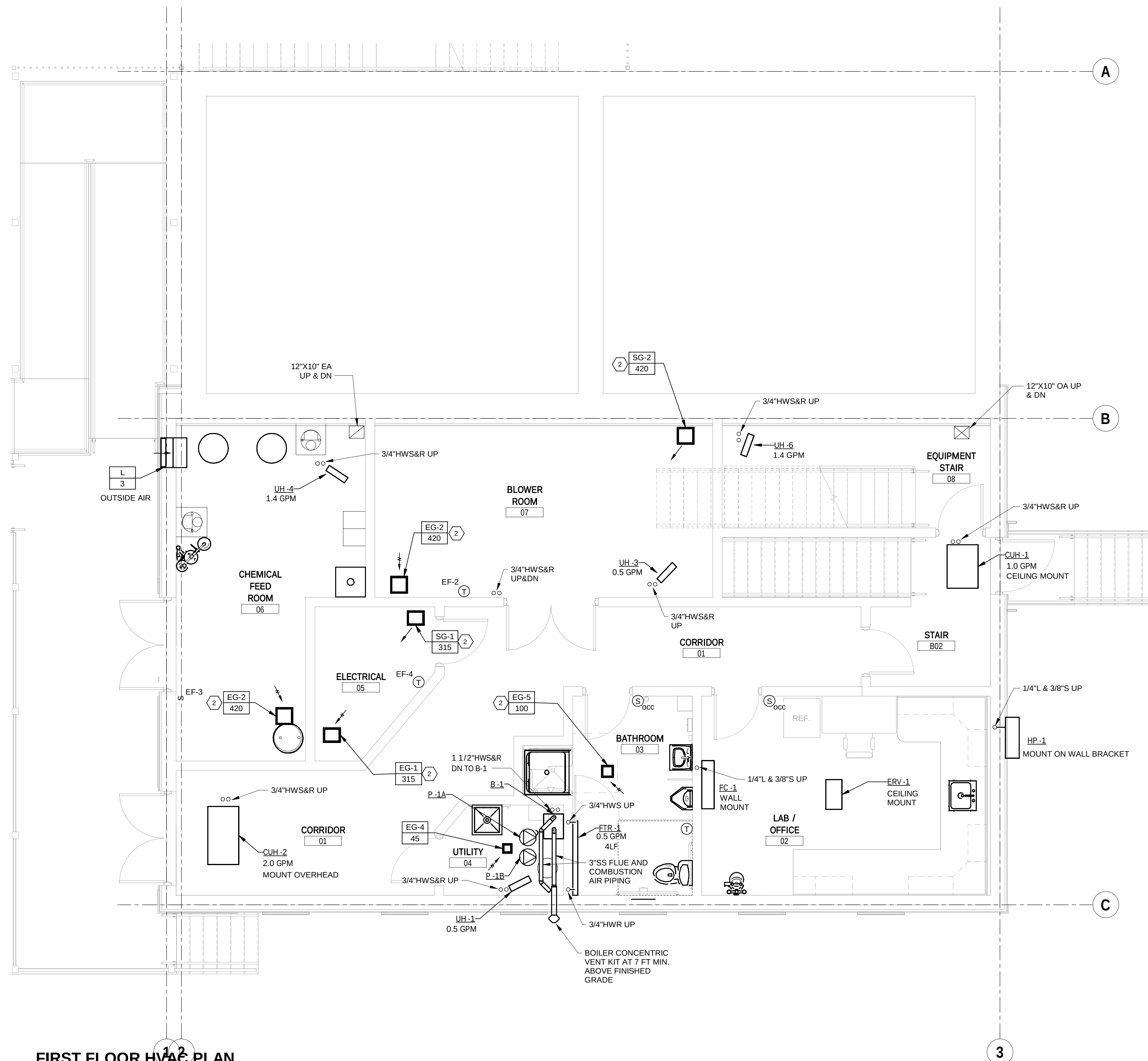
D&K PROJECT # 227947	PROJ. ENG. JJC
DRAWN BY JJC	CHECKED BY JHP

DATE	JULY 16, 2026
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SHEET NUMBER

M1.2

SHEET 57 OF 85



FIRST FLOOR HVAC PLAN
SCALE: N.T.S.

KEY NOTES:

2 MOUNT GRILLES IN CEILING WITH CEILING RADIATION DAMPER

BID SET 07/16/2026
NOT FOR CONSTRUCTION

[illegible]

CLIENT NAME

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
FACILITY

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE
CONTRACT NO. 1
HVAC PLAN -
MEZZANINE

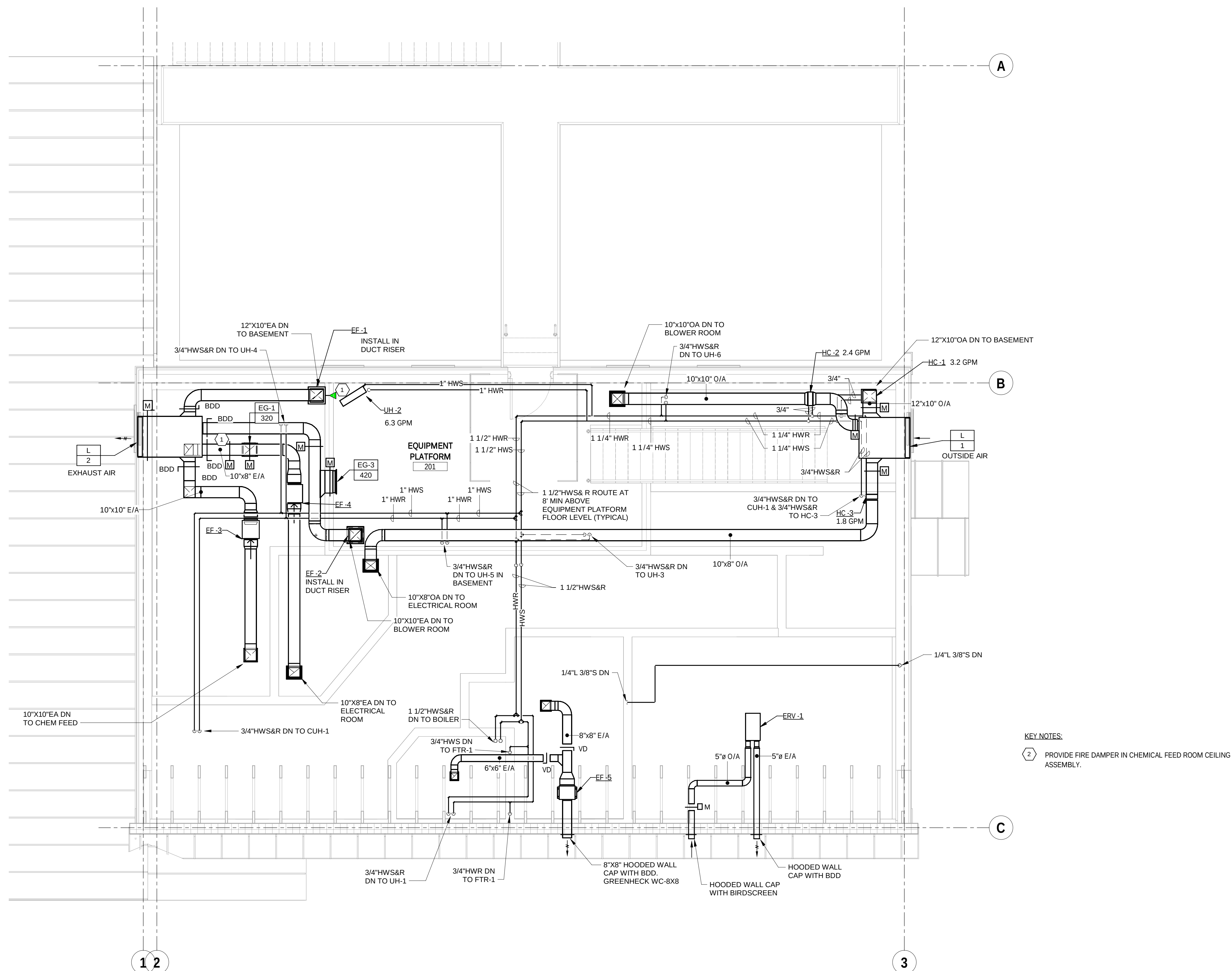
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DRAWN BY JJC	CHECKED BY JHP

DATE	JULY 2026
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SHEET NUMBER

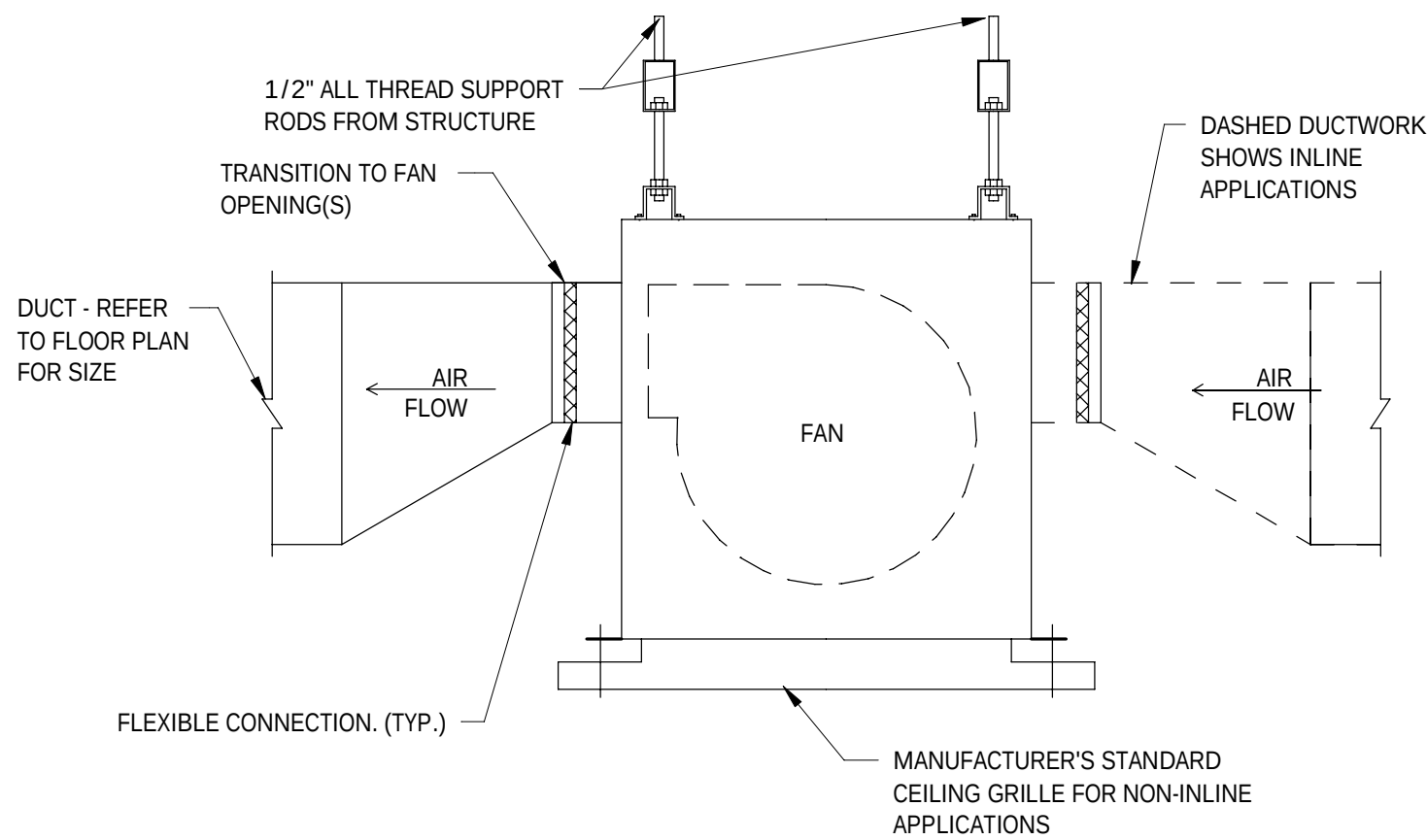
M1.3

SHEET 58 OF 85



MEZZANINE HVAC PLAN
SCALE: N.T.S.

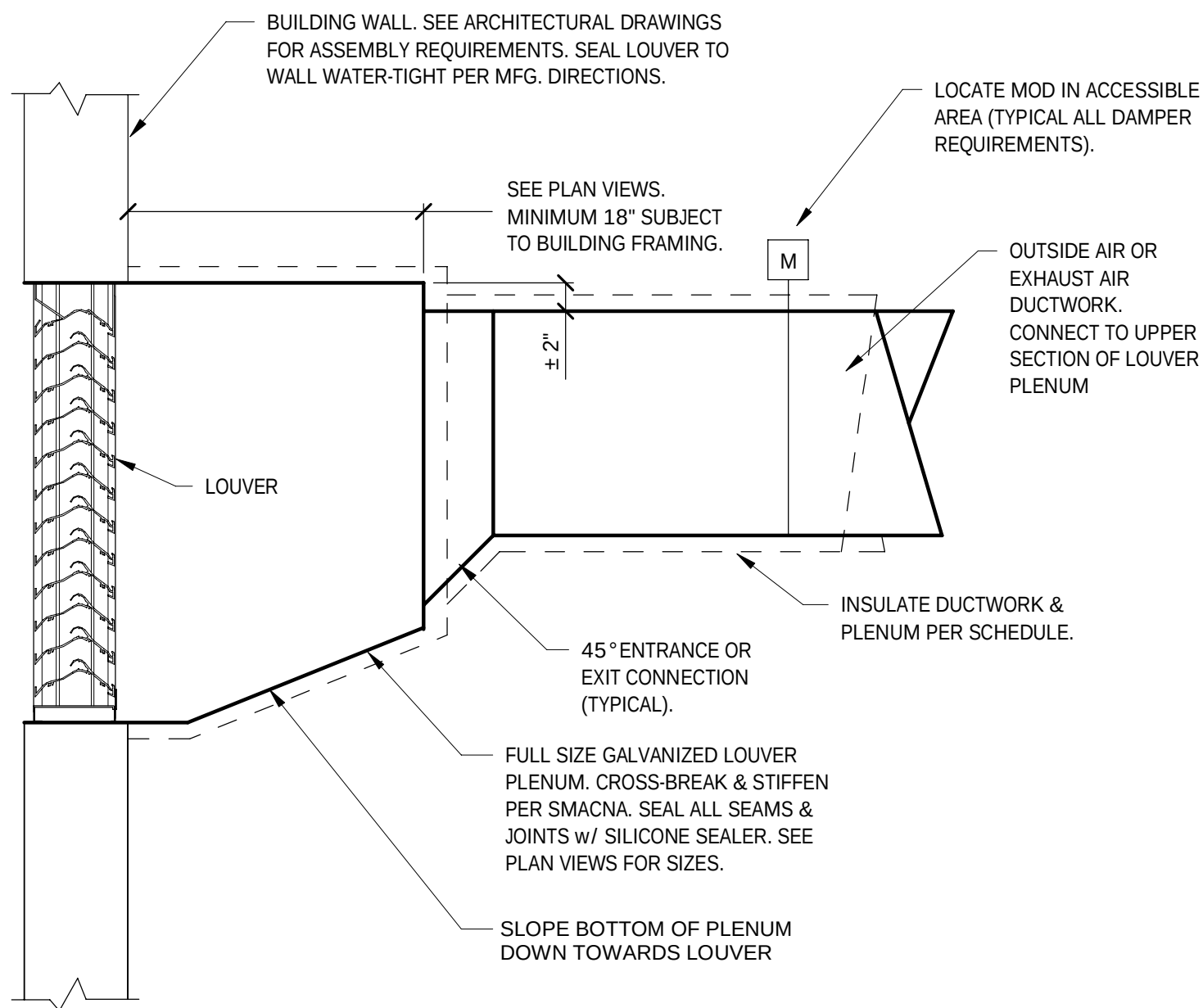
BID SET 07/16/2026
NOT FOR CONSTRUCTION



CABINET FAN DETAIL

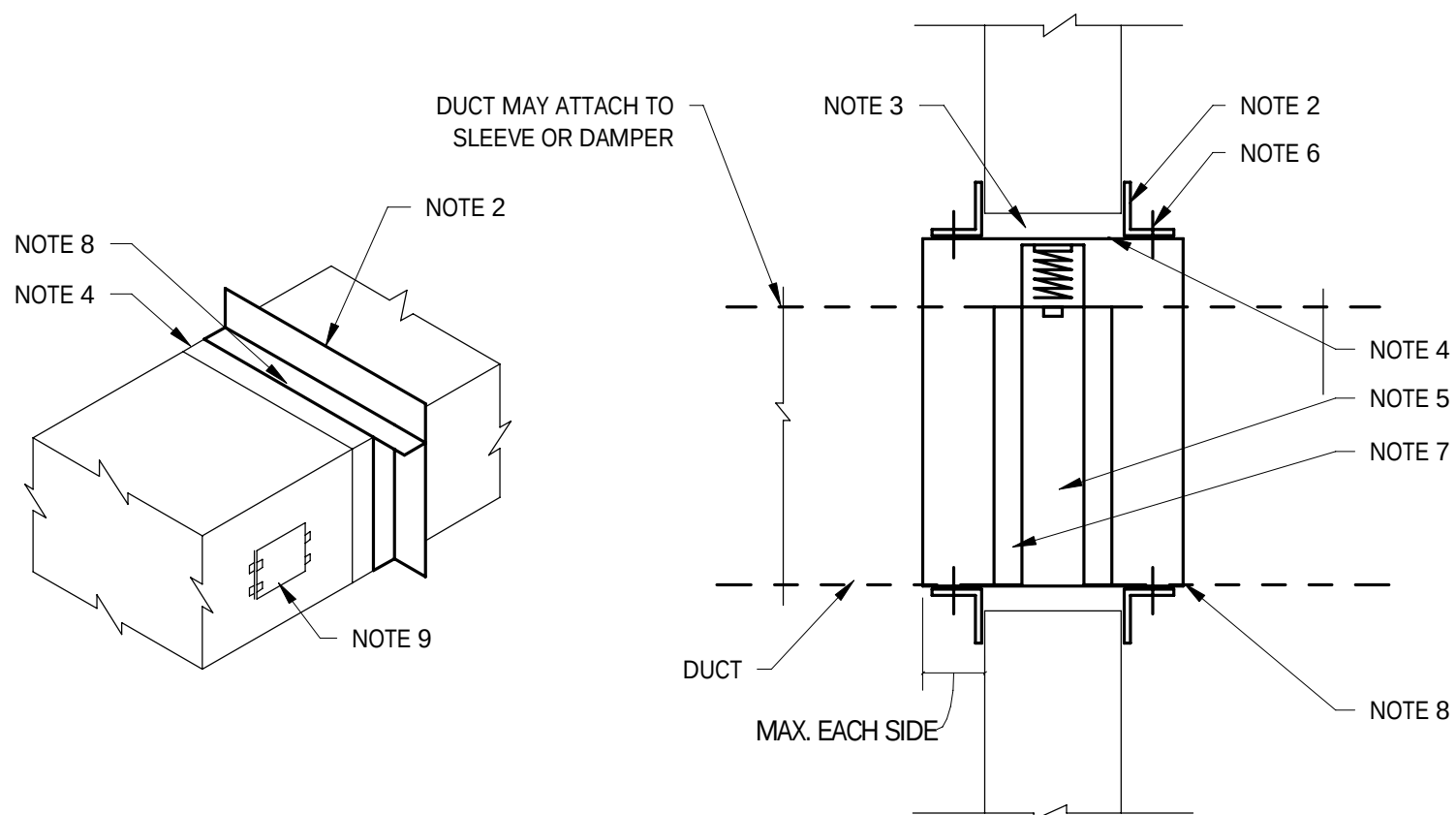
SCALE: N.T.S.

TYPICAL FOR VERTICAL FAN MOUNT



LOUVER PLENUM DETAIL

SCALE: N.T.S.



NOTES:

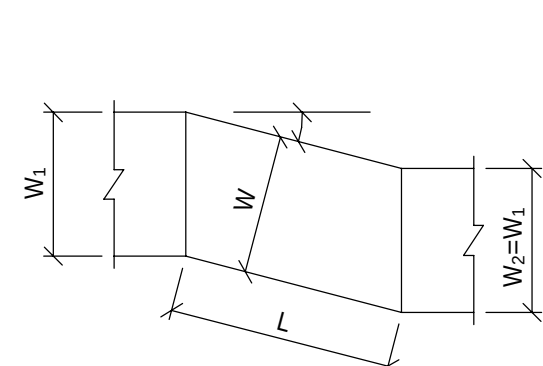
- VERTICAL POSITION IS SHOWN. HORIZONTAL INSTALLATION THROUGH FLOOR ASSEMBLY IS SIMILAR.
- RETAINING ANGLES:
 - MINIMUM 1½"x1½"x0.054 (16GA.)
 - RETAINING ANGLES MUST LAP STRUCTURAL OPENING 1" MINIMUM AND COVER CORNERS OF OPENINGS.
- CLEARANCE: 1/8" PER LINEAR FOOT BOTH DIMENSIONS.
- STEEL SLEEVE
- APPROVED FIRE DAMPER
- SECURE RETAINING ANGLES TO SLEEVE ONLY ON 8" CENTERS MINIMUM.
- SECURE DAMPER TO SLEEVE ON 8" CENTERS.
- CONNECT DUCT TO SLEEVE.
- INSTALL ACCESS DOOR.
- ALL SIZES AND DIMENSIONS TO BE AS PER SMACNA AND THE FIRE DAMPER MANUFACTURERS' DETAILS AND INSTRUCTIONS AS TESTED AND APPROVED BY U.L., MUST BE USED.

TYPICAL FIRE DAMPER DETAIL

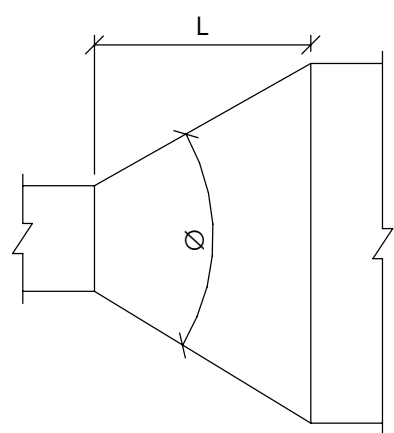
SCALE: N.T.S.

TYPICAL FOR VERTICAL DUCTS

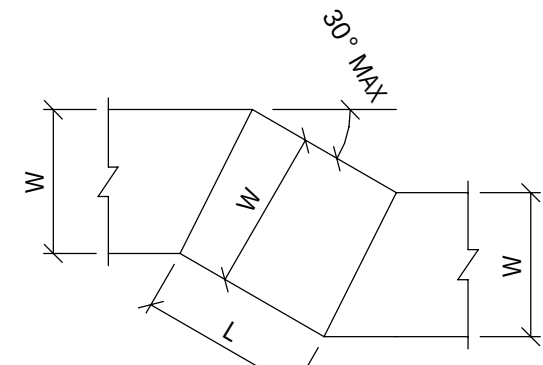
OFFSET 2 AND 3 AND TRANSITIONS MAY HAVE EQUAL OR UNEQUAL INLET AND OUTLET AREAS. TRANSITIONS MAY CONVERT DUCT PROFILES TO ANY COMBINATION FOR RECTANGULAR, ROUND OR FLAT OVAL SHAPES



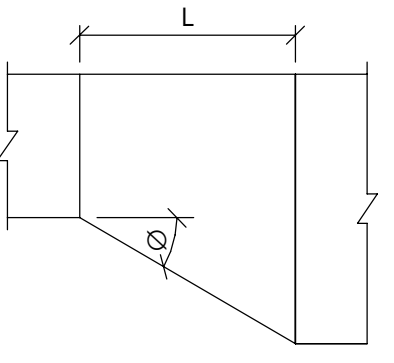
OFFSET TYPE 1 (ANGLED)



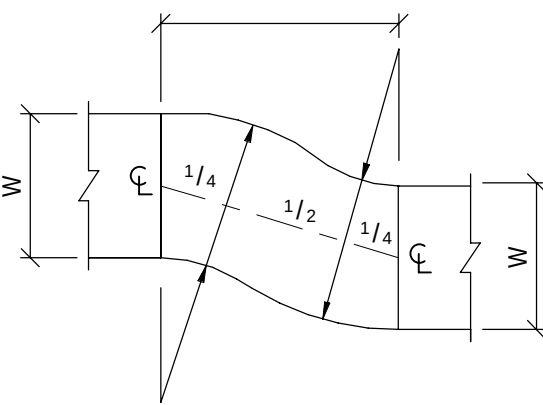
CONCENTRIC TRANSITION
Ø MAX. 45° DIVERGING,
60° CONVERGING



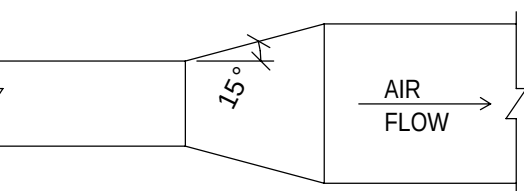
OFFSET TYPE 2 (MITERED)



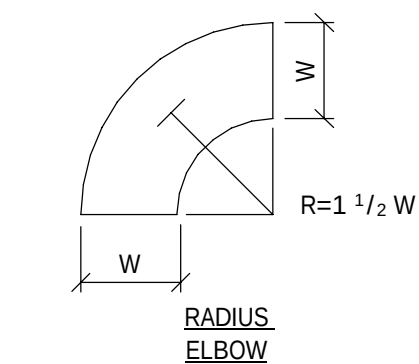
EOCCENTRIC TRANSITION Ø MAX. 30°
(EXCEPT 45° IS PERMITTED AT ROUND TO FLAT OVAL)



OFFSET TYPE 3 (RADIUSSED OR OGEE)

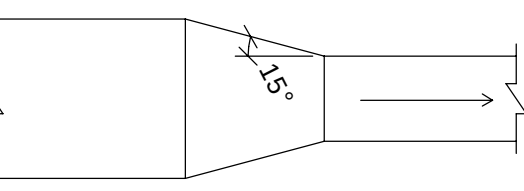


DIVERGING FLOW

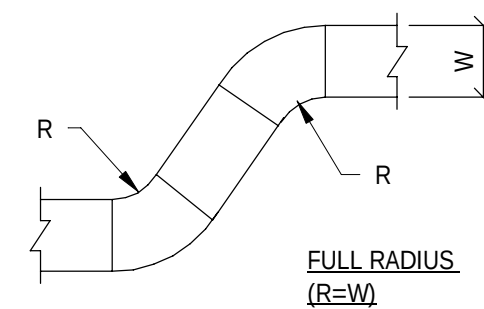


NOTE:

90 DEGREE ELBOW SHOWN
SIMILAR RADIUS CONSTRUCTION FOR ALL ANGLES

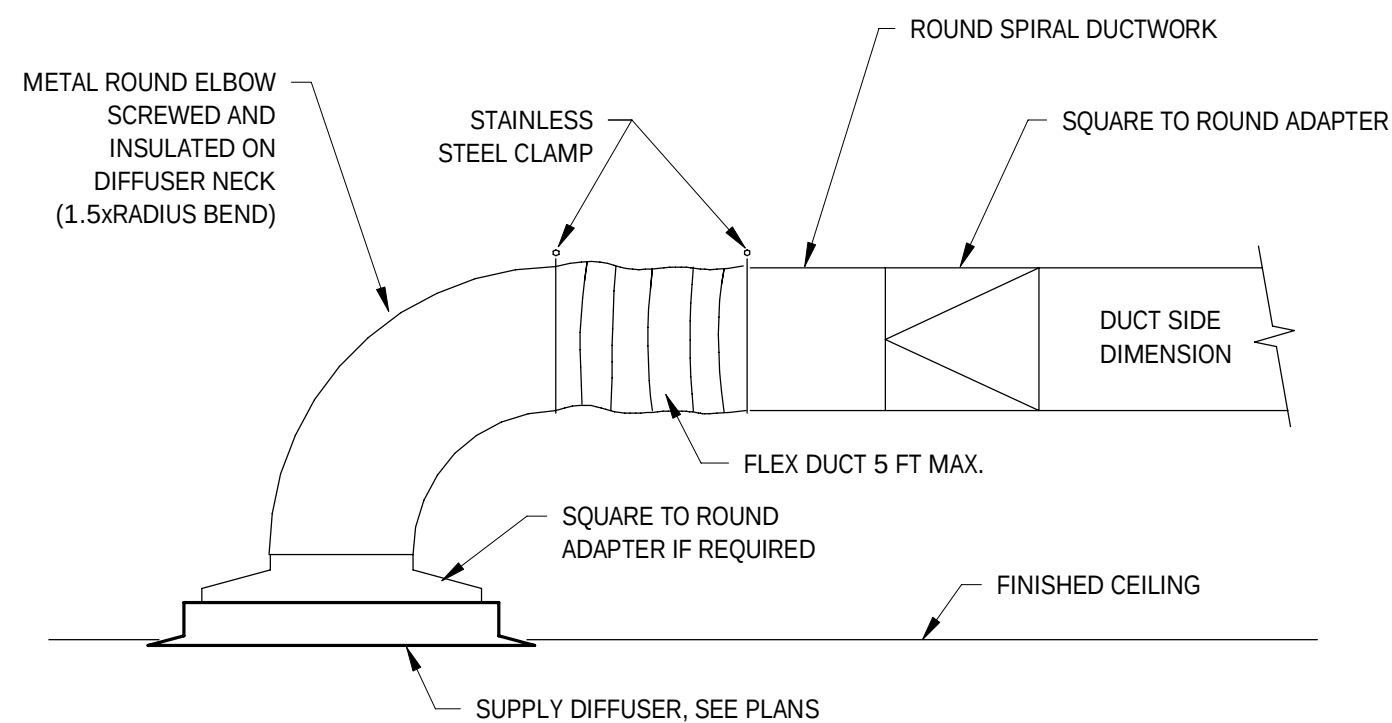


CONTRACTING FLOW



DUCTWORK TRANSITION SCHEMATICS

SCALE: N.T.S.



TYPICAL DIFFUSER CONNECTION DETAIL

SCALE: N.T.S.

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REVISIONS				
NUMBER	DATE	REVISION DESCRIPTION	BY	

CLIENT NAME

PROJECT NAME
**WAITSFIELD
WASTEWATER
TREATMENT
FACILITY**

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE
CONTRACT NO. 1
**MECHANICAL
DETAILS**

D&K PROJECT #
227947

PROJ. ENG.
JJC

DRAWN BY
JJC

CHECKED BY
JHP

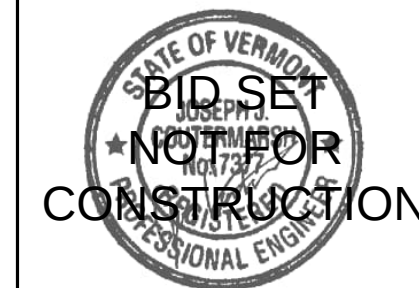
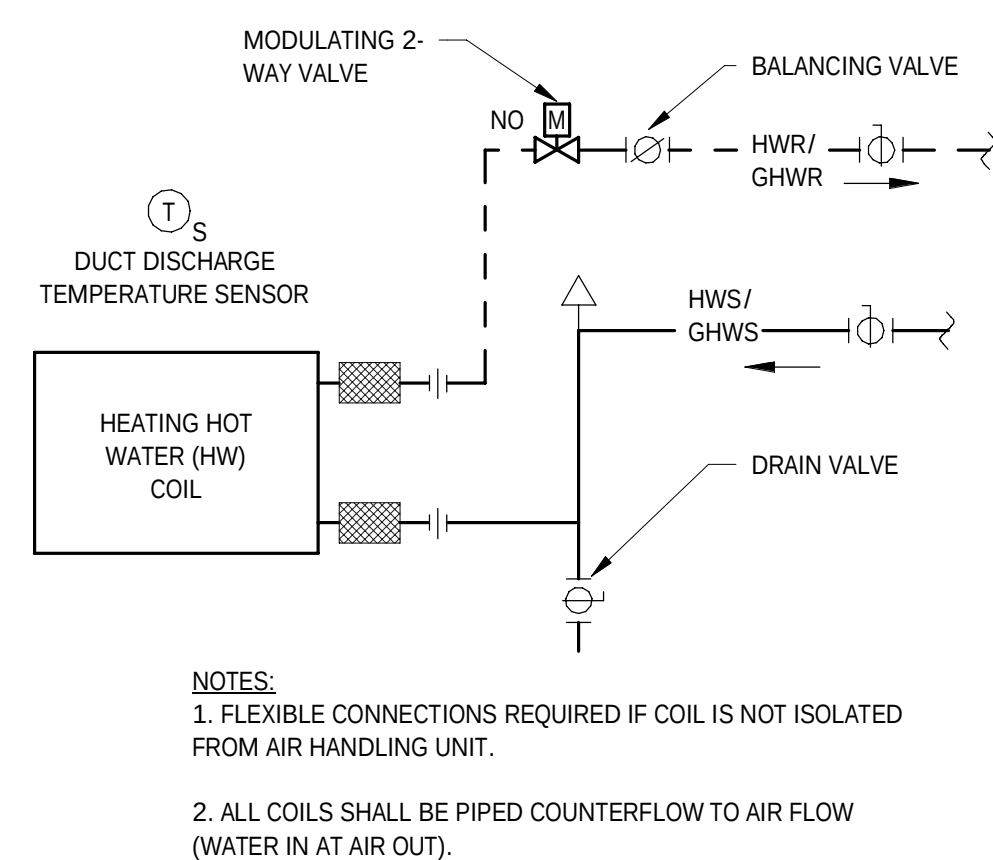
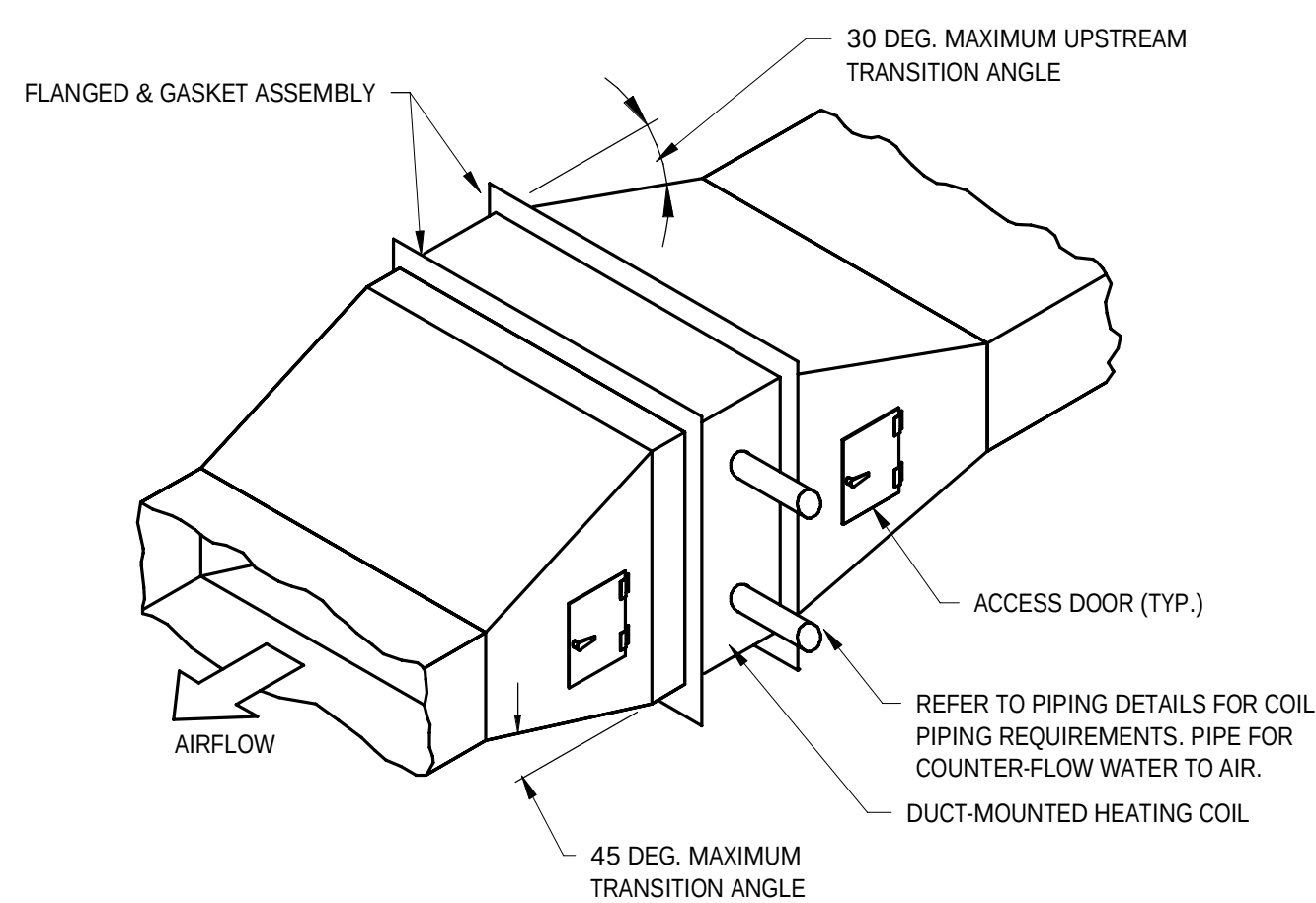
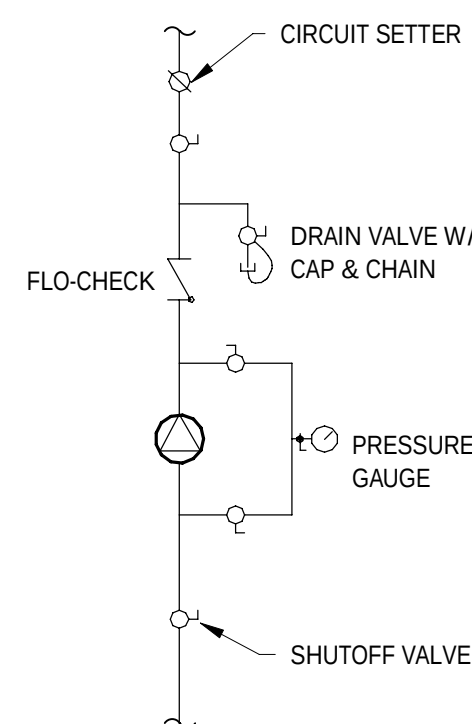
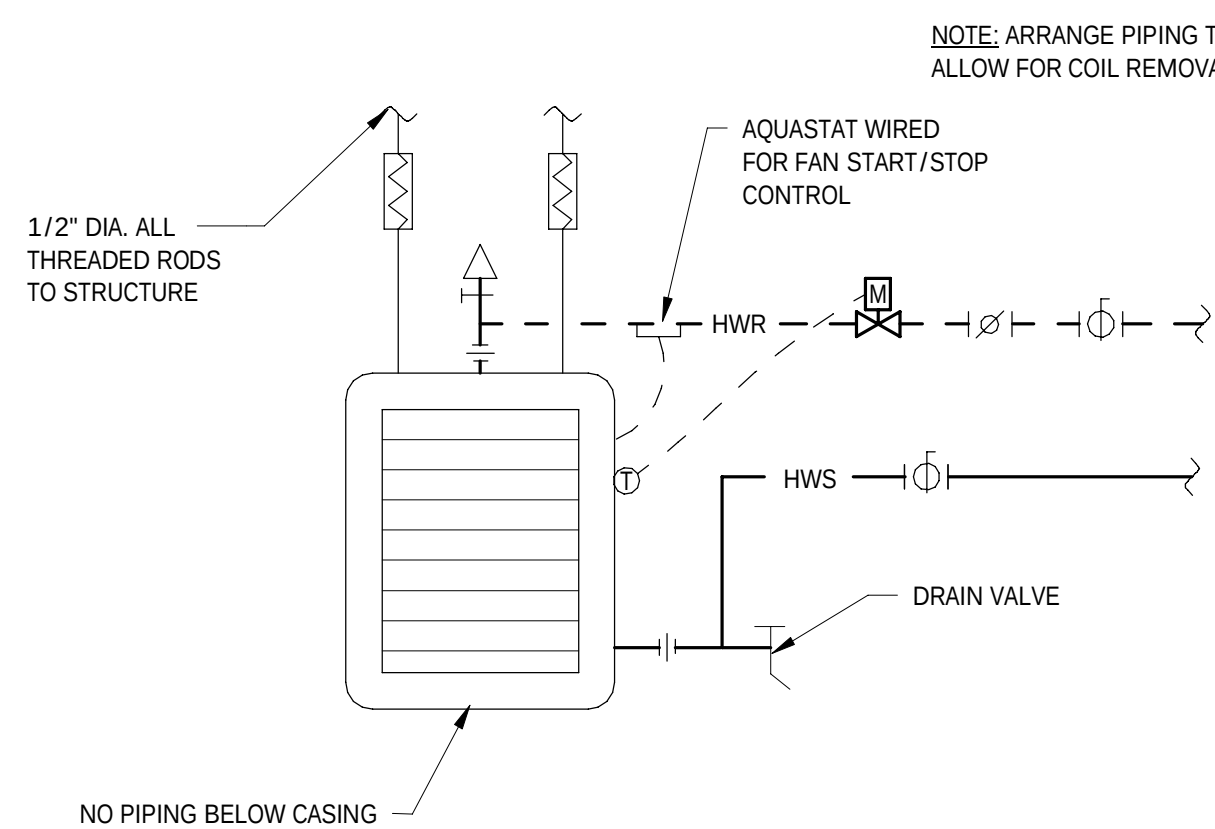
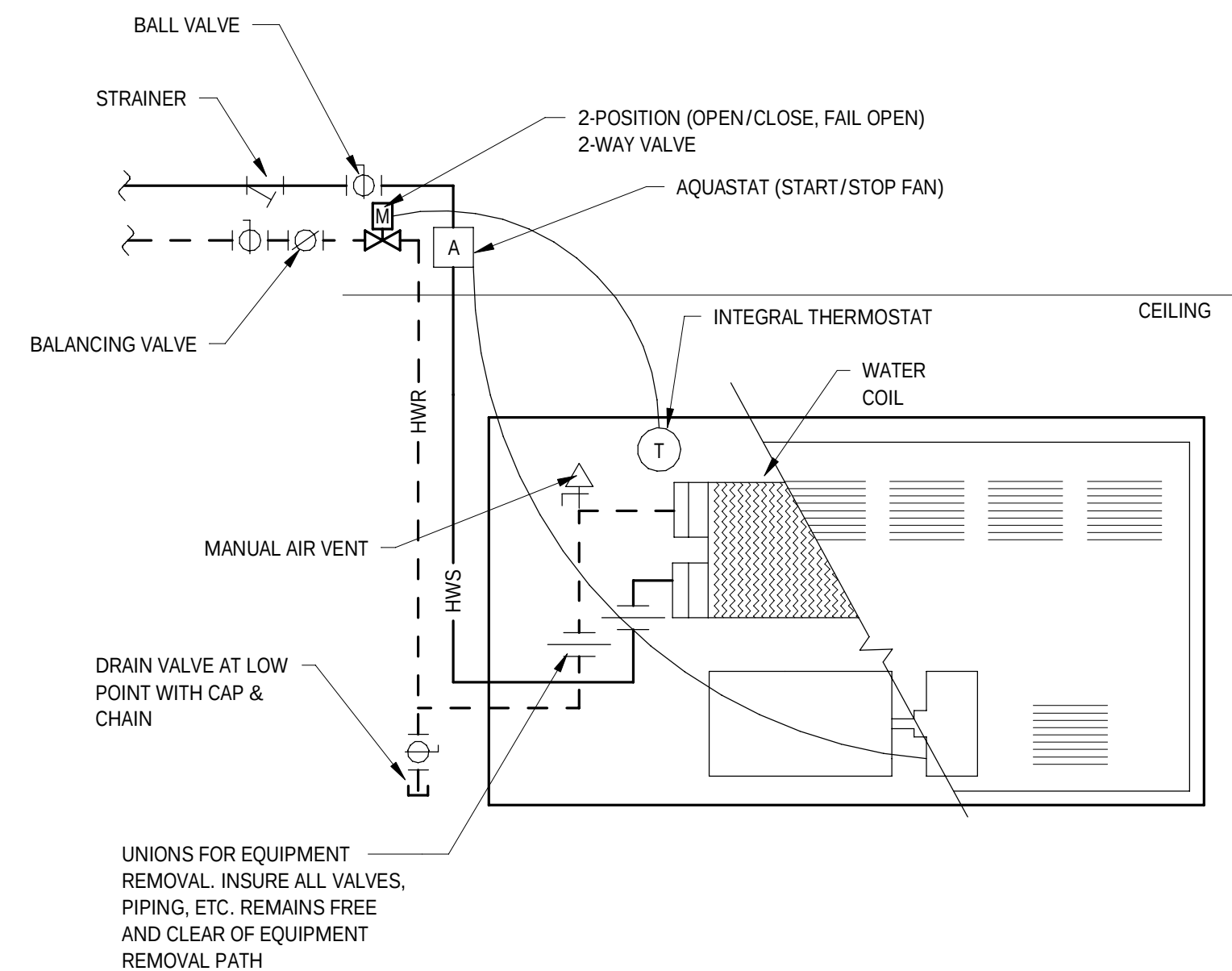
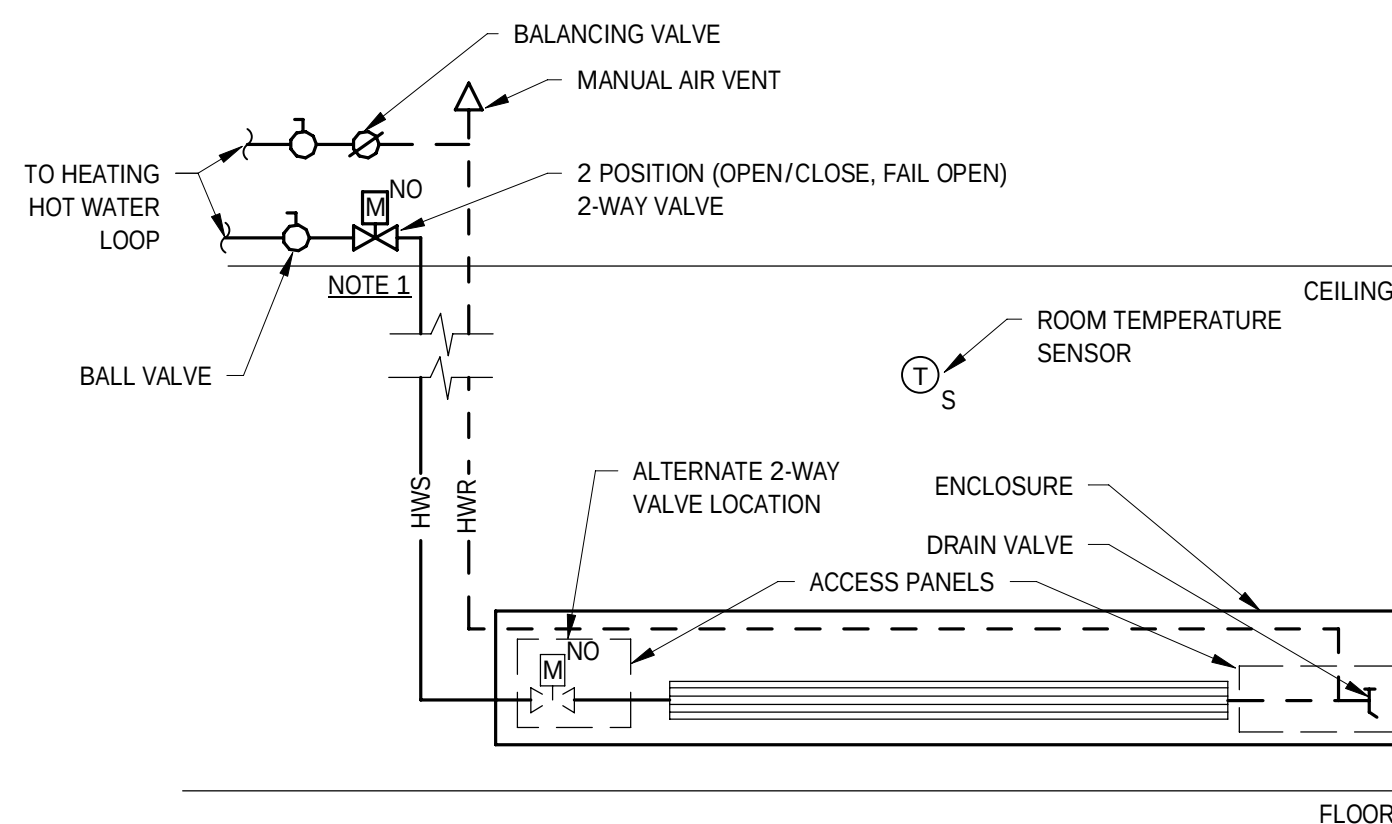
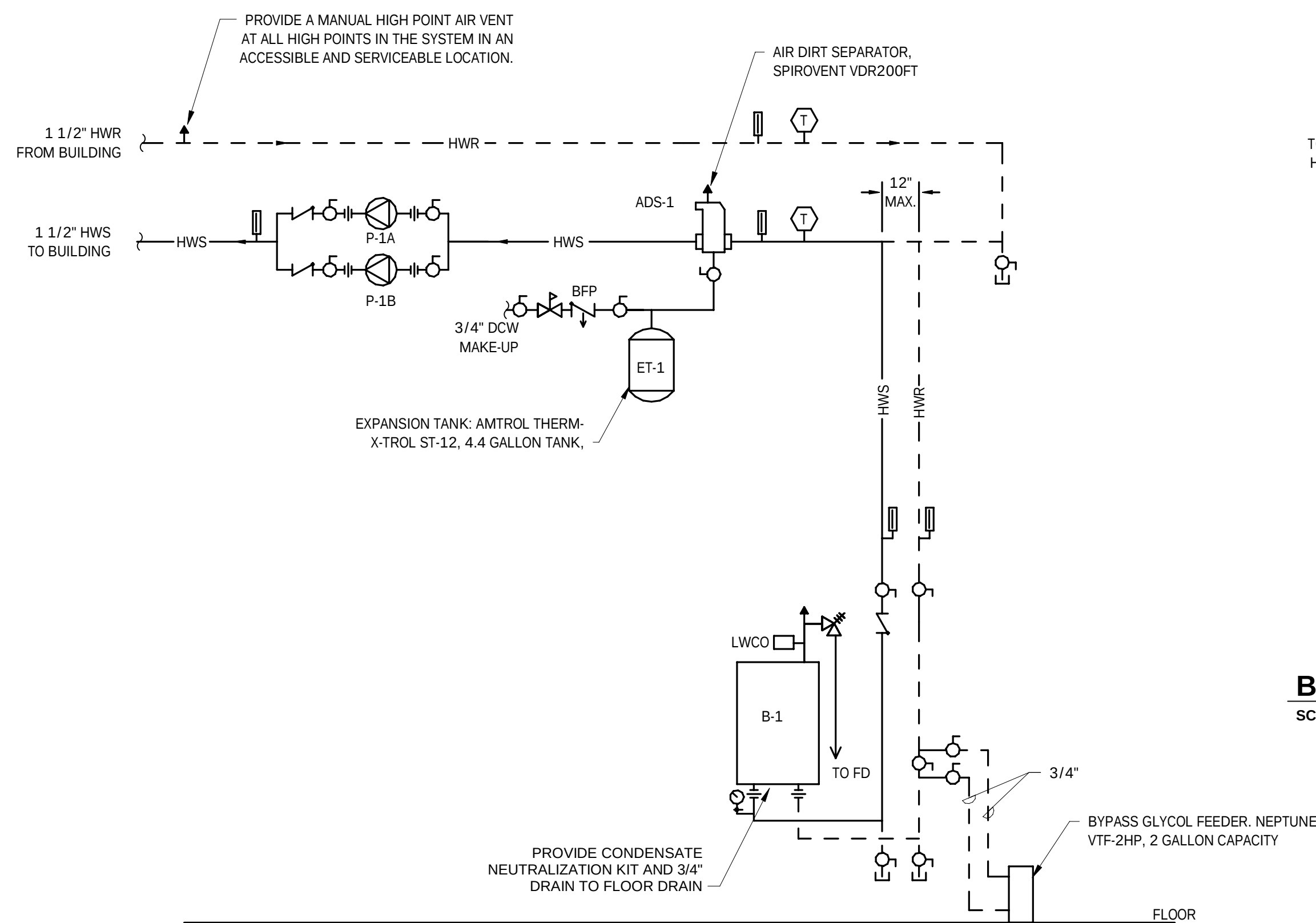
DATE
JULY 2026

SHEET NUMBER

M5.1

SHEET 59 OF 85

BID SET 07/16/2026
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WAITSFIELD, VERMONT 05673

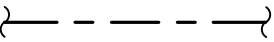
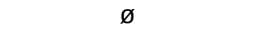
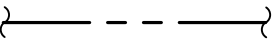
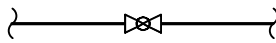
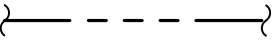
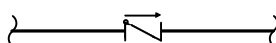
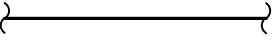
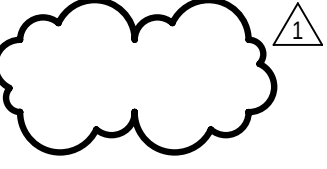
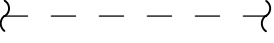
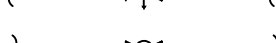
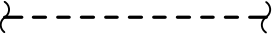
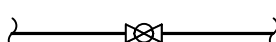
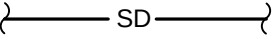
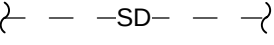
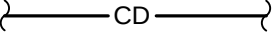
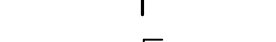
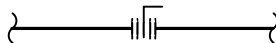
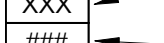
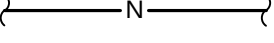
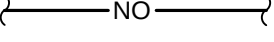
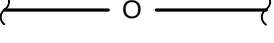
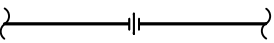
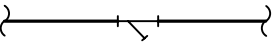
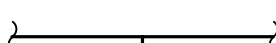
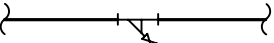
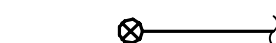
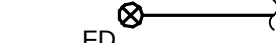
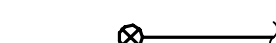
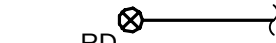
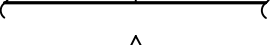
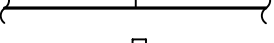
SHEET TITLE
CONTRACT NO. 1
MECHANICAL
DETAILS

D&K PROJECT #	PROJ. ENG.
227947	JJC
DRAWN BY	CHECKED BY
JJC	JHP

DATE JULY 2026

SHEET NUMBER

M5.2

PLUMBING LEGENDS & ABBREVIATIONS									
NOTE: NOT ALL SYMBOLS/ABBREVIATIONS SHOWN IN THE LEGEND ARE USED IN THIS DRAWING SET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CONTENT SHOWN ON DRAWINGS.									
PLUMBING SYSTEMS		PIPE VALVES		DRAWING NOTATIONS		ABBREVIATIONS			
	COLD WATER		GATE VALVE		PHASE OR ROUND DIAMETER	AAV	AIR ADMITTANCE VALVE	NFHB	NON-FREEZE HOSE BIBB
	HOT WATER		GLOBE VALVE		DEMO LINE	ACV	AUTOMATIC CONTROL VALVE	N.T.S.	NOT TO SCALE
	HOT WATER RECIRCULATION		CHECK VALVE		EXISTING LINE	AD	AREA DRAIN	OD	OUTSIDE DIAMETER
	SANITARY		BACKFLOW PREVENTER		REVISION CLOUD WITH REVISION NUMBER	ADA	AMERICAN DISABILITIES ACT	OSC&Y	OUTSIDE SCREW & YOKE GATE VALVE
	SANITARY LINE BELOW FLOOR/GRADE		BALL VALVE		CONNECT TO EXISTING	A.F.F.	ABOVE FINISHED FLOOR	P.C.	PLUMBING CONTRACTOR
	SANITARY VENT		SAFETY RELIEF VALVE		REMOVE EXISTING	AW	ACID RESISTANT WASTE PIPING	PD	PUMP DISCHARGE
	STORM DRAINAGE		BUTTERFLY VALVE		MOTORIZED EQUIPMENT ABBREVIATION	AV	ACID RESISTANT VENT PIPING	PO	PLUGGED OUTLET
	STORM DRAINAGE BELOW FLOOR/GRADE		ELECTRIC SOLENOID ACTUATED SAFETY SHUTOFF VALVE		NON-MOTORIZED EQUIPMENT ABBREVIATION	BLDG	BUILDING	PRV	PRESSURE REDUCING VALVE
	CONDENSATE DRAIN		GAS VALVE		DETAIL NUMBER	BLW	BELOW	PSI	POUNDS PER SQUARE INCH
	COMPRESSED AIR		PRESSURE REGULATING/REDUCING VALVE		DRAWING NUMBER	BOP	BOTTOM OF PIPE	PVC	POLYVINYL CHLORIDE (PIPE)
	NATURAL GAS		PRESSURE GAUGE WITH VALVE		SECTION LETTER	CEILING	CEILING	RD	ROOF DRAIN
	LIQUID PROPANE GAS		BALANCING VALVE		SHEET NUMBER WHERE SECTION VIEW IS SHOWN	C.M.	CONSTRUCTION MANAGER	RHW	RECIRCULATING HOT WATER
	MEDICAL GAS: NITROGEN	PLUMBING EQUIPMENT				CO	CLEANOUT	RPZ	REDUCED PRESSURE ZONE ASSEMBLY
	MEDICAL GAS: NITROUS OXIDE		(PLUMBING & DRAINAGE INSTITUTE SIZE CATEGORY)			COND	CONDENSATE	SA	SHOCK ABSORBER
	MEDICAL GAS: OXYGEN					CODP	CLEANOUT DECK PLATE	SAN	SANITARY WASTE
	MEDICAL GAS: VACUUM					CONN	CONNECT	SD	STORM DRAINAGE
	MEDICAL GAS: COMPRESSED AIR					CONT	CONTINUATION	SPEC	SPECIFICATIONS
PIPE FITTINGS						CPVC	CHLORINATED POLYVINYL CHLORIDE (PIPE)	SQ. FT.	SQUARE FEET
	UNION		WATER HAMMER ARRESTOR			CV	CHECK VALVE	TEMP	TEMPERATURE
	STRAINER		FLOOR DRAIN TRAP PRIMER			CVO	CAPPED AND VALVED OUTLET	TMV	THERMOSTATIC MIXING VALVE
	STRAINER WITH BLOW DOWN VALVE		FLOOR DRAIN			CW	COLD WATER	TYP	TYPICAL
	FLOW DIRECTION		ROOF DRAIN			DCW	DOMESTIC COLD WATER	U	URINAL
	PIPE TURNED UP		FLOOR CLEANOUT			DIA	DIAMETER	V	VENT
	PIPE TURNED DOWN		WALL CLEANOUT			DF	DRINKING FOUNTAIN	VB	VACUUM BREAKER
	TEE BOTTOM TAKE-OFF		FIXTURE OR DRAIN TRAP			DFU	DRAINAGE FIXTURE UNIT	VTR	VENT THROUGH ROOF
	TEE TOP TAKE-OFF		HOSE BIBB			DHW	DOMESTIC HOT WATER	W	WASTE
	PIPE CONTINUED		WALL HYDRANT			DHW/C	DOMESTIC HOT WATER RECIRCULATION	WC	WATER CLOSET
	PIPE CAPPED		CIRCULATOR PUMP			DN	DOWN	WCO	WALL CLEANOUT
	CONCENTRIC REDUCER		METER			DR	DRAIN	WH	WALL HYDRANT
	ECCENTRIC REDUCER					DS	DOWNSPOUT	WSFU	WATER SUPPLY FIXTURE UNITS
	FLEXIBLE PIPE CONNECTOR					DW	DISHWASHER	WPD	WATER PRESSURE DROP
	FLOW SWITCH					DWG	DRAWING	WTD	WATER TEMPERATURE DROP
	MANUAL AIR VENT					DWV	DRAIN, WASTE, AND VENT	WTR	WATER TEMPERATURE RISE
	AUTOMATIC AIR VENT					<E>	EXISTING TO REMAIN		
	THERMOMETER					E.C.	ELECTRICAL CONTRACTOR		

PLUMBING FIXTURE SCHEDULE									
ITEM	DESCRIPTION	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	TRIM & ACCESSORIES	CONNECTION SIZE				REMARKS
					WASTE	VENT	CW	HW	
EEW-1	MSR Pedestal Mount Eye/Face Wash	Haws Corporation	7261-7271		1 1/4"	0"	1/2"	1/2"	PROVIDE HAWS MODEL 9201EFE THERMOSTATIC MIXING VALVE
EWS-1	EMERGENCY EYEWASH SHOWER	HAWS	8300-8309		1 1/4"	0"	1"	1"	PROVIDE HAWS MODEL 9201E THERMOSTATIC MIXING VALVE
FCO	FLOOR CLEANOUT	Zurn Industries, LLC	Z1400	STAINLESS STEEL EXTRA HEAVY DUTY TOP					SEE PLANS FOR SIZES
FD-A	12-1/4 Heavy Duty Drain with Sediment Bucket	Zurn Industries, LLC	Z505		0"	0"	0"	0"	PROVIDE JAY R SMITH STINK STOPPER QUAD CLOSE TRAP SEAL. SEE PLANS FOR SIZES
FD-B	Body Assembly with "Type B" Strainer	Zurn Industries, LLC	ZN415-6NH-8B						PROVIDE JAY R SMITH STINK STOPPER QUAD CLOSE TRAP SEAL. SEE PLANS FOR SIZES
HB-1	WALL HYDRANT FREEZELESS	Woodford Manufacturing Company	RB65C-6	CONFIRM WALL THICKNESS. VACUUM BREAKER, TEE KEY, 3/4"					SEE PLANS FOR SIZES
L-1	LUCERNE Basin, 4" (102mm) centres, 20-1/2" x 18-1/4" x 8-1/8" (521mm x 464mm x 206mm) deep, wall hung, vitreous china, splash back, front overflow, self-draining deck, for concealed arm support.	American Standard	0355.012	SYMMONS' SYMMETRIX S202G FAUCET, ADA COMPLIANT SINGLE LEVER, NON-AERATED LAMINAR SPRAY AT 0.5 GPM, PROVIDE FLOOR MOUNTED WALL CARRIER ZURN Z1224 SERIES WITH BACK PLATE. WATTS 1/2" LEAD FREE LFE480 LAVATORY TEMPERING VALVE AT EACH LAVATORY	2"	1 1/2"	1/2"	1/2"	LOW FLOW AERATOR TO BE PROVIDED WITH FAUCET. FAUCET MUST CONTAIN NO MORE THAN 0.25" WEIGHTED AVERAGE LEAD CONTENT.
MS-1	Mop Service Basin	Zurn Water, LLC	Z1996-24	SERVICE FAUCET WITH VACUUM BREAKER, VINYL BUMPER GUARD, STAINLESS STEEL WALL GUARDS, HOSE & HOSE BRACKET, STAINLESS STEEL DRAIN	3"	1 1/2"	3/4"	3/4"	
S-1	Lustertone Single Bowl sink	Elkay Manufacturing	DLR252210	ELKAY LKD2423BHC GOOSENECK FAUCET , 1.5 GPM AERATOR	2"	1 1/2"	1/2"	1/2"	LOW FLOW AERATOR TO BE PROVIDED WITH FAUCET. FAUCET MUST CONTAIN NO MORE THAN 0.25" WEIGHTED AVERAGE LEAD CONTENT.
SH-1	SHOWER	OASIS	SH-3636 ABF/BP1	SYMMONS 9606-PLR-TRM SHOWER VALVE ASSEMBLY LESS TUB SPOUT	2"	1 1/2"	1/2"	1/2"	36" WIDE BY 36" DEEP BY 72" HIGH FIBERGLASS COMPOSITE SHOWER, 4" HIGH DAM
TMV-1	THERMOSTATIC MIXING VALVE FOR EMERGENCY EYEWASH SHOWER	HAWS	9201E		0"	0"	1"	1"	
TMV-2	THERMOSTATIC MIXING VALVE AT WATER HEATER	Powers Controls	LFMM432	30 GPM AT 10 PSI PRESSURE DROP	0"	0"	1"	1"	
TMV-3	THERMOSTATIC MIXING VALVE FOR EMERGENCY EYEWASH	HAWS	9201EFE		0"	0"	1/2"	1/2"	
UR-1	URINAL	AMERICAN STANDARD	WASHBROOK 6590.001	MANUAL FLUSH VALVE MODEL 6045.101.002, 0.5 GPF	2"	1 1/2"	3/4"	0"	WALL CARRIER, WATER HAMMER ARRESTOR
WC-1	Two-Piece Close Coupled Toilet	TOTO	CST454CEF	AMERICAN STANDARD SEAT MODEL 5321.110 EVERCLEAN ELONGATED SEAT WITH SLOW CLOSE SNAP-OFF HINGES	3"	2"	1/2"	0"	

PUMP SCHEDULE - PLUMBING												
TAG	LOCATION	SERVES	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	GPM	WPD (FT)	CONNECTION SIZES	WATTS	VOLTS	PH	HZ	REMARKS
							(IN.)					
RCP-1	BASEMENT	DHWR	TACO	006E3	2	10.0	1.5	44	120	1	60	

NOTE: ADJUST PUMP SPEED SETTING CLOSEST TO SYSTEM GPM.

PLUMBING GENERAL NOTES									
QUALITY OF WORK									
1. CONTRACT DOCUMENTS ARE IN PART DIAGRAMMATIC, INTENDED TO CONVEY SCOPE & ARRANGEMENT OF WORK. CONSULT ELECTRICAL AND STRUCTURAL CONSTRUCTION DRAWINGS FOR FAMILIARITY WITH CONDITIONS AFFECTING WORK. VERIFY SPACES IN WHICH WORK MUST BE PERFORMED BY ON-SITE MEASUREMENTS. DO NOT SCALE DRAWINGS. 2. CONTRACTOR MUST VERIFY EXISTING CONDITIONS AS THERE MAY BE VARIOUS CONDITIONS AT THE SITE WHICH DO NOT SHOW ON THE ACCOMPANYING DRAWINGS, OR WHICH ARE AT VARIANCE WITH THE CONDITIONS INDICATED ON THE DRAWINGS. IT IS IMPORTANT THAT EACH BIDDER VISIT THE SITE TO BECOME ACQUAINTED WITH THE EXISTING CONDITIONS, AND TO TAKE THESE CONDITIONS INTO CONSIDERATION WHEN PREPARING THEIR PROPOSAL. EACH BIDDER MUST OBTAIN INFORMATION OR MAKE MEASUREMENTS DESIRED. LACK OF KNOWLEDGE RELATIVE TO THE EXISTING SITE CONDITIONS IS NOT ALLOWED AS A BASIS FOR EXTRA COMPENSATION. 3. THE PLUMBING CONTRACTOR MUST PROVIDE MATERIALS, EQUIPMENT, AND LABOR TO FABRICATE NEW PLUMBING INSTALLATIONS AS SHOWN ON THE DRAWINGS AND AS SPECIFIED HEREIN: A. FURNISH AND INSTALL PIPING, CONNECTIONS, AND HARDWARE NECESSARY FOR AN ENTIRE OPERATING SYSTEM. B. A LICENSED PLUMBER MUST PERFORM PLUMBING WORK. 4. WHERE TWO OR MORE ITEMS OF THE SAME TYPE OF EQUIPMENT ARE REQUIRED, THE PRODUCT OF ONE MANUFACTURER MUST BE USED. 5. WORKSMANSHIP, MATERIALS, AND EQUIPMENT MUST BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE OWNER.									
CODES/PERMITS									
1. WORK MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE UNDERWRITERS LABORATORY STANDARDS AND MUNICIPAL, STATE AND OTHER AUTHORITIES' REGULATIONS, PUBLIC AND PRIVATE, HAVING JURISDICTION. REPORT DISCREPANCIES WITH SUCH REGULATIONS TO ENGINEER AND DO NOT PROCEED WITH WORK UNTIL WRITTEN AUTHORIZATION IS RECEIVED FROM THE ENGINEER. 2. NECESSARY FEES, PERMITS, AND APPROVALS AS REQUIRED BY THE WORK OF THESE DRAWINGS AND SPECIFICATIONS MUST BE OBTAINED AND PAID FOR BY THIS CONTRACTOR. 3. NOTHING CONTAINED IN THE SPECIFICATIONS OR INDICATED ON THESE DRAWINGS IS TO BE CONSTRUED TO CONFLICT WITH APPLICABLE PORTIONS OF LAWS, ORDINANCES, REGULATIONS, OR CODES.									
COORDINATION OF WORK									
1. COORDINATE CONSTRUCTION OF PLUMBING WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL, ELECTRICAL WORK, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS. 2. CONTRACTOR IS RESPONSIBLE TO PRODUCE FOR REVIEW AND APPROVAL COORDINATION DRAWINGS OF ALL TRADES BEFORE COMMENCEMENT OF INSTALLATION. ANY INSTALLATION WORK COMPLETED BEFORE REVIEW AND APPROVAL OF COORDINATION DRAWINGS IS AT CONTRACTORS OWN RISK AND CHANGE ORDERS SHALL NOT BE ENTERTAINED FOR ANY REQUIRED REWORK. 3. PLUMBING CONTRACTOR MUST DISCONNECT, REMOVE, AND PROPERLY DISPOSE OF PLUMBING MATERIALS AND EQUIPMENT IN ORDER TO PREPARE EXISTING AREAS AND BUILDINGS FOR RENOVATION WORK. CONTRACTOR TO CLOSELY COORDINATE WITH THE GENERAL CONTRACTOR TO PROVIDE ENTIRE DEMOLITION OF NECESSARY AREAS AND SYSTEMS. CONTRACTOR MUST REVIEW PROJECT DOCUMENTS FOR EXTENT OF DEMOLITION REQUIREMENTS – ENTIRE DEMOLITION SCOPE IS NOT NECESSARILY NOTED ON THE PLUMBING DRAWINGS. 4. THE LOCATIONS OF ITEMS SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE MOST DESIRABLE CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND MUST HAVE THE APPROVAL OF THE ENGINEER BEFORE BEING INSTALLED. DO NOT SCALE THE DRAWINGS. 5. PROVIDE LOCATIONS OF REQUIRED ACCESS PANELS FOR INSTALLATION IN WALLS AND CEILINGS TO SERVICE VALVES, DAMPERS, AND OTHER CONCEALED PLUMBING EQUIPMENT. GENERAL CONTRACTOR MUST FURNISH & INSTALL ACCESS PANELS. COORDINATE ACCESS DOOR LOCATIONS WITH ARCHITECT AND INTERIOR DESIGNER. 6. LOCATIONS AND SIZES OF FLOOR, WALL, AND ROOF OPENINGS MUST BE COORDINATED WITH OTHER TRADES INVOLVED. OPENINGS IN FIRE WALLS DUE TO PIPING MUST BE FIRE STOPPED.									
PIPING									
1. TAKE NECESSARY MEASUREMENTS AT THE BUILDING AND FABRICATE THE PIPING ON THE SITE, IF REQUIRED, TO PROVIDE AN APPROVABLE INSTALLATION. 2. INSTALL PIPING CONCEALED ABOVE CEILING OR IN WALL CHASES UNLESS OTHERWISE INDICATED. EXPOSED PIPING IS TO BE 3/4" MINIMUM FROM WALL SURFACE. 3. PROVIDE STOP VALVES AT FIXTURE AND EQUIPMENT SUPPLIES. EXPOSED FIXTURE CONNECTIONS MUST BE CHROME PLATED. PROVIDE VACUUM BREAKERS WHERE REQUIRED BY CODE. 4. PROVIDE NECESSARY HANGERS FOR SUPPORT OF HORIZONTAL AND VERTICAL PIPING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. 5. PROVIDE NECESSARY UNIONS TO FACILITATE REPAIR OF EQUIPMENT AND FITTINGS. 6. IDENTIFICATION: CONTINUOUSLY IDENTIFY PIPING 8' ON CENTER. 7. PROVIDE NECESSARY VALVES, PIPES, FITTINGS, AND WATER HAMMER ARRESTORS THROUGHOUT THE SYSTEM TO ELIMINATE WATER HAMMER. 8. PROVIDE NECESSARY FLOOR AND WALL CLEANOUTS THROUGHOUT THE SYSTEM FOR A CODE COMPLIANT INSTALLATION. 9. PIPING AT FLOOR PENETRATIONS AND PENETRATIONS OF FIRE RATED WALLS MUST BE SEALED WITH FIRE CAULK (BOTH SIDES WHERE ACCESSIBLE).									

EQUIVALENT PRODUCTS: THIS PROJECT IS INTENDED TO BE OPEN SOURCED WITH FEW OR NO PROPRIETARY SPECIFICATIONS. SPECIFIC MANUFACTURERS OR PRODUCTS ARE CALLED OUT TO SET THE DESIGN INTENT. MINIMUM PRODUCT REQUIREMENTS, LEVEL OF QUALITY, AND OPTIONS. OTHER EQUAL OR SUPERIOR PRODUCTS CAN BE SUBMITTED FOR REVIEW BY THE ENGINEER.

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BID SET
NOT FOR
CONSTRUCTION

REVISIONS

BY	REVISION DESCRIPTION	DATE	NUMBER

CLIENT NAME

PROJECT NAME

WAITSFIELD WASTEWATER TREATMENT FACILITY

PROJECT ADDRESS

4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE

CONTRACT NO. 1
PLUMBING LEGENDS & NOTES

D&K PROJECT #

227947

PROJ. ENG.

JJC

DRAWN BY

JJC

CHECKED BY

JHP

DATE

JULY 2026

SHEET NUMBER

P0.1

SHEET 63 OF 85

BID SET

07/16/2026

NOT FOR CONSTRUCTION



REVISIONS	BY	REVISION DESCRIPTION	DATE	NUMBER

CLIENT NAME

PROJECT NAME
**WAITSFIELD
WASTEWATER
TREATMENT
FACILITY**

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE
CONTRACT NO. 1
**PLUMBING PLAN -
BASEMENT**

D&K PROJECT # 227947	PROJ. ENG. JJC
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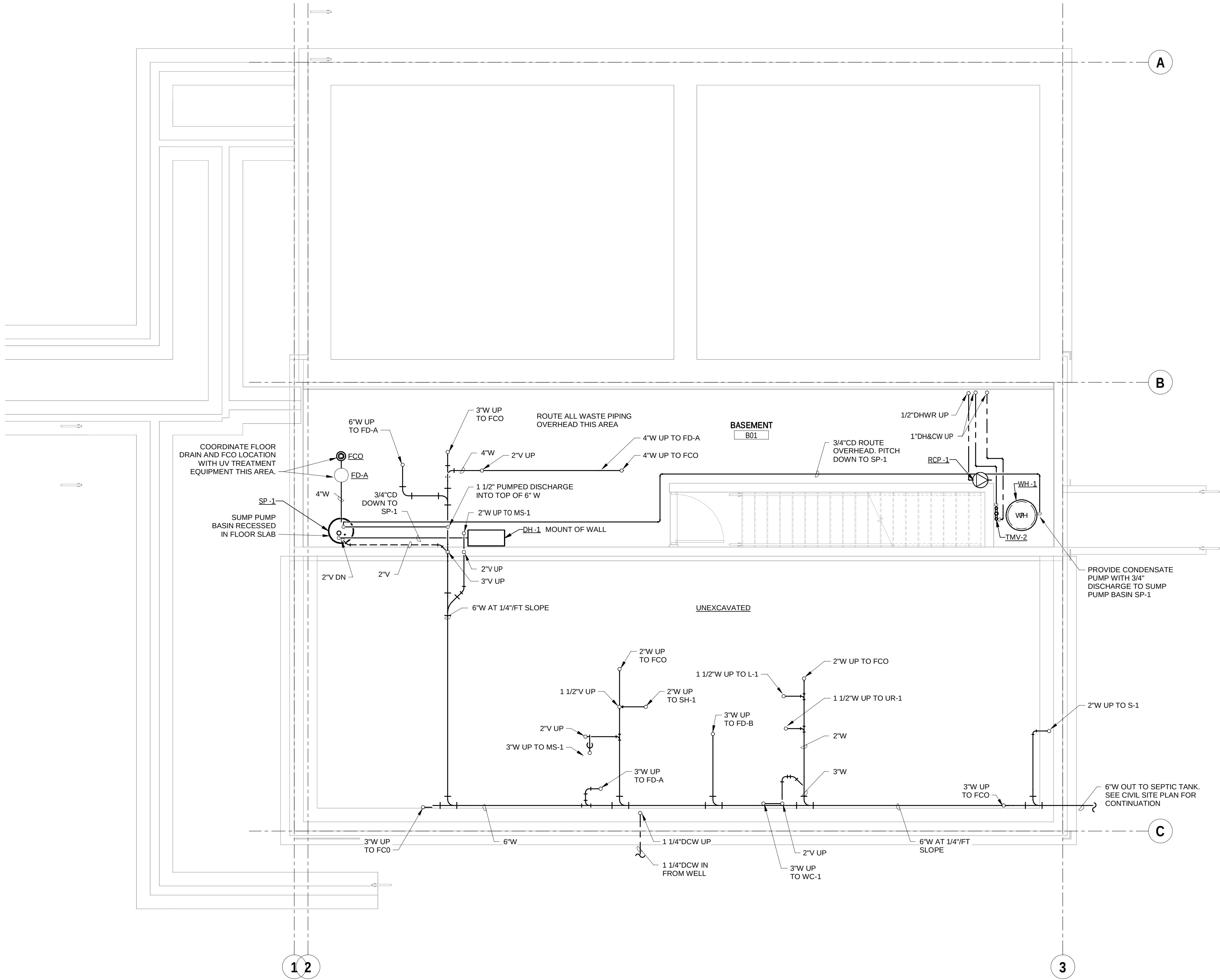
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DATE
JULY 2026

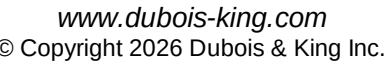
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P1.1

SHEET 64 OF 85



BASEMENT PLUMBING PLAN
SCALE: N.T.S.

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CLIENT NAME

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
FACILITY

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE
CONTRACT NO. 1
PLUMBING PLAN -
FIRST FLOOR

&K PROJECT # 227947	PROJ. ENG. JJC
RAWN BY JJC	CHECKED BY JHP

DATE JULY 2026

SHEET NUMBER

P1.2

SHEET 65 OF 85



BID SET 07/16/2026
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[illegible]

CLIENT NAME

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
FACILITY

PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE
CONTRACT NO. 1
PLUMBING PLAN -
MEZZANINE

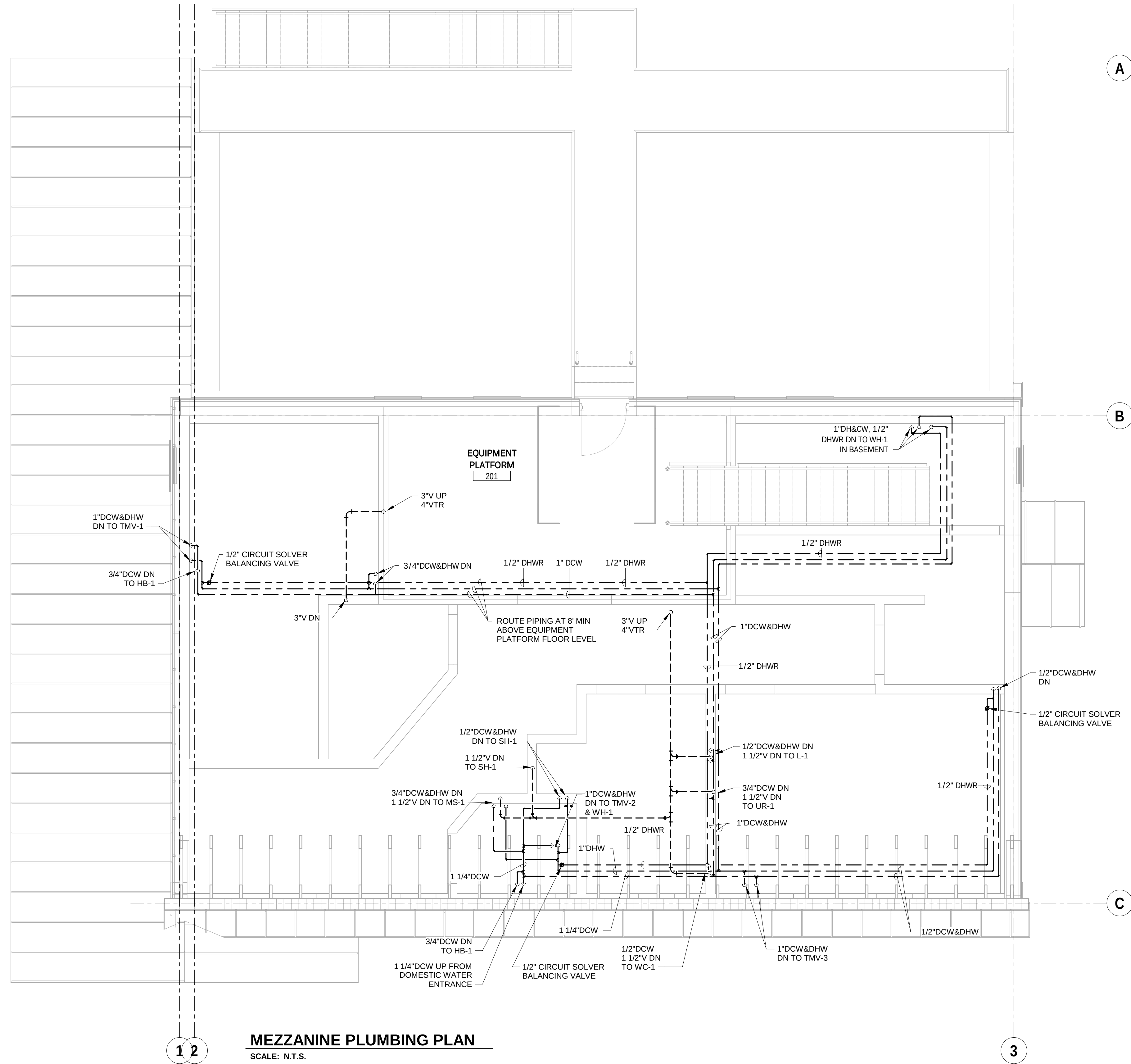
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DATE	JULY 2026
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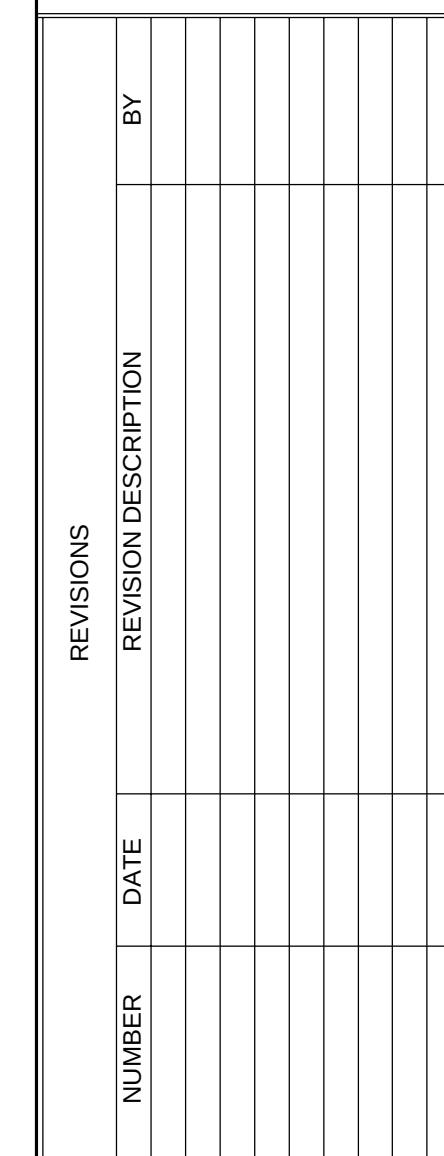
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SHEET 66 OF 85



MEZZANINE PLUMBING PLAN

SCALE: N.T.S.



PROJECT ADDRESS
4144 MAIN STREET
WAITSFIELD, VERMONT 05673

SHEET TITLE
CONTRACT NO. 1
PLUMBING DETAILS

D&K PROJECT #	PROJ. ENG.
227947	JJC

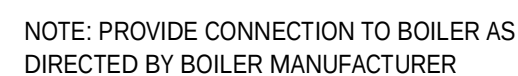
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DATE
JULY 2026

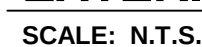
SHEET NUMBER

P5.1

SHEET 67 OF 85



SCALE: N.T.S.



SUMP PUMP SCHEDULE												
TAG	LOCATION	SERVES	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	GPM	WPD (FT)	CONNECTION SIZES	HP	VOLTS	PH	HZ	REMARKS
							DISCHARGE (IN.)					
SP-1	BASEMENT	BASEMENT	Zoeller	912-0082/M2.66	34	10.0	2	0.3	115	1	60	SUMP PUMP IN PE BASIN

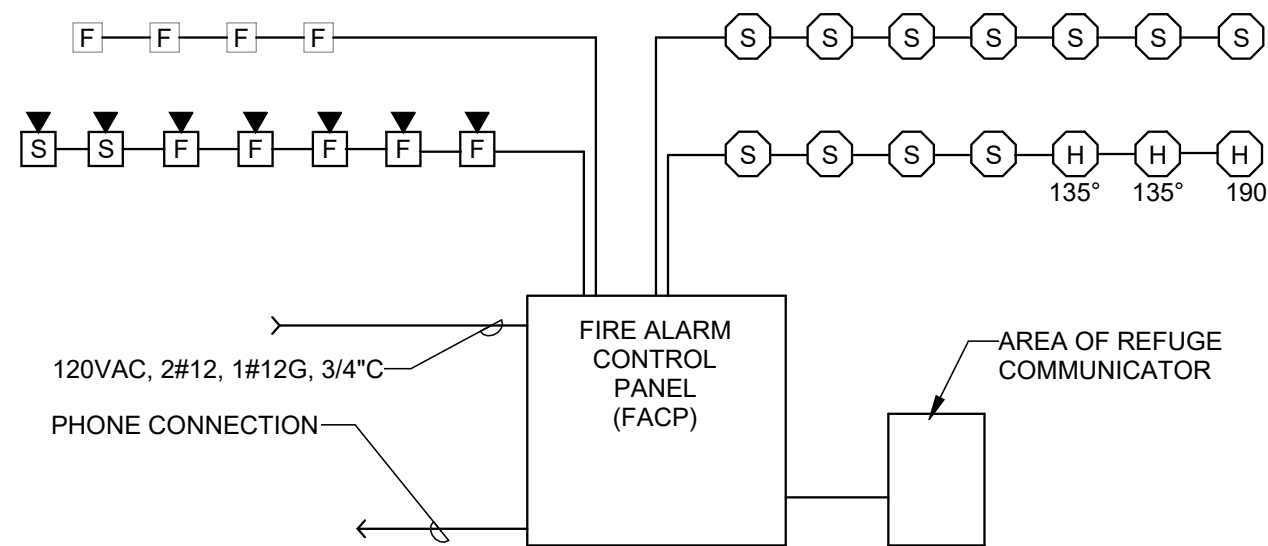
TAG	LOCATION	SERVES	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	GPM	WPD (FT)	CONNECTION SIZES	HP	VOLTS	PH	HZ	REMARKS
							DISCHARGE (IN.)					
SP-1	BASEMENT	BASEMENT	Zoeller	912-0082/M2 64	34	10.0	2	0.3	115	1	60	SUMP PUMP IN PE BASIN

ELECTRICAL LEGENDS & ABBREVIATIONS			
NOTE: NOT ALL SYMBOLS/ABBREVIATIONS SHOWN IN THE LEGEND ARE USED IN THIS DRAWING SET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CONTENT SHOWN ON DRAWINGS.			
POWER		LIGHTING CONTROLS	
	DUPLEX RECEPTACLE, 20A, 120V		SINGLE POLE SWITCH
	GFCI DUPLEX RECEPTACLE		3-WAY SWITCH
	GFCI WEATHER RESISTANT DUPLEX RECEPTACLE WITH WATERPROOF IN-USE COVER		4-WAY SWITCH
	DUPLEX RECEPTACLE WITH TYPE-A AND TYPE-C USB		0-10V DIMMER SWITCH
	DUPLEX RECEPTACLE ON EMERGENCY CIRCUIT, DEVICE SHALL BE RED WITH RED DEVICE PLATE		PHASE DIMMER SWITCH
	DUPLEX RECEPTACLE FOR FIXED MICROWAVE, COORDINATE EXACT LOCATION WITH ES		OCCUPANCY SWITCH
	DUPLEX RECEPTACLE FOR FIXED DISHWASHER, COORDINATE EXACT LOCATION WITH ES		OCCUPANCY DIMMER SWITCH
	SPLIT WIRED DUPLEX RECEPTACLE, TOP SWITCHED		OCCUPANCY 3-WAY SWITCH
	AUTOMATICALLY CONTROLLED DUPLEX RECEPTACLE, TOP CONTROLLED WITH NEC REQUIRED MARKING		LOW VOLTAGE SWITCH
	COUNTERTOP HEIGHT DUPLEX RECEPTACLE, 20A, 120V		LOW VOLTAGE DIMMER SWITCH
	QUADRUPLUX RECEPTACLE, 20A, 120V		WIRELESS SWITCH
	COUNTERTOP HEIGHT QUADRUPLUX RECEPTACLE, 20A, 120V		WIRELESS DIMMER SWITCH
	CEILING MOUNTED DUPLEX RECEPTACLE		CEILING MOUNTED OCCUPANCY/VACANY SENSOR
	SPECIAL PURPOSE RECEPTACLE, REFER TO SCHEDULE.		CEILING MOUNTED OCCUPANCY/VACANY/DAYLIGHT SENSOR
	EQUIPMENT SERVICE SWITCH		DAYLIGHT SENSOR
	MOTOR STARTER, PROVIDED BY MC, INSTALLED BY EC.		EXTERIOR PHOTOCELL
	VARIABLE FREQUENCY DRIVE, PROVIDED BY MC, INSTALLED BY EC.		ASTRONOMICAL 365 DAY TIMECLOCK
	JUNCTION BOX	COMMUNICATION	
	ELECTRIC MOTOR		FLUSH MOUNTED 2-PORT CAT. 6 WALL JACK WITH (2) CAT. 6 HOMERUNS TO NETWORK TERMINATION AREA
ELECTRICAL DISTRIBUTION			WIRELESS ACCESS POINT LOCATION WITH (1) CAT. 6 HOMERUN TO NETWORK TERMINATION AREA
	ELECTRICAL DISTRIBUTION PANEL		WALL PHONE LOCATION WITH (1) CAT. 6 HOMERUN TO NETWORK TERMINATION AREA
	HEAVY DUTY FUSED DISCONNECT, 600V		FLUSH MOUNTED CATV FEMALE F CONNECTOR WITH (1) RG6/U HOMERUN TO CATV TERMINATION AREA
	DRY TYPE TRANSFORMER		PUBLIC ADDRESS SPEAKER
	DISTRIBUTION SWITCHBOARD, REFER TO ONE-LINE DIAGRAM		AUDIO SPEAKER
	AUTOMATIC TRANSFER SWITCH (ATS)	SECURITY	
LIGHTING			IP CAMERA, PROVIDE (1) CAT. 6 HOMERUN TO SECURITY TERMINATION AREA
	RECESSED RECTANGULAR LUMINAIRE, DRAWN TO SCALE		CARD READER
	EMERGENCY RECESSED RECTANGULAR LUMINAIRE, DRAWN TO SCALE		ELECTRIC STRIKE
	SURFACE RECTANGULAR LUMINAIRE, DRAWN TO SCALE		REQUEST TO EXIT
	EMERGENCY SURFACE RECTANGULAR LUMINAIRE, DRAWN TO SCALE		KEYPAD
	LINEAR PENDANT LUMINAIRE, DRAWN TO SCALE		SECURITY MOTION SENSOR
	RECESSED DOWNLIGHT LUMINAIRE, DRAWN TO SCALE		SECURITY CONTROL PANEL
	EMERGENCY RECESSED DOWNLIGHT LUMINAIRE, DRAWN TO SCALE	DRAWING NOTATIONS	
	SURFACE DOWNLIGHT LUMINAIRE, DRAWN TO SCALE		DEMO LINE
	ROUND PENDANT LUMINAIRE, DRAWN TO SCALE		EXISTING LINE
	UNDERCABINET LUMINAIRE, DRAWN TO SCALE		NEW LINE
	WALL MOUNTED VANITY LUMINAIRE, DRAWN TO SCALE		REVISION CLOUD WITH REVISION NUMBER
	WALL MOUNTED LUMINAIRE		NOTES WHEN SIMILAR TO SECTION
	WALL MOUNTED SCONCE LUMINAIRE		DETAIL NUMBER
	EXTERIOR WALLPACK LUMINAIRE, DRAWN TO SCALE		DRAWING NUMBER
	HIGH BAY LUMINAIRE, DRAWN TO SCALE		NOTES WHEN SIMILAR TO SECTION
	WALL MOUNTED EMERGENCY LIGHTING UNIT		SECTION LETTER
	WALL MOUNTED EMERGENCY REMOTE HEAD		SHEET NUMBER WHERE SECTION VIEW IS SHOWN
	WALL MOUNTED EXIT SIGN, FILLED SIDES INDICATE ILLUMINATED FACE, ARROWS INDICATE DIRECTION	ABBREVIATIONS	
	CEILING MOUNTED EXIT SIGN, FILLED SIDES INDICATE ILLUMINATED FACE, ARROWS INDICATE DIRECTION		PHASE
	WALL MOUNTED COMBINATION EXIT/EMERGENCY SIGN, FILLED SIDES INDICATE ILLUMINATED FACE, ARROWS INDICATE DIRECTION		ALTERNATING CURRENT
	CEILING MOUNTED COMBINATION EXIT/EMERGENCY SIGN, FILLED SIDES INDICATE ILLUMINATED FACE, ARROWS INDICATE DIRECTION		AMP FRAME
			ABOVE FINISH FLOOR
			ABOVE FINISH GRADE
			ALUMINUM
			ALTERNATE
			ARCHITECT(URAL)
			AMP TRIP
			AUTOMATIC TEMPERATURE CONTROL
			AUTOMATIC TRANSFER SWITCH
			AMERICAN WIRE GAUGE
			BUILDING AUTOMATION SYSTEM
			BUSWAY
			CONDUIT
			CABLE ACCESS TELEVISION
			CIRCUIT BREAKER
			CIRCUIT
			CEILING
			CONSTRUCTION MANAGER
			CONDUCTOR
			CONNECT
			CURRENT TRANSFORMER
			COPPER
			DIRECT CURRENT
			DISCONNECT
			DOWN
			DOUPLE POLE
			DOUPLE THROW
			DRAWING
			EXISTING
			ELECTRICAL CONTRACTOR
			ELECTRIC HEATER
			EMERGENCY
			ELECTRICAL METALLIC TUBING
			END OF LINE RESISTOR
			EQUIPMENT SUPPLIER
			FUSE
			FIRE ALARM
			FIRE ALARM CONTROL PANEL
			FEEDER
			FLOOR
			FUSIBLE SWITCH
			FEET
			FIRE PROTECTION CONTRACTOR
			DEMOLISH
			GENERAL CONTRACTOR
			GENERATOR
			GROUND FAULT CIRCUIT INTERRUPTER
			GROUND FAULT PROTECTION
			GROUND
			HAND-OFF-AUTOMATIC HORSEPOWER
			FREQUENCY IN CYCLES PER SECOND
			INTERMEDIATE METALLIC CONDUIT IN INCH(ES)
			JUNCTION BOX
			KEY OPERATED
			THOUSAND CIRCULAR MIL(S)
			KILOVOLT AMPERE(S)
			KILOVOLT AMPERE(S)
			KILOWATT(S)
			LINEAR FEET
			LOW VOLTAGE
			MECHANICAL CONTRACTOR
			MAIN CIRCUIT BREAKER
			MOTOR CONTROL CENTER
			MECHANICAL, ELECTRICAL, PLUMBING
			MANHOLE
			MAIN LUGS ONLY
			MOUNTING HEIGHT
			MOTOR
			MANUAL TRANSFER SWITCH
			NORMALLY CLOSED
			NATIONAL ELECTRICAL CODE
			NONFUSED
			NOT IN CONTRACT
			NORMALLY OPEN
			NUMBER
			NOT TO SCALE
			OVERHEAD
			POLE(S)
			PLUMBING CONTRACTOR
			PANEL
			POTENTIAL TRANSFORMER
			POLYVINYL CHLORIDE
			RELAY
			REMOVE AND RELOCATE
			RECEPTACLE
			RIGID METALIC CONDUIT
			SECONDARY
			SINGLE THROW
			SQUARE FEET
			SWITCH
			SWITCHBOARD
			TELEPHONE
			TEMPORARY
			TELEVISION
			TYPICAL
			UNDERCABINET
			UNDERGROUND
			UNIT HEATER
			UNGROUND
			UNLESS OTHERWISE NOTED
			UNINTERRUPTED POWER SYSTEM
			VOLT(S)
			VOLT AMPERE(S)
			REACTIVE VOLT AMPERE(S)
			VAPORPROOF
			VARIABLE FREQUENCY DRIVE
			VERIFY IN FIELD
			WATT(S)
			WEATHERPROOF
			TRANSFORMER
			EXPLOSION PROOF

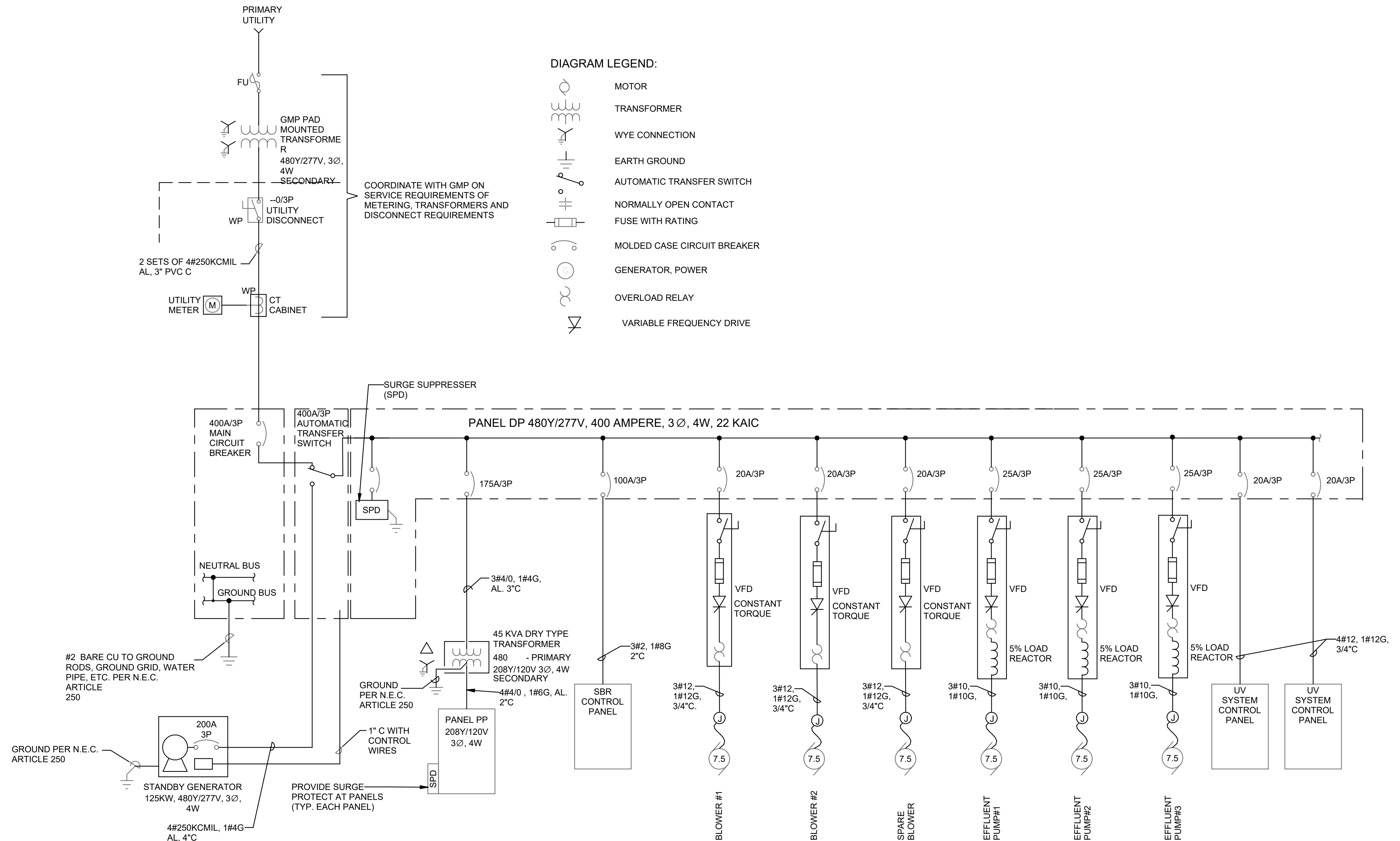
ELECTRICAL SHEET LIST	
SHEET NUMBER	SHEET NAME
E0.1	ELECTRICAL LEGENDS & NOTES
E0.2	SINGLE LINE DIAGRAM
E1.1	FIRST FLOOR ELECTRICAL PLAN
E1.2	MEZZANINE AND LOWER LEVEL POWER PLANS
E2.1	LIGHTING PLANS
E5.1	ELECTRICAL DETAILS
E5.2	WIRING DIAGRAMS
E5.3	ELECTRICAL DETAILS
E6.1	PANEL SCHEDULE
ES1	ELECTRICAL SITE PLAN
</	

3. ACTUAL NUMBER OF DEVICES IS NOT SHOWN. REFER TO FINAL PLANS FOR EXACT LOCATIONS AND QUANTITIES. A NEW ADDRESSABLE FIRE ALARM SYSTEM IS REQUIRED FOR ALL AREAS OF THE CONTROL BUILDING.
2. AUDIO/VISUAL DEVICE CIRCUITS SHALL HAVE A MINIMUM OF 20% SPARE CAPACITY. .
3. CORRIDOR AUDIO/VISUAL (STROBE TYPE) NOTIFICATION DEVICES SHALL BE SYNCHRONIZED.
4. ALARM WIRING SHALL BE IN CONDUIT.
5. NUMBER OF CONDUCTORS PER MANUFACTURER'S REQUIREMENTS AND SHALL COMPLY WITH NEC.
6. ALL INSTALLATION WORK SHALL BE DONE IN ACCORDANCE WITH FIRE ALARM MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
7. FIRE ALARM SYSTEM MUST COMPLY WITH STATE OF VERMONT REQUIREMENTS AND APPROVED BY LOCAL VT TOWN FIRE DEPARTMENT.
8. LABEL ALL ADDRESSABLE DEVICES ON OUTSIDE OF DEVICE WITH PRINTED ADHESIVE TAPE - BLACK PRINT ON CLEAR OR WHITE..
9. PROVIDE SMOKE DETECTORS ABOVE ALL FIRE ALARM CONTROL PANELS, INCLUDING THE FACP AND ALL SNAC PANELS.
10. ALL CIRCUITS SHALL BE CLASS A LOOPS. TWO RISERS PER CIRCUIT LOOP SHALL BE SEPARATED BY 1'-1/4" MINIMUM.
11. FIRE ALARM SYSTEM SHALL BE U.L.LISTED AND ADA COMPLIANT.
12. SUBMIT A COPY OF THE PROPOSED FIRE ALARM SYSTEM SUBMITTAL TO THE LOCAL FIRE DEPARTMENT FOR FINAL APPROVAL.

FACP	FIRE ALARM CONTROL PANEL
	COMBINATION AUDIO/VISUAL (STROBE) NOTIFICATION APPLIANCE MTD. @ 6" BELOW CEILING OR +80" AFF, WHICHEVER IS LESS. WITH FIELD SELECTABLE OUTPUT SETTINGS
	MANUAL PULL STATION.
	VISUAL (STROBE) NOTIFICATION DEVICE, MTD. @ 6" BELOW CEILING OR +80" AFF, WHICHEVER IS LESS. WITH FIELD SELECTABLE OUTPUT SETTING
	SMOKE DETECTOR, CEILING MTD
	FIXED TEMPERATURE (135°) HEAT DETECTOR, CEILING MTD.



SCALE: NO SCALE



SCALE: NO SCALE

1. REFER TO PANEL SCHEDULE FOR COMPLETE LIST OF CONNECTED LOADS

[illegible]

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

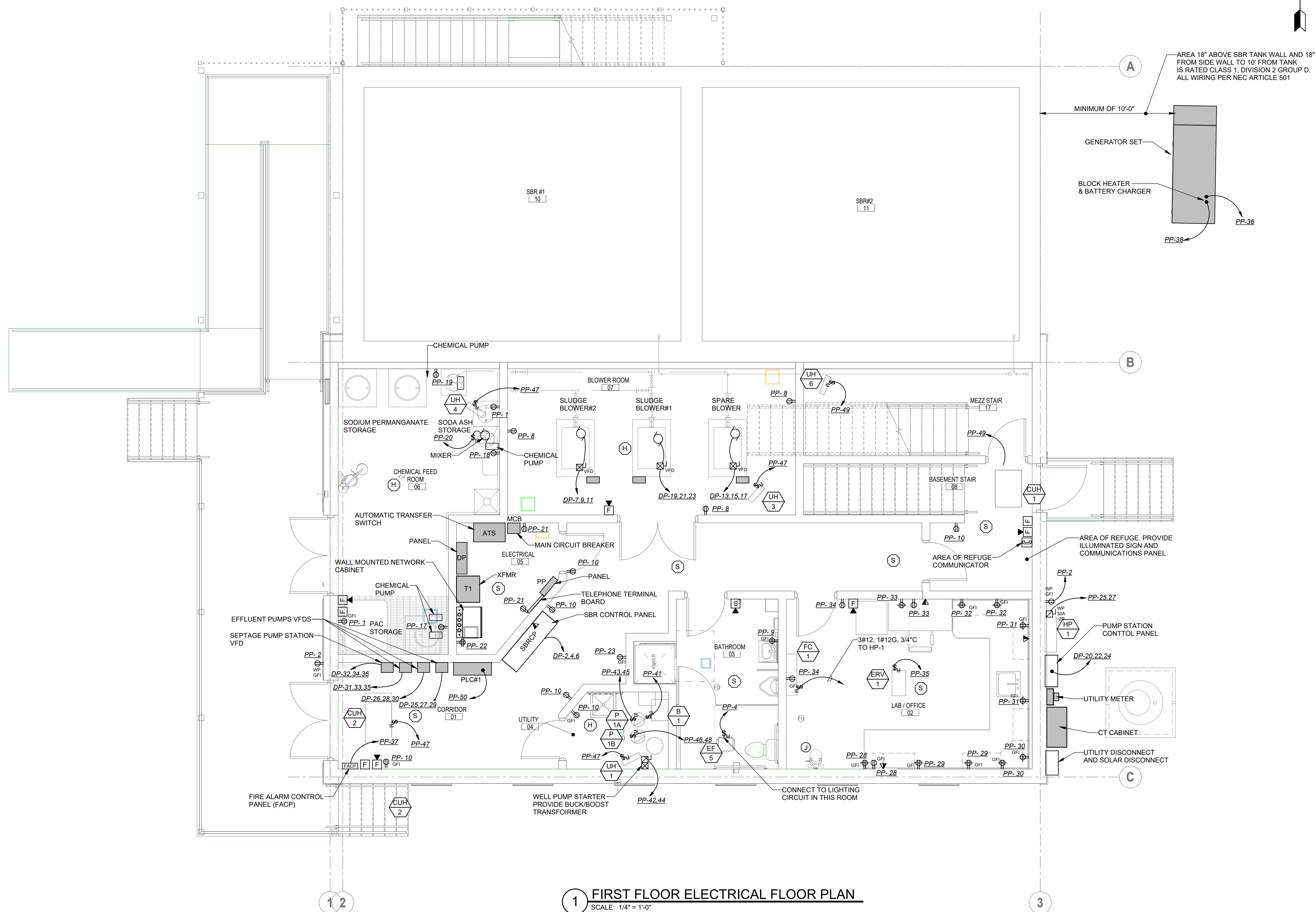
SHEET TITLE
CONTRACT NO. 1
SINGLE LINE
DIAGRAM

&K PROJECT # 25-1756	PROJ. ENG. WHH
RAWN BY WHH	CHECKED BY EJD

JULY 2026

SHEET NUMBER

0.2



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

BID SET
NOT FOR CONSTRUCTION

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
FIRST FLOOR
ELECTRICAL PLAN

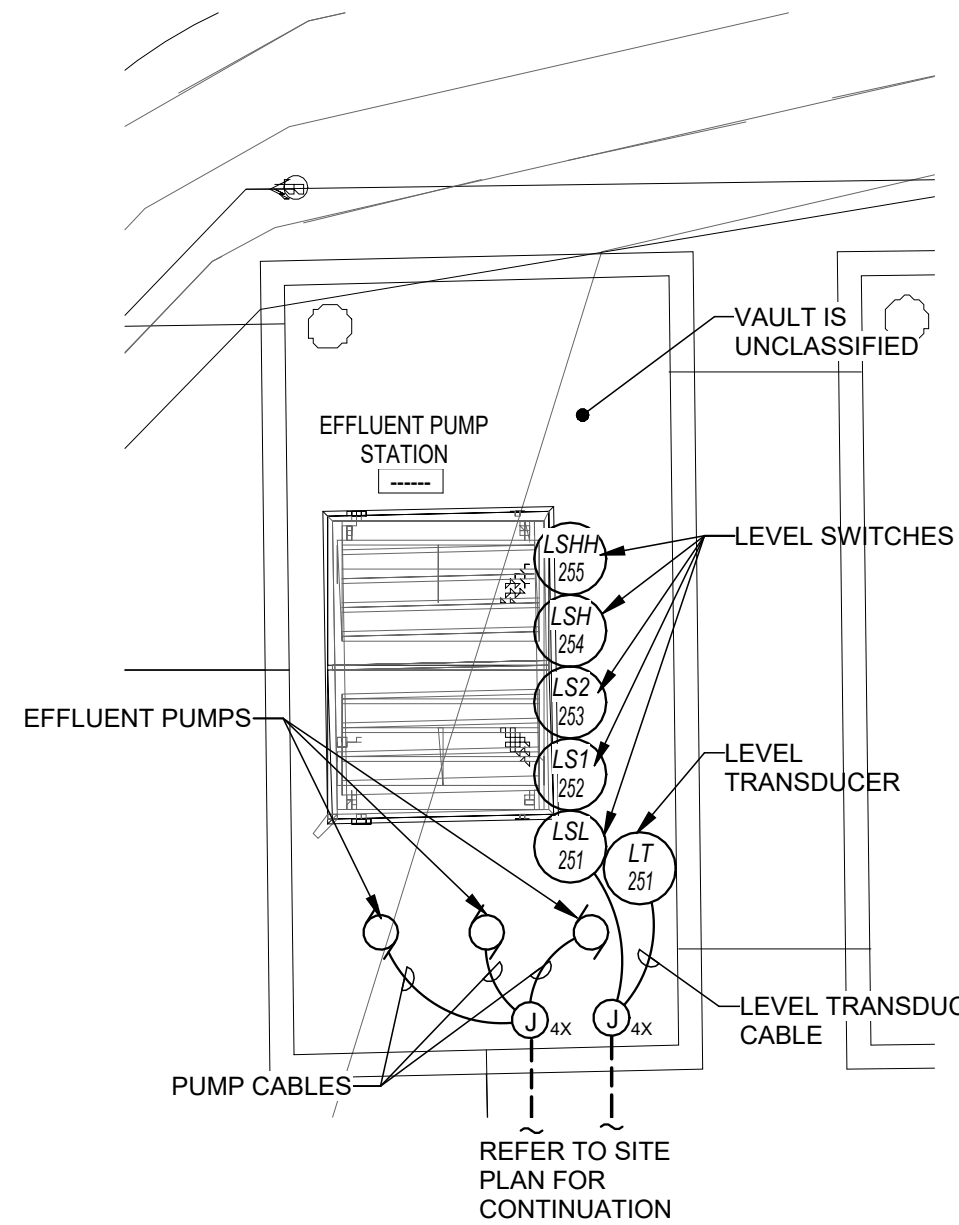
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DRAWN BY WHH	CHECKED BY EJD

DATE	JULY 2026
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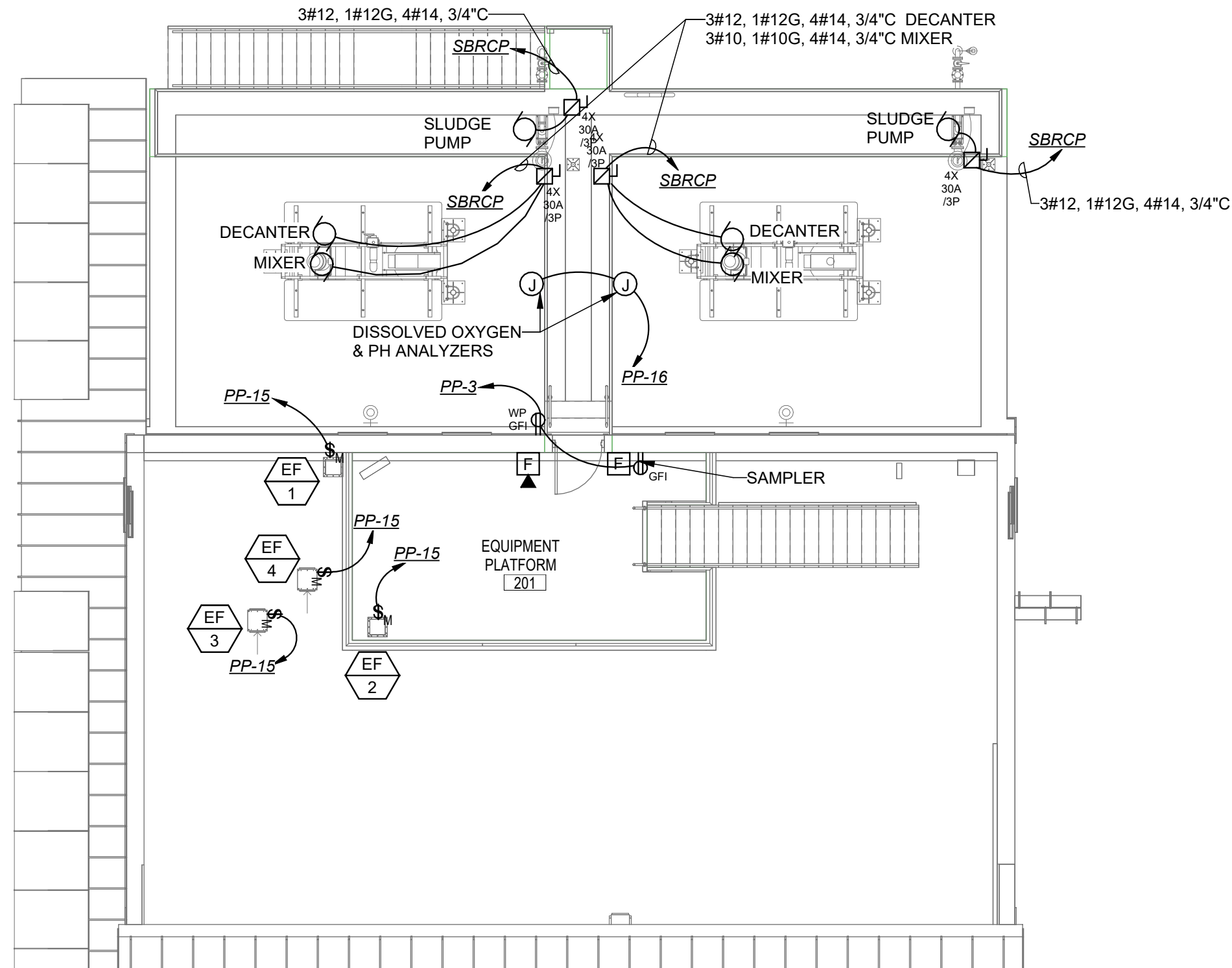
SHEET NUMBER

E1.1

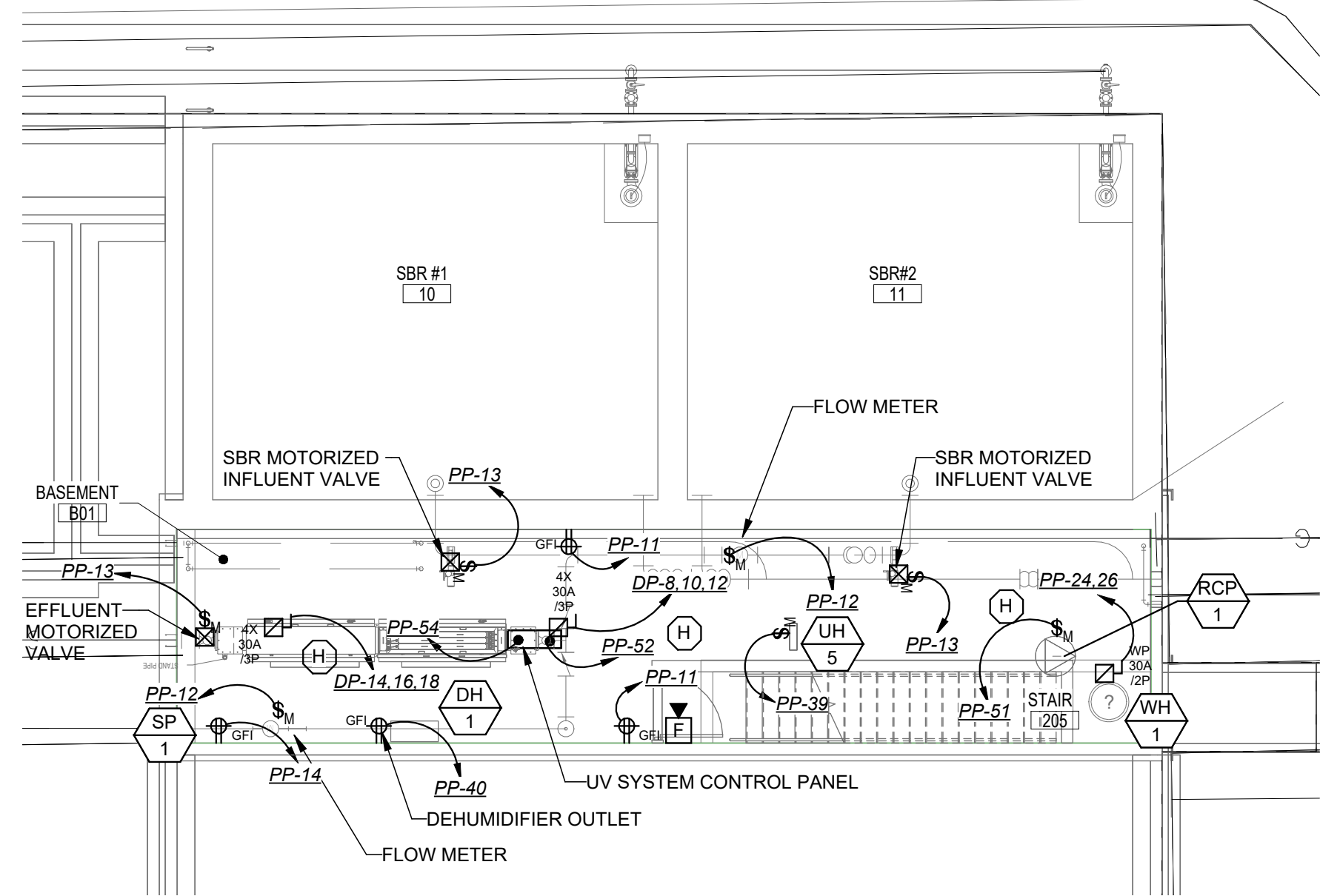
SHEET: 70 of 85



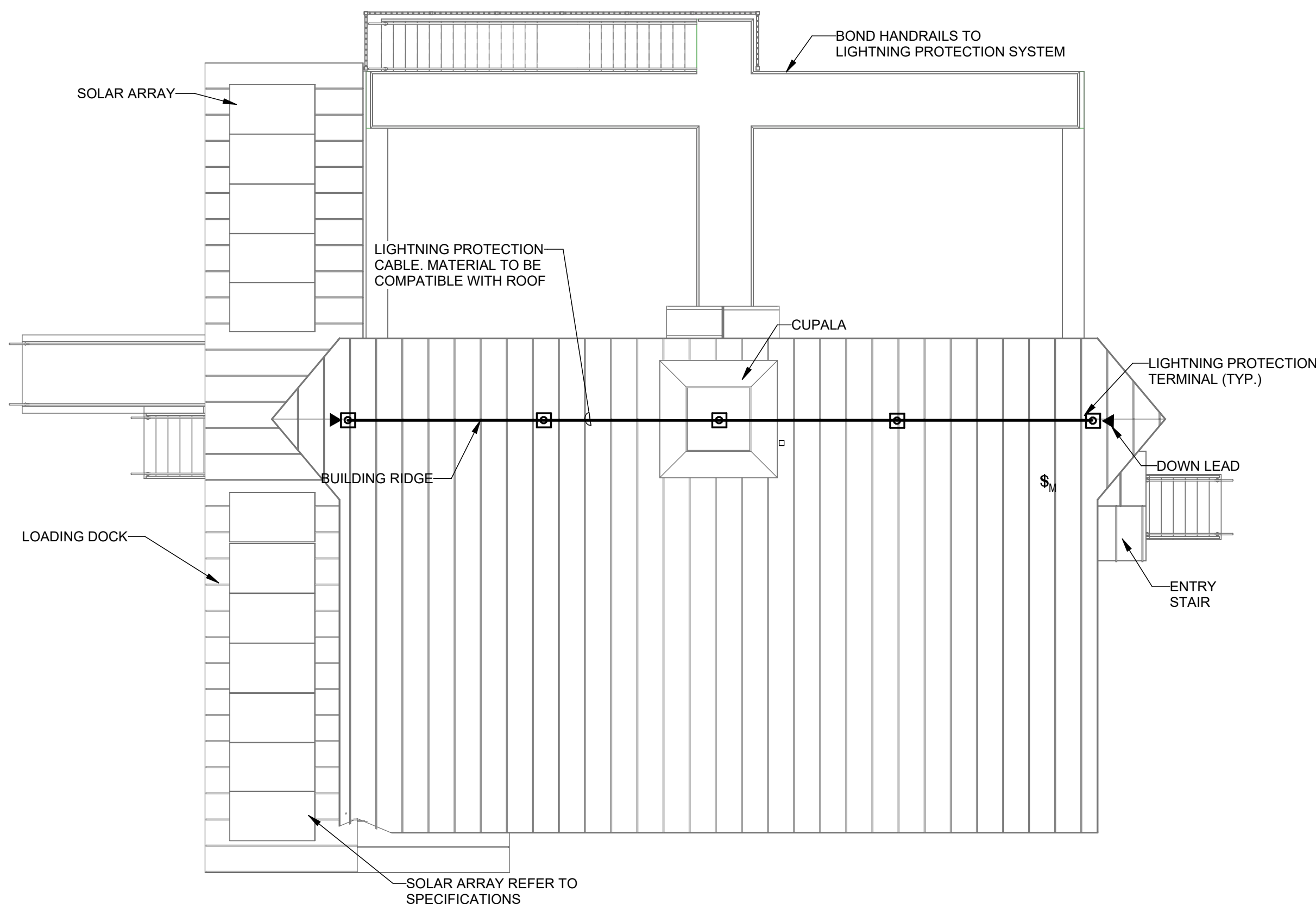
4 EFFLUENT PUMP STATION ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



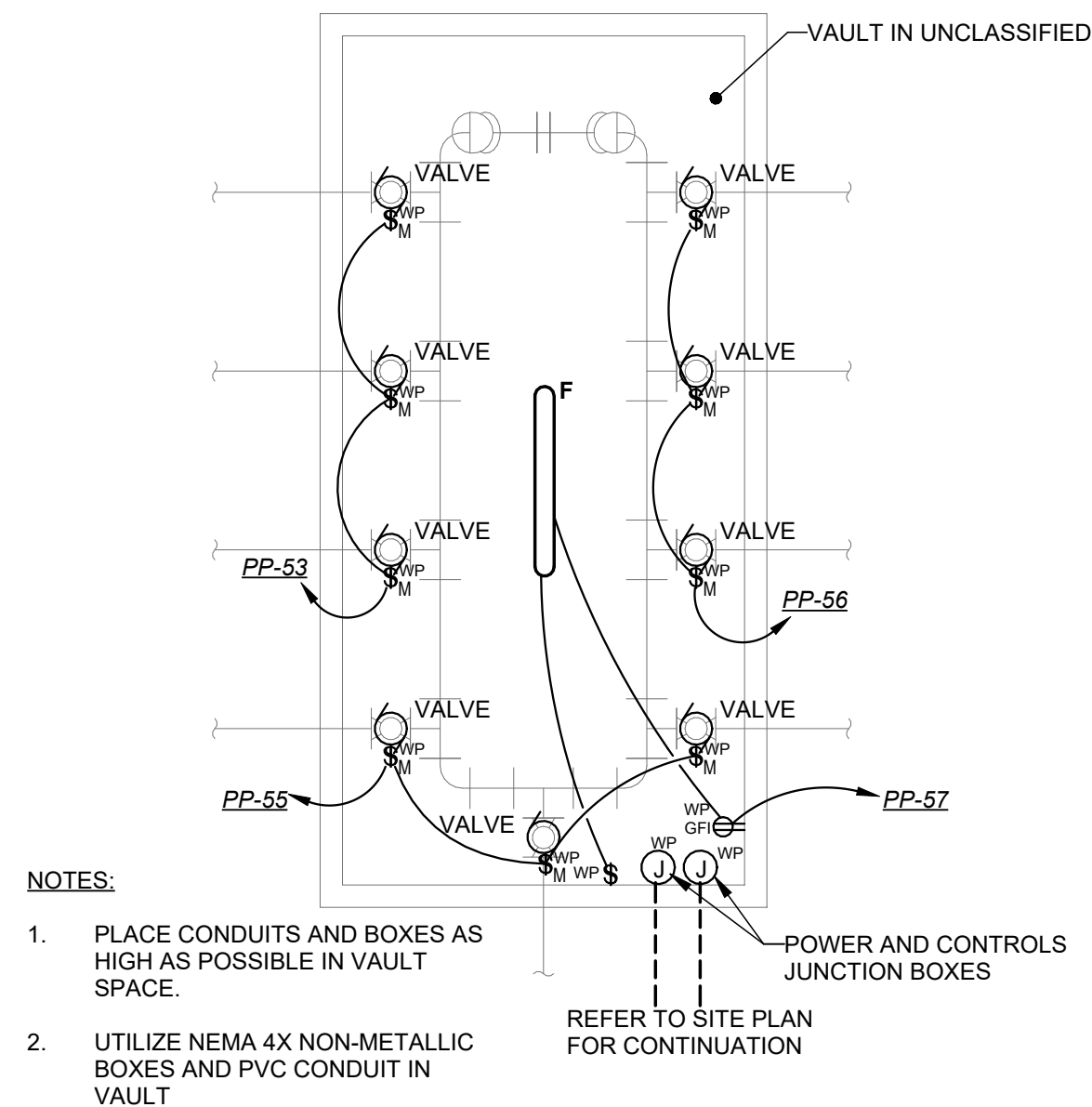
2 MEZZANINE LEVEL ELECTRICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"



1 LOWER LEVEL ELECTRICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"

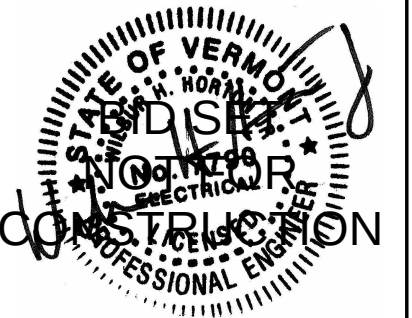
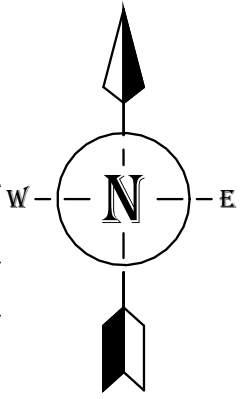


5 ELECTRICAL ROOF PLAN
SCALE: 1/8" = 1'-0"



- NOTES:
1. PLACE CONDUITS AND BOXES AS HIGH AS POSSIBLE IN VAULT SPACE.
 2. UTILIZE NEMA 4X NON-METALLIC BOXES AND PVC CONDUIT IN VAULT

3 EFFLUENT VALVE VAULT ELECTRICAL PLAN
SCALE: 1/4" = 1'-0"



REVISIONS	BY	REVISION DESCRIPTION	DATE	NUMBER

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
**WAITSFIELD
WASTEWATER
TREATMENT
CENTER**

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
**MEZZANINE AND
LOWER LEVEL
POWER PLANS**

D&K PROJECT #
25-1756

PROJ. ENG.
WHH

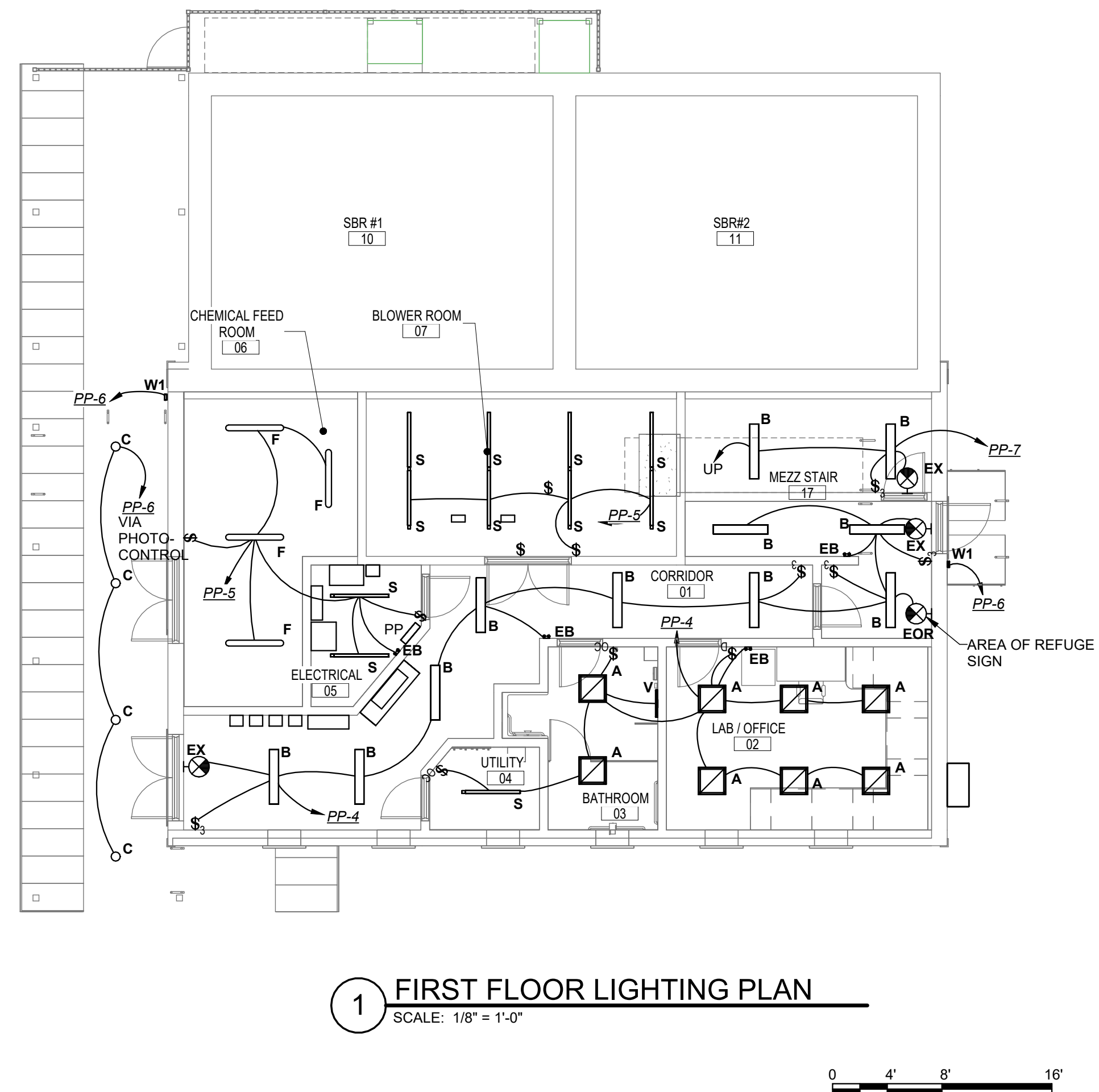
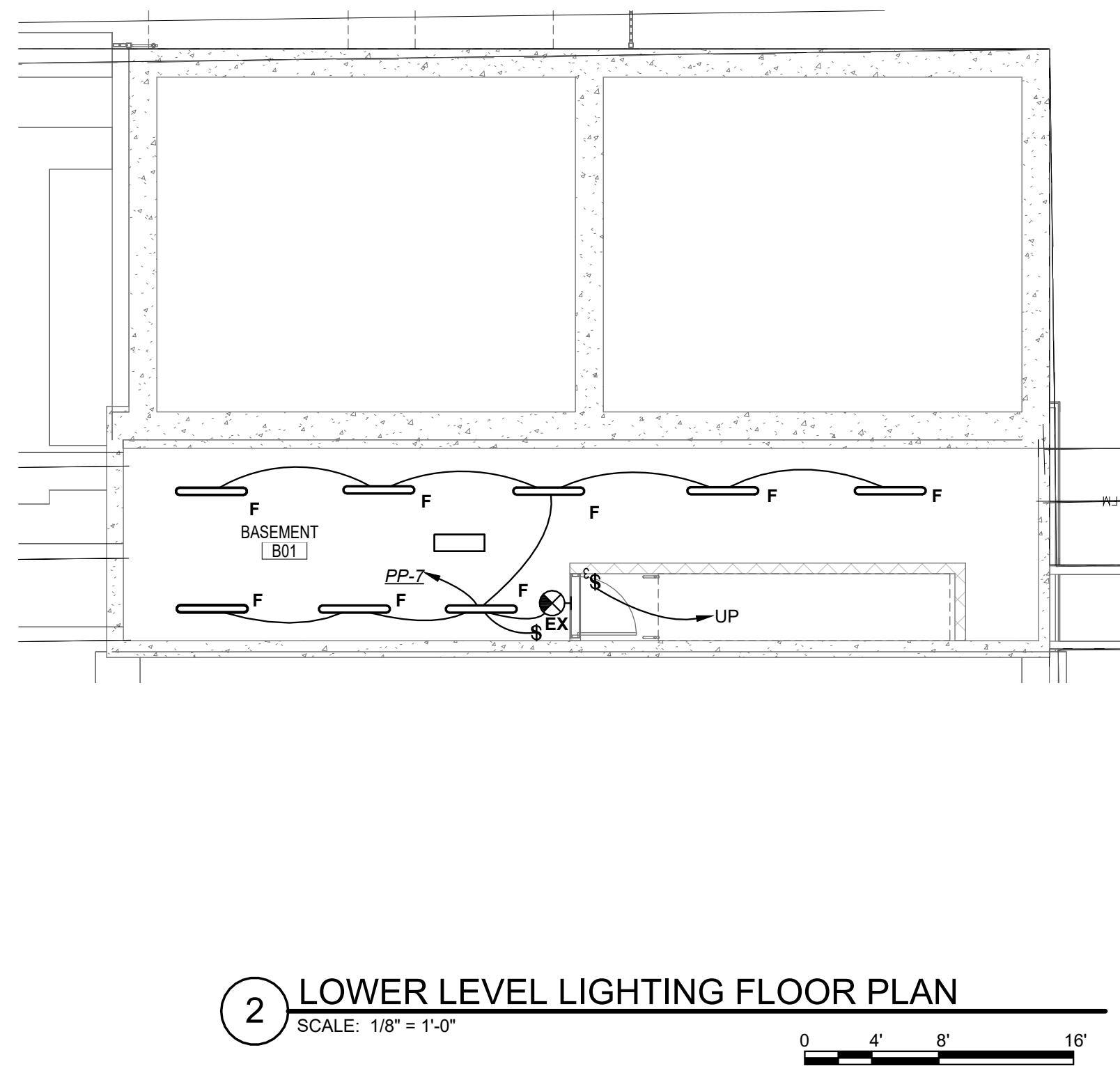
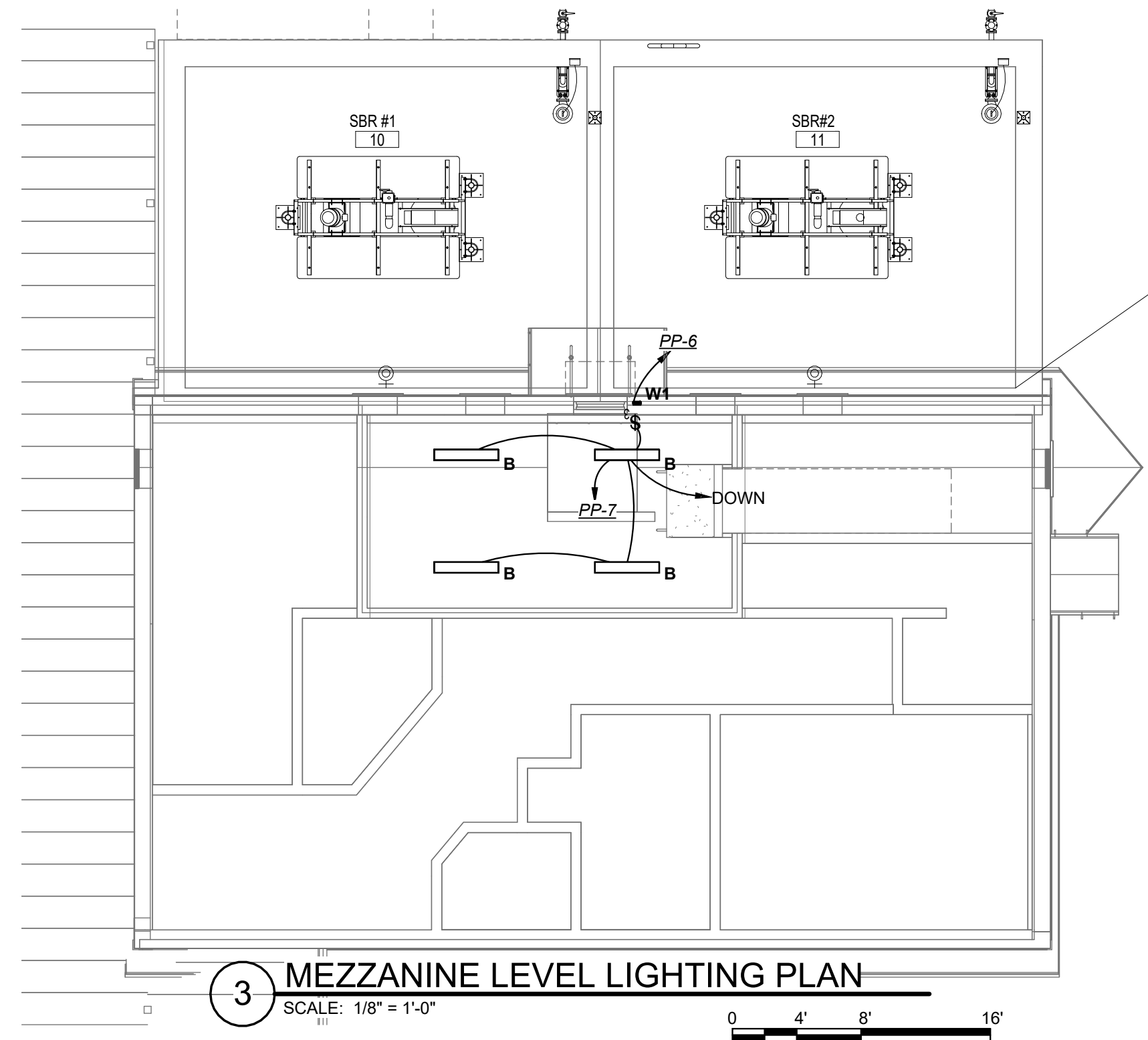
DRAWN BY
WHH

CHECKED BY
EJD

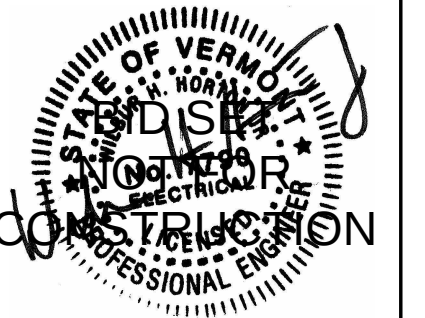
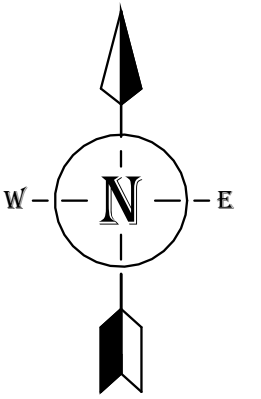
DATE
JULY 2026

SHEET NUMBER
E1.2

SHEET: 71 of 85



LIGHTING FIXTURE SCHEDULE									
TYPE	MANUFACTURER	MODEL	DESCRIPTION	MOUNTING	FINISH	LUMENS	LAMP COLOR	ELECTRICAL	REMARKS
A	LITHONIA LIGHTING	CPX 2X2 AL07 80CRI SWW7 SWL MVOLT	2X2 FLAT PANEL	RECESSED	WHITE	2500	4000K	120 V/1-19 VA	
B	LITHONIA LIGHTING	TRUN 48 AL04 FMP 8SWW2 2T MVOLT	4' WRAP	SURFACE	WHITE	3000	4000K	120 V/1-30 VA	
C	JUNO LIGHTING	JSBC 6IN SWW2 90CRI WL MW	6" DIA SURFACE	SURFACE	BLACK	1000	4000K	120 V/1-13 VA	WITH TRIM JSBCTRIM 6IN MB
EB	LITHONIA LIGHTING	EU2L	EMERGENCY	WALL @76"	WHITE	N/A	4000K	120 V/1-2 VA	
EOR	LITHONIA LIGHTING	LQM P W 1 R MVOLT EL SW01	AREA OF REFUGE SIGN	WALL @76"	WHITE	N/A	RED	120 V/1-3 VA	
EX	LITHONIA LIGHTING	LHOM S W RG MVOLT M6	EXIT SIGN	WALL @76"	WHITE	N/A	RED	120 V/1-3 VA	
F	LITHONIA LIGHTING	CSVT L48 AL03 MVOLT SWW3 80CRI	4' INDUSTRIAL	SURFACE	WHITE	3100	4000K	120 V/1-27 VA	
S	LITHONIA LIGHTING	CSS L48 AL03 MVOLT MIN10 ZC 40K 80CRI	4' STRIP LIGHT	SURFACE	WHITE	3000	4000K	120 V/1-22 VA	
V	LITHONIA LIGHTING	FMVCSL 24IN MVOLT 30K 90CRI M6	2' VANITY	WALL @76"	NICKLE	1300	3000K	120 V/1-18 VA	
W1	LITHONIA LIGHTING	WYPX0 LED AL0 SWW2 MVOLT PE DDRX1 M2	WALL PACK	WALL @ 8"	BLACK	850	4000K	120 V/1-13 VA	

[illegible]

CLIENT NAME
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WAITSFIELD
WASTEWATER
TREATMENT
CENTER

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WAITSFIELD, VT 05673

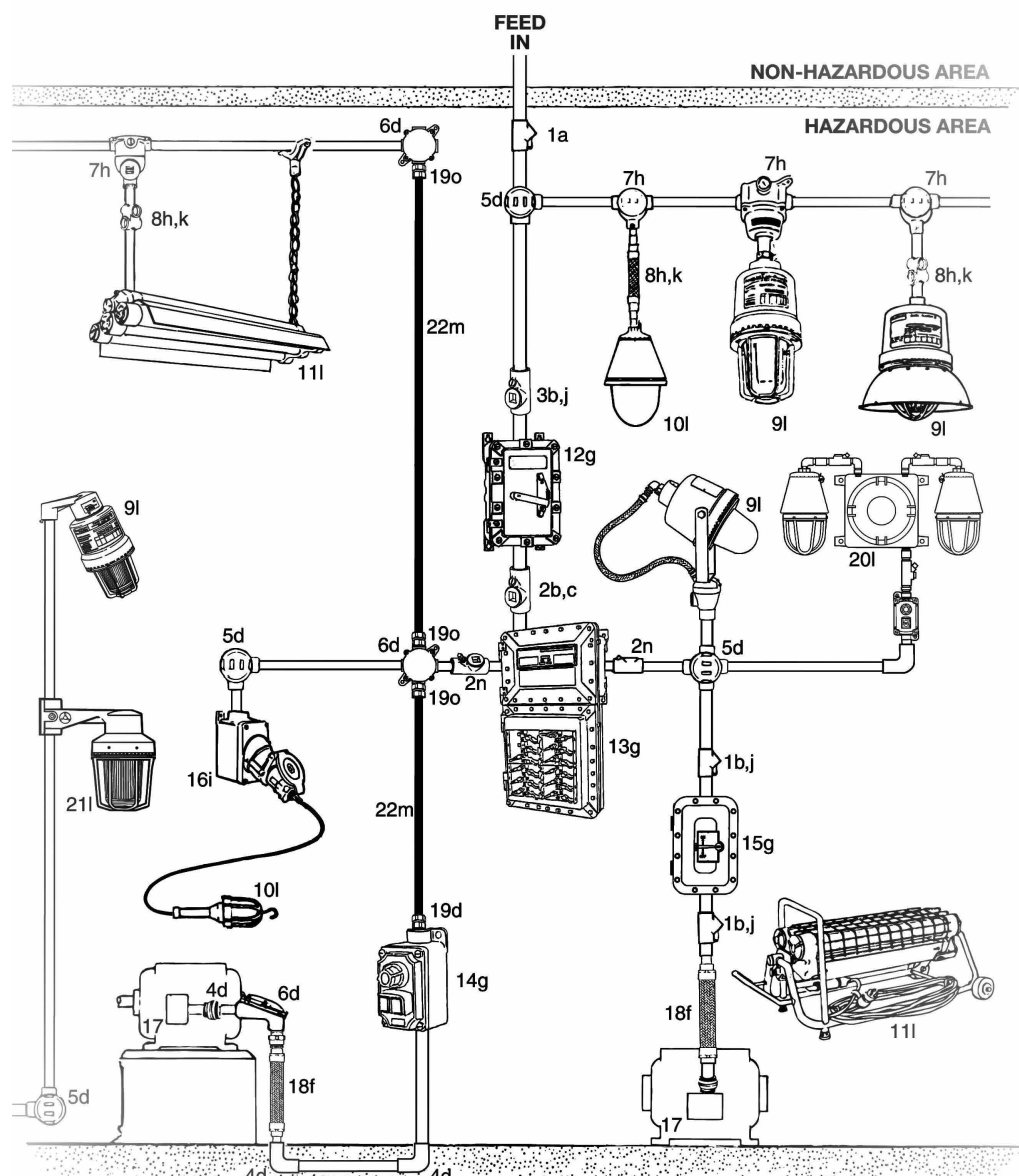
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CONTRACT NO. 1
LIGHTING PLANS

K&K PROJECT # 25-1756	PROJ. ENG. WHH
RAWN BY WHH	CHECKED BY EJD

ATE
JULY 2026

SHEET NUMBER

E2.1



**CLASS 1, DIVISION 1, GROUP D
LIGHTING INSTALLATION DETAIL**

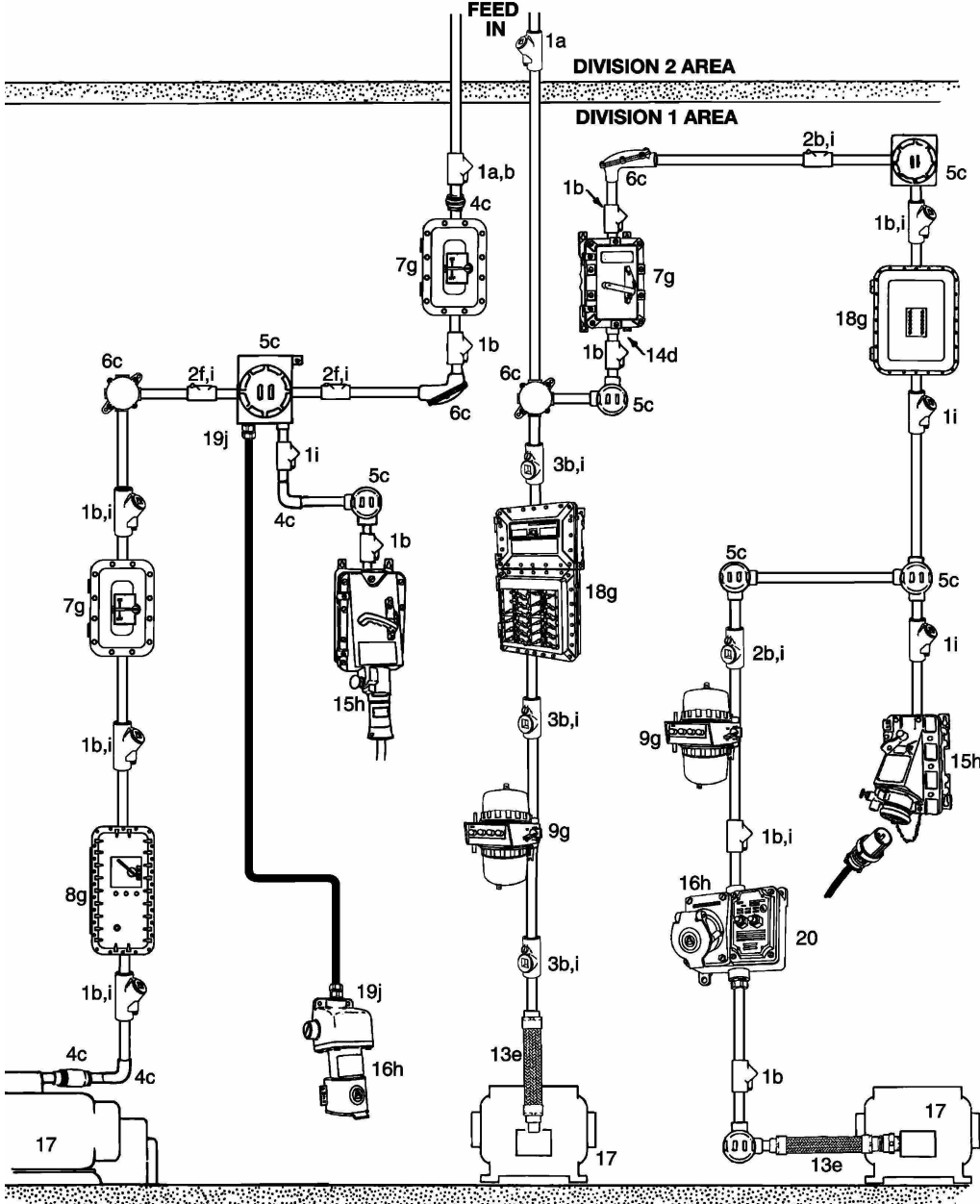
NOT TO SCALE

NOTE:
THIS DIAGRAM IS GENERAL IN NATURE AND IS PROVIDED FOR REFERENCE ONLY. PORTIONS MAY NOT APPLY TO THIS PROJECT. THE INTENT IS TO PROVIDE TYPICAL DETAILS FOR CONSTRUCTION IN CLASS I, DIVISION 1 HAZARDOUS LOCATIONS.

- ITEM**
- 1 SEALING FITTINGS. VERTICAL CONDUITS.
 - 2 SEALING FITTINGS. VERTICAL OR HORIZONTAL CONDUITS.
 - 3 SEALING FITTINGS, EXPANDED FILL.
 - 4 UNIONS/ELBOWS.
 - 5 EXPLOSIONPROOF JUNCTION BOXES. WITH THREADED COVERS.
 - 6 EXPLOSIONPROOF JUNCTION BOXES.WITH GROUND SURFACE COVERS.
 - 7 FIXTURE HANGERS.
 - 8 FLEXIBLE AND SWIVEL FIXTURE SUPPORTS.
 - 9 LUMINAIRES, FLOOD.
 - 10 LUMINAIRES, LED.
 - 11 LUMINAIRES, LED.
 - 12 CIRCUIT BREAKER.
 - 13 PANELBOARD, FACTORY SEALED.
 - 14 PUSH BUTTON/ PILOT LIGHT, FACTORY SEALED.
 - 15 SWITCH/MANUAL MOTOR STARTER. DISCONNECT.
 - 16 RECEPTACLE, FACTORY SEALED.
 - 17 MOTOR FOR HAZARDOUS LOCATION.
 - 18 FLEXIBLE CONNECTOR.
 - 19 TMCX CABLE/CONNECTORS, LISTED FOR CLASS I, DIVISION 1.
 - 20 EMERGENCY LIGHTING SYSTEM. ELS SERIES.
 - 21 STROBE WARNING LIGHT. CODE-MASTER™ STROBE.
 - 22 MC-HL ARMORED/PVC JACKETED CABLE.

NATIONAL ELECTRIC CODE REFERENCE

- a. SECTION 501.15(A)(4) SEAL REQUIRED ON EITHER SIDE OF BOUNDARY (WITHIN 10 FEET) ENTERING OR LEAVING HAZARDOUS AREA.
- b. SECTION 501.15(A)(1) SEALS REQUIRED WITHIN 18 INCHES OF ALL ARCING DEVICES.
- c. SECTION 501.15(A)(1) SEALS REQUIRED IF CONDUIT IS TRADE SIZE 2 OR LARGER.
- d. SECTION 501.10(A) AND 500.8(D) BOXES AND FITTINGS MUST BE EXPLOSIONPROOF AND HAVE 5 FULL THREADS (4-1/2 WHEN FACTORY THREADED) ENGAGED. PERMITTED WIRING METHODS INCLUDE THREADED RMC, THREADED IMC, LISTED MI CABLE/FITTINGS AND LISTED MC-HL CABLE WITH LISTED CABLE CONNECTORS.
- e. SECTION 501.15(F)(1) DRAIN/BREATHERS MUST BE INSTALLED TO PREVENT ACCUMULATION OF LIQUIDS OR CONDENSED VAPORS.
- f. SECTION 501.10(A)(2) FLEXIBLE CONNECTIONS AS AT MOTOR TERMINALS MUST BE EXPLOSIONPROOF.
- g. SECTION 501.115 PANELBOARDS, CIRCUIT BREAKERS, PUSH BUTTONS, SWITCHES, MOTOR CONTROLLERS SHALL BE EXPLOSIONPROOF AND APPROVED FOR CLASS I, DIVISION 1 LOCATIONS.
- h. SECTION 501.130(A)(4) BOXES AND FITTINGS USED FOR SUPPORT OF LIGHTING FIXTURES SHALL BE APPROVED FOR CLASS I, DIVISION 1 LOCATIONS.
- i. SECTION 501.145 RECEPTACLES AND PLUGS MUST BE EXPLOSIONPROOF AND PROVIDE GROUNDING CONDUCTOR FOR PORTABLE EQUIPMENT.
- j. SECTION 501.15(C)(6) APPROVED EXPANDED FILL SEALS PERMIT UP TO 40% FILL OF CROSS SECTIONAL AREA OF CONDUIT.
- k. SECTION 501.130(A)(3) PENDANT FIXTURE STEMS MUST BE THREADED RIGID OR IMC CONDUIT. STEMS OVER 12 INCHES MUST BE BRACED OR HAVE APPROVED FLEXIBLE CONNECTOR.
- l. SECTION 501.130(A)(1) ALL LIGHTING FIXTURES, BOTH FIXED AND PORTABLE, MUST BE APPROVED FOR CLASS I, DIVISION 1.
- m. SECTION 501.10(A)(1)(C) WHERE WIRING METHODS ALLOW MC-HL CABLE IN INDUSTRIAL ESTABLISHMENTS WITH LIMITED PUBLIC ACCESS.
- n. FOR SOME APPLICATIONS PRODUCTS MAY REQUIRE SEALS INSTALLED IMMEDIATELY ADJACENT
- o. SECTION 501.15(D)(1) CABLE SEALS, CLASS I, DIVISION 1.



**CLASS 1, DIVISION 1, GROUP D
POWER INSTALLATION DETAIL**

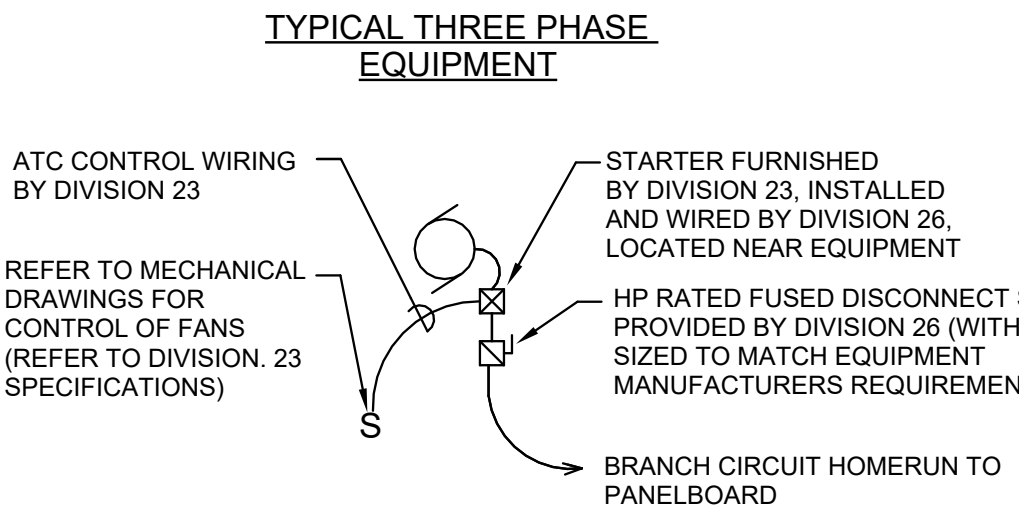
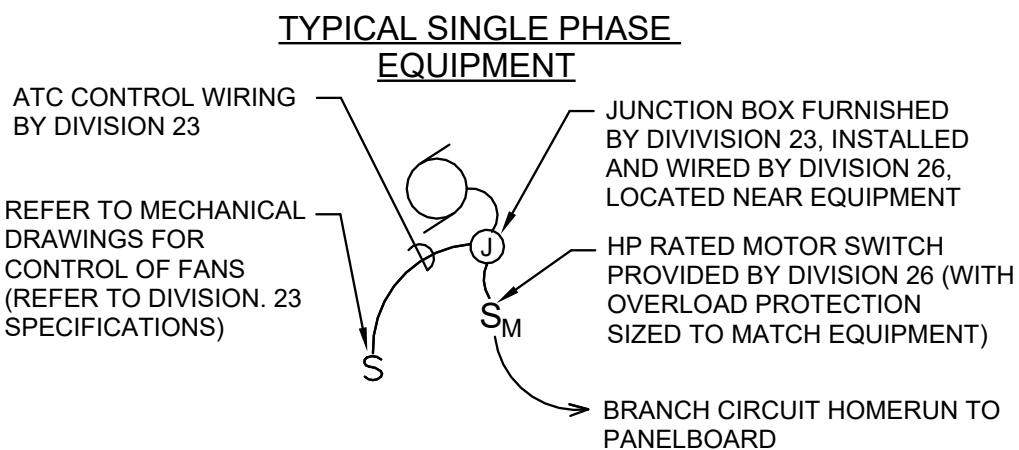
NOT TO SCALE

NOTE:
THIS DIAGRAM IS GENERAL IN NATURE AND IS PROVIDED FOR REFERENCE ONLY. PORTIONS MAY NOT APPLY TO THIS PROJECT. THE INTENT IS TO PROVIDE TYPICAL DETAILS FOR CONSTRUCTION IN CLASS I, DIVISION 1 HAZARDOUS LOCATIONS.

- ITEM**
- 1 SEALING FITTING. - USED WITH VERTICAL CONDUITS.
 - 2 SEALING FITTINGS. - USED WITH VERTICAL OR HORIZONTAL CONDUITS.
 - 3 SEALING FITTINGS, EXPANDED FILL.
 - 4 UNIONS/ELBOWS.
 - 5 EXPLOSIONPROOF JUNCTION BOXES. WITH THREADED COVERS.
 - 6 EXPLOSIONPROOF JUNCTION BOXES.WITH GROUND SURFACE COVERS.
 - 7 CIRCUIT BREAKER/DISCONNECT SWITCH/MANUAL STARTERS.
 - 8 COMBINATION CIRCUIT BREAKER AND LINE STARTER. BOLTED COVER.
 - 9 THREADED CIRCUIT BREAKER. THREADED COVER.
 - 10 PUSH BUTTON/PILOT LIGHT, FACTORY SEALED.
 - 11 PUSH BUTTON, NON-FACTORY SEALED..
 - 12 SWITCH/MOTOR STARTER, FACTORY SEALED.
 - 13 FLEXIBLE CONNECTOR.
 - 14 DRAIN/BREATHES, COMBINATION. .
 - 15 RECEPTACLE, NON-FACTORY SEALED. .
 - 16 RECEPTACLE, FACTORY SEALED.
 - 17 MOTOR FOR EXPLOSIONPROOF LOCATION.
 - 18 PANELBOARDS.
 - 19 TYPE MC-HL CABLE WITH TMCX CONNECTORS, LISTED FOR CLASS I, DIVISION 1.
 - 20 GROUND FAULT INTERRUPTER (GFI).

NATIONAL ELECTRIC CODE REFERENCE

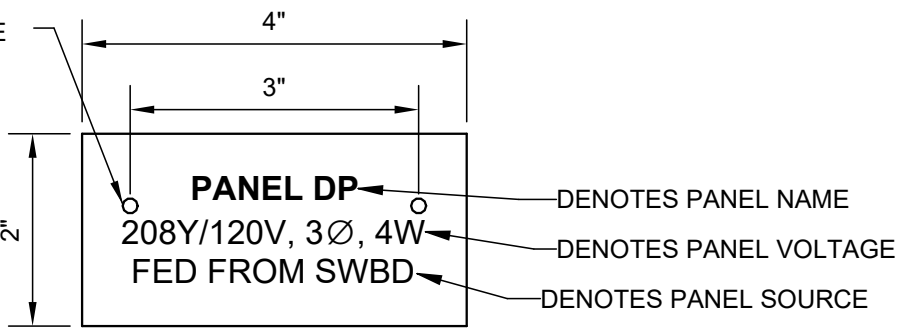
- a. SECTION 501.15(A)(4) SEAL REQUIRED ON EITHER SIDE OF BOUNDARY (WITHIN 10 FEET) ENTERING OR LEAVING HAZARDOUS AREA.
- b. SECTION 501.15(A)(1) SEALS REQUIRED WITHIN 18 INCHES OF ALL ARCING DEVICES.
- c. SECTION 501.10(A) AND 500.8(D) BOXES AND FITTINGS MUST BE EXPLOSIONPROOF AND HAVE 5 FULL THREADS (4-1/2 WHEN FACTORY THREADED) ENGAGED. PERMITTED WIRING METHODS INCLUDE THREADED RMC, THREADED IMC, LISTED MI CABLE/FITTINGS AND LISTED MC-HL CABLE WITH LISTED CABLE CONNECTORS.
- d. SECTION 501.15(F)(1) DRAIN/BREATHERS MUST BE INSTALLED TO PREVENT ACCUMULATION OF LIQUIDS OR CONDENSED VAPORS.
- e. SECTION 501.10(A)(2) FLEXIBLE CONNECTIONS AS AT MOTOR TERMINALS MUST BE EXPLOSIONPROOF.
- f. SECTION 501.10(A)(3) ALL BOXES, FITTINGS AND JOINTS SHALL BE APPROVED FOR CLASS I, DIVISION 1.
- g. SECTION 501.115 PANELBOARDS, CIRCUIT BREAKERS, PUSH BUTTONS, SWITCHES, MOTOR CONTROLLERS SHALL BE EXPLOSIONPROOF AND APPROVED FOR CLASS I, DIVISION 1 LOCATIONS.
- h. SECTION 501.115 RECEPTACLES AND PLUGS MUST BE EXPLOSIONPROOF AND PROVIDE GROUNDING CONDUCTOR FOR PORTABLE EQUIPMENT.
- i. SECTION 501.15(A)(1)(2) SEALS REQUIRED IF ENTRIES ARE TRADE SIZE 2" OR LARGER.
- j. SECTION 501.15(D)(1) CABLE SEALS, CLASS I, DIVISION 1.



TYPICAL WIRING DIAGRAMS MECHANICAL EQUIPMENT

MOTOR CONNECTION DETAIL

SCALE: NO SCALE

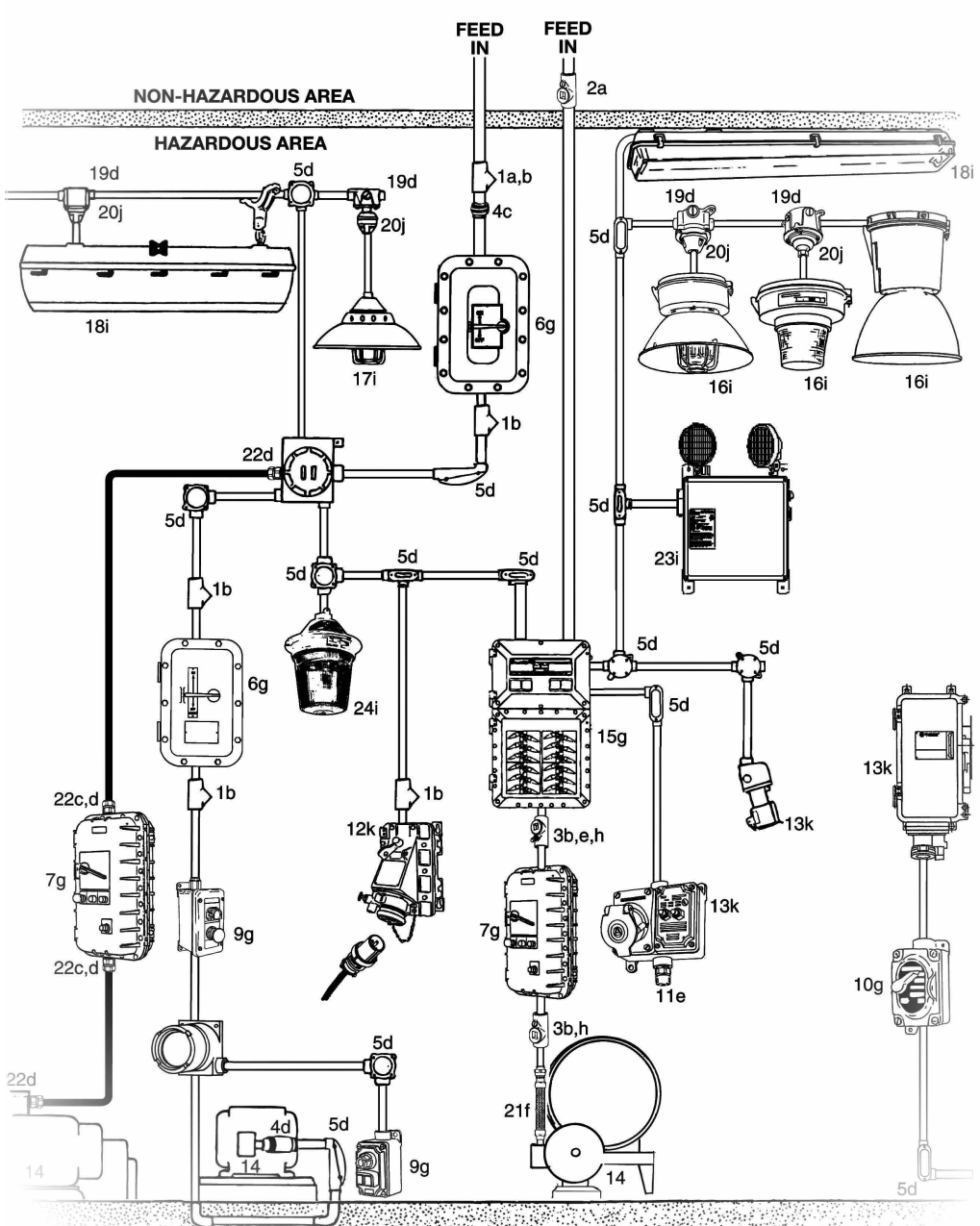


NOTES:

1. PROVIDE NAMEPLATES FOR ALL PANELBOARDS, DISCONNECTS AND ELECTRICAL EQUIPMENT, TYPICAL. REFER TO SPECIFICATIONS FOR ADDITIONAL NAMEPLATE REQUIREMENTS.
2. NAMEPLATE SHALL BE 1/16" WHITE PLASTIC W/ BLACK CENTER LAMINATION. FACE SHALL BE WHITE, ENGRAVED LETTERS SHALL BE BLACK AND 1/4" HIGH.
3. SECURE NAMEPLATE TO SURFACES WITH (2) FLAT-HEAD BRASS SCREWS.

**PANELBOARDS & DISCONNECTS NAMEPLATE
DETAIL**

SCALE: NO SCALE



**CLASS 1, DIVISION 2, LIGHTING AND
POWER INSTALLATION**

NOT TO SCALE

NOTE:
THIS DIAGRAM IS GENERAL IN NATURE AND IS PROVIDED FOR REFERENCE ONLY. PORTIONS MAY NOT APPLY TO THIS PROJECT. THE INTENT IS TO PROVIDE TYPICAL DETAILS FOR CONSTRUCTION IN CLASS I, DIVISION 2 HAZARDOUS LOCATIONS.

- ITEM**
- 1 SEALING FITTING. USED WITH VERTICAL CONDUITS.
 - 2 SEALING FITTINGS. USED WITH VERTICAL OR HORIZONTAL CONDUITS.
 - 3 SEALING FITTING, EXPANDED FILL.
 - 4 UNIONS/ELBOWS.
 - 5 CONDUIT BOXES, BODIES, FITTINGS.
 - 6 CIRCUIT BREAKER OR DISCONNECT SWITCH.
 - 7 COMBINATION CIRCUIT BREAKER AND LINE STARTER. BOLTED COVER.
 - 8 THREADED CIRCUIT BREAKER, THREADED COVER.
 - 9 PUSH BUTTON/PILOT LIGHT, FACTORY SEALED.
 - 10 SWITCH/MOTOR STARTER, FACTORY SEALED.
 - 11 DRAIN/BREATHES, COMBINATION.
 - 12 RECEPTACLE, NON-FACTORY SEALED, INTERLOCKED
 - 13 RECEPTACLE, FACTORY SEALED, WITH GFI
 - 14 MOTOR FOR DIVISION 2 HAZARDOUS LOCATION.
 - 15 LIGHTING PANELBOARD, FACTORY SEALED..
 - 16 LUMINAIRES, FLOOD.
 - 17 LUMINAIRES, LED
 - 18 LUMINAIRES, FLUORESCENT/LED
 - 19 OUTLET BOXES FOR PENDANT MOUNT FIXTURES.
 - 20 FLEXIBLE FIXTURE SUPPORTS
 - 21 FLEXIBLE CONNECTOR. LIQUIDTIGHT FLEXIBLE METAL CONDUIT AND FITTINGS.
 - 22 CABLE/CONNECTORS. LISTED FOR DIVISION 2.
 - 23 EMERGENCY LIGHTING SYSTEM.
 - 24 STROBE WARNING LIGHT.

NATIONAL ELECTRIC CODE REFERENCE

- a. SECTION 501.15(B)(2) SEALS REQUIRED ON EITHER SIDE OF THE BOUNDARY (WITHIN 10 FEET) ENTERING OR LEAVING THE HAZARDOUS (CLASSIFIED) AREAS
- b. SECTION 501.15(B)(1) SEALS REQUIRED IN ALL CONDUITS CONNECTED TO ENCLOSURES THAT ARE REQUIRED TO BE EXPLOSIONPROOF
- c. SECTION 501.15(B)(1) AND 501.15(E)(1) CLASS I, DIVISION 1 WIRING METHODS SUCH AS THREADED RIGID METAL CONDUIT, IMC AND EXPLOSIONPROOF FITTINGS ARE REQUIRED BETWEEN THE SEAL AND THE EXPLOSIONPROOF ENCLOSURE. MC-HL OR MC CABLE IS ALLOWED HOWEVER FITTINGS MUST BE CLASS I, DIVISION 1 LISTED (CABLE CONNECTOR WITH INTEGRAL SEALING METHOD).
- d. SECTION 501.10(B) BOXES AND FITTINGS ARE NOT REQUIRED TO BE EXPLOSIONPROOF UNLESS THE ENCLOSURE CONTAINS ARCING (CONTACTS), SPARKING OR HEAT PRODUCING DEVICES. PERMITTED WIRING METHODS INCLUDE ALL THOSE FOR DIVISION 1 SUCH AS THREADED RMC, THREADED IMC AND LISTED MC-HL CABLE WITH LISTED CABLE CONNECTORS. ALSO A VARIETY OF ADDITIONAL CABLE AND RACEWAY SYSTEMS ARE PERMITTED INCLUDING MC CABLE WITH LISTED MC CABLE CONNECTORS.
- e. SECTION 501.15(F)(1) DRAINS/BREATHERS MUST BE INSTALLED TO PREVENT ACCUMULATION OF LIQUIDS OR CONDENSED VAPORS.
- f. SECTION 501.10(B)(2) FLEXIBLE CONNECTIONS SUCH AS FLEXIBLE FITTINGS AND LIQUIDTIGHT FLEXIBLE METAL CONDUIT WITH LISTED FITTINGS ARE PERMITTED. LISTED LIQUIDTIGHT FLEXIBLE METAL CONDUIT FITTINGS ARE FITTINGS LISTED FOR USE WITH LIQUIDTIGHT FLEXIBLE METAL CONDUIT. THEY ARE NOT FITTINGS LISTED FOR CLASS I, DIVISION 2 HAZARDOUS (CLASSIFIED) LOCATIONS.
- g. SECTION 501.115(B)(1) CIRCUIT BREAKERS, PUSHBUTTONS, SWITCHES, MOTOR CONTROLLERS SHALL BE IDENTIFIED FOR THE LOCATION - EXPLOSIONPROOF OR CONTACTS ARE WITHIN A FACTORY SEALED EXPLOSIONPROOF CHAMBER.
- h. SECTION 501.15(C)(6) APPROVED EXPANDED FILL SEALS PERMIT UP TO 40% FILL OF CROSS SECTIONAL AREA OF CONDUIT.
- i. SECTION 501.130(B)(1) LUMINAIRES SHALL BE TESTED AND MARKED WITH THE OPERATING TEMPERATURE/IT-CODE (CLASS I, DIVISION 2) OR LUMINAIRES SHALL BE IDENTIFIED CLASS I, DIVISION 1 - EXPLOSIONPROOF
- j. SECTION 501.130(B)(3) PENDANT FIXTURE STEMS MUST BE THREADED RIGID METAL OR IMC CONDUIT. STEMS OVER 12 INCHES MUST BE BRACED OR HAVE AN APPROVED FLEXIBLE FITTING/CONNECTOR.
- k. SECTION 501.145 RECEPTACLES AND PLUGS MUST BE IDENTIFIED FOR THE LOCATION (EXPLOSIONPROOF OR CLASS I, DIVISION 2) AND HAVE A GROUNDING CONDUCTOR FOR PORTABLE EQUIPMENT.

BID SET
NOT FOR CONSTRUCTION

7/16/2026

DuBois & King inc

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REVISIONS	BY	DATE	NUMBER
REVISION DESCRIPTION			

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
ELECTRICAL
DETAILS

D&K PROJECT #
25-1756

PROJ. ENG.
WHH

DRAWN BY
WHH

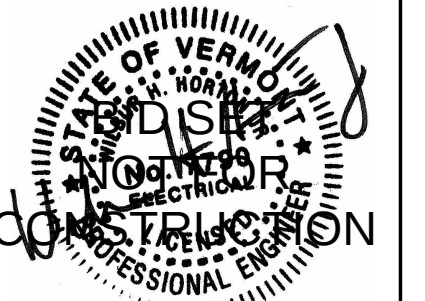
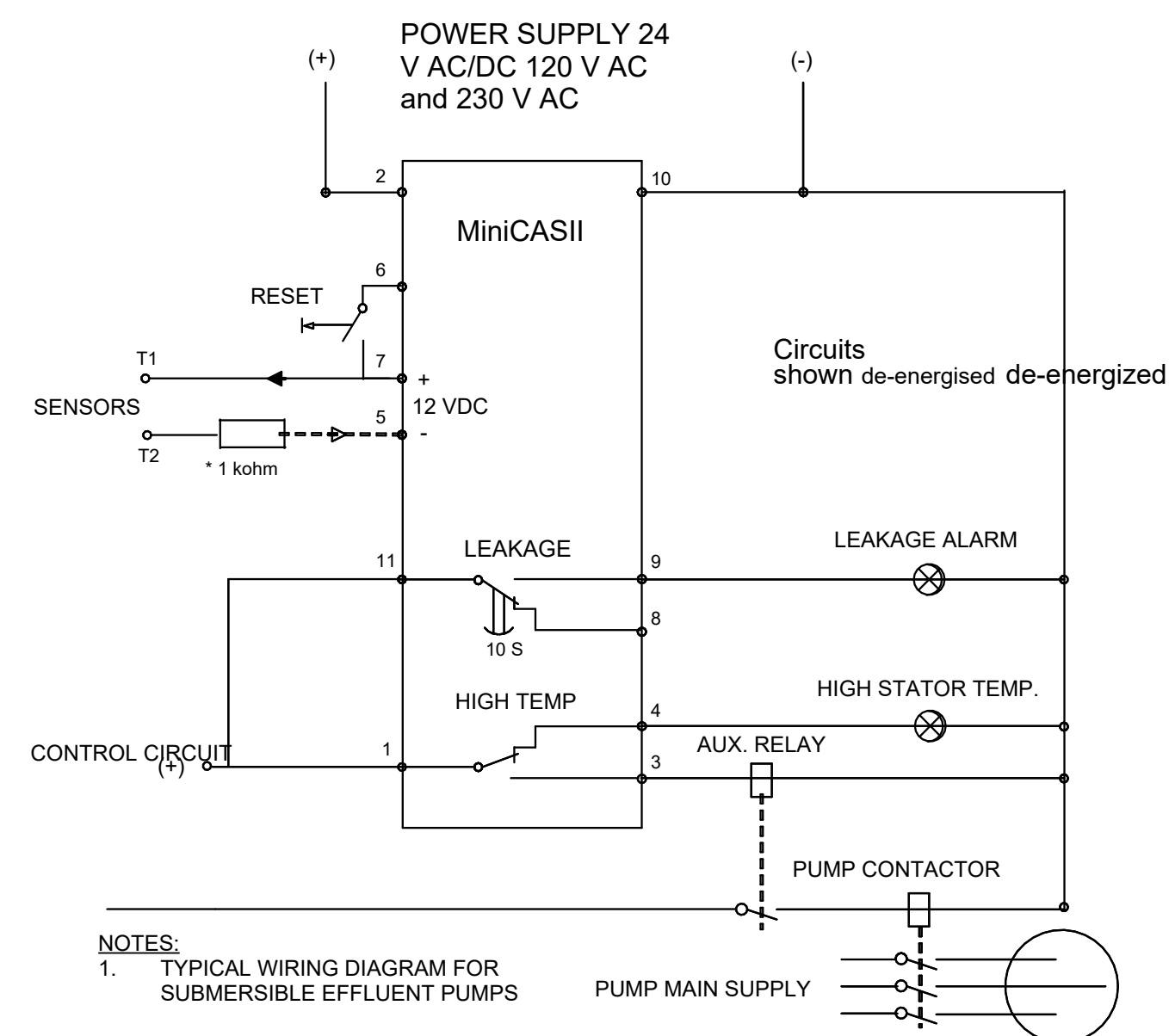
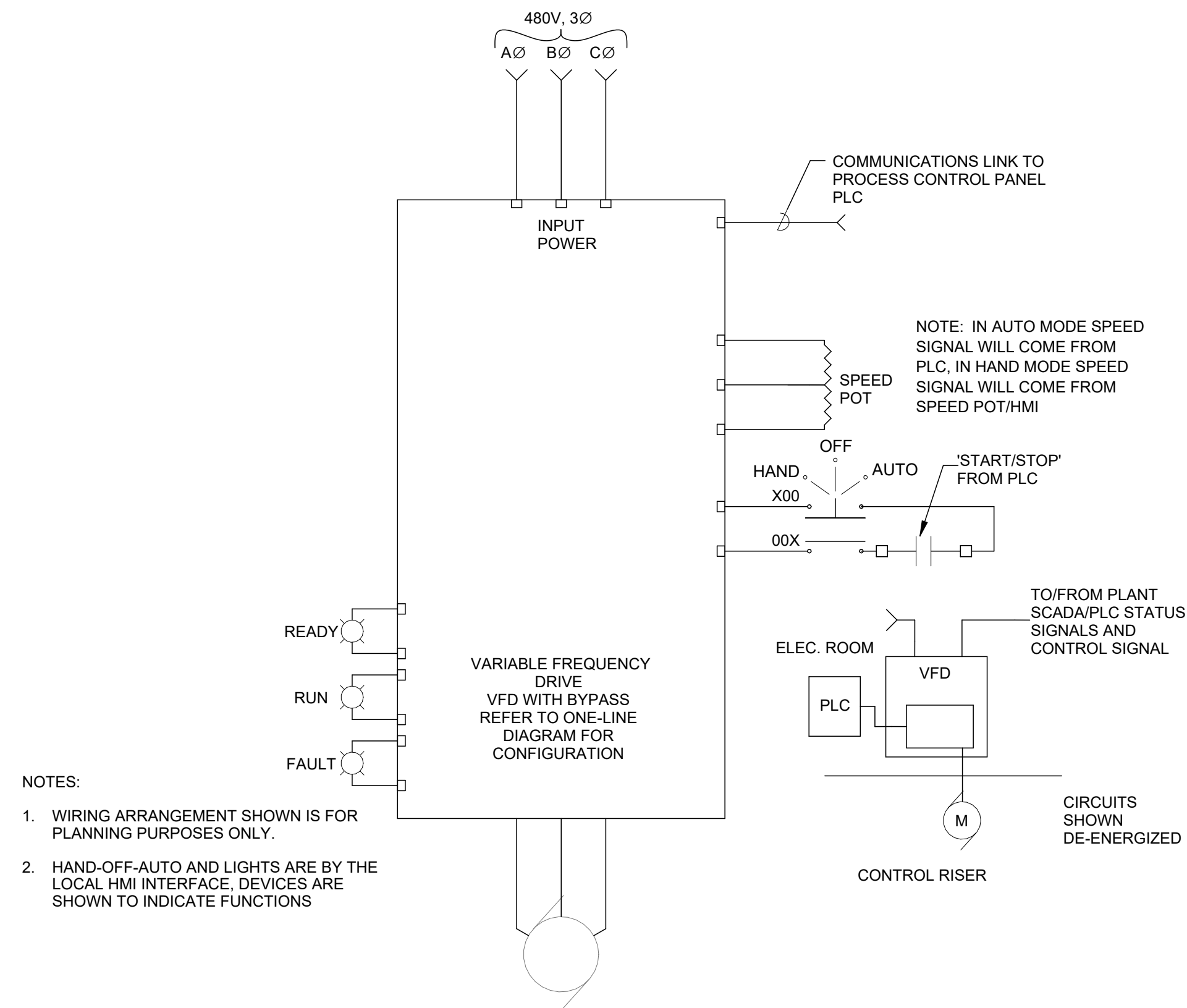
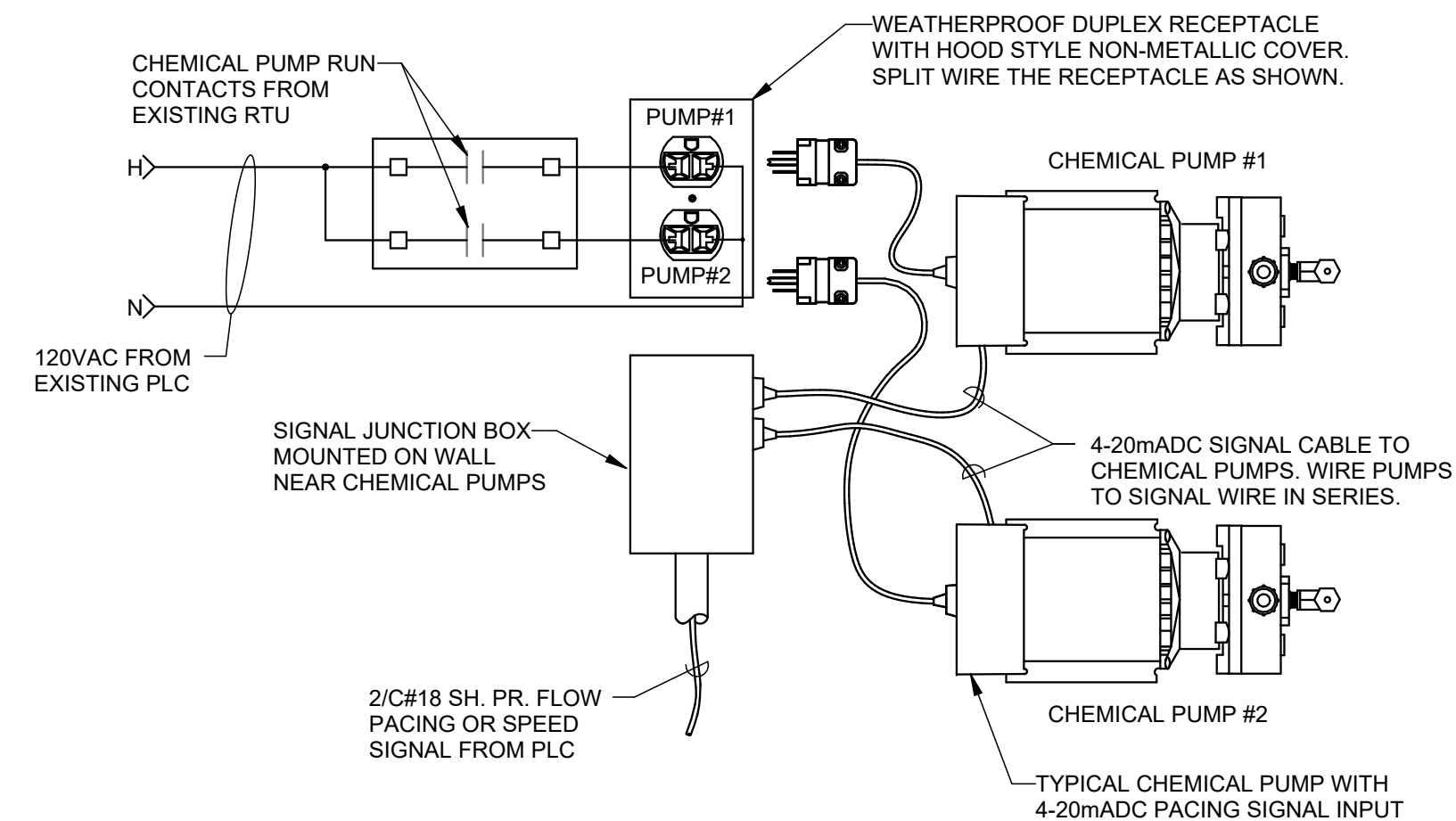
CHECKED BY
EJD

DATE
JULY 2026

SHEET NUMBER

E5.1

SHEET: 73 of 85

[illegible]

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

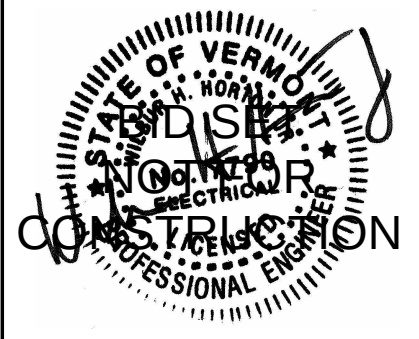
SHEET TITLE CONTRACT NO. 1 WIRING DIAGRAMS
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&K PROJECT # 25-1756	PROJ. ENG. WHH
DRAWN BY WHH	CHECKED BY RFK

DATE
JULY 2026

SHEET NUMBER

5.2

[illegible]

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
PANEL SCHEDULE

D&K PROJECT # 25-1756	PROJ. ENG. WHH
DRAWN BY WHH	CHECKED BY EJD

DATE JULY 2026

SHEET NUMBER

E6.1

SHEET: 76 of 85

Panel: DP																	
Location: ELECTRICAL 05 Supply From: ATS Mounting: Surface Enclosure: Type 1										Volts: 480/277 Wye Phases: 3 Wires: 4 SubFeed Lugs: No				A.I.C. Rating: 22 KAIC Mains Type: MLO Mains Rating: 600 A Panel Bus 600A			
WIRE SIZE (H,N&G)	CONDUIT	DESCRIPTION	POLE	AMP	CKT No	A	B	C	A	B	C	CKT No	AMP	POLE	DESCRIPTION	CONDUIT	WIRE SIZE (H,N&G)
3-#4, 1-#4, 1-#8	1-1/4"	TRANSFORMER T1	3	70 A	1	13957			8980			2					
					3		9828			8980		4	100 A	3	SBRCP	2"	3-#1, 1-#1, 1-#8
					5			11227			8980	6					
					7	2273			1333			8					
3-#12, 1-#12	3/4"	POWER BLOWER #1	3	20 A	9	2273				1333		10	20 A	3	POWER BASEMENT UV SYSTEM	3/4"	3-#12, 1-#12, 1-#12
					11			2273			1333	12					
3-#12, 1-#12	3/4"	POWER BLOWER #2	3	20 A	13	2273			1333			14					
					15		2273			1333		16	20 A	3	POWER BASEMENT UV SYSTEM	3/4"	3-#12, 1-#12, 1-#12
					17			2273			1333	18					
3-#12, 1-#12	3/4"	POWER BLOWER #3	3	20 A	19	2273			377			20					
					21		2273			377		22	20 A	3	SEWAGE PUMP STATION	3/4"	3-#12, 1-#12, 1-#12
					23			2273			377	24					
					25	2923			2923			26					
3-#12, 1-#12	2"	EFFLUENT PUMP #1	3	20 A	27		2923			2923		28	20 A	3	EFFLUENT PUMP #2 VFD	2"	3-#12, 1-#12
					29			2923			2923	30					
					31	2923			2923			32					
3-#12, 1-#12	2"	EFFLUENT PUMP #3 VFD	3	20 A	33		2923			2923		34	20 A	3	MOTOR CORRIDOR 01		3-#12, 1-#12, 1-#12
					35			2923			2923	36					
--	--	SPACE	1	--	37	--			--			38	--	1	SPACE	--	--
--	--	SPACE	1	--	39	--			--			40	--	1	SPACE	--	--
--	--	SPACE	1	--	41	--			--			42	--	1	SPACE	--	--
Total Load:						44492 VA		40363 VA		41762 VA							
Total Amps:						161 A		146 A		152 A							
Load Classification			Connected Load			Demand Factor			Estimated Demand			Panel Totals					
HVAC			45822 VA			100.00%			45822 VA								
Lighting			1330 VA			100.00%			1330 VA								
Motor			54789 VA			100.00%			54789 VA								
Other			0 VA			0.00%			0 VA								
Power			16280 VA			100.00%			16280 VA								
Receptacle			8396 VA			100.00%			8396 VA								
Notes:																	

Panel: PP

Location: ELECTRICAL 05

Supply From: T1

Mounting: SURFACE

Enclosure: TYPE 1

Volts: 120/208 Wye

Phases: 3

Wires: 4

A.I.C. Rating: 10 KAIC

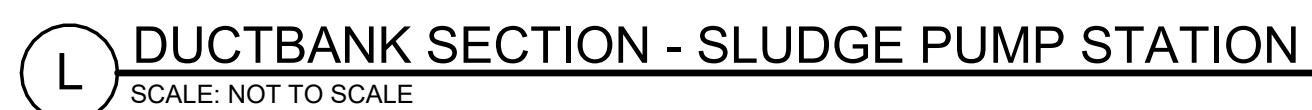
Mains Type: MCB

Mains Rating: 225 A

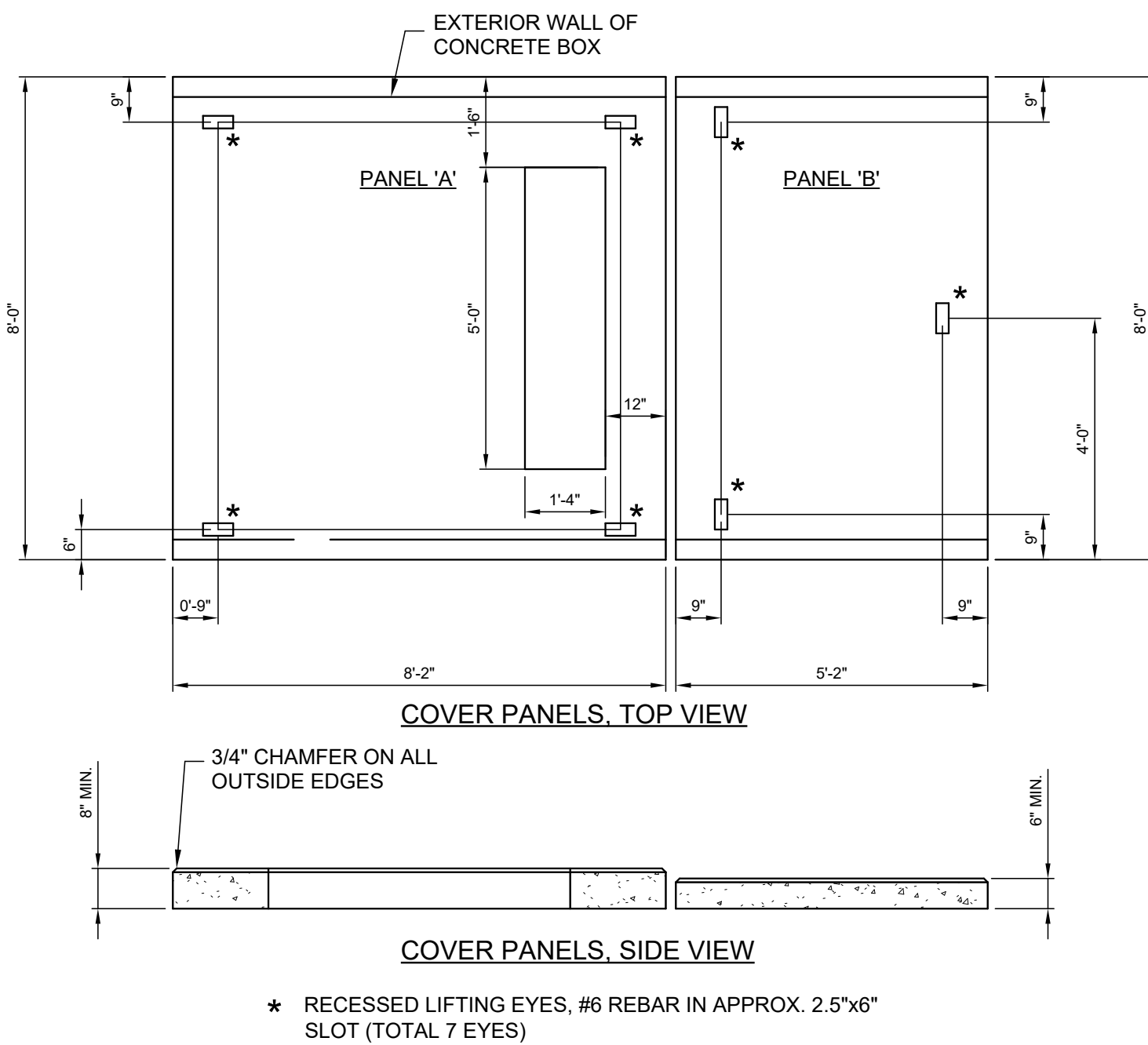
Panel Bus 225 A

WIRE SIZE (H.N&G)	CONDUIT	DESCRIPTION	POLE	AMP	CKT No	A	B	C	A	B	C	CKT No	AMP	POLE	DESCRIPTION	CONDUIT	WIRE SIZE (H.N&G)
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE CHEMICAL ROOM --	1	20 A	1	360			360			2	20 A	1	RECEPTACLE	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE ROOM	1	20 A	3		360			729		4	20 A	1	LIGHTING	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	LIGHTING CHEMICAL ROOM	1	20 A	5			330			92	6	20 A	1	LIGHTING	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	LIGHTING	1	20 A	7	402			540			8	20 A	1	RECEPTACLE BLOWER ROOM 07	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE BATHROOM 03	1	20 A	9		180			1080		10	20 A	1	RECEPTACLE CORRIDOR 01	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE BASEMENT B01	1	20 A	11			360			200	12	20 A	1	HVAC BASEMENT B01	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	HVAC BASEMENT B01	1	20 A	13	1500			180			14	20 A	1	RECEPTACLE BASEMENT B01	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	HVAC EF-1, 2, 3 & 4	1	20 A	15		756			200		16	20 A	1	ANALYZERS	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE CHEMICAL ROOM --	1	20 A	17			180			180	18	20 A	1	RECEPTACLE CHEMICAL FEED..	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE CHEMICAL FEED..	1	20 A	19	180			830			20	20 A	1	HVAC CHEMICAL FEED ROOM 06	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE ELECTRICAL 05	1	20 A	21		360			360		22	20 A	1	NETWORK EQUIPMENT	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE CORRIDOR 01	1	20 A	23			180			2250	24	20 A	2	WATER HEATER	3/4"	2-#12, 1-#12, 1-#12
2-#12, 1-#12, 1-#12	3/4"	HP-1	2	20 A	25	1450			2250			26	20 A	2	WATER HEATER	3/4"	2-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE LAB / OFFICE 02	1	20 A	29		1450			360		28	20 A	1	RECEPTACLE LAB / OFFICE 02	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE LAB / OFFICE 02	1	20 A	31	360			360			30	20 A	1	RECEPTACLE LAB / OFFICE 02	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE LAB / OFFICE 02	1	20 A	33		360			360		32	20 A	1	RECEPTACLE LAB / OFFICE 02	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECEPTACLE LAB / OFFICE 02	1	20 A	35			500			1500	34	20 A	1	RECEPTACLE LAB / OFFICE 02	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	HVAC LAB / OFFICE 02	1	20 A	37	250			200			36	20 A	1	BLOCK HEATER	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	FACP	1	20 A	37	250			200			38	20 A	1	BATTERY CHARGER	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	HVAC BASEMENT B01	1	20 A	39		100			836		40	20 A	1	RECEPTACLE BASEMENT B01	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	BOILER	1	20 A	41			250			1170	42	20 A	2	WELL PUMP	3/4"	2-#12, 1-#12, 1-#12
2-#12, 1-#12, 1-#12	3/4"	PUMP P-1A	2	20 A	43	565			1170			44	20 A	2	WELL PUMP	3/4"	2-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	HVAC UTILITY 04	1	20 A	47		565			565		46	20 A	2	PUMP P-1B	3/4"	2-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	UNIT HEATERS	1	20 A	49	1000			500			50	20 A	1	PLC#1	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	RECIRCULATION PUMP	1	20 A	51			500			500	52	20 A	1	UV SYSTEM CONTROLS	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	VALVE VAULT - VALVES	1	20 A	53			750			500	54	20 A	1	UV SYSTEM CONTROLS	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	VALVE VAULT - VALVES	1	20 A	55	750			750			56	20 A	1	VALVE VAULT - VALVES	3/4"	1-#12, 1-#12, 1-#12
1-#12, 1-#12, 1-#12	3/4"	VALVE VAULT RECEPTS/LIGHT	1	20 A	57		207			0		58	20 A	1	SPARE	--	--
--	--	SPARE	1	20 A	59			0		0	0	60	20 A	1	SPARE	--	--
--	--	SPARE	1	20 A	61	0			0		0	62	20 A	1	SPARE	--	--
--	--	SPARE	1	20 A	63		0			0		64	20 A	1	SPARE	--	--
--	--	SPARE	1	20 A	65			0		0		66	20 A	1	SPARE	--	--
--	--	SPARE	1	20 A	67	0			0	0		68	20 A	1	SPARE	--	--
--	--	SPARE	1	20 A	69		0			0		70	20 A	1	SPARE	--	--
--	--	SPARE	1	20 A	71			0		0	0	72	20 A	1	SPARE	--	--
Total Load:						13957 VA		9828 VA		11227 VA							
Total Amps:						118 A		82 A		95 A							
Load Classification			Connected Load			Demand Factor			Estimated Demand			Panel Totals					
HVAC			18886 VA			100.00%			18886 VA								
Lighting			1330 VA			100.00%			1330 VA			Total Conn. Load: 35012 VA					
Motor			2250 VA			100.00%			2250 VA			Total Est. Demand: 35012 VA					
Other			0 VA			0.00%			0 VA			Total Conn.: 97 A					
Power			4150 VA			100.00%			4150 VA			Total Est. Demand: 97 A					
Receptacle			8396 VA			100.00%			8396 VA								
Notes:																	

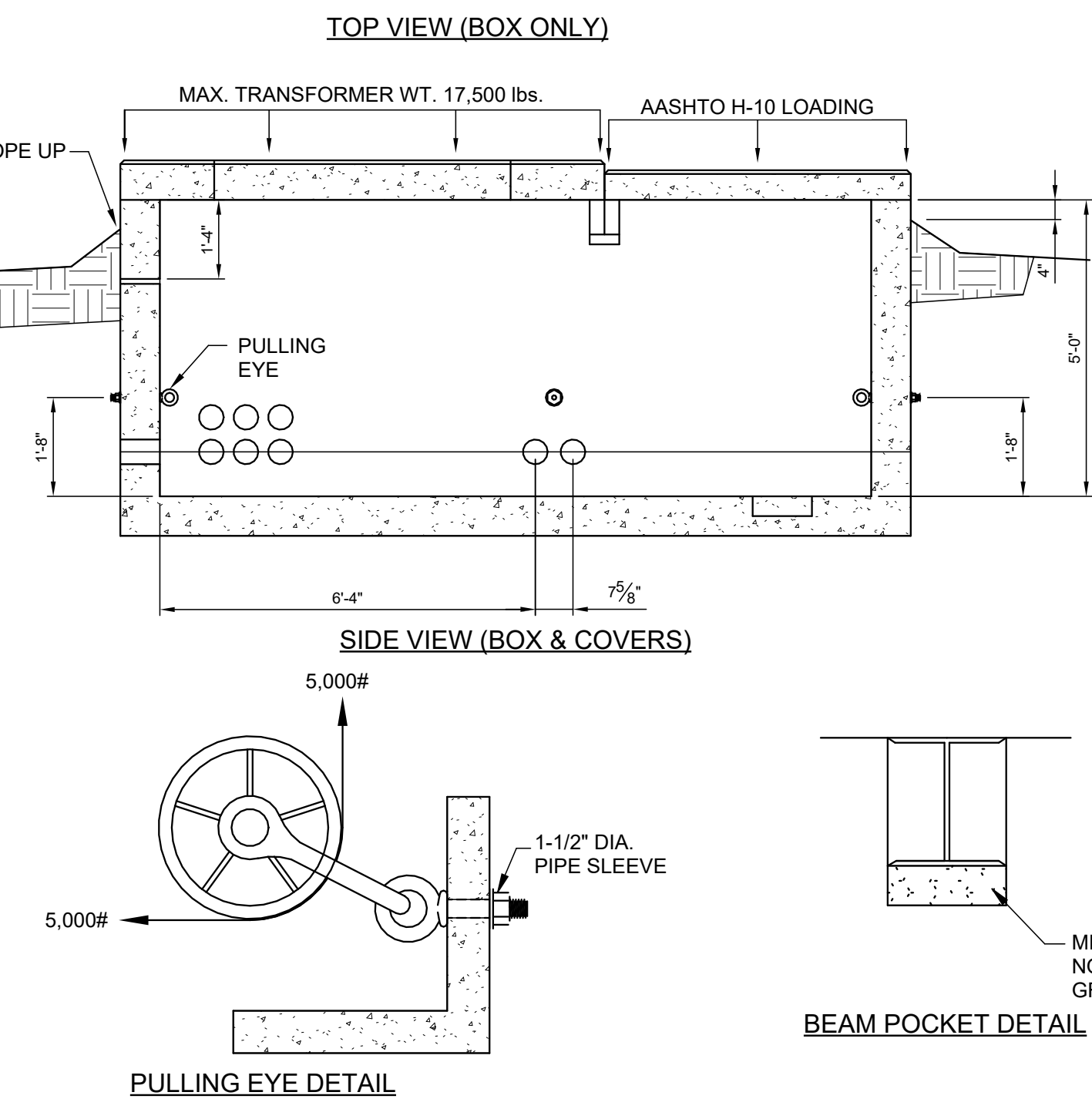
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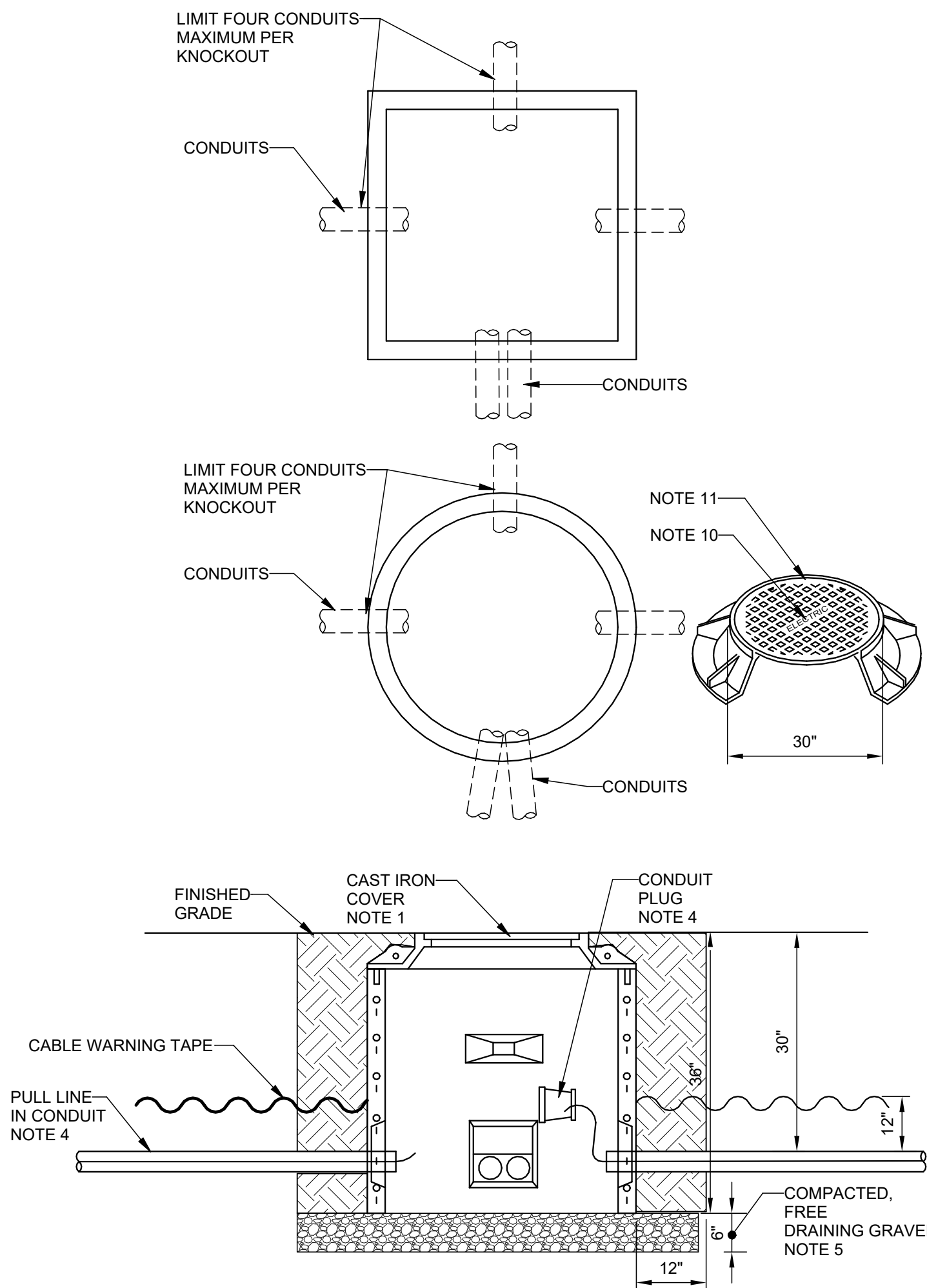


1. CONCRETE TO BE MIN. 4000 PSI, 28 DAY STRENGTH.
2. AIR ENTRAINMENT TO BE 4% TO 6%.
3. REINFORCING STEEL TO CONFORM TO ASTM-615, GRADE 60 AND TO BE PLACED IN ACCORDANCE WITH ACI STANDARDS.
4. PROVIDE #4 REINFORCING @ 9" EACH WAY, TOP AND SIDES.
5. ALL CONCRETE WORK SHALL CONFORM TO ACI STANDARD PRACTICE
6. CONCRETE FOUNDATIONS MAY BE CAST-IN-PLACE OR PRE-CAST DESIGN.



VAULT DETAILS

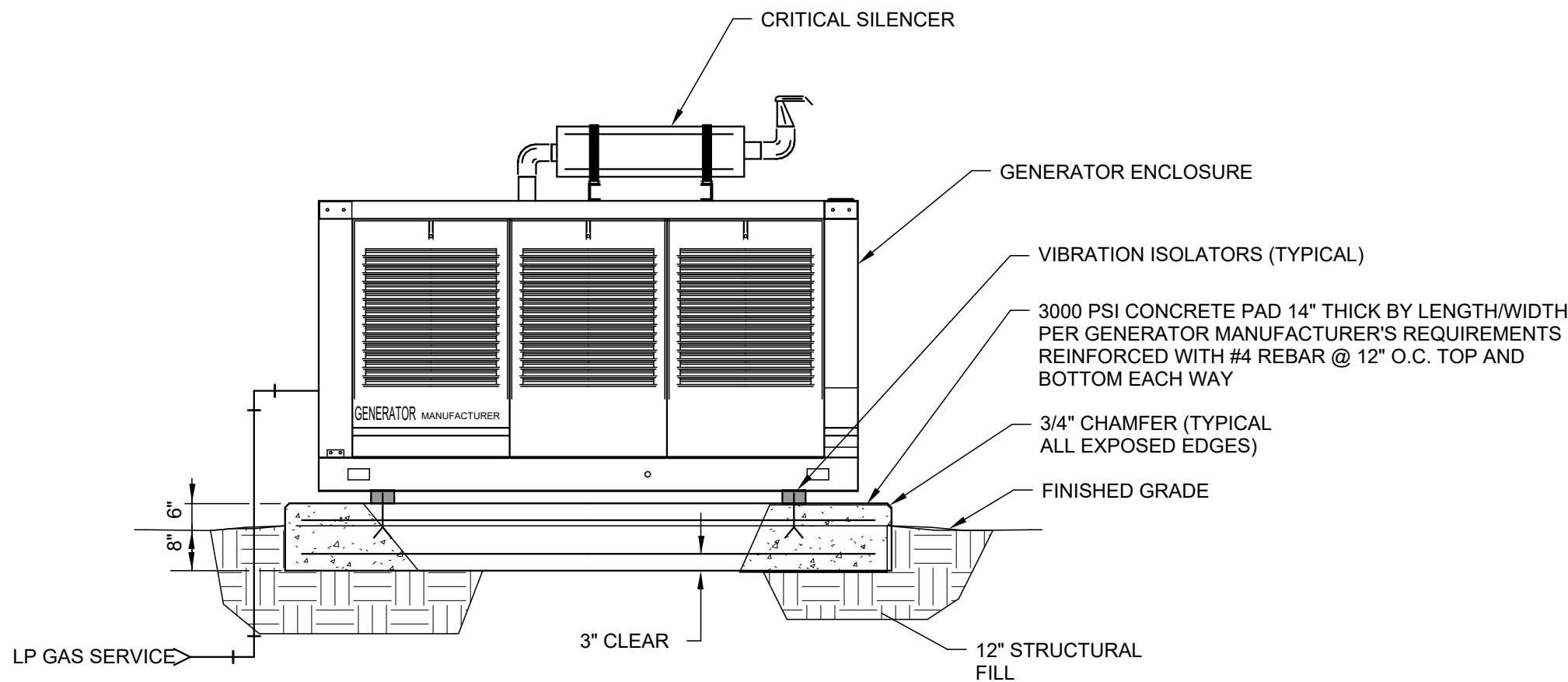
7/16/2026



4 HANDHOLE DETAIL
SCALE: 12" = 1'-0"

HANDHOLE GENERAL NOTES:

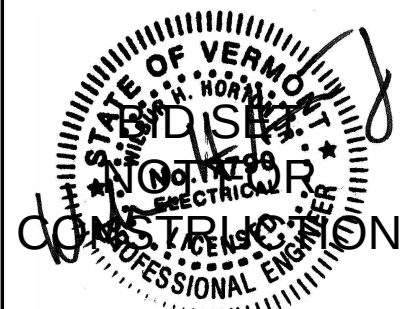
1. INSTALL 36"D X 36"H ROUND OR 36" SQUARE X 36"H HANDHOLE, AND CAST IRON FRAME.
2. INSTALL CONDUIT, WITH ALL JOINTS CEMENTED, THROUGH KNOCKOUT TO 4" INSIDE HANDHOLE. TERMINATE CONDUIT RUN WITH END BELL. CONDUIT DESTINATION TO BE PERMANENTLY MARKED ON CONDUIT END. CONDUIT SIZE AS SHOWN ON DRAWING SCH. 40 PVC. LIMIT (4) 4" DIAMETER CONDUITS PER KNOCKOUT.
3. GAPS AROUND CONDUIT AT KNOCKOUT OPENINGS SHALL BE SEALED WITH CEMENT MORTAR TO PREVENT BACKFILL FROM ENTERING HANDHOLE.
4. INSTALL 1/4" DIAMETER NYLON PULL LINE IN EACH DUCT, INCLUDING 10' SLACK, AND SECURE TO CONDUIT PLUG. PLUGGED CONDUIT TO BE LEFT ACCESSIBLE.
5. INSTALL ON VIRGIN OR WELL TAMPED GRAVEL. WHERE POOR SOIL EXISTS, REMOVE TO 6" BELOW BOTTOM OF HANDHOLE AND BACKFILL WITH COMPACTED CLEAN GRAVEL, FREE OF FOREIGN MATTER AND DEBRIS, AND EXTENDING 12" PST EDGE OF STRUCTURE. REMAINING BACKFILL SHALL NOT CONTAIN ASHES, FROZEN MATERIAL DEBRIS OR STONES LAGER THAN 2" IN MAXIMUM DIA.
6. WHEN INSTALLING CABLE , UTILIZE PULLING EYELETS PROVIDE IN HANDHOLE.
7. THE GRAY CAST IRON SHALL CONFORM TO ASTM A48-1983 CLASS 30-B.
8. DESIGN LOADING SHALL BE IN ACCORDANCE WITH AASHTO HS20-1983.
9. (5) 1-1/4" DIA. HOLES, 5" FROM EDGE AND 72 DEGREE APART.
10. "ELECTRIC" LETTERS 2-1/2" HIGH.
11. FOUNDRY NAME OR INSIGNIA AND DATE (YEAR MANUFACTURED) SHALL BE CAST IN UNDERSIDE OF COVER.
12. RIBS TO BE TAPERED FROM 1/2" TO 3/4".
13. LIFTING NOTCH ADJACENT TO EACH PICK HOLE.
14. THE 30" COVER FITS INTO THE 30" FRAME. WEIGHT OF 30" COVER APPROXIMATELY 265 POUNDS.



NOTES:

1. PROVIDE 6"x6" WINDOW IN SLAB AND SLIP JOINT AT CONDUIT TERMINATIONS.
2. ALL WORK SHALL BE DONE PER PLUMBING AND GAS CODE AND LOCAL GAS COMPANY REQUIREMENTS. EXACT GAS PIPE SIZE AND PRESSURE AS PER GENERATOR MANUFACTURER'S REQUIREMENTS.

1 GENERATOR MOUNTING DETAIL
SCALE: 12" = 1'-0"



REVISIONS	BY	REVISION DESCRIPTION
	DATE	NUMBER

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
ELECTRICAL SITE
DETAILS

D&K PROJECT # 25-1756	PROJ. ENG. WHH
DRAWN BY WHH	CHECKED BY EJD

DATE
JULY 2026

SHEET NUMBER

ES5.2

SHEET: 80 of 85

COORDINATION & INTEGRATION:

1. THE CONTROL SYSTEM SUPPLIER SHALL HAVE PRIMARY RESPONSIBILITY FOR SOFTWARE AND PROGRAMMING OF SCADA.
2. THE VARIOUS EQUIPMENT VENDORS SHALL HAVE PRIMARY RESPONSIBILITY FOR THEIR EQUIPMENT HARDWARE SOFTWARE AND PROGRAMMING.
3. THE EQUIPMENT SUPPLIERS SHALL COORDINATE THEIR RESPECTIVE INPUT/OUTPUT (I/O) LISTS WITH THE CONTROL SYSTEM INTEGRATOR.
4. RESOLUTION OF VARIOUS CONTROL SYSTEM INTERFACE ISSUES WILL BE MADE IN CONJUNCTION WITH THE SHOP DRAWING REVIEW PHASES OF THE PROJECT.

CONTROL VOLTAGES:

1. THE PREFERRED CONTROL VOLTAGES ARE 24 VAC AND 24 VDC FOR SAFETY CONSIDERATIONS.
2. 120 VAC MAY BE USED FOR CONTROLS.
3. 24 VDC SHOULD BE USED INSIDE CABINETS AND WHERE THE POSSIBILITY OF INDUCTIVE COUPLING WILL PRODUCE ERRONEOUS SIGNALS.
4. CONTROL CIRCUITS SHALL BE PROPERLY FUSED.
5. 4-20 ma EXTERNAL LOOPS SHOULD BE FUSED WITH A SERIES 217, 0.032A FAST ACTING FUSE.

INSTRUMENTATION GROUNDING:

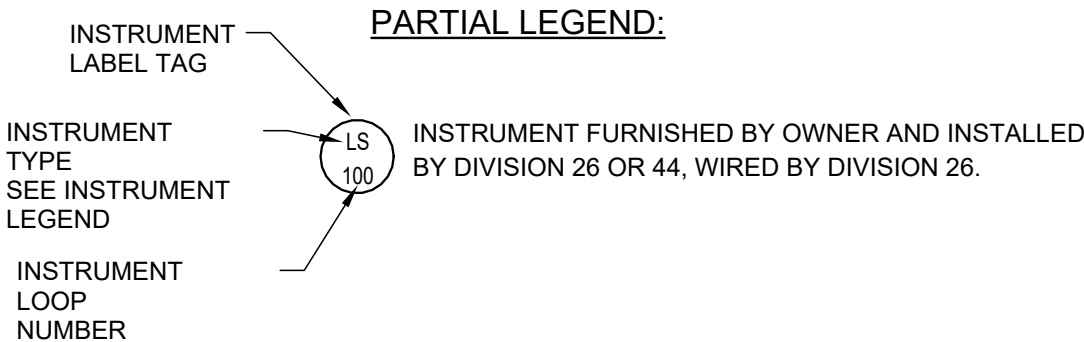
1. SHIELDED CONDUCTORS SHALL HAVE THEIR SHIELD WIRE CONNECTED TO GROUND AT ONE END ONLY. GROUND SHIELDS AT CONTROL PANEL, NOT AT FIELD INSTRUMENTS.
2. CONTROL CABINETS SHALL BE PROVIDED WITH AN ISOLATED INSTRUMENT GROUND BUS FOR INSTRUMENTATION GROUND WIRE. THIS BUS SHALL BE TIED TO FACILITY GROUND AT A SINGLE POINT (BONDED).
3. EQUIPMENT & INSTRUMENT GROUNDS SHALL NOT BE INTERMIXED.
4. WHERE ANALOG SIGNALS ARE LACED FROM ONE DEVICE TO ANOTHER, THE SHIELD/DRAIN WIRE SHALL BE CONTINUOUS AND ONLY TIED TO GROUND AT ONE POINT.

PROCESS PARAMETER SCALING & CALIBRATION

1. ALL INSTRUMENTS SHALL BE PROPERLY CALIBRATED BY THE INSTALLING CONTRACTOR. A CALIBRATION STICKER SHALL BE ATTACHED INDICATING CALIBRATION DATE AND THE INITIALS OF THE INDIVIDUAL WHO PERFORMED THE CALIBRATION.
2. ALL PROCESS ANALOG LOOPS SHALL BE PROPERLY CALIBRATED AND SCALED TO THE EXTENT POSSIBLE AND PRACTICAL. ANALOG INSTRUMENTS SHALL BE CALIBRATED TO READ THE ENTIRE OPERATING RANGE FOR THE PARAMETER BEING MONITORED. ADEQUATE RESOLUTION SHALL BE PROVIDED SO THAT AUTOMATIC CONTROL PROCESSES SHALL RESPOND PROPERLY.

INSTRUMENTATION PIPING & MOUNTING

1. DIRECT READING INSTRUMENTS SHALL BE MOUNTED AT EYE HEIGHT, ~5 FT ABOVE FINISHED FLOOR, UNLESS PROCESS RESTRAINTS NECESSITATE OTHER MOUNTING ARRANGEMENTS, OR UNLESS OTHERWISE NOTED.
2. INSTRUMENTS SHALL BE SECURELY ANCHORED TO THE STRUCTURES OR MONITORED EQUIPMENT. PROPER MOUNTING HARDWARE SHALL BE UTILIZED. (BOLTS, NUTS, UNISTRUT, ETC.)
3. ALL INSTRUMENT TUBING SHALL BE CONSTRUCTED OF MATERIAL COMPATIBLE WITH MONITORED PROCESS FLUID UNLESS OTHERWISE NOTED. TUBING INSTALLATION SHALL PROVIDE ADEQUATE PROTECTION AND SUPPORT WHERE APPROPRIATE. TUBING AND PIPING ARRANGEMENTS SHALL BE PROPERLY SLOPED AND INSTALLED FOR THE FLUID BEING MONITORED. REFER TO INSTRUMENT SOCIETY OF AMERICA (ISA) GUIDELINES AND RECOMMENDATIONS.
4. ALL INSTRUMENT TAPS INTO PROCESS PIPING SHALL BE PROVIDED WITH AN ISOLATION VALVE. (NOMINAL 1/2" OR 3/4" BALL VALVE). ISOLATION VALVES SHALL BE CONSTRUCTED OF MATERIAL COMPATIBLE WITH THE MONITORED PROCESS FLUID.
5. ALL INSTRUMENTS WHICH REQUIRE PERIODIC CALIBRATION SHALL BE PROVIDED WITH MEANS TO CALIBRATE IN PLACE (E.G. CALIBRATION BLOCK AND/OR CALIBRATION VALVING.)
6. VENTS AND DRAINS SHALL BE PROVIDED ON PROCESS EQUIPMENT AND INSTRUMENTATION AS REQUIRED TO SUPPORT ROUTINE AND MAINTENANCE OPERATIONS.



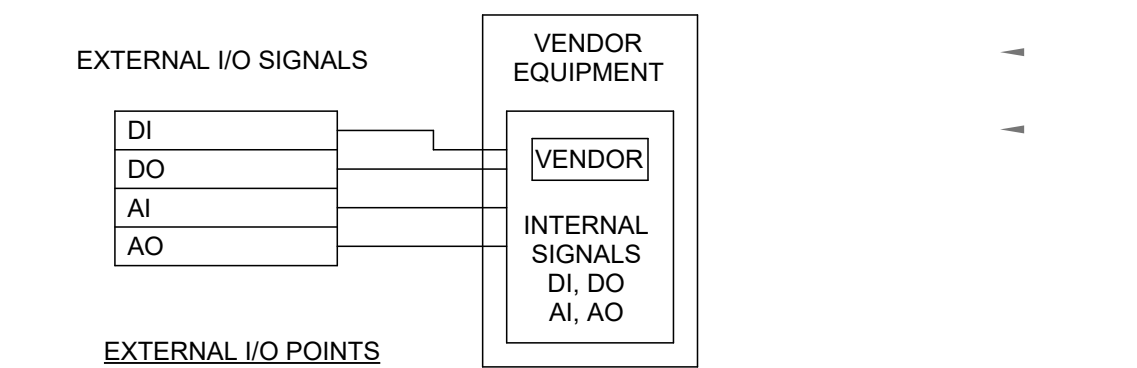
INPUT/OUTPUT SIGNALS:

1. THE VARIOUS EQUIPMENT AND CONTROL SYSTEM SUPPLIERS SHALL COORDINATE THEIR RESPECTIVE INPUT/OUTPUT SIGNALS BETWEEN THEMSELVES, THE SYSTEM INTEGRATOR AND THE ENGINEER.
2. WHERE ONE CONTROL SYSTEM REQUIRES A SIGNAL (DIGITAL INPUT OR DIGITAL OUTPUT) FROM AN EXTERNAL DEVICE OR OTHER CONTROL SYSTEM, IT SHALL BE PROVIDED BY INDEPENDENT DRY CONTACT.
3. WHERE CONTROL VOLTAGES OR SIGNALS ARE NOT COMPATIBLE, INTERPOSING RELAYS SHALL BE PROVIDED. PROVIDE ANALOG SIGNAL BOOSTERS OR ISOLATORS WHERE REQUIRED FOR PROPER EQUIPMENT OPERATION.

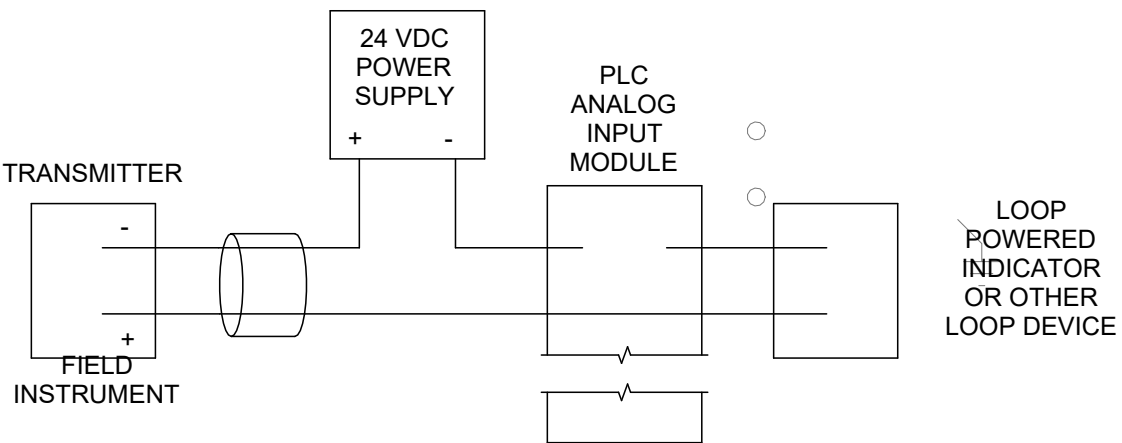
ALARMS:

1. THE VARIOUS EQUIPMENT AND CONTROL SYSTEM SUPPLIERS SHALL COORDINATE THEIR RESPECTIVE ALARM LISTS AND POINTS SO THAT AN INTEGRATED ALARM LIST IS PREPARED FOR THE PROJECT.
2. THE SYSTEM INTEGRATOR SHALL PREPARE AND PROVIDE A SUMMARY OF ALL PLANT ALARMS.

VENDOR CONTROL PANELS - INTERNAL & EXTERNAL I/O



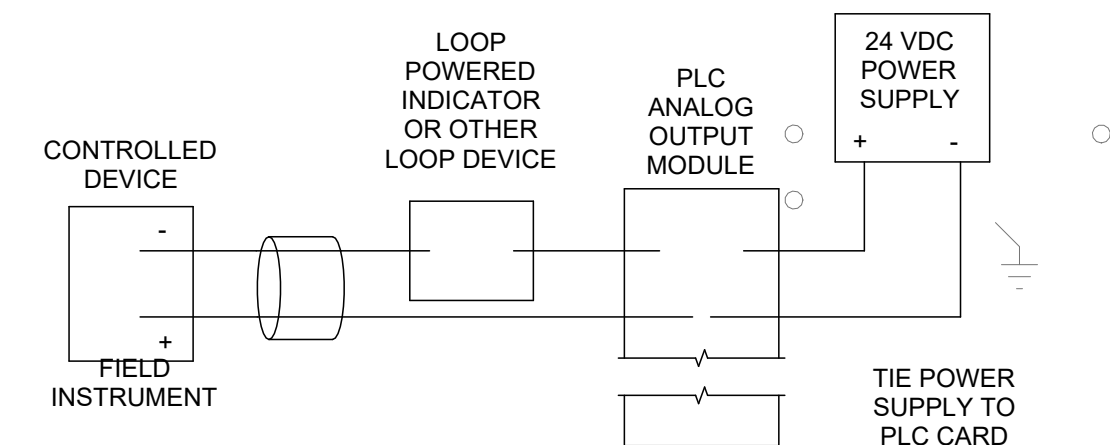
THESE DRAWINGS DEPICT THE INSTRUMENTATION SIGNALS THAT ARE PROVIDED TO OR FROM A VENDOR'S PROCESS (EXTERNAL I/O). TO THIS END, THE ENGINEER HAS NOT DEFINED ALL OF THE VENDOR RELATED INTERNAL INPUT/OUTPUT SIGNALS. THESE WILL BE DELINEATED IN THE VENDOR'S SHOP DRAWINGS. THE ENGINEER HAS DEFINED EXTERNAL SIGNALS THAT INTERFACE WITH THE VENDOR'S CONTROL SYSTEM TO THE EXTENT THAT THEY ARE KNOWN. ADDITIONAL EXTERNAL I/O MAY BE DEFINED IN CONJUNCTION WITH THE SHOP DRAWING PHASE OF THE PROJECT.



TYPICAL 4-20 ma ANALOG INPUT LOOP

NOT TO SCALE

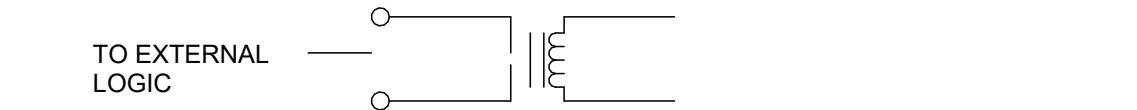
NOTE: LOOP FAN OUT CONSIDERATIONS MUST BE EVALUATED. ACTUAL WIRING CONNECTION AT PLC MAY VARY DEPENDING ON DC SUPPLY AND PLC AI CARD WIRING ARRANGEMENT. OTHER LOOP WIRING ARRANGEMENT MAY BE REQUIRED (E.G. 3 WIRE, 4 WIRE, ETC.) DEPENDING ON INSTRUMENT TYPE. CONSULT MANUFACTURER'S LITERATURE.



TYPICAL 4-20 ma ANALOG OUTPUT LOOP

NOT TO SCALE

NOTE: LOOP FAN OUT CONSIDERATIONS MUST BE EVALUATED. ACTUAL WIRING CONNECTION AT PLC MAY VARY DEPENDING ON DC SUPPLY AND PLC AO CARD WIRING ARRANGEMENT. OTHER LOOP WIRING ARRANGEMENT MAY BE REQUIRED (E.G. 3 WIRE, 4 WIRE, ETC.) DEPENDING ON INSTRUMENT TYPE. CONSULT MANUFACTURER'S LITERATURE.



DRY CONTACT ARRANGEMENT

NOT TO SCALE

INSTRUMENTATION NOTES:

1. PROVIDE NECESSARY WIRING AND CONDUIT BETWEEN PLC PANELS, REMOTE INPUT/OUTPUT MODULES AND FIELD INSTRUMENTS AS REQUIRED.
2. MINIMUM SIZE CONDUIT TO BE 3/4".
3. MINIMUM SIZE CONTROL WIRING TO BE #14 AWG.
4. SHIELDED CABLE TO BE 2/C#18 FOR LOOP POWERED DEVICES. 4/C#18 FOR 4-WIRE DEVICES.
5. WIRING MAY BE COMBINED IN SINGLE RACEWAYS FOR EACH OF THE FOLLOWING CATEGORIES. DO NOT MIX CATEGORIES IN A SINGLE CONDUIT
 - A. 120V POWER WIRING
 - B. CONTROL AND DISCRETE OUTPUT SIGNALS (24VAC)
 - C. DISCRETE INPUT SIGNALS (24VDC)
 - D. ANALOG SIGNAL WIRING
6. LOCATION OF VALVES, INSTRUMENTS, ETC. ARE SHOWN IN APPROXIMATE LOCATIONS. REFER TO PROCESS DRAWINGS FOR FURTHER DETAIL. FINAL LOCATIONS TO BE DETERMINED IN FIELD BY ENGINEER AND/OR VENDOR WHERE APPROPRIATE.
7. REFER TO POWER PLANS FOR INSTRUMENTATION POWER REQUIREMENTS.
8. IT IS THE INTENT OF DRAWINGS AND SPECIFICATIONS TO OBTAIN A COMPLETE AND SATISFACTORY INSTALLATION. AN ATTEMPT HAS BEEN MADE TO SEPARATE AND DEFINE THE WORK OF THE CONTRACTOR. DRAWINGS ARE DIAGRAMMATIC, BUT SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION OF THE FACILITY AND THE WORK OF OTHER TRADES WILL PERMIT. THE DRAWINGS OF NECESSITY UTILIZE SYMBOLS AND SCHEMATIC DIAGRAMS TO INDICATE VARIOUS ITEMS OF WORK. THEREFORE, NO INTERPRETATION WILL BE MADE FROM THE LIMITATION OF SYMBOLS AND DIAGRAMS THAT ANY ELEMENTS NECESSARY FOR A COMPLETE INSTALLATION ARE EXCLUDED. THE ENGINEER SHOULD BE NOTIFIED OF ANY DISCREPANCIES, OMISSIONS, CONFLICTS OR INTERFERENCES WHICH OCCUR BETWEEN VARIOUS DRAWINGS AND SPECIFICATIONS. IF SUCH NOTIFICATION IS NOT RECEIVED, THE INSTALLING CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THEIR INTERPRETATIONS.
9. DURING ROUGH IN AND FINISHED STAGES OF CONSTRUCTION, THE INSTRUMENTATION CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND KEEP CLEAN ALL ELECTRICAL EQUIPMENT, PANELS, FIXTURES AND DEVICES AS WELL AS ALL EXISTING EQUIPMENT AND RELATED WORK AREAS.
10. THE CONTRACTOR SHALL PROVIDE ALL INFORMATION ABOUT PROPOSED EQUIPMENT TO THE ENGINEER/OWNER FOR REVIEW PURPOSES. THE CONTRACTOR SHALL PROVIDE ALL INSTALLATION DETAILS AND SUPPORT COMPONENTS SO THAT THESE MAY BE BUILT INTO THE CONSTRUCTION IN A TIMELY MANNER.
11. THE GENERAL AND SPECIFIC NOTES SHOWN ON THE ELECTRICAL DRAWINGS ARE INCORPORATED INTO THE INSTRUMENTATION NOTES BY REFERENCE.
12. CONTROL CIRCUITS SHALL BE ARRANGED TO USE SUPERVISED CONTACTS WHEREVER POSSIBLE. THIS MEANS THAT NORMALLY CLOSED CONTACTS WILL BE USED AND THE CONTACTS WILL OPEN WHEN A PROCESS TRANSITION OCCURS (E.G. HIGH LEVEL, LOW LEVEL, HIGH PRESSURE, ETC.)
13. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL DETAILS FOR CONDUIT, DEVICE LOCATIONS, AND POWER CIRCUITS.

INSTRUMENT LABEL LEGEND:

- | | |
|-----|---|
| AE | ANALYTICAL ELEMENT |
| AV | ACTUATED VALVE |
| AIT | ANALYTICAL INDICATOR TRANSMITTER |
| AFS | AIR FLOW SWITCH |
| CV | CONTROL VALVE |
| ES | EMERGENCY STOP |
| FCV | FLOW CONTROL VALVE |
| FE | FLOW ELEMENT |
| FIT | FLOW INDICATOR TRANSMITTER |
| FS | FLOW SWITCH |
| FS | FLOAT SWITCH |
| FT | FLOW TRANSMITTER |
| HIT | HUMIDITY INDICATOR TRANSMITTER |
| IA | INTRUSION ALARM |
| IR | CURRENT MONITOR RELAY |
| IS | CURRENT SENSOR |
| KQI | TIME TOTALIZER INDICATOR (ELAPSED TIME METER) |
| LE | LEVEL ELEMENT |
| LIC | LEVEL INDICATOR TRANSMITTER |
| LIT | LEVEL INDICATOR CONTROLLER |
| LS | LEVEL SWITCH |
| LT | LEVEL TRANSMITTER |
| MV | MOTORIZED VALVE |
| PB | PUSH-BUTTON |
| PIT | PRESSURE INDICATOR TRANSMITTER |
| PS | PRESSURE SWITCH |
| PT | PRESSURE TRANSMITTER |
| R/O | REMOTE INPUT/OUTPUT MODULE |
| SS | SENSOR SWITCH |
| SV | SOLENOID VALVE |
| TE | TEMPERATURE ELEMENT |
| TIT | TEMPERATURE INDICATOR TRANSMITTER |
| TS | TEMPERATURE SWITCH |
| TT | TEMPERATURE TRANSMITTER |
| VS | VIBRATION SWITCH |
| ZS | PROXIMITY SWITCH |
| ZXL | PROXIMITY SWITCH LOW |
| ZXH | PROXIMITY SWITCH HIGH |



REVISIONS	BY	REVISION DESCRIPTION	DATE	NUMBER

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
INSTRUMENTATION
LEGEND

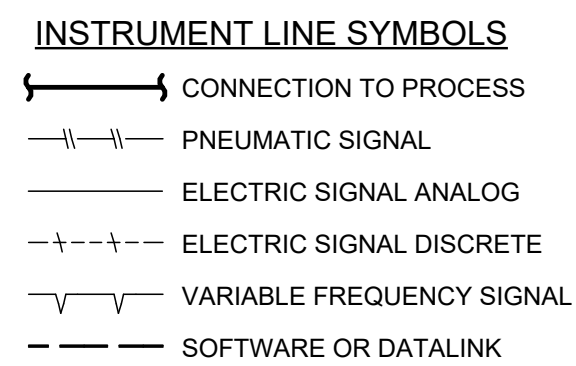
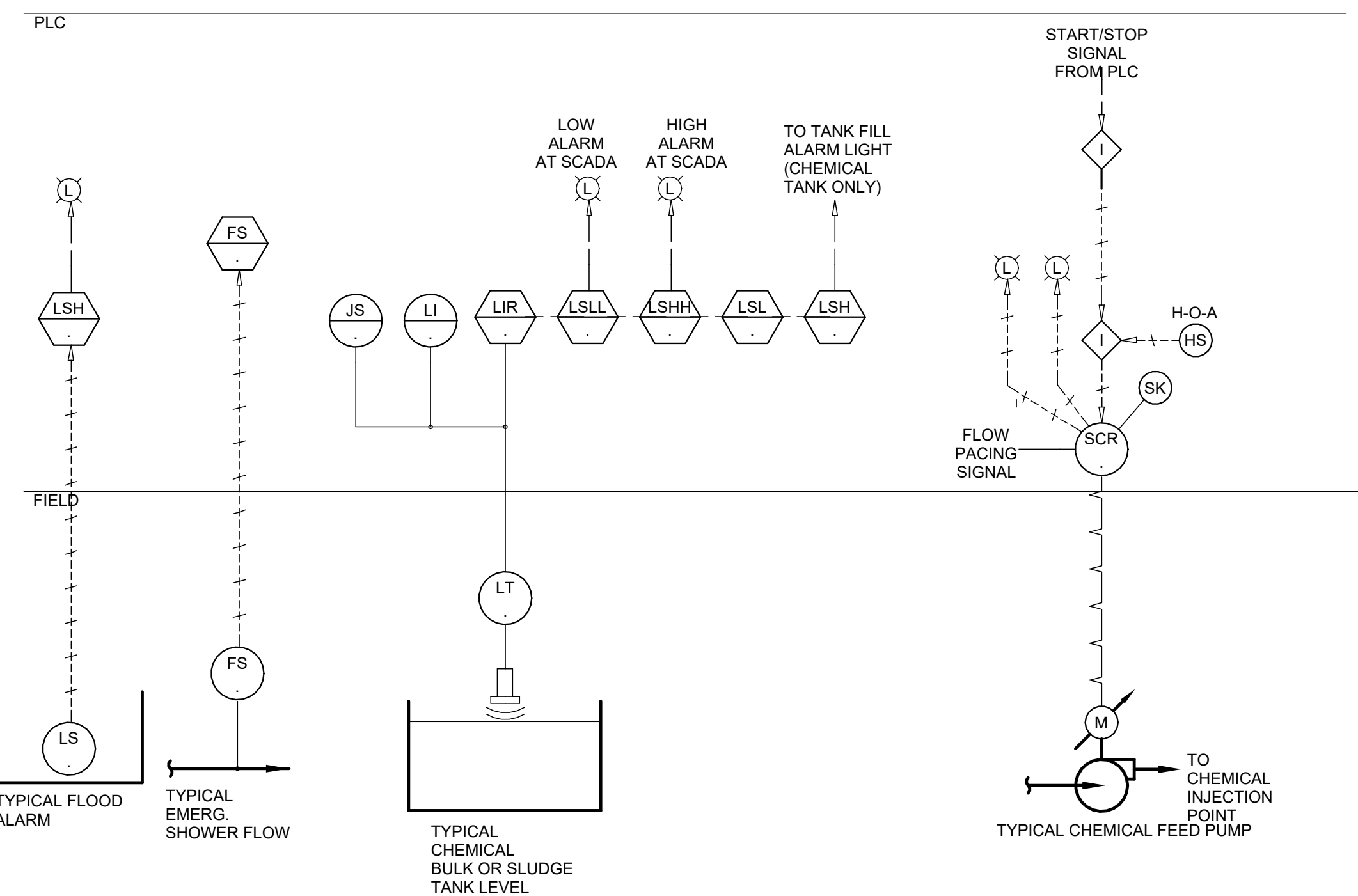
D&K PROJECT #	PROJ. ENG.
25-1756	WHH
DRAWN BY	CHECKED BY
WHH	EJD

DATE
JULY 2026

SHEET NUMBER

10.1

SHEET: 81 of 85



1. PROVIDE SURGE PROTECTORS, MCG MODEL DEP ON ALL SIGNAL WIRING ENTERING OR LEAVING THE BUILDING.
2. SBR AND UV SYSTEMS CONTROLS ARE PER MANUFACTURER AND DEFINED IN SPECIFICATIONS

- | | |
|---|--|
|  | EXISTING |
|  | LOCALLY MOUNTED |
|  | PANEL MOUNTED |
|  | COMPUTER/PLC FUNCTION
ANALOG OR DIGITAL INPUT |
|  | PUMP |
|  | BLOWER |
|  | MOTOR VARIABLE SPEED |
|  | MOTORIZED VALVE |
|  | INTERLOCK LOGIC |
|  | METER |
|  | MOTOR |
| AS: | AIR SUPPLY |
| ES: | ELECTRIC SUPPLY |
|  | HAND SWITCH |
|  | SPEED CONTROL |

BID SET
NOT FOR CONSTRUCTION

SBR INSTRUMENTATION WIRING SCHEDULE SBR CONTROL PANEL (PLC#2)					
TAG NO.	INSTRUMENT	DESCRIPTION	TO DEVICE	WIRE	COMMENTS
101A	MV	MOTORIZED VALVE SBR#1	SBR CONTROL PANEL	6#14	INFLUENT CONTROL VALVE TO SBR VALVE OPEN/CLOSE & POSITION
101B	MV	MOTORIZED VALVE SBR#1	SBR CONTROL PANEL	6#14	INFLUENT CONTROL VALVE TO SBR VALVE OPEN/CLOSE & POSITION
102A	FIT	FLOW METER SBR#1	SBR CONTROL PANEL	2/CH18 SH. PR.	FLOW TO SBR BASIN
102B	FIT	FLOW METER SBR#1	SBR CONTROL PANEL	2/CH18 SH. PR.	FLOW TO SBR BASIN
105A	M	SBR #1 MIXER	SBR CONTROL PANEL	PUMP CABLE	MIXER POWER CABLE
105B	M	SBR #2 MIXER	SBR CONTROL PANEL	PUMP CABLE	MIXER POWER CABLE
106A	M	SBR#1 DECANter DRIVE	SBR CONTROL PANEL	POWER CABLE	DECANter POWEER CABLE
106B	M	SBR#2 DECANter DRIVE	SBR CONTROL PANEL	POWER CABLE	DECANter POWER CABLE
107A	SV	AIR VALVE	SBR CONTROL PANEL	2#14	AIR VALVE OPEN/CLOSE
107B	SV	AIR VALVE	SBR CONTROL PANEL	2#14	AIR VALVE OPEN/CLOSE
108A	AIT	DO ANALYZER	SBR CONTROL PANEL	2/CH18 SH. PR.	DISSOLVED OXYGEN LEVEL SBR#1
108B	AIT	DO ANALYZER	SBR CONTROL PANEL	2/CH18 SH. PR.	DISSOLVED OXYGEN LEVEL SBR#2
109A	AIT	PH ANALYZER	SBR CONTROL PANEL	2/CH18 SH. PR.	DISSOLVED OXYGEN LEVEL SBR#1
109B	AIT	PH ANALYZER	SBR CONTROL PANEL	2/CH18 SH. PR.	DISSOLVED OXYGEN LEVEL SBR#2
110A	LT	LEVEL TRANSMITTER	SBR CONTROL PANEL	2/CH18 SH. PR.	SBR #1 LEVEL
110B	LT	LEVEL TRANSMITTER	SBR CONTROL PANEL	2/CH18 SH. PR.	SBR #2 LEVEL
111A	LSH	LEVEL SWITCH - HIGH	SBR CONTROL PANEL	2#14	SBR #1 HIGH LEVEL
111B	LSH	LEVEL SWITCH - HIGH	SBR CONTROL PANEL	2#14	SBR #2 HIGH LEVEL
112A	M	SBR #1 SLUDGE PUMP	SBR CONTROL PANEL	PUMP CABLE	PUMP POWER CABLE
112B	M	SBR #2 SLUDGE PUMP	SBR CONTROL PANEL	PUMP CABLE	PUMP POWER CABLE
113A	MV	MOTORIZED VALVE - SLUDGE VALVE	SBR CONTROL PANEL	6#14	VALVE OPEN/CLOSE & POSITION
NOTES: 1. REFER TO SBR SYSTEM DRAWINGS FOR EXACT WIRING AND CONTROL REQUIREMENTS					

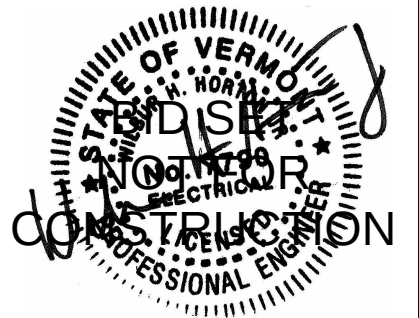
INSTRUMENTATION WIRING SCHEDULE PLC#3					
TAG NO.	INSTRUMENT	DESCRIPTION	TO DEVICE	WIRE	FUNCTION
140	UV	UV SYSTEM MODULE	PLC#3	ETHERNET CABLE	NETWORK COMMUNICATIONS
141	UV	UV SYSTEM MODULE	PLC#3	ETHERNET CABLE	NETWORK COMMUNICATIONS

INSTRUMENTATION WIRING SCHEDULE BLOWERS					
TAG NO.	INSTRUMENT	DESCRIPTION	TO DEVICE	WIRE	FUNCTION
180A	VFD	BLOWER #1	PLC#4B	4#14, 2/C*18 SH. PR.	VFD START/STOP, RUN STATUS & SPEED SIGNAL
180B	VFD	BLOWER #2	PLC#4A	4#14, 2/C*18 SH. PR.	VFD START/STOP, RUN STATUS & SPEED SIGNAL
180C	VFD	SPARE BLOWER	PLC#4C	4#14, 2/C*18 SH. PR.	VFD START/STOP, RUN STATUS & SPEED SIGNAL
181A	TT	TEMPERATURE TRANSMITTER	PLC#4B	2/CH18 SH. PR.	BLOWER HIGH TEMPERATURE
181B	TT	TEMPERATURE TRANSMITTER	PLC#4A	2/CH18 SH. PR.	BLOWER HIGH TEMPERATURE
181C	TT	TEMPERATURE TRANSMITTER	PLC#4C	2/CH18 SH. PR.	BLOWER HIGH TEMPERATURE
182A	VS	VIBRATION SWITCH	PLC#4B	2#14	BLOWER HIGH VIBRATION
182B	VS	VIBRATION SWITCH	PLC#4A	2#14	BLOWER HIGH VIBRATION
182C	VS	VIBRATION SWITCH	PLC#4C	2#14	BLOWER HIGH VIBRATION
183A	PT	PRESSURE TRANSMITTER	PLC#4B	2/CH18 SH. PR.	BLOWER HIGH PRESSURE ALARM
183B	PT	PRESSURE TRANSMITTER	PLC#4A	2/CH18 SH. PR.	BLOWER HIGH PRESSURE ALARM
183C	PT	PRESSURE TRANSMITTER	PLC#4C	2/CH18 SH. PR.	BLOWER HIGH PRESSURE ALARM

INSTRUMENTATION WIRING SCHEDULE					
TAG NO.	INSTRUMENT	DESCRIPTION	TO DEVICE	WIRE	FUNCTION
120	LT	LEVEL TRANSMITTER	PLC#1	2/CH18 SH. PR.	PAC CHEMICAL TANK LEVEL
121	M	CHEMICAL PUMP	PLC#1	2/CH18 SH. PR. & 2#14	PAC PUMP #1 SPEED SIGNAL & START/STOP
122	M	CHEMICAL PUMP	PLC#1	2/CH18 SH. PR. & 2#14	PAC PUMP #2 SPEED SIGNAL & START/STOP
123	LT	LEVEL TRANSMITTER	PLC#1	2/CH18 SH. PR.	SODA ASH CHEMICAL TANK LEVEL
124	M	CHEMICAL PUMP	PLC#1	2/CH18 SH. PR. & 2#14	SODA ASH CHEMICAL PUMP SPEED & START/STOP
125	MX	MIXER	PLC#1	2#14	SODA ASH MIXER START/STOP
126	LT	LEVEL TRANSMITTER	PLC#1	2/CH18 SH. PR.	SODIUM PERMANGANATE TANK LEVEL
127	M	CHEMICAL PUMP	PLC#1	2/CH18 SH. PR. & 2#14	SODIUM PERMANGANATE PUMP SPEED & START/STOP
128	MX	MIXER	PLC#1	2#14	MIXER START/STOP
130	SV	SOLENOID VALVE	PLC#1	2#14	PAC VALVE #1 OPEN/CLOSE
131	SV	SOLENOID VALVE	PLC#1	2#14	PAC VALVE #2 OPEN/CLOSE
132	SV	SOLENOID VALVE	PLC#1	2#14	SODA ASH VALVE #1 OPEN/CLOSE
133	SV	SOLENOID VALVE	PLC#1	2#14	SODA ASH VALVE #2 OPEN/CLOSE
134	SV	SOLENOID VALVE	PLC#1	2#14	SODIUM PERMANGANATE VALVE #1 OPEN/CLOSE
135	SV	SOLENOID VALVE	PLC#1	2#14	SODIUM PERMANGANATE VALVE #2 OPEN/CLOSE
142	MV	MOTORIZED VALVE - EFFLUENT VALVE	PLC#1	6#14	EFFLUENT VALVE OPEN/CLOSE AND POSITION
143	MV	MOTORIZED VALVE - EFFLUENT VALVE	PLC#1	6#14	EFFLUENT VALVE OPEN/CLOSE AND POSITION
144	MV	MOTORIZED VALVE - EFFLUENT VALVE	PLC#1	6#14	EFFLUENT VALVE OPEN/CLOSE AND POSITION
150	FIT	FLOW METER - FLOW TO LEACH FIELD	PLC#1	2/CH18 SH. PR.	EFFLUENT FLOW SIGNAL (FLOW TO LEACH FIELD)
200	MV	MOTORIZED VALVE#9	PLC#1	2#14	EFFLUENT VALVE OPEN/CLOSE
200A	ZS	LIMIT SWITCH - VALVE OPEN	PLC#1	2#14	EFFLUENT VALVE OPEN POSITION
200B	ZS	LIMIT SWITCH - VALVE CLOSED	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
201	MV	MOTORIZED VALVE#11	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
201A	ZS	LIMIT SWITCH - VALVE OPEN	PLC#1	2#14	EFFLUENT VALVE OPEN POSITION
201B	ZS	LIMIT SWITCH - VALVE CLOSED	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
202	MV	MOTORIZED VALVE#2	PLC#1	2#14	EFFLUENT VALVE OPEN/CLOSE
202A	ZS	LIMIT SWITCH - VALVE OPEN	PLC#1	2#14	EFFLUENT VALVE OPEN POSITION
202B	ZS	LIMIT SWITCH - VALVE CLOSED	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
203	MV	MOTORIZED VALVE#3	PLC#1	2#14	EFFLUENT VALVE OPEN/CLOSE
203A	ZS	LIMIT SWITCH - VALVE OPEN	PLC#1	2#14	EFFLUENT VALVE OPEN POSITION
203B	ZS	LIMIT SWITCH - VALVE CLOSED	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
204	MV	MOTORIZED VALVE#4	PLC#1	2#14	EFFLUENT VALVE OPEN/CLOSE
204A	ZS	LIMIT SWITCH - VALVE OPEN	PLC#1	2#14	EFFLUENT VALVE OPEN POSITION
204B	ZS	LIMIT SWITCH - VALVE CLOSED	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
205	MV	MOTORIZED VALVE#5	PLC#1	2#14	EFFLUENT VALVE OPEN/CLOSE
205A	ZS	LIMIT SWITCH - VALVE OPEN	PLC#1	2#14	EFFLUENT VALVE OPEN POSITION
205B	ZS	LIMIT SWITCH - VALVE CLOSED	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
206	MV	MOTORIZED VALVE#6	PLC#1	2#14	EFFLUENT VALVE OPEN/CLOSE
206A	ZS	LIMIT SWITCH - VALVE OPEN	PLC#1	2#14	EFFLUENT VALVE OPEN POSITION
206B	ZS	LIMIT SWITCH - VALVE CLOSED	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
207	MV	MOTORIZED VALVE#7	PLC#1	2#14	EFFLUENT VALVE OPEN/CLOSE
207A	ZS	LIMIT SWITCH - VALVE OPEN	PLC#1	2#14	EFFLUENT VALVE OPEN POSITION
207B	ZS	LIMIT SWITCH - VALVE CLOSED	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
208	MV	MOTORIZED VALVE#8	PLC#1	2#14	EFFLUENT VALVE OPEN/CLOSE
208A	ZS	LIMIT SWITCH - VALVE OPEN	PLC#1	2#14	EFFLUENT VALVE OPEN POSITION
208B	ZS	LIMIT SWITCH - VALVE CLOSED	PLC#1	2#14	EFFLUENT VALVE CLOSE POSITION
209	LSH	LEVEL SWITCH - HIGH	PLC#1	2#14	FLOOD ALARM
210	FS	FLOW SWITCH	PLC#1	2#14	EYEWASH ALARM CHEMICAL ROOM
211	FS	FLOW SWITCH	PLC#1	2#14	EYEWASH ALARM OFFICE
220	LSH	LEVEL SWITCH - HIGH (FLOOD ALARM)	PLC#1	2#14	UV ROOM FLOOD ALARM
250A	VFD	EFFLUENT PUMP #1	PLC#1	4#14, 2/C*18 SH. PR.	VFD START/STOP, RUN STATUS & SPEED SIGNAL
250B	VFD	EFFLUENT PUMP #2	PLC#1	4#14, 2/C*18 SH. PR.	VFD START/STOP, RUN STATUS & SPEED SIGNAL
250C	VFD	EFFLUENT PUMP #3	PLC#1	4#14, 2/C*18 SH. PR.	VFD START/STOP, RUN STATUS & SPEED SIGNAL
251	LT	LEVEL TRANSMITTER	PLC#1	2/CH18 SH. PR.	EFFLUENT PUMP STATION LEVEL
251	LSL	LEVEL TRANSMITTER	PLC#1	2#14	EFFLUENT PUMP STATION FLOAT SWITCH - LEVEL CONTROL
252	LS1	LEVEL SWITCH - INTERMEDIATE	PLC#1	2#14	EFFLUENT PUMP STATION FLOAT SWITCH - LEVEL CONTROL
253	LS2	LEVEL SWITCH - INTERMEDIATE	PLC#1	2#14	EFFLUENT PUMP STATION FLOAT SWITCH - LEVEL CONTROL
254	LSH	LEVEL SWITCH - HIGH	PLC#1	2#14	EFFLUENT PUMP STATION FLOAT SWITCH - LEVEL CONTROL
255	LSHH	LEVEL SWITCH - HIGH HIGH	PLC#1	2#14	EFFLUENT PUMP STATION FLOAT SWITCH - LEVEL CONTROL
260	ATS	AUTOMATIC TRANSFER SWITCH	PLC#1	4#14	PLANT ON STANDBY POWER
270	CP	SEWAGE PUMP STATION CONTROL PANEL	PLC#1	8#14	PUMP STATION FAIL ALARM & STATUS
280	VFD	SEPTAGE PPUMP STATION	PLC#1	4#14, 2/C*18 SH. PR.	VFD START/STOP, RUN STATUS & SPEED SIGNAL
281	LT	LEVEL TRANSMITTER	PLC#1	2/CH18 SH. PR.	SLUDGE TANK #1 LEVEL
282	LT	LEVEL TRANSMITTER	PLC#1	2/CH18 SH. PR.	SLUDGE TANK #2 LEVEL
283	LT	LEVEL TRANSMITTER	PLC#1	2/CH18 SH. PR.	SLUDGE TANK #3 LEVEL
284	LT	LEVEL TRANSMITTER	PLC#1	2/CH18 SH. PR.	SLUDGE TANK #4 LEVEL
285	LT	LEVEL TRANSMITTER	PLC#1	2/CH18 SH. PR.	SLUDGE PUMP STATION LEVEL
300	SAM	SAMPLER	PLC#1	2/CH18 SH. PR.	FLOW SIGNAL TO SAMPLER



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REVISIONS	BY	DATE	NUMBER	REVISION DESCRIPTION				

CLIENT NAME
TOWN OF
WAITSFIELD

PROJECT NAME
WAITSFIELD
WASTEWATER
TREATMENT
CENTER

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
INSTRUMENTATION
WIRE SCHEDULES

D&K PROJECT #	PROJ. ENG.
25-1756	WHH
DRAWN BY	CHECKED BY
WHH	EJD

DATE
JULY 2026

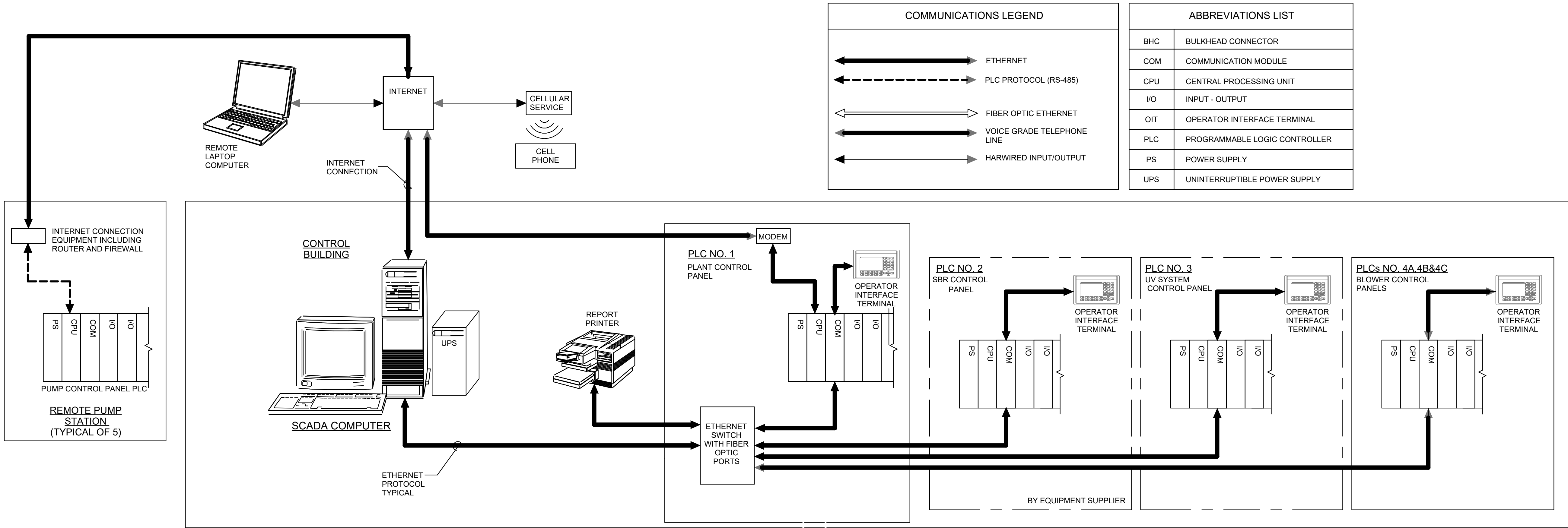
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10.3

SHEET: 83 of 85

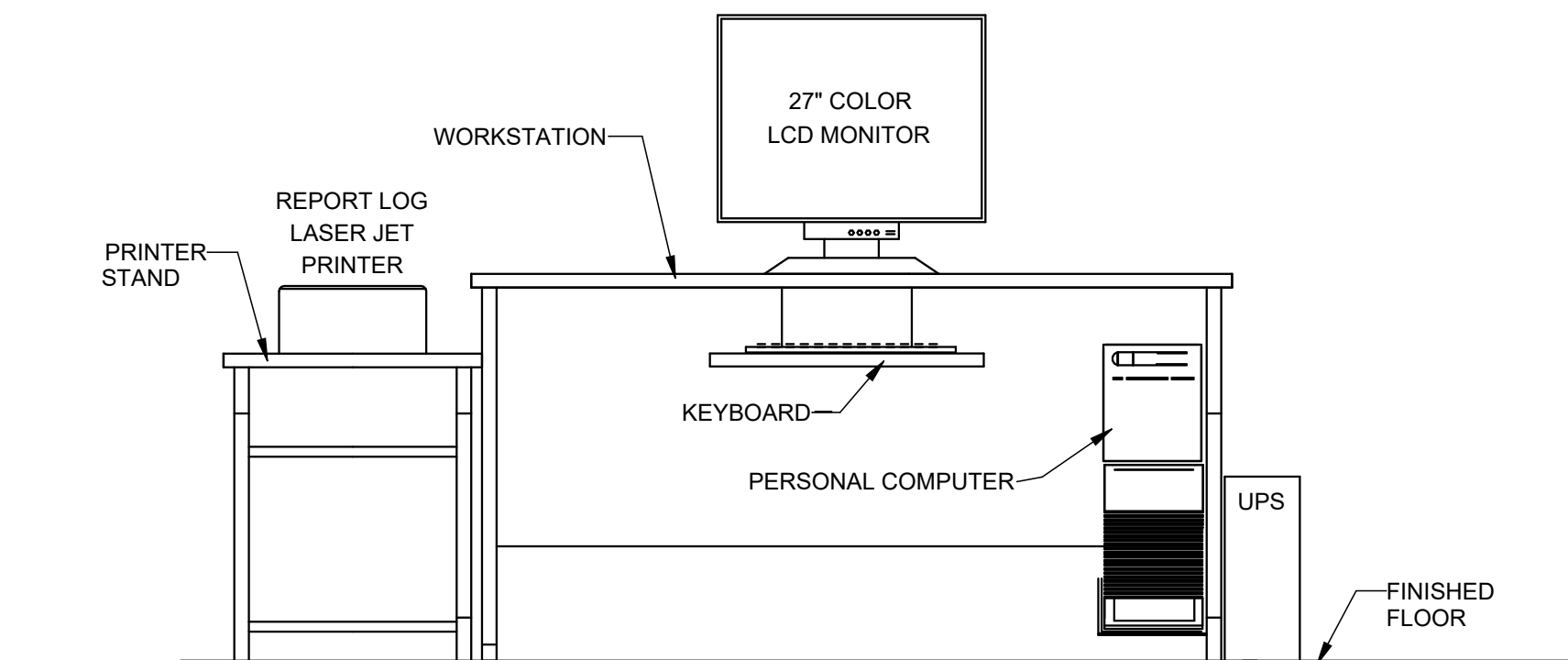
BID SET
NOT FOR CONSTRUCTION

7/16/2026



1
SCALE: NO SCALE

**SUPERVISORY CONTROL AND DATA AQUISION
SYSTEM (SCADA) BLOCK DIAGRAM**



2
SCALE: NOT TO SCALE

OPERATIONS CONSOL ELEVATION AT OFFICE

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**STATE OF VERMONT
DESIGN
CONSTRUCTION
PROFESSIONAL ENGINEER**

REVISIONS	BY	DATE	NUMBER
REVISION DESCRIPTION			

CLIENT NAME
**TOWN OF
WAITSFIELD**

PROJECT NAME
**WAITSFIELD
WASTEWATER
TREATMENT
CENTER**

PROJECT ADDRESS
4144 MAIN ST
WAITSFIELD, VT 05673

SHEET TITLE
CONTRACT NO. 1
**SCADA SYSTEM
BLOCK DIAGRAM**

D&K PROJECT #	PROJ. ENG.
25-1756	WHH
DRAWN BY	CHECKED BY
WHH	EJD

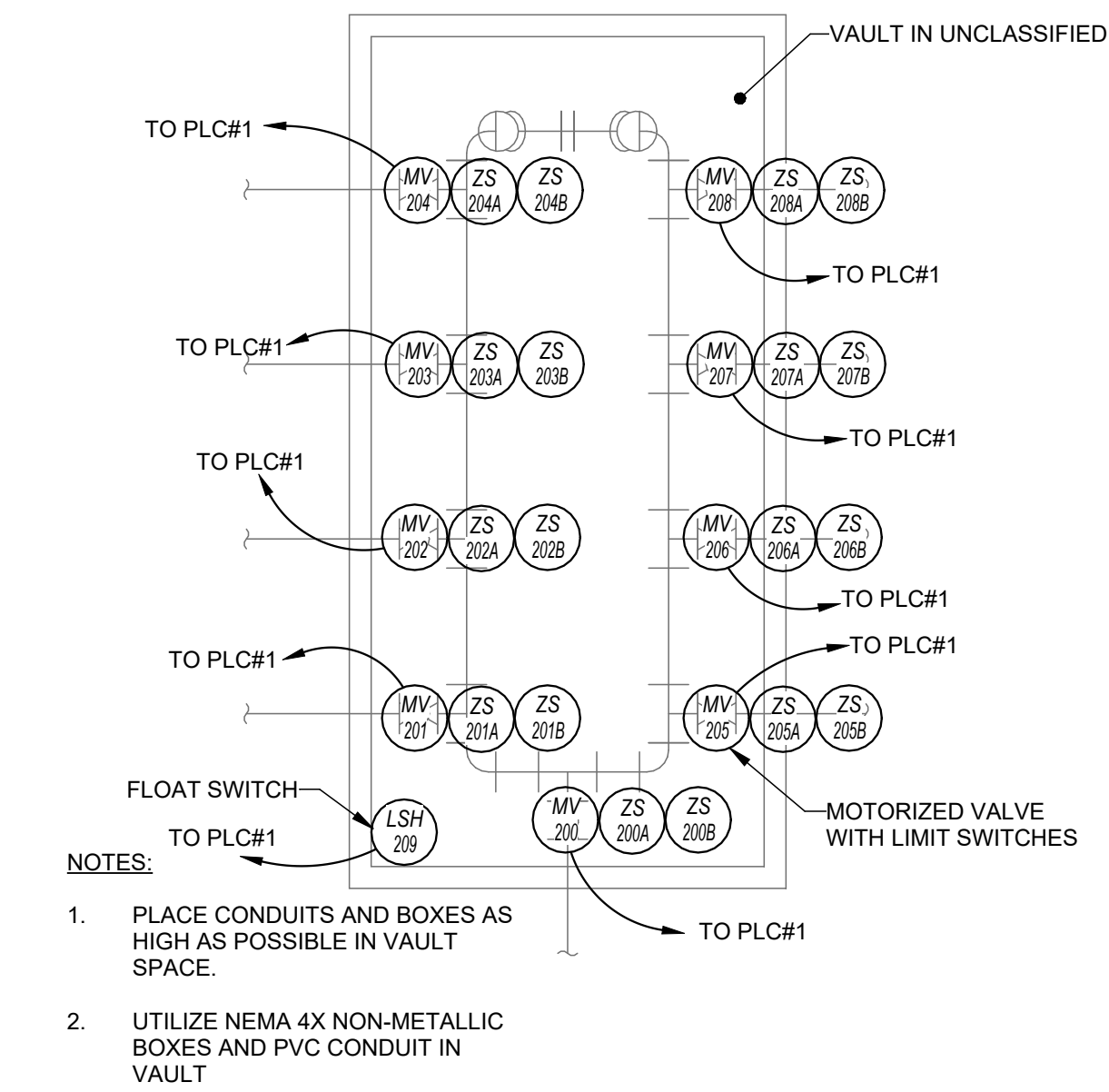
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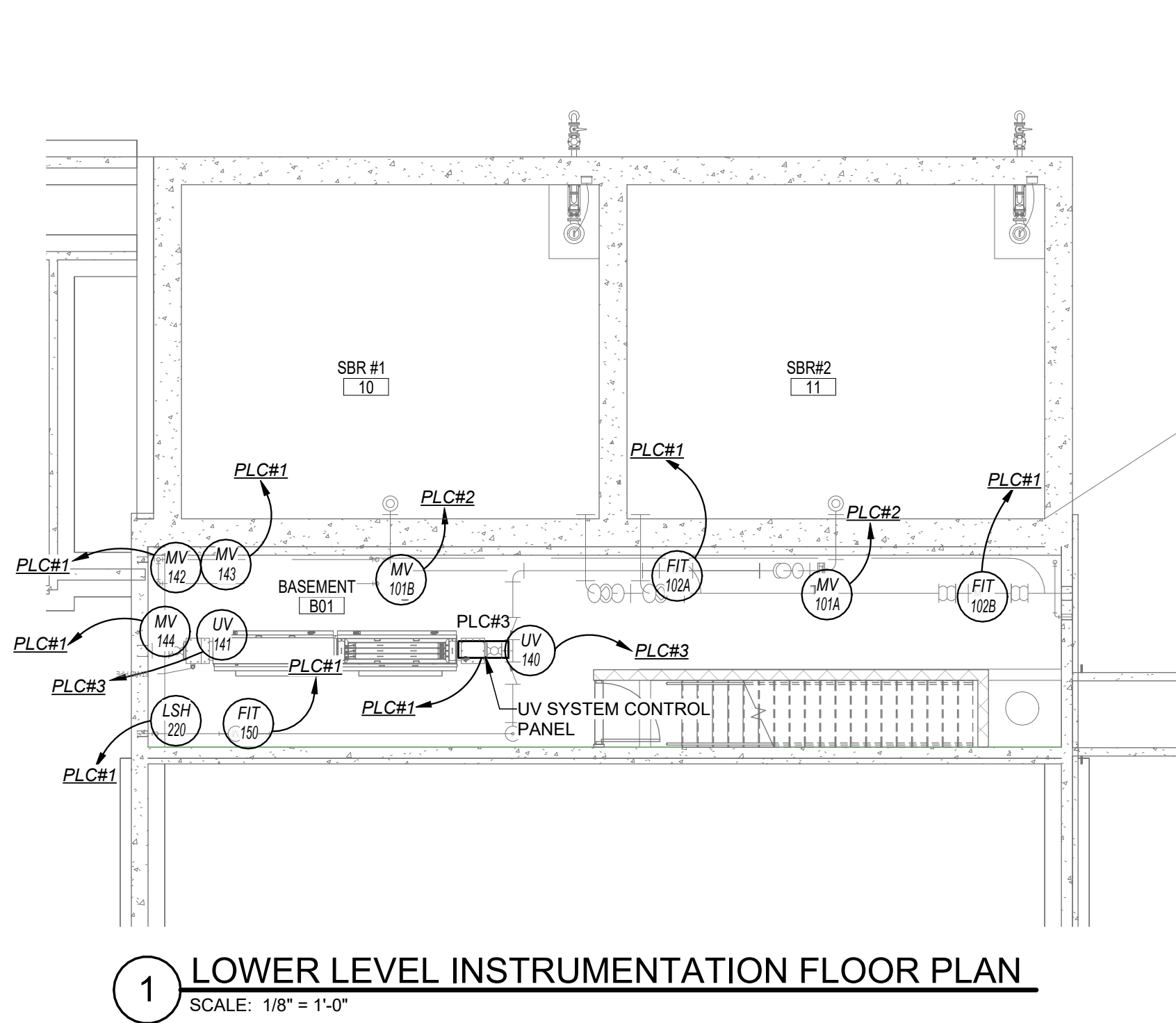
SHEET: 84 of 85

BID SET
NOT FOR CONSTRUCTION

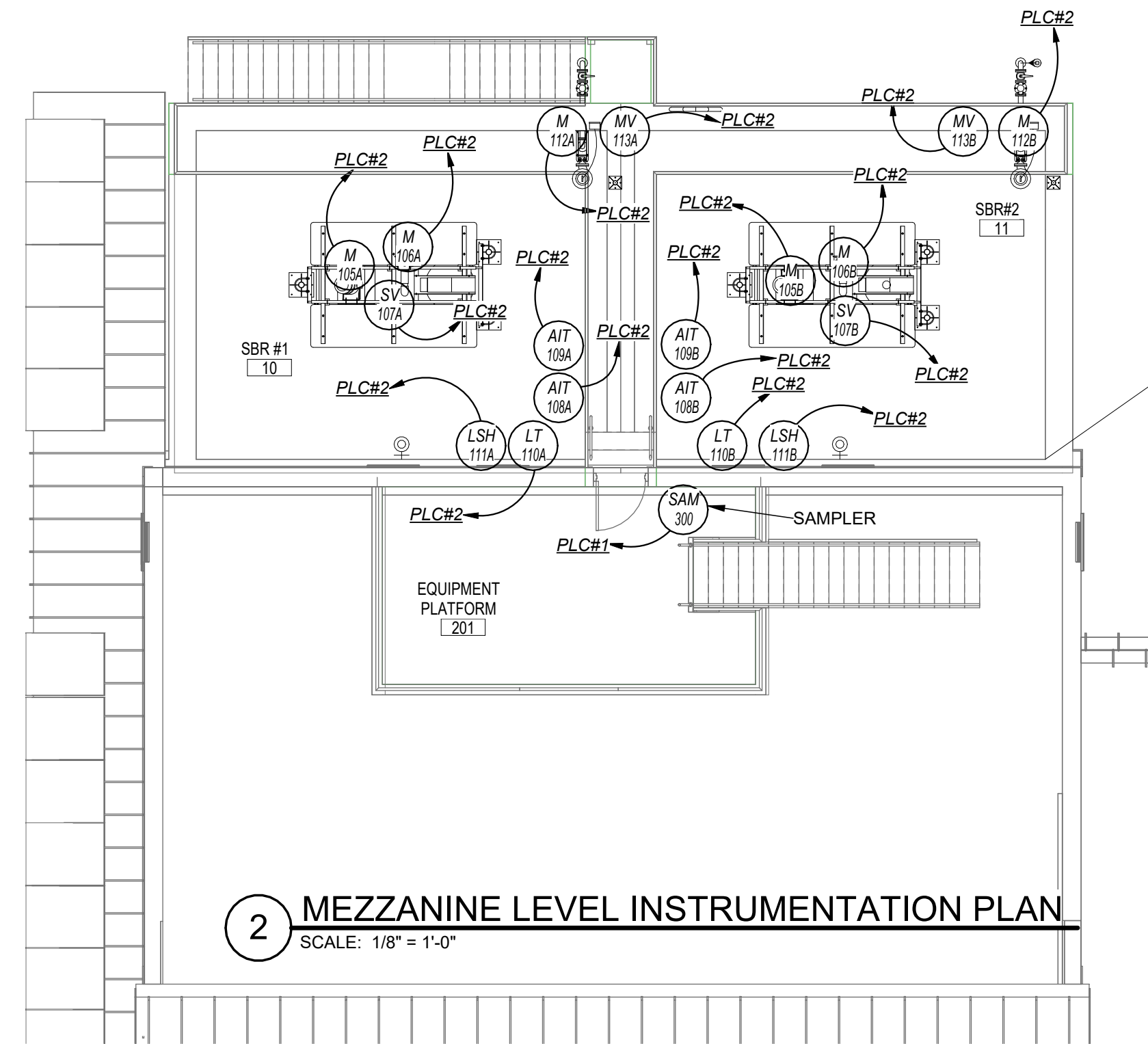
7/16/2026



4 EFFLUENT VALVE VAULT INSTRUMENTATION PLAN
SCALE: 1/4" = 1'-0"



1 LOWER LEVEL INSTRUMENTATION FLOOR PLAN
SCALE: 1/8" = 1'-0"



2 MEZZANINE LEVEL INSTRUMENTATION PLAN
SCALE: 1/8" = 1'-0"

