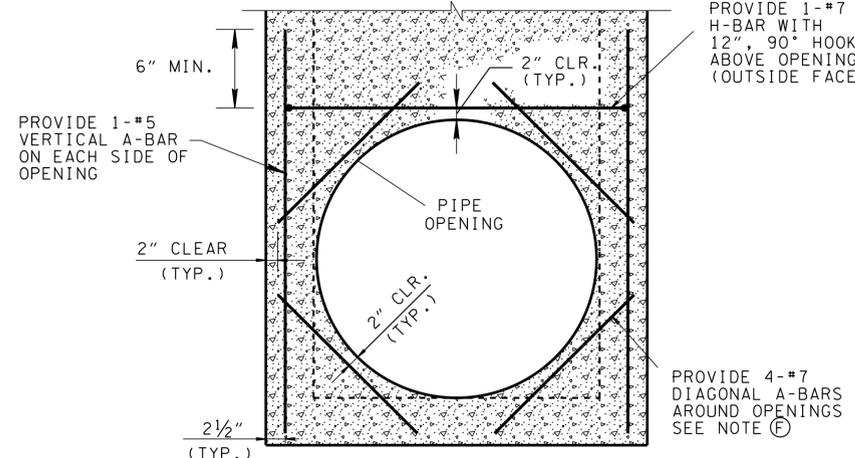
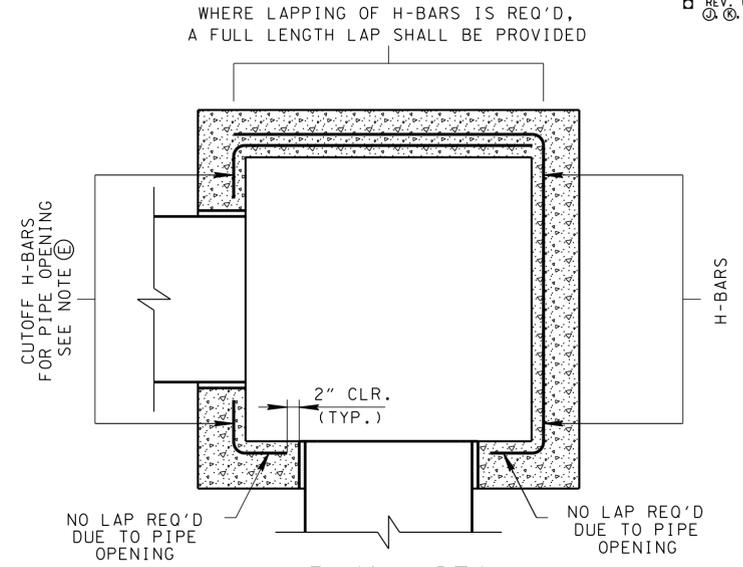


ELEVATION VIEW
(EDGE OF PIPE OPENING IS GREATER THAN OR EQUAL TO 6" FROM SIDE WALL)

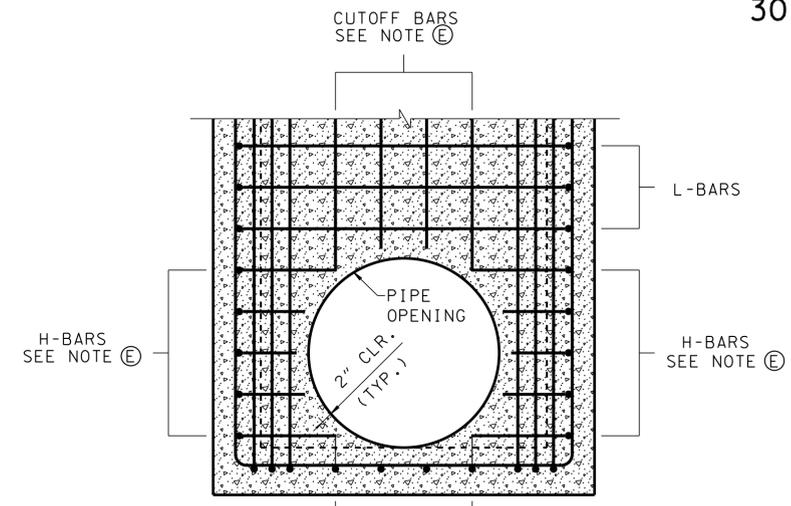


ELEVATION VIEW
(EDGE OF PIPE OPENING IS LESS THAN TO 6" FROM SIDE WALL)

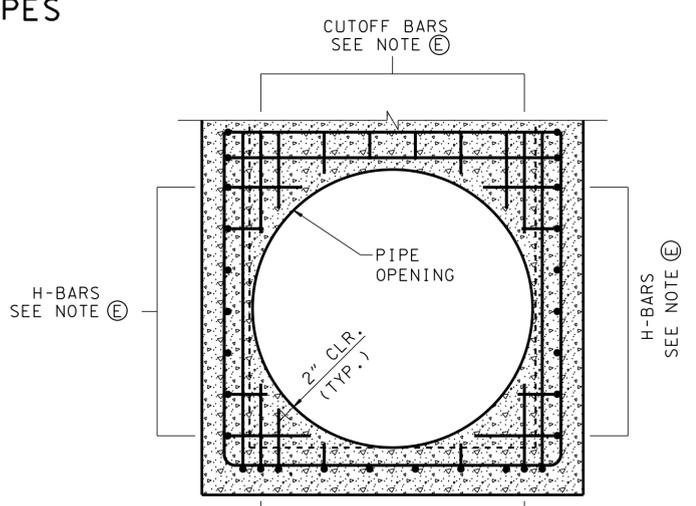


PLAN VIEW
WHERE LAPPING OF H-BARS IS REQ'D, A FULL LENGTH LAP SHALL BE PROVIDED.
NO LAP REQ'D DUE TO PIPE OPENING
NO LAP REQ'D DUE TO PIPE OPENING
SEE NOTE (C)
DEPICTING ADJACENT PIPE OPENINGS AND OVERLAPPING H-BARS (VERTICAL REINFORCING NOT SHOWN FOR CLARITY)

ADDITIONAL REINFORCING REQUIRED FOR 30" OR LARGER PIPES



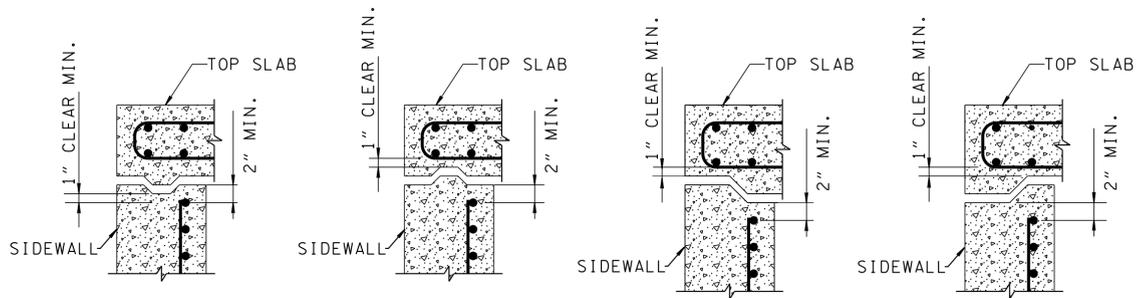
ELEVATION VIEW
(EDGE OF PIPE OPENING IS GREATER THAN OR EQUAL TO 6" FROM SIDE WALL)



ELEVATION VIEW
(EDGE OF PIPE OPENING IS LESS THAN 6" FROM SIDE WALL)

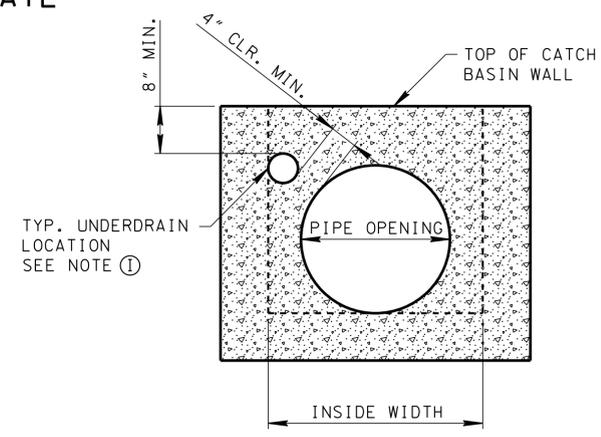
- GENERAL NOTES**
- (A) DRAWING TO BE USED FOR ALL NONCIRCULAR CAST-IN-PLACE AND ALL NONCIRCULAR PRECAST CATCH BASINS, MANHOLES, JUNCTION BOXES AND SPRING DRAINS.
 - (B) PLACE ALL REINFORCING STEEL AS DETAILED ON APPLICABLE STANDARD DRAWINGS. TO ACCOMMODATE A PIPE OPENING, THE REQUIRED REINFORCING SCHEMES SHALL BE MODIFIED BY CUTTING OR TRIMMING THE AFFECTED REINFORCING STEEL AS DETAILED ON THIS STANDARD DRAWING.
 - (C) HORIZONTAL H-BARS AS DETAILED ON THE STANDARD DRAWINGS ASSUME PIPE OPENINGS AS SHOWN ON THE APPLICABLE STANDARD DRAWING. IN THESE CASES, THE LEGS OF THE H-BARS SHALL BE TERMINATED TO ACCOMMODATE PIPE OPENINGS AND THERE WILL BE NO LAPPING OF H-BARS. IN THE CASE SHOWN ON THIS SHEET, WITH PIPE OPENINGS IN ADJACENT CATCH BASIN WALLS, A FULL LENGTH LAP SHALL BE REQUIRED IN THE SOLID WALL. IF PIPE OPENINGS ARE IN OPPOSITE WALLS BUT ROTATED 90° FROM WHAT IS DEPICTED ON THE STANDARD DRAWING (I.E. FOR A CROSS-DRAIN) THE CONTRACTOR HAS THE OPTION TO MODIFY THE H-BARS IN A SIMILAR FASHION SO AS TO ELIMINATE LAPS.
 - (D) L-BARS SHALL BE PLACED AS DETAILED ON THE APPLICABLE STANDARD DRAWING AND SHALL NOT BE MODIFIED.
 - (E) IF MODIFICATION TO STEEL REINFORCEMENT FOR A PIPE OPENING RESULTS IN ONE LEG OF AN H-BAR LESS THAN 6 INCHES LONG, THE LEG MAY BE OMITTED. IF MODIFICATION TO STEEL REINFORCEMENT FOR A PIPE OPENING RESULTS IN AN A-BAR LESS THAN 6 INCHES LONG, THEN THE A-BAR MAY BE OMITTED ENTIRELY.
 - (F) ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED AROUND PIPE OPENINGS AS DETAILED ON THIS SHEET. PROVIDE DIAGONAL BARS WHEN PIPE OPENING IS FOR A 30 INCH OR LARGER PIPE.
 - (G) TIE ADDITIONAL REINFORCEMENT TO THE EXISTING INSIDE FACE REINFORCEMENT.
 - (H) THE PREFERRED LOCATION OF UNDERDRAIN CONNECTIONS, WHEN REQUIRED, IS IN A WALL WITH NO PIPE OPENING. UNDERDRAIN CONNECTIONS SHALL BE LOCATED AT LEAST 8 INCHES FROM THE TOP OF THE CATCH BASIN WALL. IF PLACEMENT IN A WALL WITH A PIPE OPENING IS NECESSARY, THE OUTSIDE EDGE OF THE UNDERDRAIN SHALL BE LOCATED A MINIMUM OF 4 INCHES FROM THE OUTSIDE EDGE OF THE PIPE OPENING.
 - (I) UNDERDRAIN HOLE SHOULD BE PLACED BETWEEN THE REINFORCING BARS. DURING THE PLACEMENT OF THE UNDERDRAIN HOLE, EVERY EFFORT SHALL BE MADE TO AVOID CUTTING REINFORCEMENT.
 - (J) VARIATIONS OF BAR LOCATION DUE TO REQUIRED SPLICES IS ACCEPTABLE UP TO A DISTANCE EQUAL TO THE BAR DIAMETER.
 - (K) MANUFACTURING TOLERANCES WILL BE AS SHOWN ON STANDARD OPERATING PROCEDURE (SOP) 5-3.
 - (L) A SINGLE L-BAR OF THE SAME DIAMETER MAY BE SUBSTITUTED FOR TWO OVERLAPPING H-BARS.

BAR TERMINATION TO ACCOMMODATE PIPE OPENINGS



NOTE: WHEN ALTERNATE DETAIL IS PROVIDED, MINIMUM CLEAR DIMENSIONS AND INTERIOR SLAB THICKNESS SHOWN ON STANDARDS SHALL BE MAINTAINED.

ALTERNATE JOINT DETAILS



TYPICAL UNDERDRAIN CONNECTION DETAIL
SEE NOTE (H)

