

**RULES FOR PLACEMENT OF CIRCULAR WINDOWS**

1. THERE SHALL BE A MINIMUM OF 3" OF CLEARANCE BETWEEN ADJACENT HOLES.
2. THE EDGE OF A CIRCULAR WINDOW OF ANY SIZE MUST NOT BE CLOSER THAN 12" TO THE JAMB OF A MAN-DOOR OPENING OR EDGE OF A TILT-PANEL. IF THE JAMB REINFORCING IS 12" OR GREATER IN WIDTH, THEN THE EDGE OF THE CIRCULAR WINDOW MUST BE A MINIMUM OF 2" FROM JAMB REINFORCING FURTHEST FROM THE JAMB EDGE (EDGE OF THE OPENING).
3. THE EDGE OF A CIRCULAR WINDOW OF ANY SIZE MUST NOT BE CLOSER THAN 16" TO THE JAMB OF A LARGE OPENING SUCH AS A ROLL-UP DOOR OPENING. IF THE JAMB REINFORCING IS 16" OR GREATER IN WIDTH, THEN THE EDGE OF THE CIRCULAR WINDOW MUST BE A MINIMUM OF 2" FROM THE JAMB REINFORCING FURTHEST FROM THE JAMB EDGE (EDGE OF THE OPENING).
4. THE EDGE OF A CIRCULAR WINDOW OF ANY SIZE MUST NOT BE CLOSER THAN 12" TO THE TOP EDGE OF ANY OPENING (AT THE HEADER). IF THE HEADER REINFORCING IS 12" OR GREATER IN WIDTH, THEN THE EDGE OF THE CIRCULAR WINDOW MUST BE A MINIMUM OF 2" FROM THE REINFORCING FURTHEST FROM THE TOP EDGE OF THE OPENING.
5. SPECIAL REINFORCING IN A TILT-PANEL AT A BEAM OR JOIST LOCATION MUST NOT BE INTERRUPTED BY A CIRCULAR WINDOW.

**KEY NOTES**

- 1 REFER TO DETAILS 514, 515, AND 516 AS EXAMPLES FOR PERIMETER REINFORCING FOR CLUSTER WINDOWS. TYPICAL FOR CLUSTERS.
- 2 NOT USED.
- 3 NOT USED.
- 4 NOT USED.
- 5 MECHANICAL OPENING - APPROXIMATE LOCATION AND SIZE, REFER TO ARCH'L/MECH'L FOR ACTUAL LOCATION AND SIZE.
- 6 CONCRETE RETURN PER DETAIL 523/ZS5502.
- 7 DRINKING FOUNTAIN - VERIFY.
- 8 CORNER GUARDS PER DETAIL 522/ZS5502 AND REF. ARCH'L.
- 9 STEP FOOTING BELOW WATER HARVESTING TRENCH.

**NOTE:**

ALL PANELS ARE f'c=3,000 PSI U.N.O.

**GENERAL NOTES**

1. ALL STRUCTURAL PANELS SHOW THE INTERIOR FACE OF PANEL. REFERENCE ARCHITECTURAL FOR EXTERIOR FACE.
2. REFERENCE ARCHITECTURAL MANUAL FOR SCHEDULE OF CIRCULAR OPENINGS.

**B. COMMERCIAL BUILDING INTERIOR ELEVATION 1**

1/8" = 1'-0"

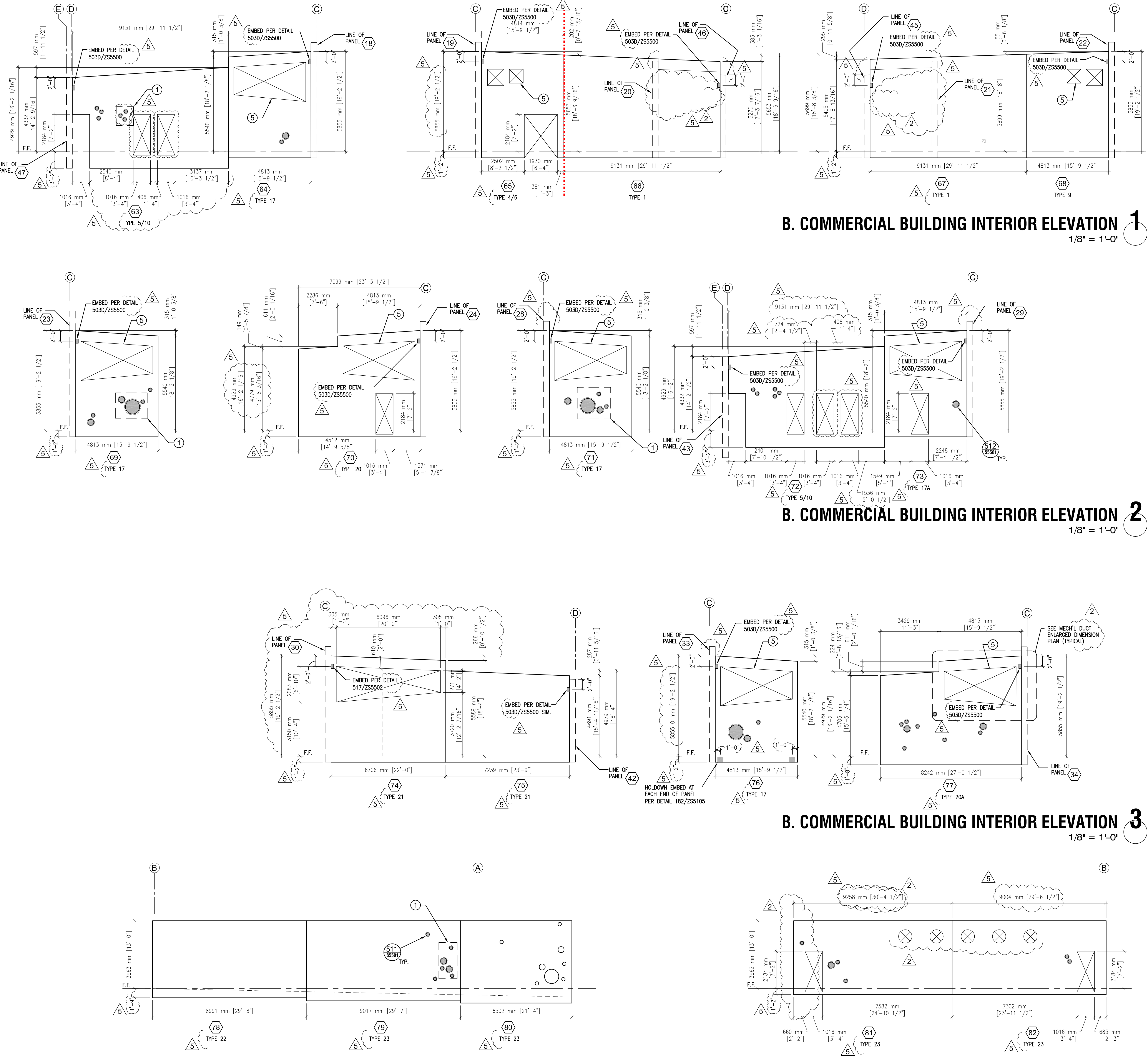
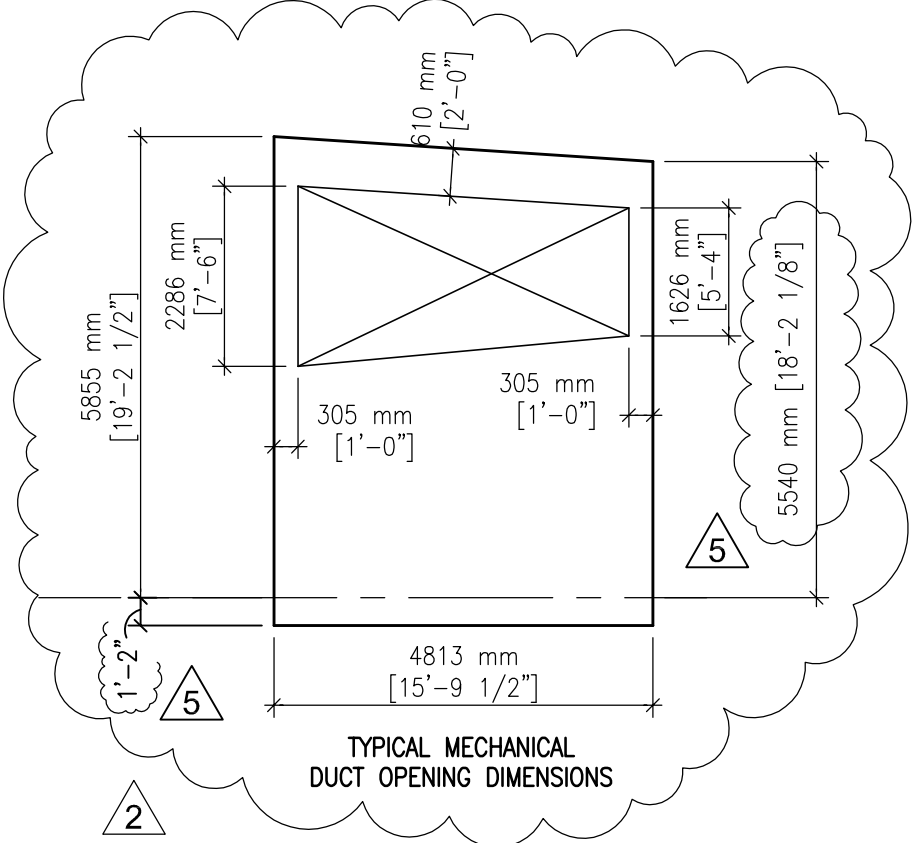
**B. COMMERCIAL BUILDING INTERIOR ELEVATION 2**

1/8" = 1'-0"

**B. COMMERCIAL BUILDING INTERIOR ELEVATION 3**

1/8" = 1'-0"

**B. COMMERCIAL BUILDING NORTH ELEVATION 4**

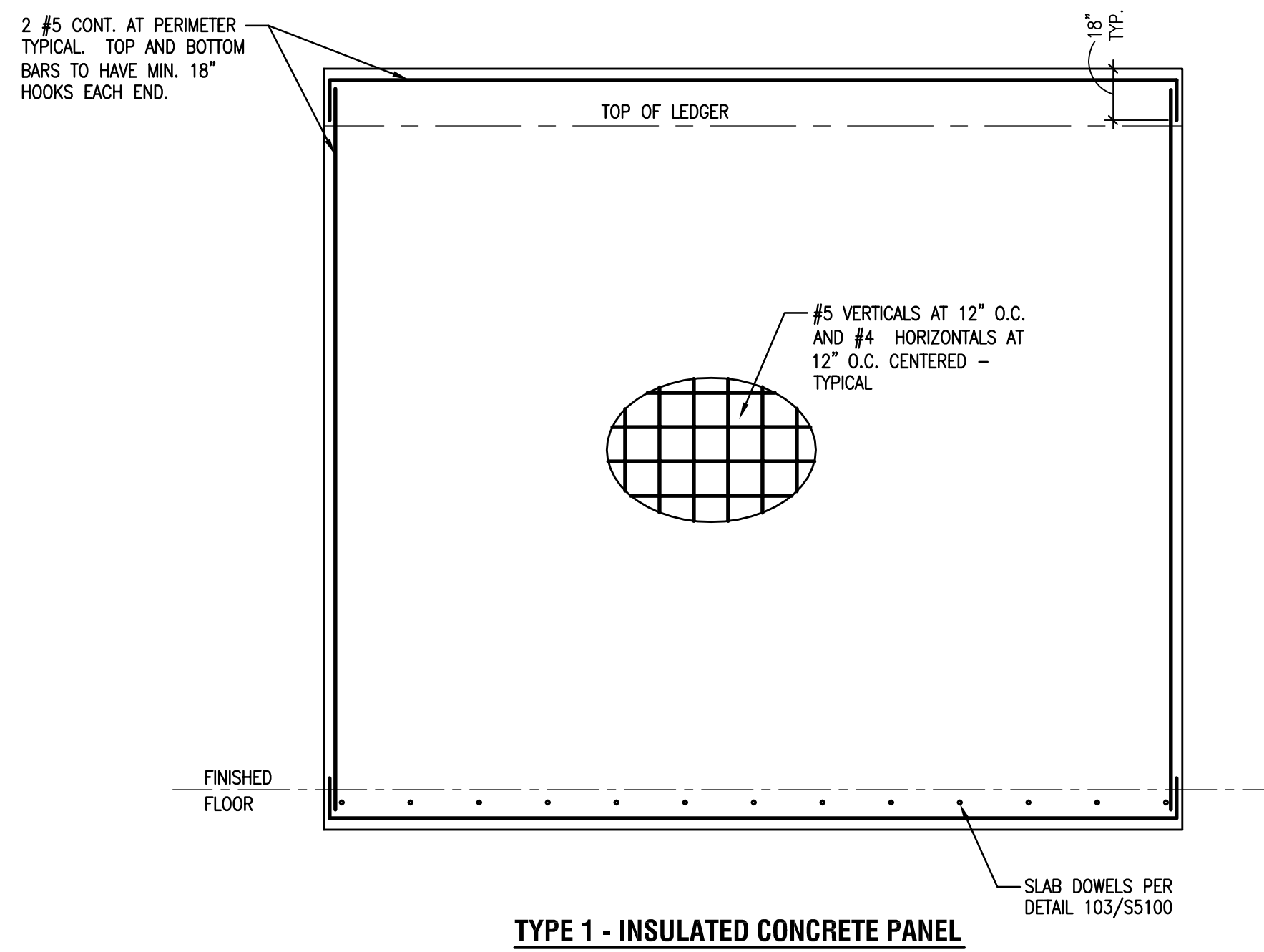


## TILT-UP CONCRETE PANEL NOTES:

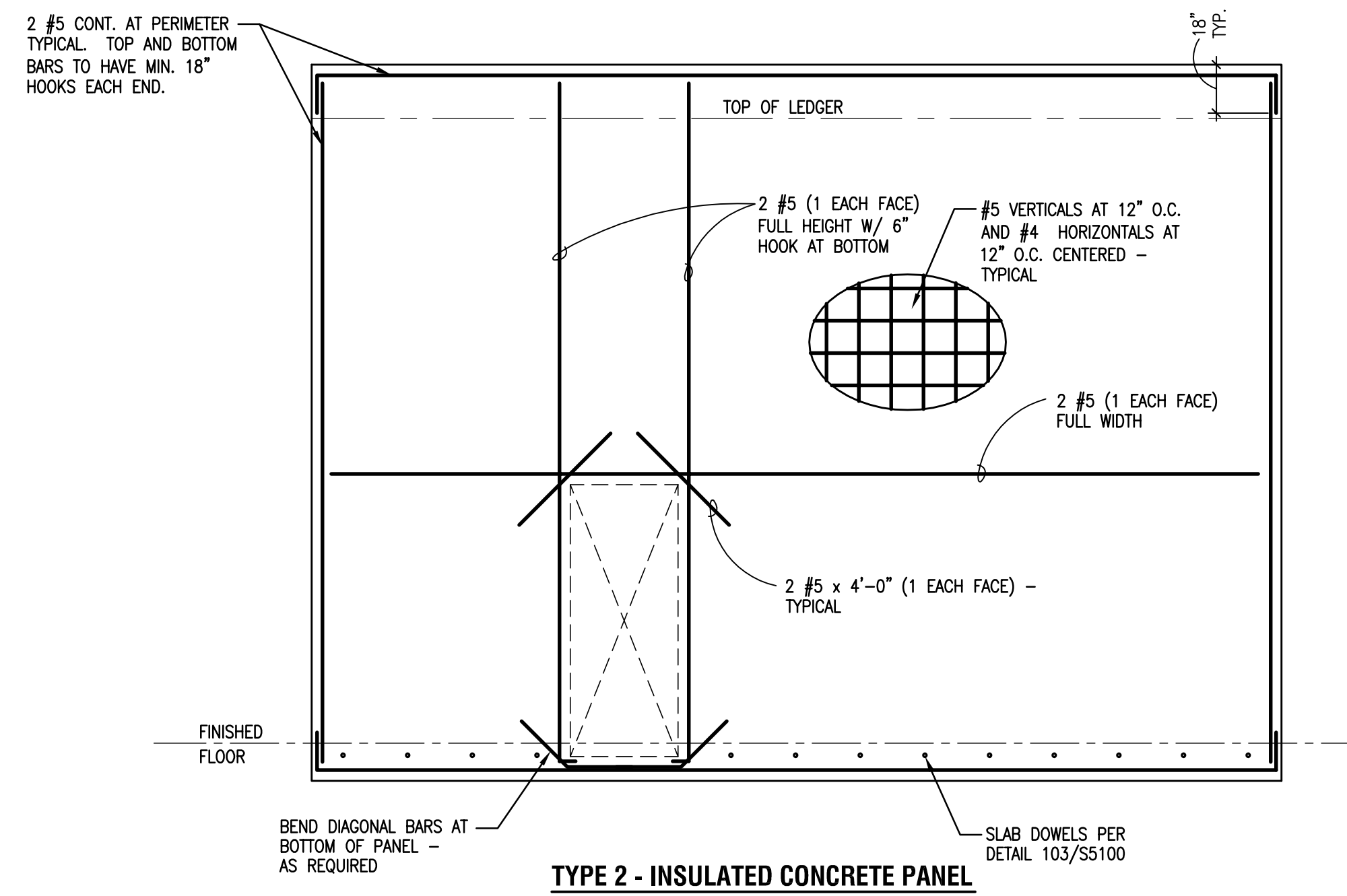
1. PANEL ELEVATIONS ARE BY TYPE REFERENCE OF REINFORCING REQUIRED AND SHOWING ONLY PARTIAL LISTING OF EMBEDMENTS AND EXTREME CAUTION SHALL BE EXERCISED BY THE CONTRACTOR TO LAY OUT PANELS TO PROPER DIMENSIONS WITH REQUIRED REINFORCING. OPENINGS AND EMBEDMENTS REQUIRED FOR EACH PANEL.
2. ALL PANEL ELEVATIONS ARE AS VIEWED FROM THE INTERIOR SIDE OF THE BUILDING EXCEPT WHERE NOTED OTHERWISE. REFERENCE ARCHITECTURAL EXTERIOR ELEVATIONS FOR LOCATIONS AND TYPES OF TEXTURES AND REVEALS.
3. DO NOT SCALE ANY PANEL ELEVATIONS SHOWN HEREIN. REFER TO PLANS AND ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS. WHERE DIMENSIONS ARE SHOWN, IT IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN PROVIDING SHOP DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH ARCHITECT.
4. DIMENSIONS FROM BUILDING FINISHED FLOORS TO BOTTOM OF PANEL TO BE GOVERNED BY THE APPROPRIATELY FLAGGED FOUNDATION DETAIL FOR EACH PARTICULAR LOCATION. USED IN CONJUNCTION WITH FINISHED GRADES ADJACENT TO BUILDING SHOWN ON CIVIL ENGINEERING DRAWINGS. VERIFY WITH FLAGGED DETAILS ON ARCHITECTURAL DRAWINGS.
5. ALL PANEL OPENINGS MAY NOT BE SHOWN ON THE ELEVATIONS. FOR EXACT SIZE, NUMBER AND LOCATION OF OPENINGS, REFERENCE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS. RESOLVE ANY DISCREPANCY THRU THE ARCHITECT.
6. REFERENCE PLANS, ELEVATIONS, SECTIONS, NOTES AND/OR DETAILS FOR ALL HEIGHTS, OPENINGS, EMBEDDED ITEMS, ETC.
7. PROVIDE 1/2"x1/2" CHAMFERS AT ALL EXPOSED PANEL EDGES AND CORNERS, UNLESS NOTED OTHERWISE.
8. REINFORCING SHOWN IS FOR IN-PLACE CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR PICK UP POINT INSERTS AND LOCATIONS. SPECIAL PICK UP REINFORCING AND STRONG BACKS, AND ALL PICK UP PLACING OPERATIONS.
9. ALL "TYPICAL REINFORCING" SHALL BE TYPICAL THRU-OUT PANEL WITH OTHER REINFORCING SHOWN IN ADDITION TO TYPICAL REINFORCING, UNLESS OTHERWISE NOTED.
10. ALL REINFORCING TO BE CENTERED IN DESIGN PANEL THICKNESS. ALL PERIMETER REINFORCING AND REINFORCING AT PERIMETERS OF OPENINGS IN PANELS TO BE 1 1/2" IN FROM EDGE. DOUBLE REINFORCING TO BE CENTERED IN PANEL WITH 1" CLEAR SPACE BETWEEN BARS, BUT NOT LESS THAN ONE BAR DIAMETER, UNLESS OTHERWISE SHOWN OR NOTED.
11. ALL TOP AND BOTTOM PANEL PERIMETER BARS TO HAVE 18" HOOK AT EACH END. ALL OPENINGS SIDE PERIMETER BARS TO HAVE 6" HOOK AT BOTTOM. ALL HORIZONTAL REINFORCING AT TOP OF OPENINGS TO EXTEND 2'-0" BEYOND EACH OPENING, UNLESS OTHERWISE SHOWN. REFERENCE TYPICAL OPENING IN PRECAST CONCRETE PANEL DETAIL FOR ADDITIONAL INFORMATION.
12. FOR WELDING OF ASTM A615--GRADE 60 REINFORCING BARS, USE E90 SERIES LOW HYDROGEN RODS.
13. ALL PANEL JOINTS TO BE 3/4" AND SEALED WITH BUTYL ROD AND CAULKING ON INTERIOR AND EXTERIOR FACES.

## TYPICAL REINFORCING U.N.O.

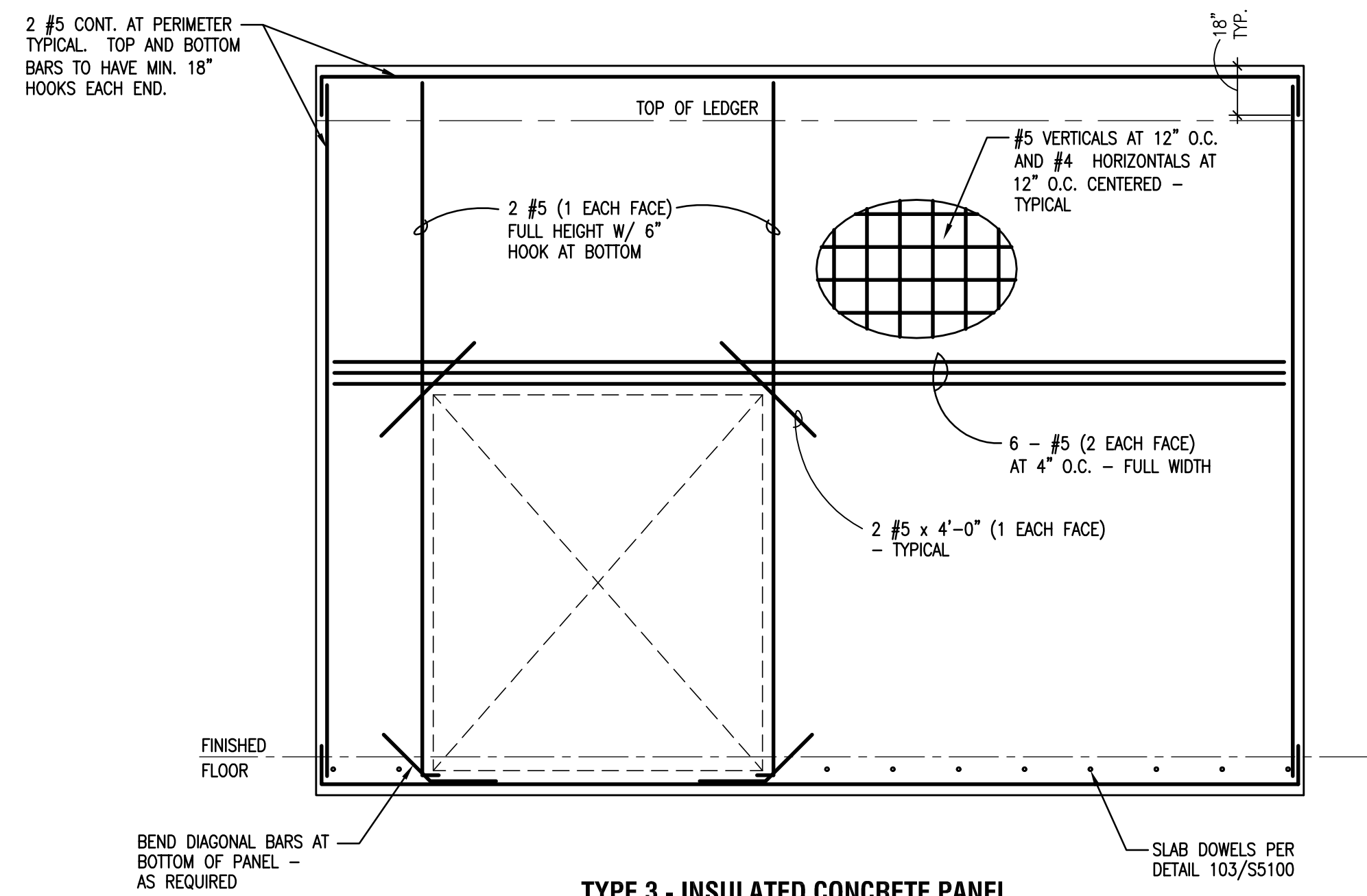
INSULATED CONCRETE PANELS	
OVERALL THICKNESS	13 1/2"
DESIGN THICKNESS	8"
VERTICAL BARS, CENTERED IN 8" LAYER	#5 AT 12" O.C.
HORIZONTAL BARS, CENTERED IN 8" LAYER	#4 AT 12" O.C.
12" THICK PANELS	
OVERALL THICKNESS	12"
DESIGN THICKNESS	11 1/4"
VERTICAL BARS, EACH FACE	#5 AT 12" O.C.
HORIZONTAL BARS, EACH FACE	#4 AT 12" O.C.
10" THICK PANELS	
OVERALL THICKNESS	10"
DESIGN THICKNESS	9 1/4"
VERTICAL BARS, EACH FACE	#5 AT 12" O.C.
HORIZONTAL BARS, EACH FACE	#4 AT 12" O.C.
8" THICK PANELS	
OVERALL THICKNESS	8"
DESIGN THICKNESS	7 1/4"
VERTICAL BARS, CENTERED	#5 AT 12" O.C.
HORIZONTAL BARS, CENTERED	#4 AT 12" O.C.
ALL PANELS	
PANEL PERIMETER BARS	2 - #5
OPENING PERIMETER BARS	2 - #5
MAXIMUM REVEAL DEPTH	3/4"



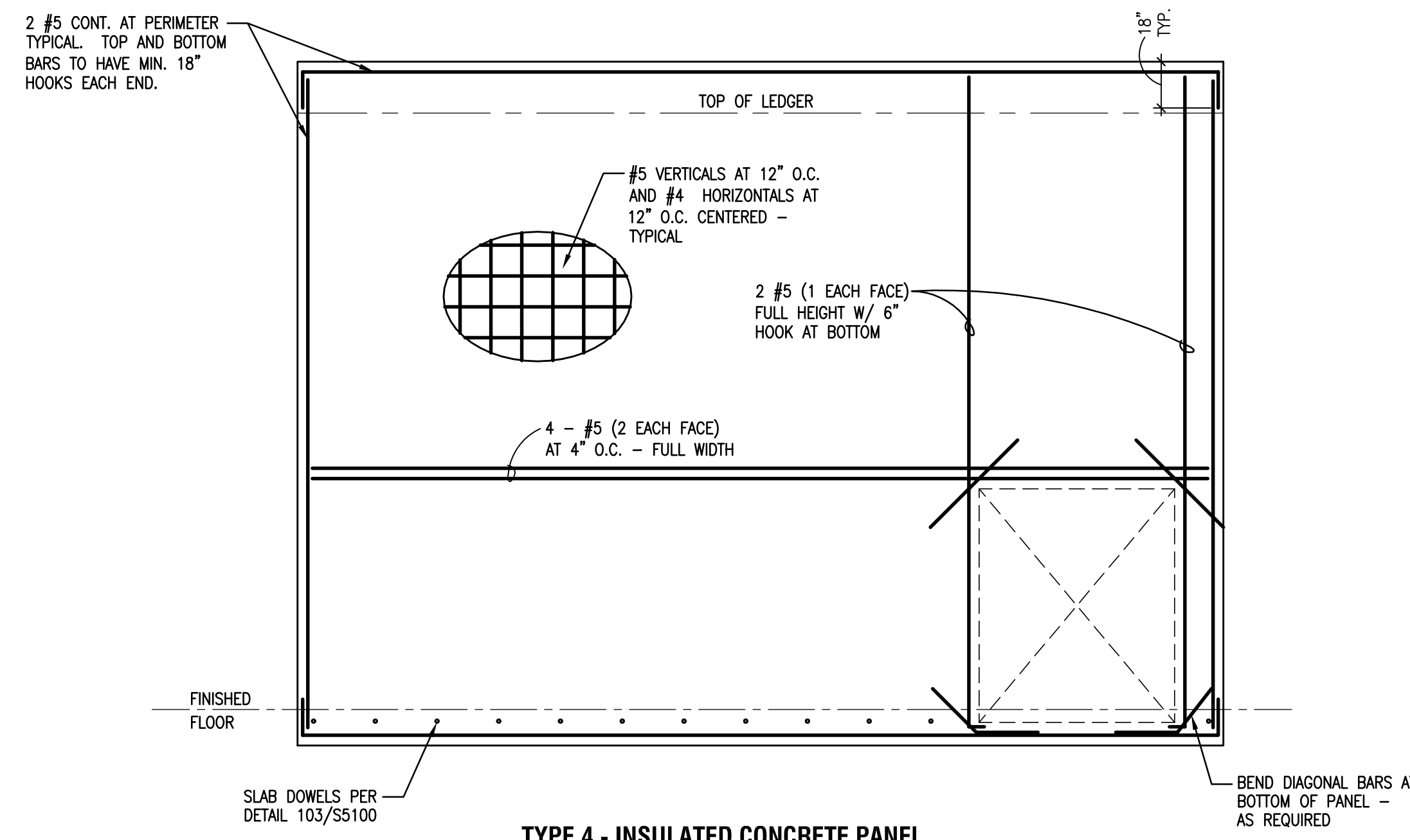
TYPE 1 - INSULATED CONCRETE PANEL



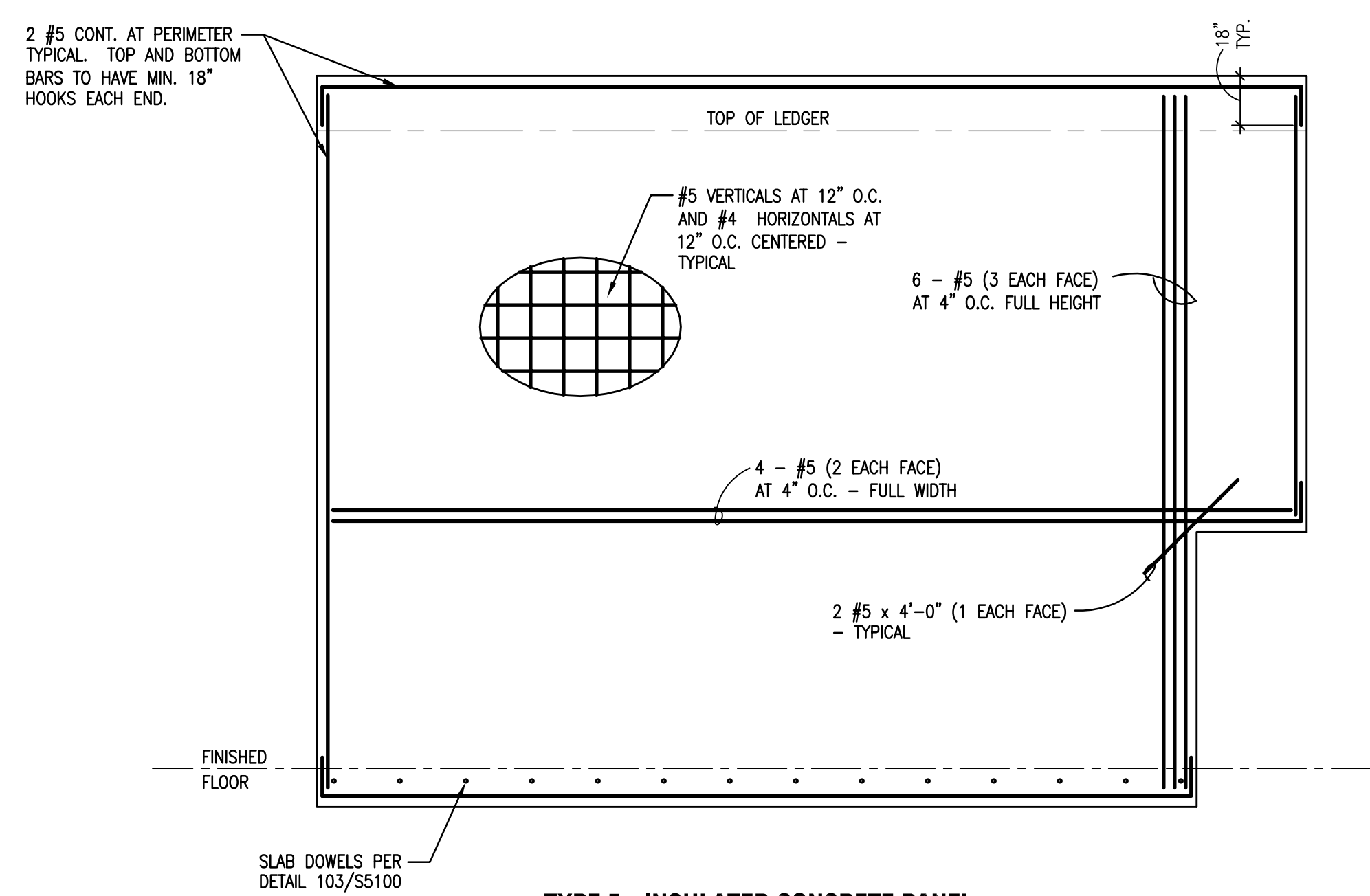
TYPE 2 - INSULATED CONCRETE PANEL



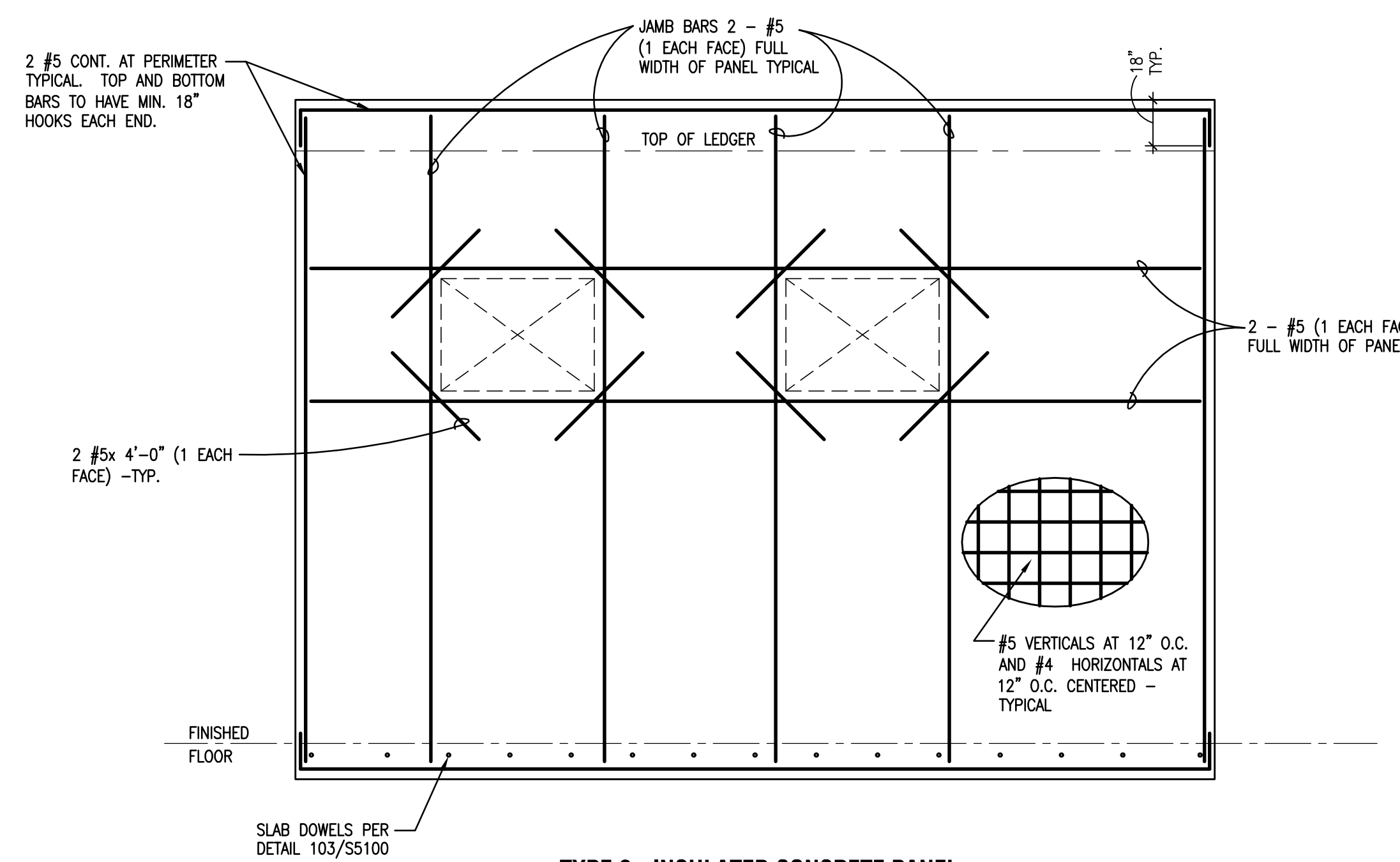
TYPE 3 - INSULATED CONCRETE PANEL



TYPE 4 - INSULATED CONCRETE PANEL



TYPE 5 - INSULATED CONCRETE PANEL

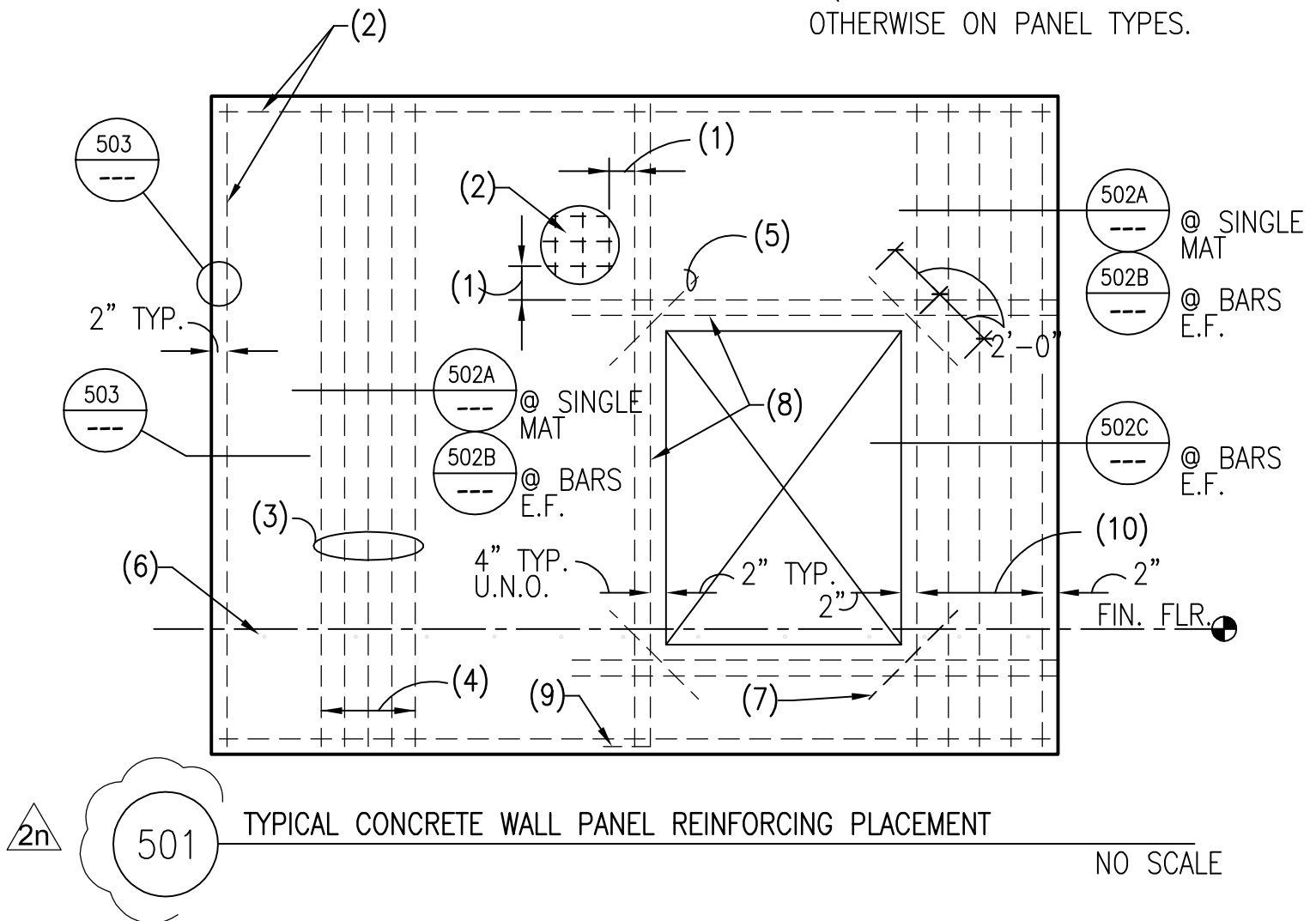


TYPE 6 - INSULATED CONCRETE PANEL



NOTES:

1. TYPICAL MAT SPACING OR LESS.
2. TYPICAL MAT REINFORCING— SEE PANEL ELEVATION — MAY BE OMITTED WHERE SPECIAL REINF. IS SPECIFIED ON PANEL TYPE.
3. ADDITIONAL VERTICAL REINF. — SEE PANEL ELEVATIONS.
4. SEE PANEL TYPES FOR SPACING.
5. 1 - #5 x 4'-0" LONG CORNER BAR — INSTALL IN CENTER OF PANEL.
6. SLAB DOWELS AT 48" O.C. 2" MIN. FROM EDGE TO OPENING. FIRST DOWEL 6" FROM JAMB OR EDGE.
7. WHERE 2'-0" CANNOT BE ATTAINED, EXTEND BARS AS FAR AS POSSIBLE AND HOOK OR BEND.
8. TYPICAL OPENING PERIMETER BARS 2 - #5 (1 EACH FACE).
9. 6" HOOK AT OPENING PERIMETER BARS.
10. EQ. SPACES UNLESS NOTED OTHERWISE ON PANEL TYPES.



NO SCALE

# Mechanical Duct Plan

FULL SIZE, MIN. 6" DEEP RETURN PLENUM, TYPICAL.

FIELD INSTALLED FILTER RACK WITH IN UNIT ENCLOSURE, TYPICAL.

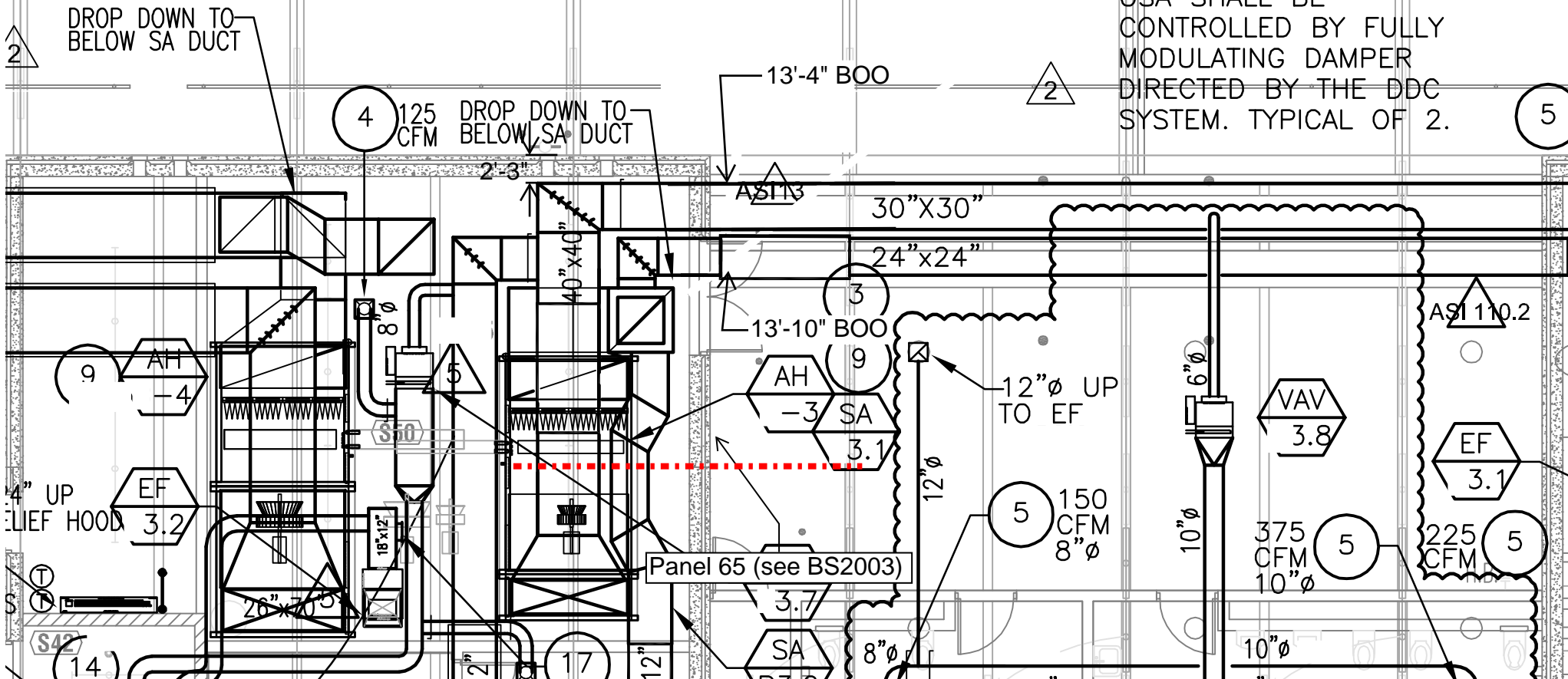
8"Ø DUCT TIGHT TO UNDER SIDE OF ROOF. TYPICAL.

USE CARBON STEEL SCHEDULE 10 WHERE EXPOSED UNDER CANOPY.

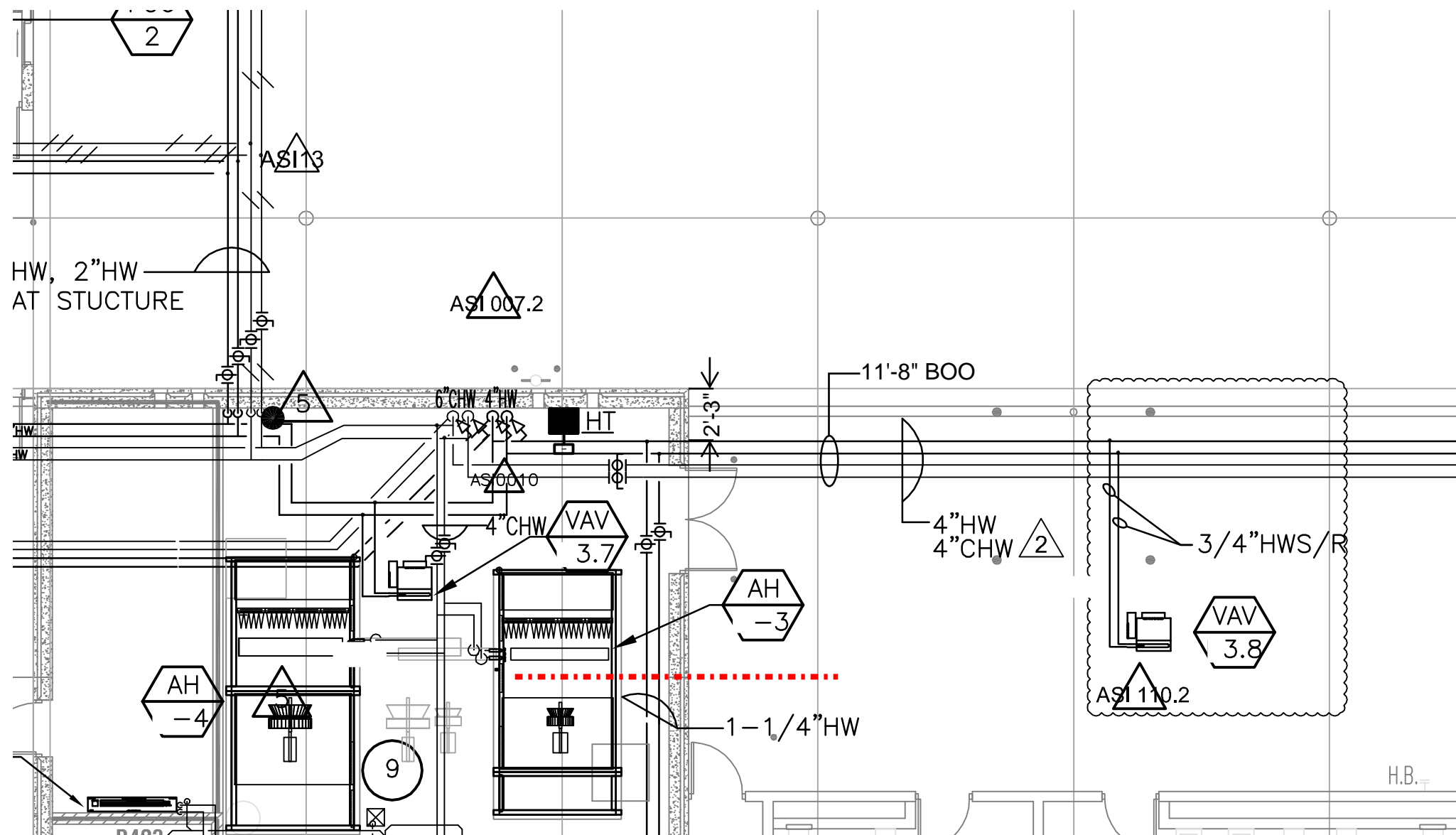
42"x42" FROM RETURN  
AIR PLENUM UP. CONTINUE  
UP THROUGH ROOF WITH  
30"x30" TO ROOF

- MOUNTED INTAKE HOOD.

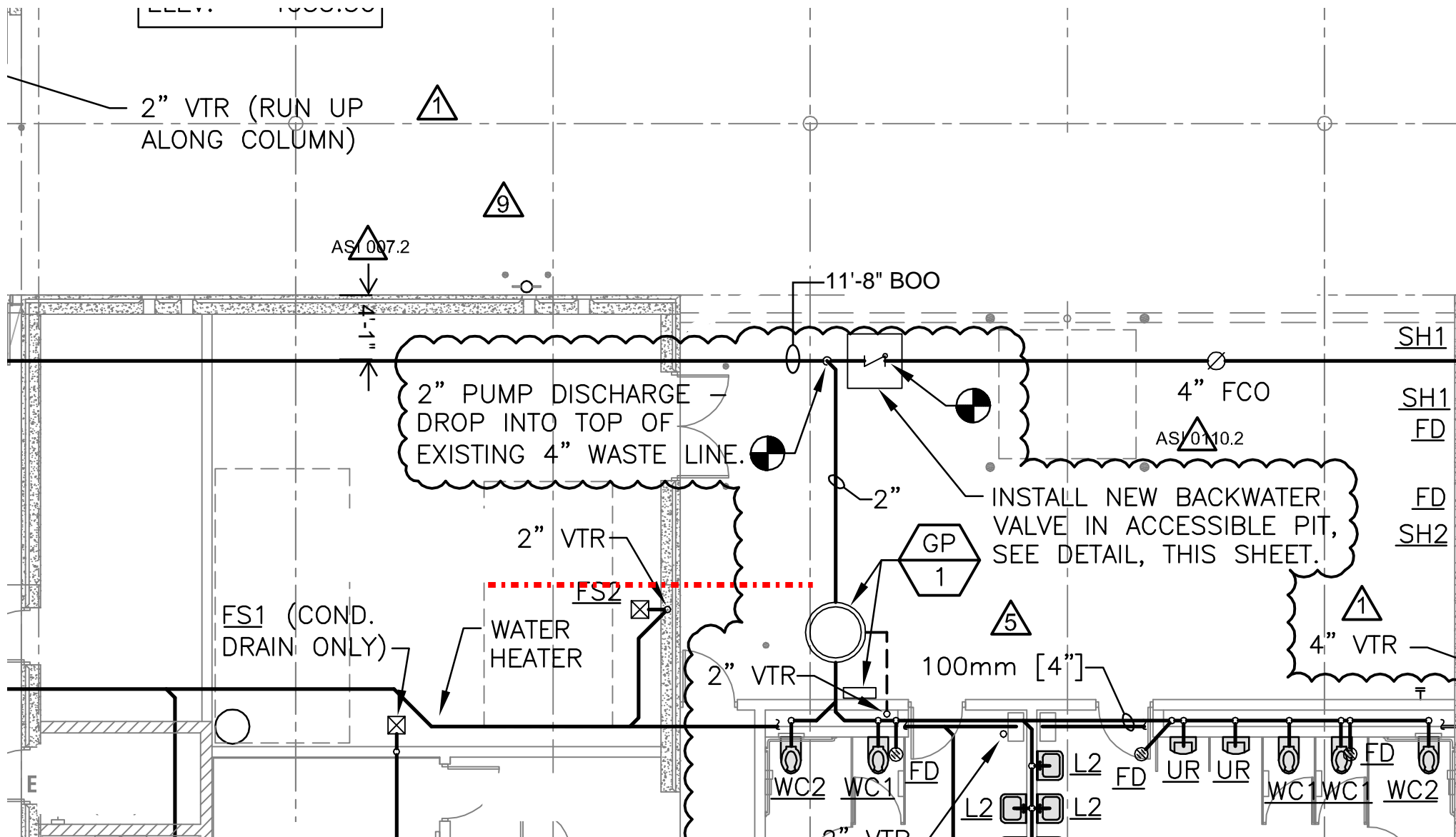
OSA SHALL BE  
CONTROLLED BY FULLY  
MODULATING DAMPER  
DIRECTED BY THE DDC  
SYSTEM. TYPICAL OF 2.



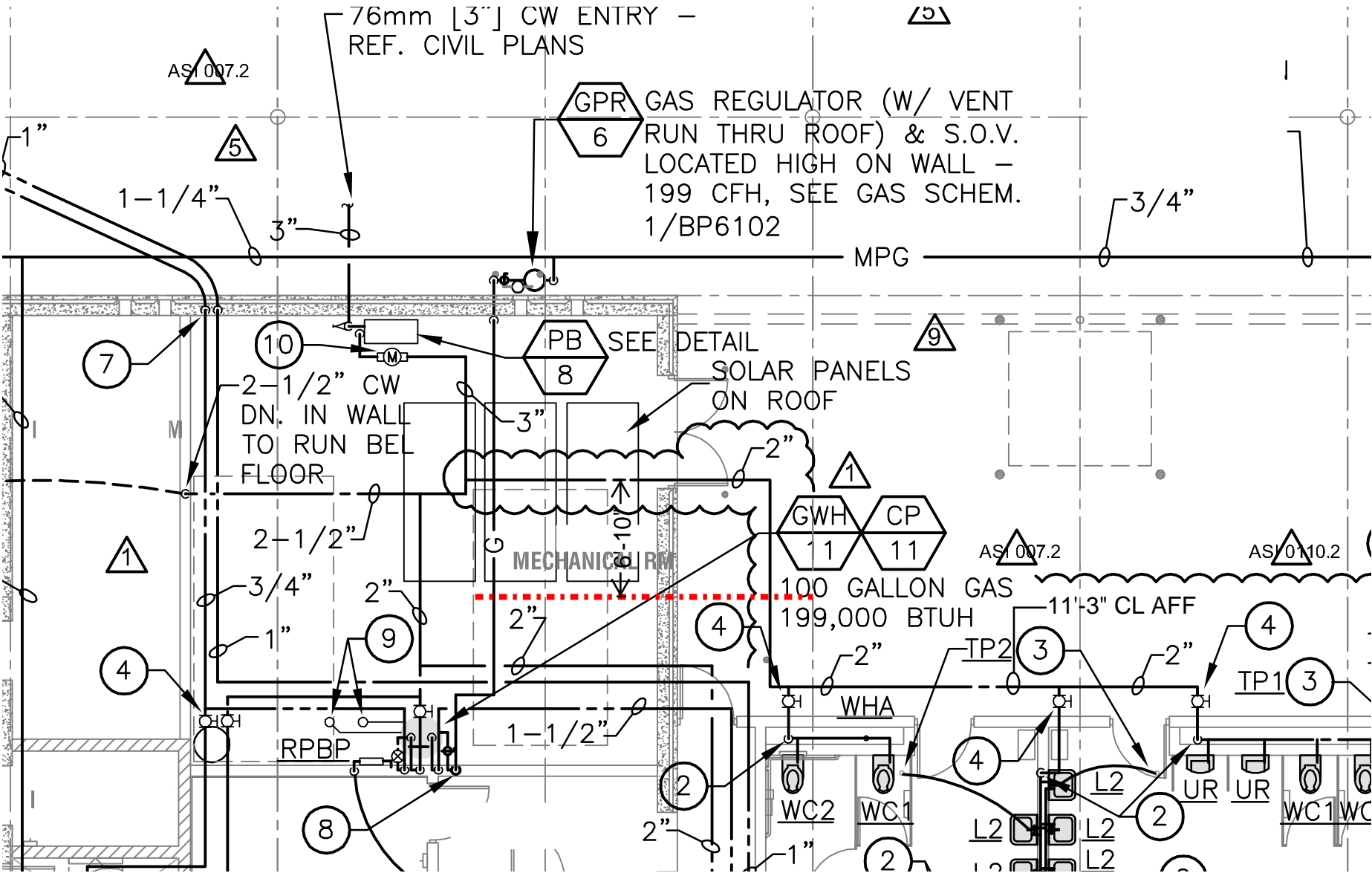
Mechanical - Piping Plan



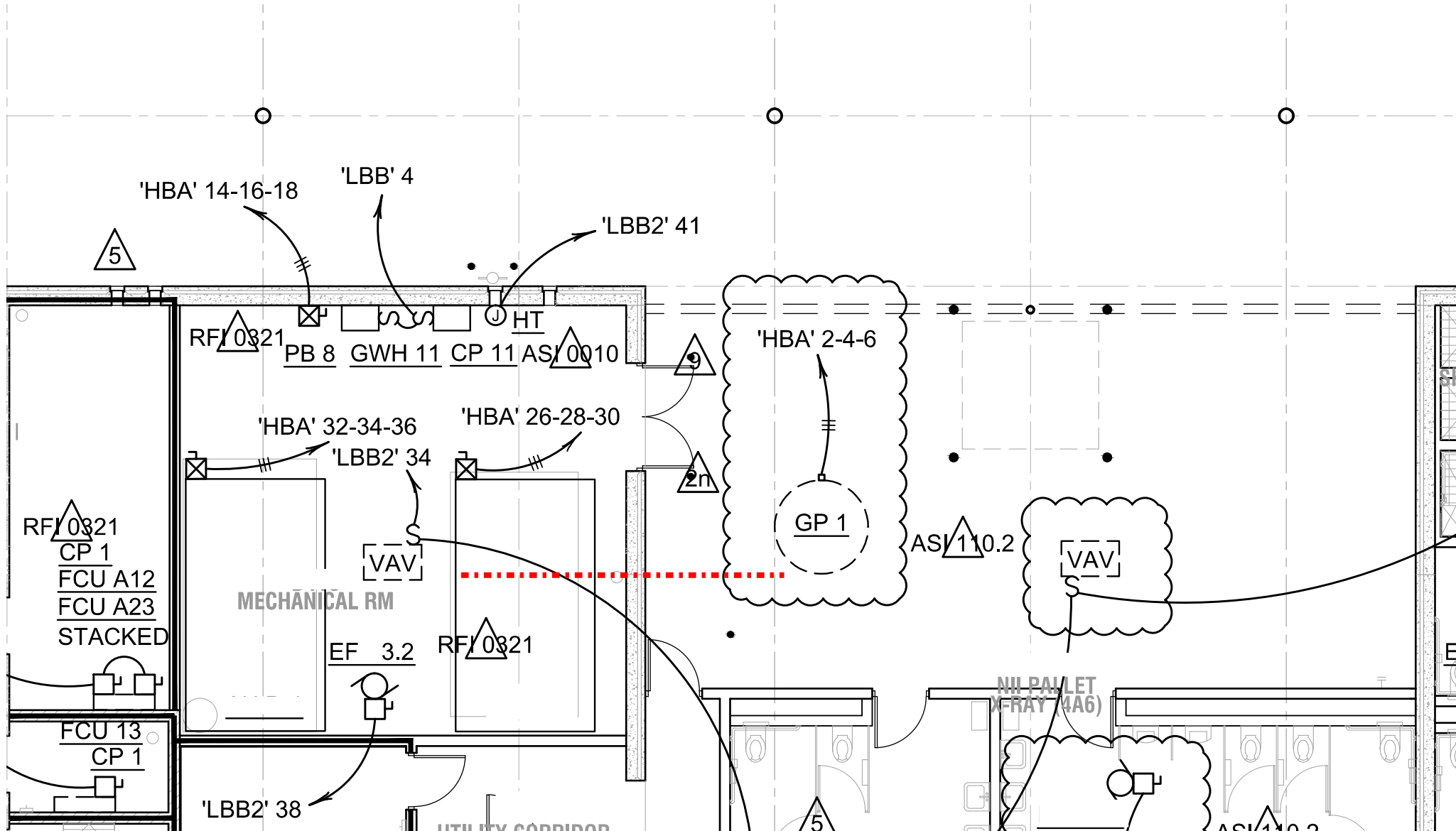
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Plumbing Water Piping

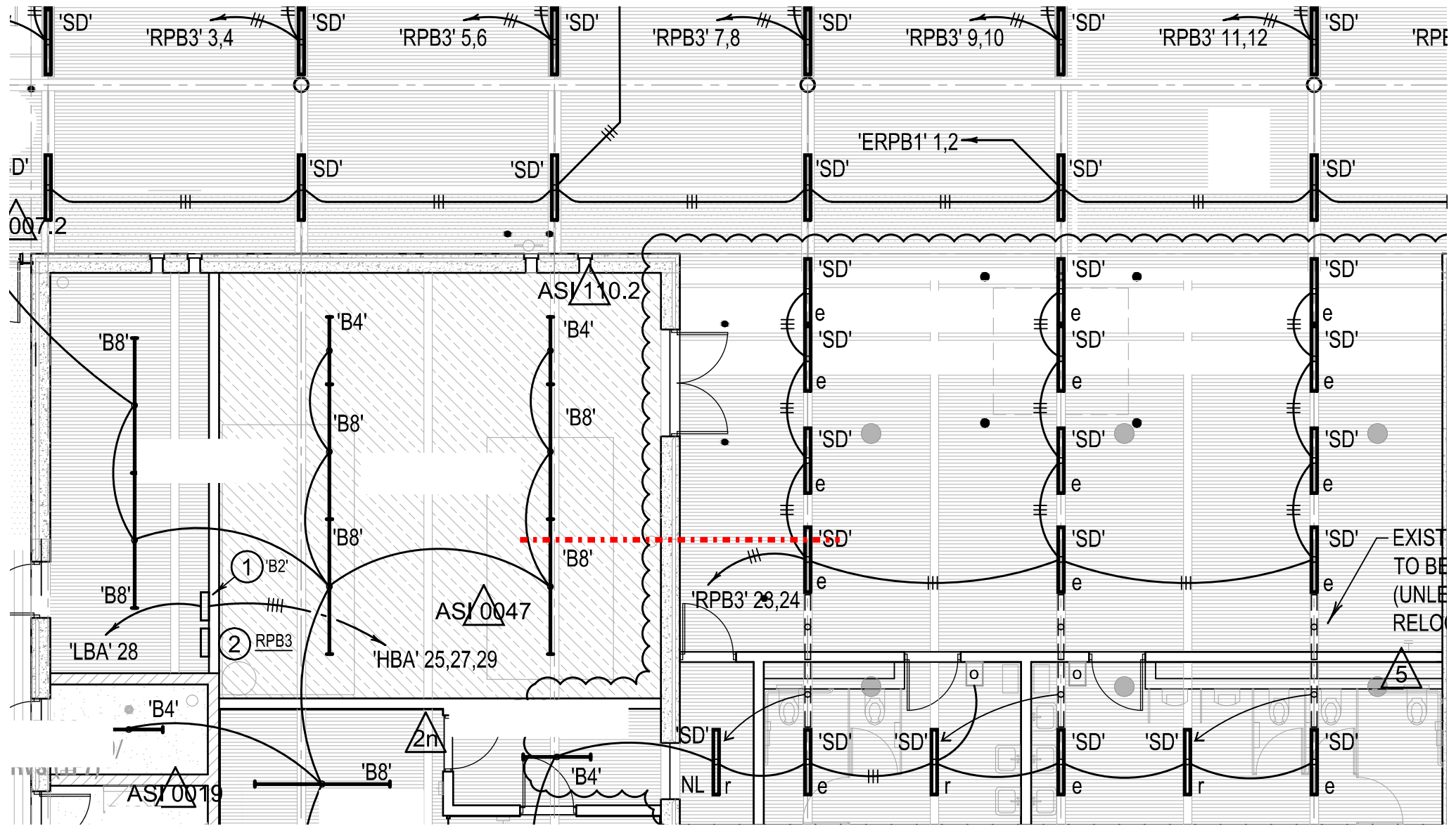


# Power Plan

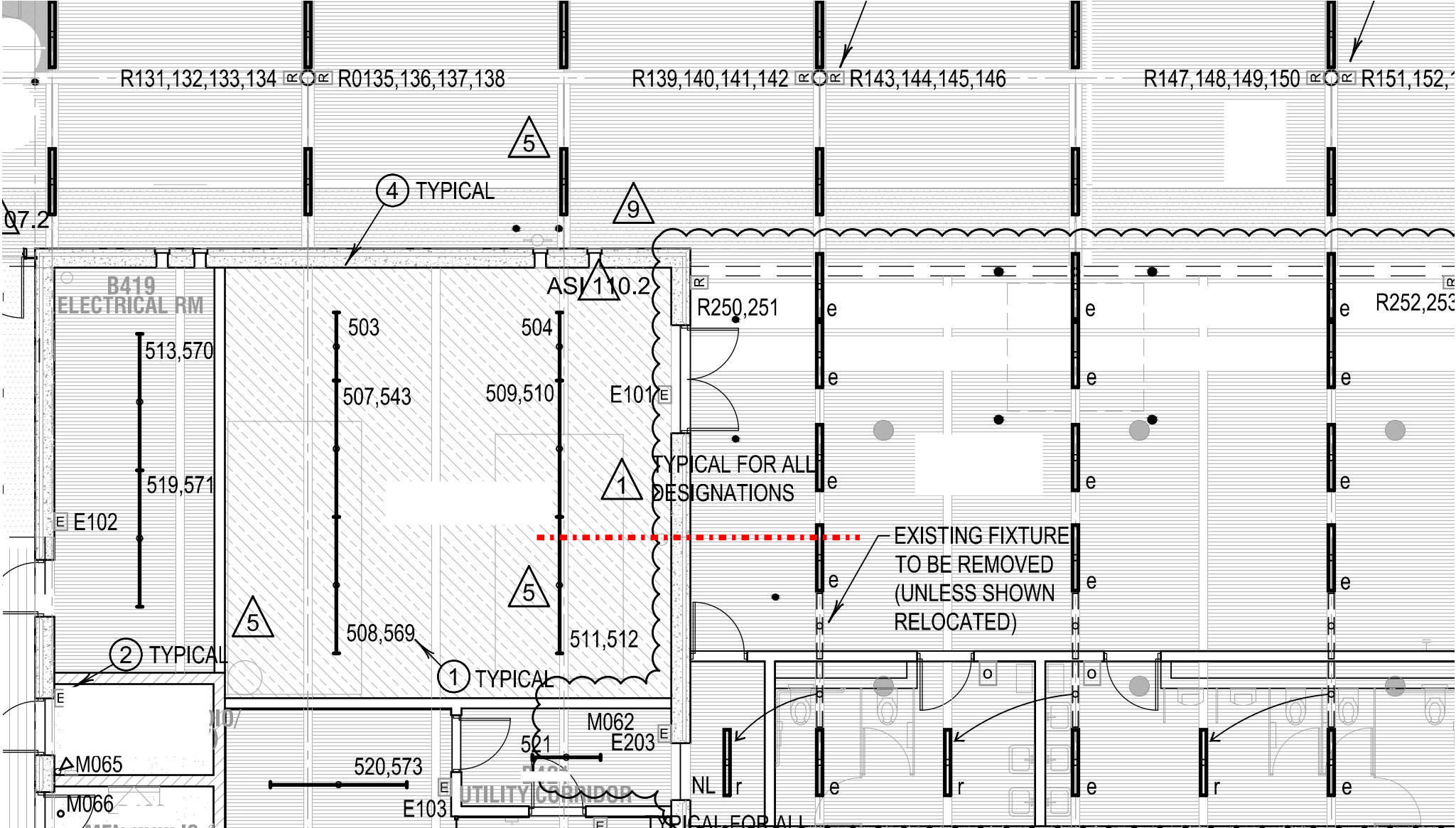




Lighting Plan



Lighting Control Plan



# Enlarged Power Plan

