

FOUNDATIONS

1. FOOTING ELEVATIONS SHOWN REPRESENT THE MINIMUM DEPTH TO WHICH FOOTINGS SHALL BE CARRIED. IF FOOTING EXCAVATIONS REVEAL DISTURBED, UNSTABLE, OR UNSUITABLE SOIL, THE ENGINEER SHALL BE NOTIFIED. FOOTINGS SHALL BE LOWERED AS REQUIRED TO OBTAIN SUITABLE BEARING. ALL UNSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED AND FOOTINGS SHALL REST ON UNDISTURBED SOIL OR PRE-ENGINEERED FILL USING SUITABLE MATERIAL OR COMPACTED #21A BASE COURSE WITH A MINIMUM BEARING CAPACITY OF 1,500 PSF. COMPACT EACH LAYER OF FILL OR BACKFILL TO 95% OF THE MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 698.

CONCRETE

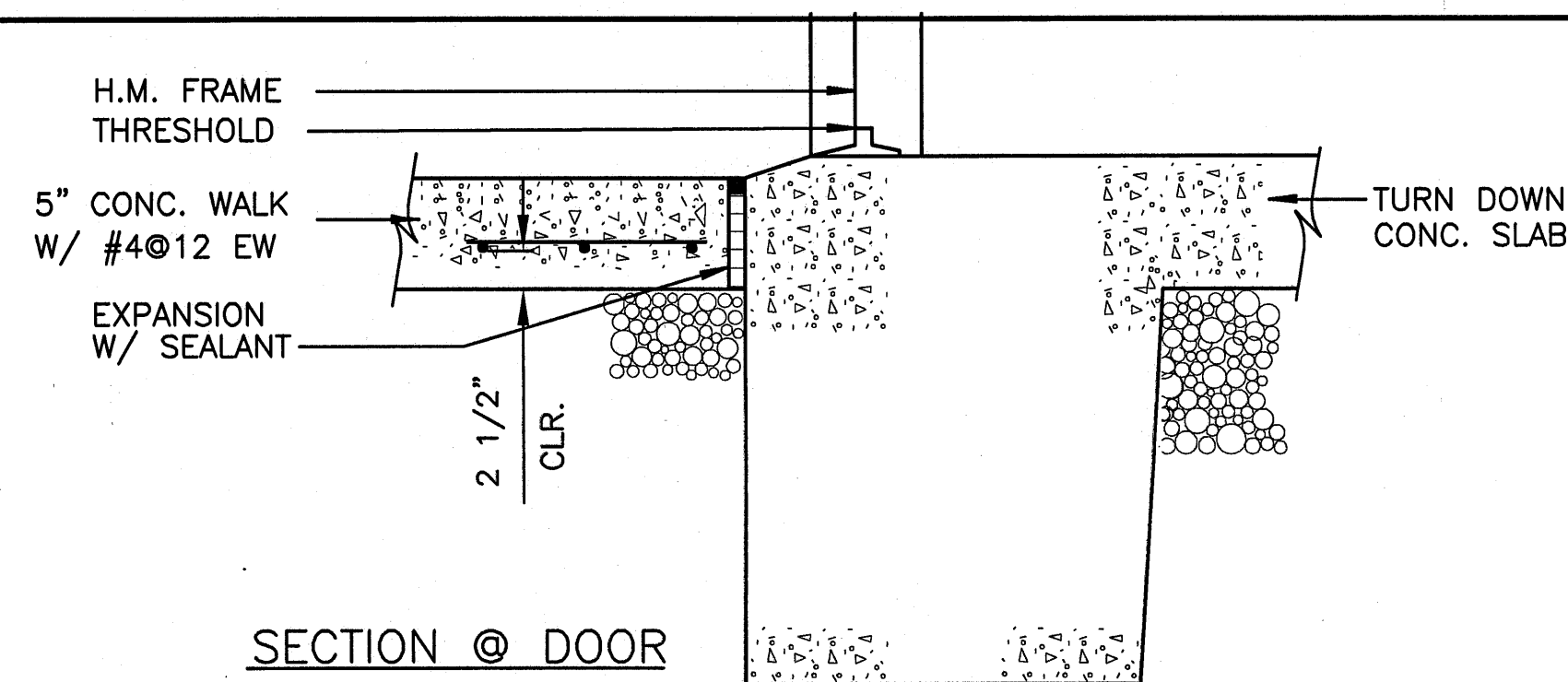
1. ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH ACI 315-80, REVISED 1986, UNLESS OTHERWISE NOTED. ALL SPLICES SHALL BE CLASS B TENSION WITH ALL APPLICABLE MODIFICATION FACTORS, UNLESS OTHERWISE NOTED. SPLICES NOT INDICATED MAY BE PROVIDED IF PROPERLY DETAILED ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER. SPREAD REINFORCING AT OPENINGS AND SLEEVES UNLESS OTHERWISE DETAILED. DO NOT CUT REINFORCING BARS. CONCRETE PROTECTION FOR REINFORCEMENT SHALL CONFORM TO ACI 301-89 AND SHALL BE INDICATED ON THE SHOP DRAWINGS. ALL SPLICE LENGTHS AND EMBEDMENT LENGTHS, BENDING DIAGRAMS, AND ASSEMBLY DIAGRAM SHALL BE INDICATED ON THE SHOP DRAWINGS.

PRECAST CONCRETE UTILITY BUILDING

1. THE CONTRACTOR SHALL COORDINATE STRUCTURAL DRAWINGS WITH DRAWINGS FURNISHED BY PRECAST BUILDING MANUFACTURER PRIOR TO CONSTRUCTION, ANY DISCREPANCY SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
2. SHOULD THE CONTRACTOR SELECT A PRECAST BUILDING WITH DIFFERENT DETAIL REQUIREMENTS, THEN ANY MODIFICATIONS TO THE FOUNDATION, SLAB, ETC. SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.

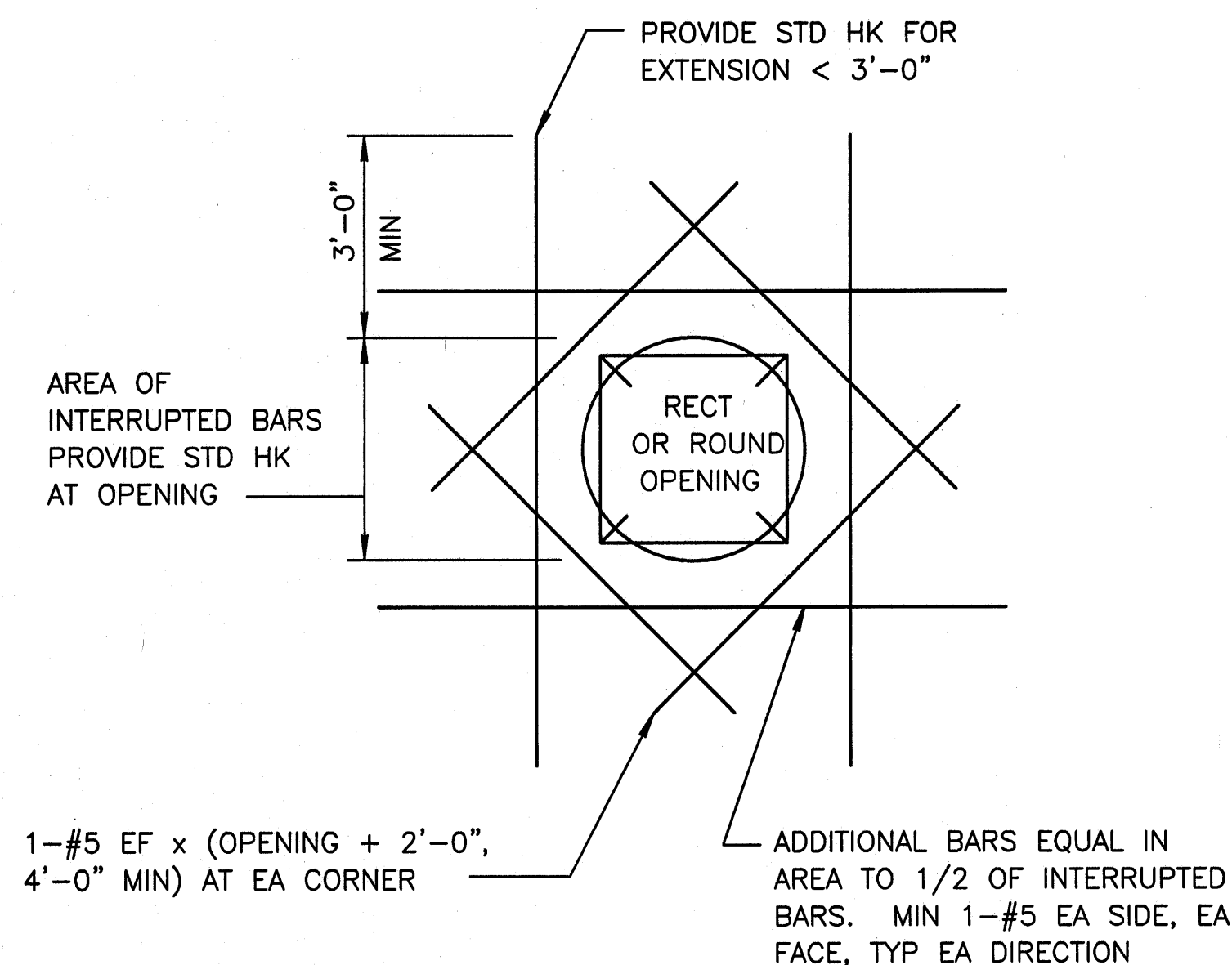
1. 8"—90° MJ BEND (RESTRAINED)
2. 4"—90° BEND
3. 4" FLOOR DRAIN W/TRAP— BRASS FLOOR GRATING AND FRAME
4. PUMP AND MOTOR
5. 3"—90° BEND (AS REQUIRED BY PUMP MFG.)
6. NOT USED
7. 4" GATE VALVE
8. AIR RELIEF VALVE AND SPOOL PIECE
9. 4" TEE
10. 4" SURGE RELIEF VALVE (ANGLE)
11. 4" SPOOL PIECE (LENGTH AS REQUIRED)
12. 4" FLEXIBLE COUPLING (RESTRAINED TYPE)
13. 8" x 4" REDUCER
14. 4" x 3" REDUCER
15. CONC. PUMP BASE (SEE NOTE THIS PAGE)
16. PIPE SUPPORT
17. ELECTRIC HEATER (MH 6'—6")
18. RADIO MODEM AND SCADA PANEL
19. 3'—0" X 6'—8" DOUBLE DOORS
20. NOT USED
21. NOT USED
22. NOT USED
23. LOW SUCTION PRESSURE CUTOFF SWITCH AND TRANSDUCER— SET AT 70 PSI
24. PRESSURE GAUGE (DISCHARGE)
25. PRESSURE GAUGE (SUCTION)
26. PRESSURE TRANSMITTER TO SCADA (ACTIVATES PUMPS IF TELEMETRY FAILS)
27. 4" PVC ELBOW
28. 4" FLANGED SLUDGE SHOE FITTING
29. 4" PRESSURE SUSTAINING VALVE
30. NOT USED
31. DISCHARGE PRESSURE TRANSMITTER
32. 2"—90° BEND (AS REQUIRED BY PUMP MFG.)
33. 4" x 2" REDUCER

NOTE:
PROVIDE PIPING OR TUBING FROM PUMP BASES AND AIR RELEASE
TO FLOOR DRAIN.



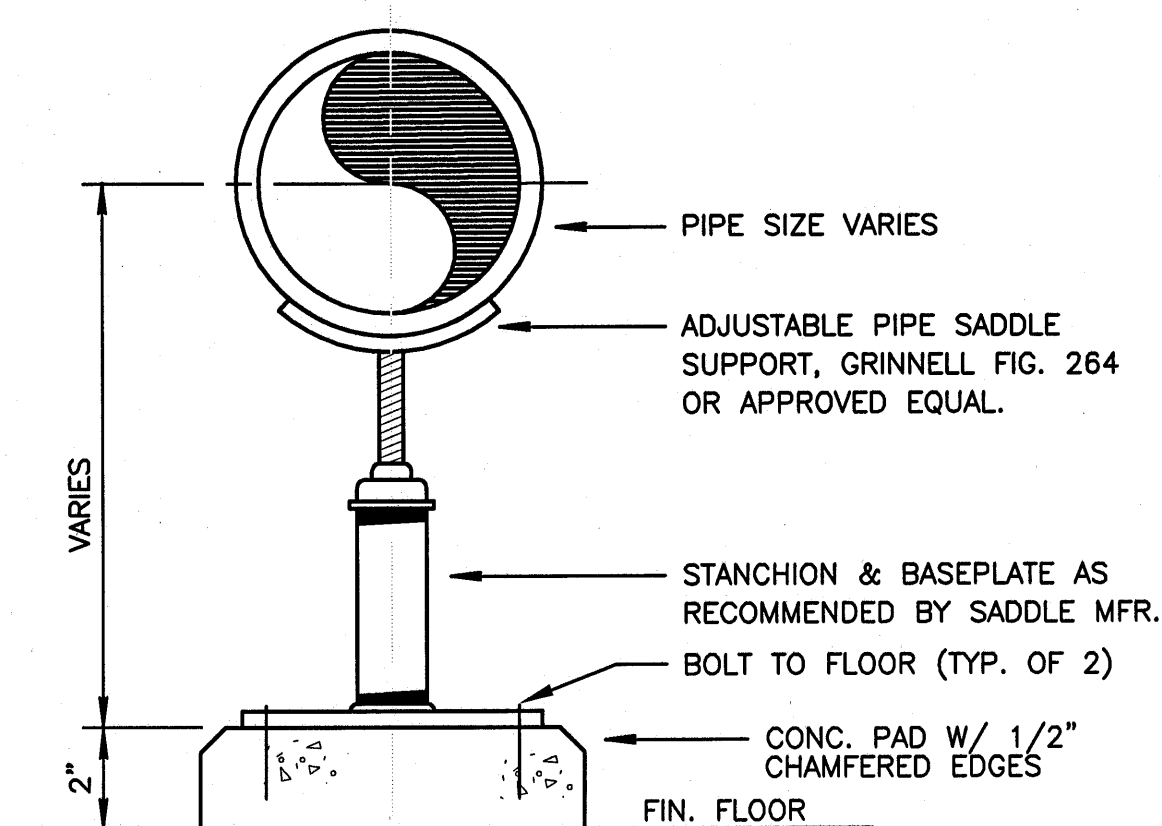
SECTION @ DOOR

SCALE: 1 1/2"=1'-0"



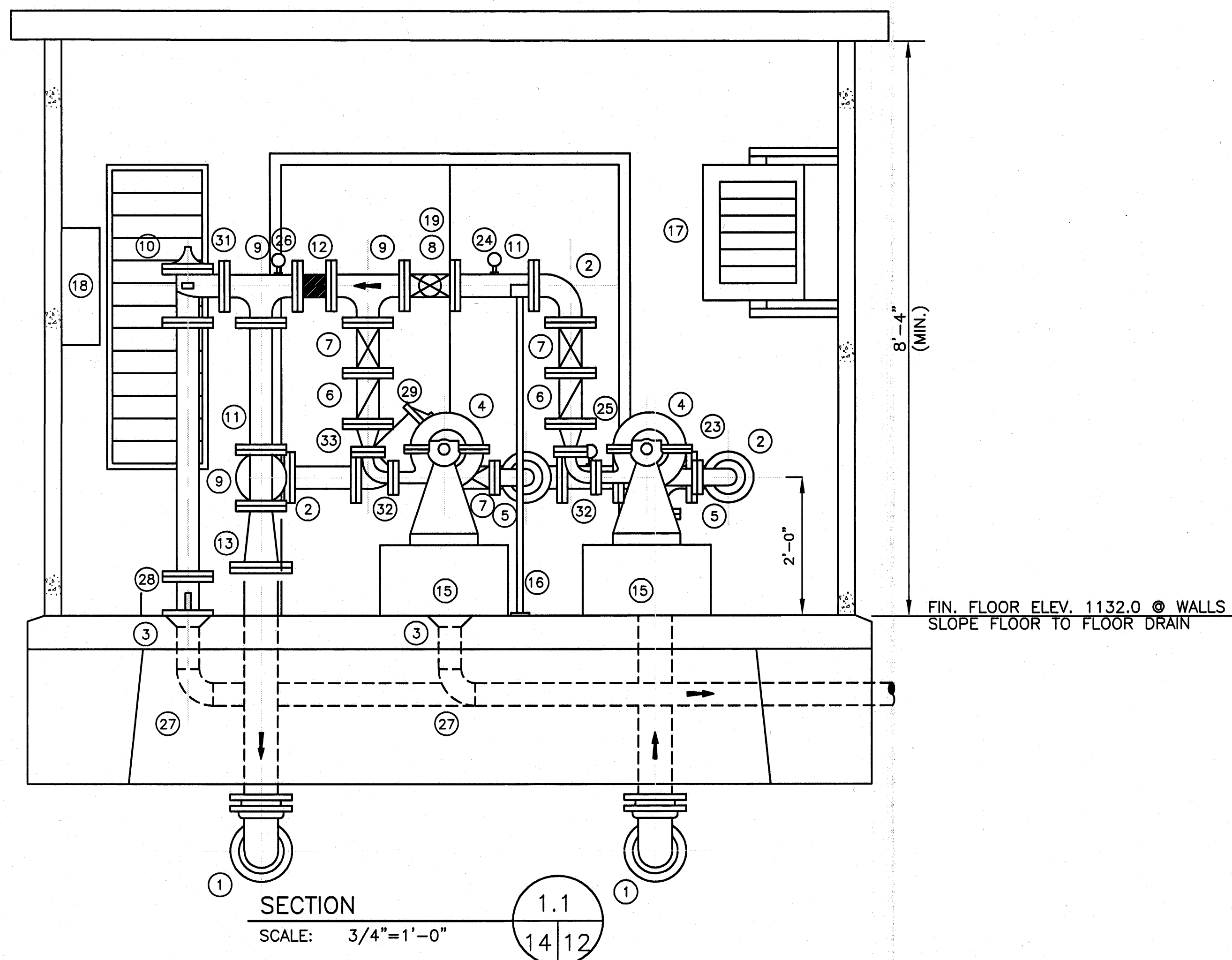
NOTE: BARS INDICATED ARE NOT REQ'D @ OPENINGS OF 7" OR LESS

TYPICAL SLAB
OPENING DETAIL
NOT TO SCALE




FLOOR PIPE SUPPORT

SCALE: NONE



NOTE:
CONCRETE PUMP BASES SHALL BE SIZED TO BE
2" LARGER ON ALL SIDES THAN THE PUMP BASE,
AND SHALL BE THE PROPER HEIGHT TO SUIT THE
PUMPS PROVIDED.

REFER TO SECTION 1.2
FOR REINFORCING
OF WALLS, FOOTINGS
AND SLAB

[illegible]

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MILL MOUNTAIN WATER PROJECT
PUMP STATION—
SECTIONS AND DETAILS
CITY OF ROANOKE, VIRGINIA

Vertical Scale:
N/A

Horizontal Scale:
AS NOTED

Commission Number:
2120

Sheet No.:

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RECORD DRAWINGS