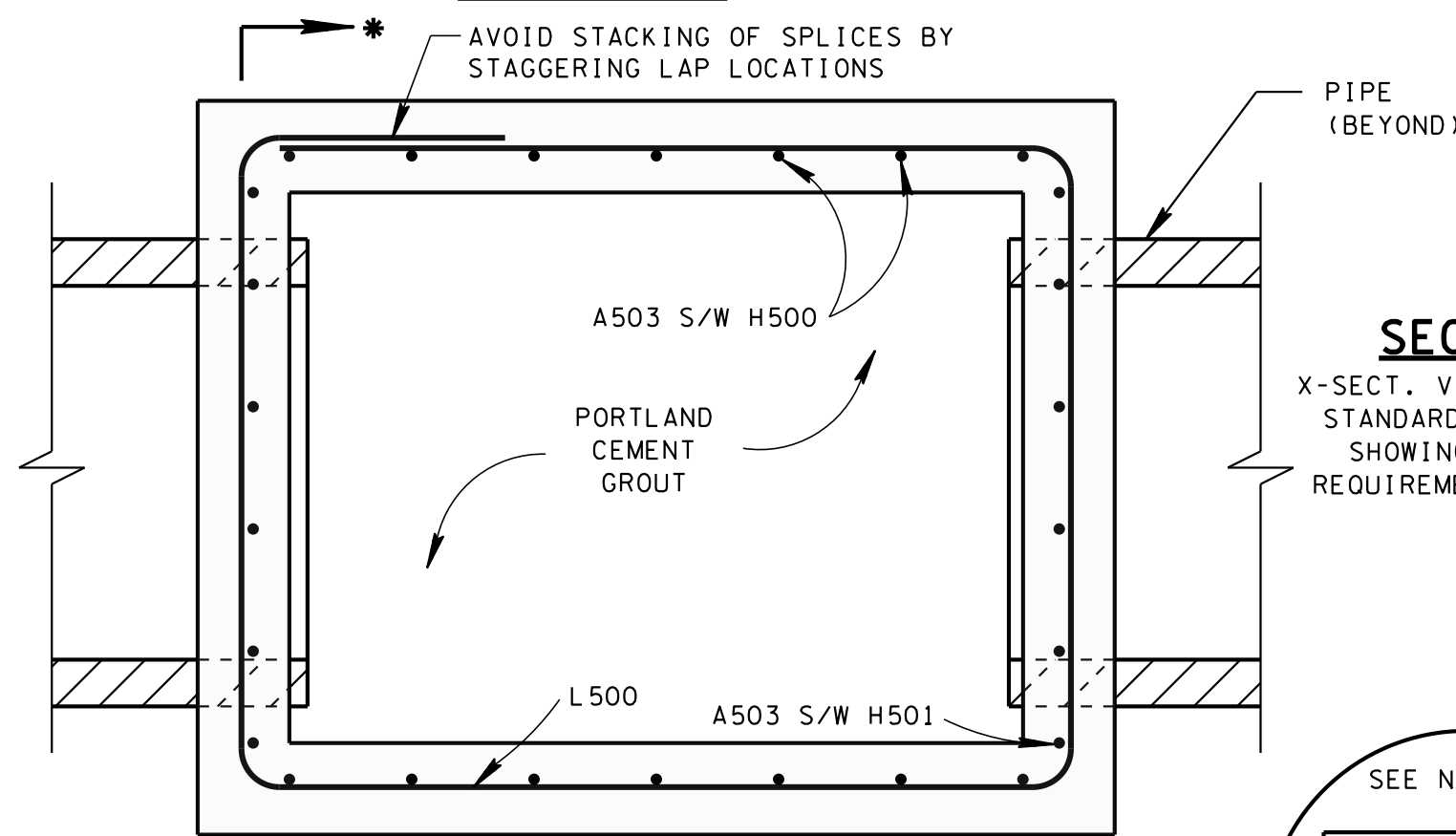
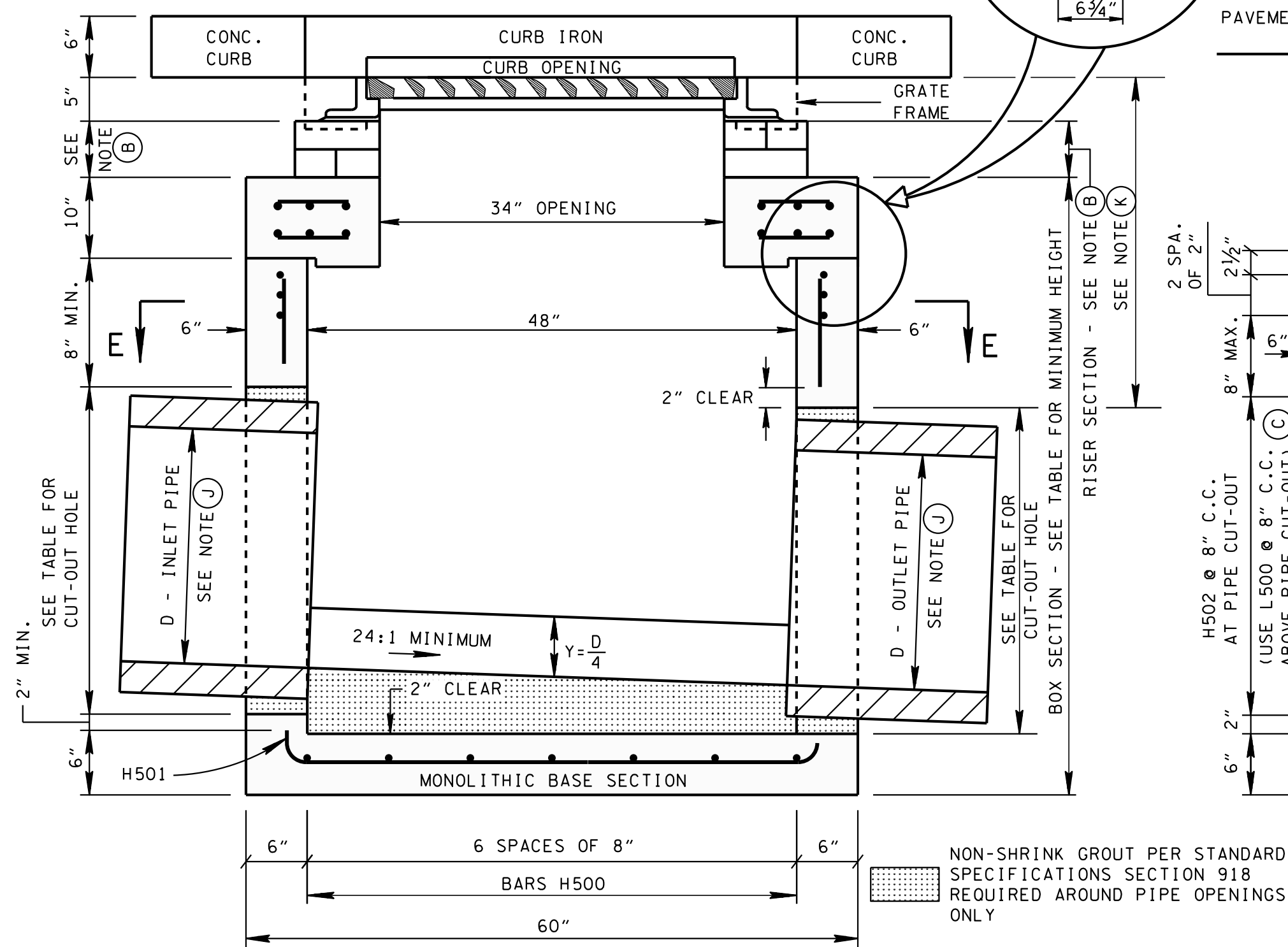


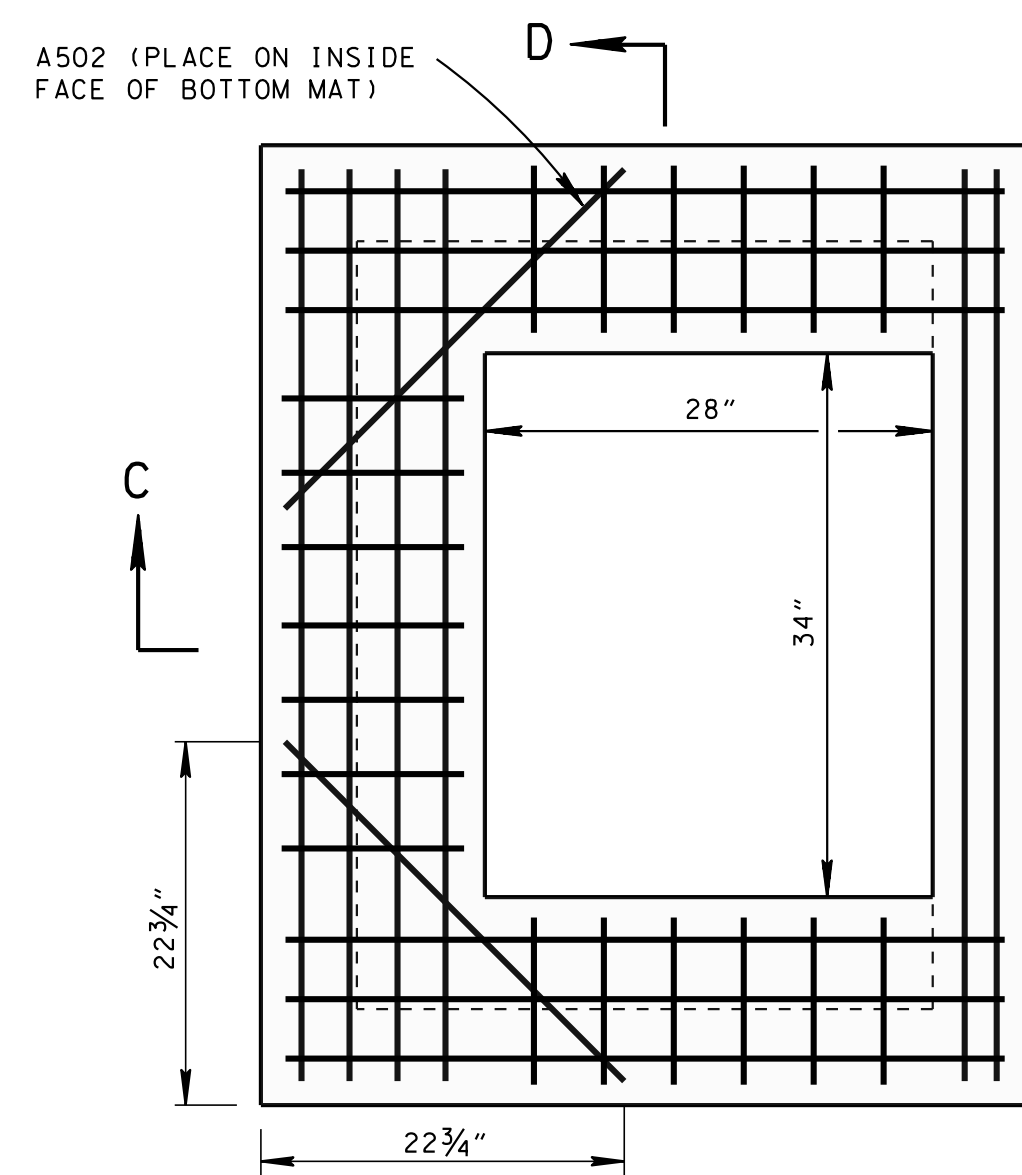
PLAN VIEW



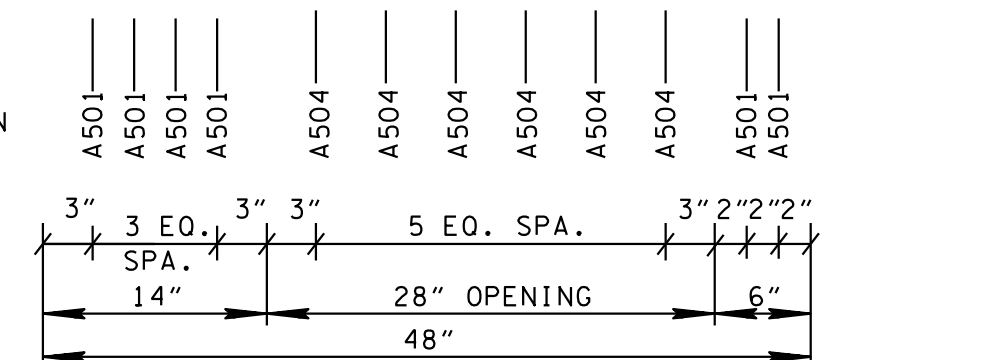
SECTION E-E



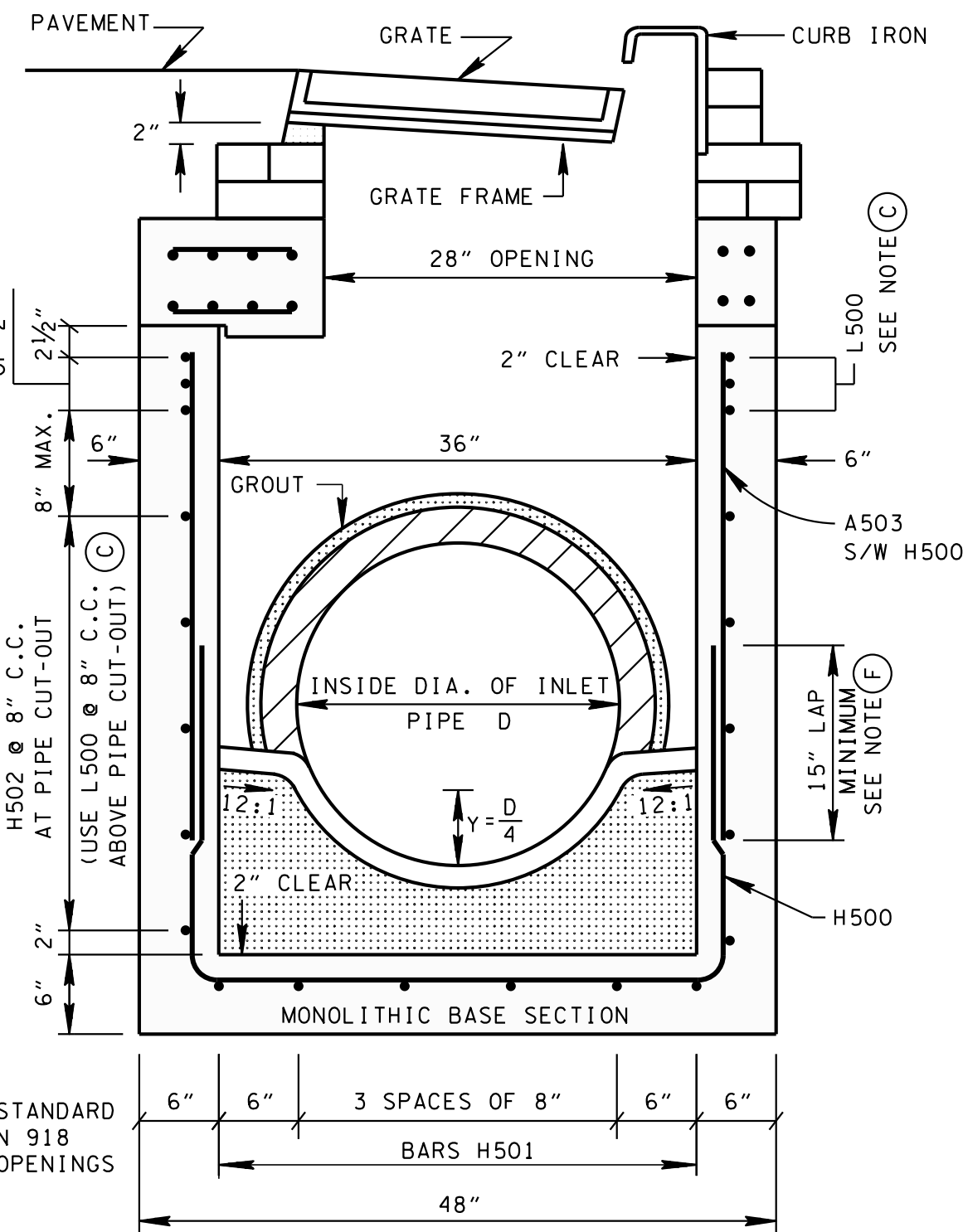
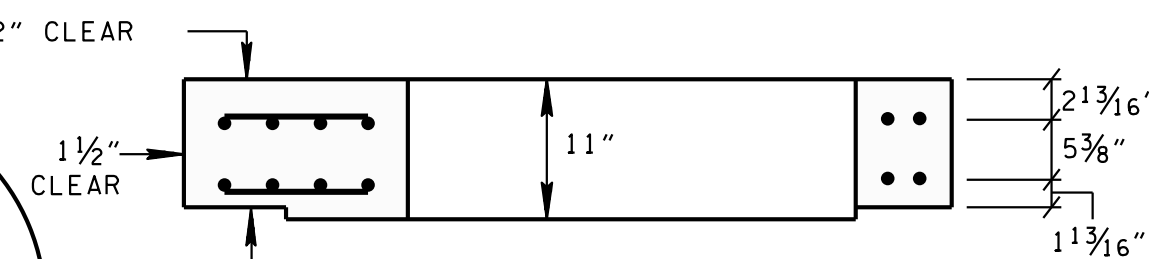
SECTION A-A



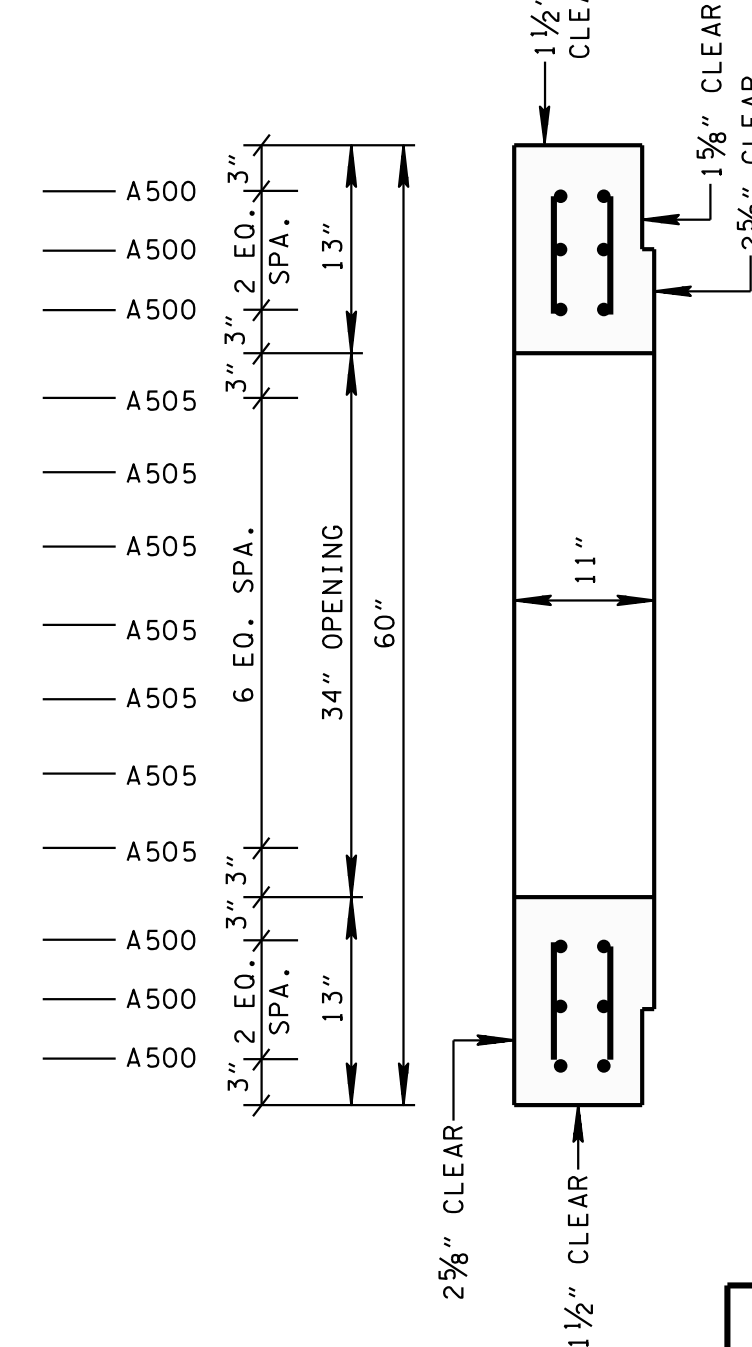
PLAN VIEW



SECTION C-C



SECTION B-B



SECTION D-D

CATCH BASIN MAXIMUM DEPTH NOTE

MAXIMUM DEPTH FOR THIS STRUCTURE IS 12.00'.

| CATCH BASIN DIMENSIONS | | | | FOR DESIGN USE ONLY CATCH BASIN MINIMUM DESIGN DEPT. (FEET) |
|---|------------------------------------|---|---|---|
| INSIDE DIAMETER (D) OF PIPE (INCHES) | PIPE WALL THICKNESS (INCHES) | DIAMETER OF CUT-OUT HOLES (INCHES) | BOX SECTION MINIMUM HEIGHTS (INCHES) | |
| 18 | 2½ | 25 | 49 | 3.88 |
| 24 | 3 | 32 | 56 | 4.42 |
| ④ 30 | 3½ | 39 | 63 | 4.96 |
| ④ 36 | 4 | 46 | 70 | 5.50 |

- ① CUT-OUT HOLES BASED ON REINFORCED CONCRETE PIPE WITH WALL TYPE "B".
- ② ALL FLEXIBLE PIPE MATERIALS REQUIRE GASKET. SEE STANDARD DRAWING D-PB-2.
- ③ CUT-OUT HOLES FOR PRECAST STRUCTURES TO BE FORMED IN ORDER TO OBTAIN A SMOOTH EDGED HOLE. SCORED OR ETCHED HOLES WITH REINFORCING STEEL LEFT UNCUT WILL NOT BE PERMITTED.
- ④ TO BE USED IN 48 INCH INTERIOR WALLS ONLY.

- ❑ REV. 12-18-96: MODIFIED DRAWING NO. D-CB-12P BY CHANGING CURB INION.
- ❑ REV. 12-31-96: REMOVED 0.5" PREMOLDED FIBER EXPANSION JOINT FROM SECTION "B-B". REMOVED OLD GENERAL NOTE ⑥ CHANGED LABEL OF LAST THREE GENERAL NOTES.
- ❑ REV. 10-26-97: CHANGED MINIMUM DEPTH TABLE AND MODIFIED STEEL IN BASE SECTION.
- ❑ REV. 1-19-99: MODIFIED CATCH BASIN MINIMUM DEPTH TABLE.
- ❑ REV. 3-20-00: ADDED SPECIAL NOTE RESTRICTING USE OF NO. 13 CATCH BASINS TO RADIUS LESS THAN 25 FEET.
- ❑ REV. 5-27-01: CHANGED PAY ITEMS IN GENERAL NOTE ①
- ❑ REV. 7-29-02: CHANGED ASTM SPECIFICATION IN GENERAL NOTE ⑥
- REV. 8-01-12: REVISED CATCH BASIN FOR COMPLIANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION WITH INTERIMS. REVISED REINFORCING, GENERAL NOTES, LEGEND AND ADDITIONAL MISC. DRAFTING EDITS.
- ❑ REV. 9-24-12: MODIFIED TOP SLAB AND MINIMUM DEPTH.
- ❑ REV. 3-11-14: ELIMINATED STIRRUPS

GENERAL NOTES

- (A) DRAWING TO BE USED FOR ALL PRECAST NO. 13 CONCRETE CATCH BASINS THAT ARE BETWEEN MINIMUM DEPTH AND TWELVE FEET. SEE STANDARD DRAWING D-CB-13S FOR DETAILS OF CAST-IN-PLACE NO. 13 CONCRETE CATCH BASINS AND PRECAST NO. 13 CONCRETE CATCH BASINS THAT ARE GREATER TWELVE FEET IN DEPTH. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL CONSTRUCTION NOTES & DETAILS.
- (B) THIS DIMENSION MAY VARY FROM A MINIMUM OF 0 INCHES TO A MAXIMUM OF 24 INCHES AS LONG AS 23 INCHES IS SATISFIED. THE CONTRACTOR HAS THE OPTION OF USING BRICK OR STANDARD PRECAST CONCRETE RISER FRAMES. THE USE OF BRICK SHALL BE LIMITED TO 6 INCHES. IF THIS DIMENSION EXCEEDS 6 INCHES, PRECAST CONCRETE RISER FRAMES SHALL BE USED AS SHOWN ON STANDARD DRAWING D-RF-1.
- (C) THIS DRAWING DEPICTS THE MINIMUM HORIZONTAL REINFORCING AT THE TOP OF CATCH BASIN WALLS. SEE ADDITIONAL DETAILS ON STANDARD DRAWING D-CB-99 FOR TALLER SECTIONS AND STEEL PLACEMENT ABOVE PIPE OPENINGS.
- (D) THE CONTRACTOR MAY WITH PERMISSION FROM THE ENGINEER SUBSTITUTE PRECAST CATCH BASINS FOR CAST-IN-PLACE CATCH BASINS PROVIDED THAT ALL PRECAST ELEMENTS MEET ASTM C913 (CURRENT EDITION) UNLESS SUPERSEDED BY THIS DRAWING.

CONCRETE: $f'_c = 4,000$ POUNDS PER SQUARE INCH AT 28 DAYS
REINFORCING STEEL: ASTM A615, $F_y = 60,000$ POUNDS PER SQUARE INCH
ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.

- (E) PRECAST CATCH BASIN UNITS WHICH ARE DAMAGED DURING SHIPMENT OR INSTALLATION WILL BE REJECTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE DAMAGED CATCH BASIN UNITS AT HIS OWN EXPENSE.
- (F) THE FABRICATOR MAY ELIMINATE THE A503 BARS BY LENGTHENING THE VERTICAL LEG OF THE H500/H501 BARS SO THAT 1½ INCHES OF CLEAR COVER IS PROVIDED AT THE TOP OF THE STRUCTURE.
- (G) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.
- (H) THE CONTRACTOR IS TO PATCH ALL LIFTING DEVICE HOLES WITH GROUT AND PLACE A MINIMUM OF ONE (1) INCH OF COVER OVER THE HARDWARE OF THESE DEVICES ON BOTH TOP AND BOTTOM SURFACES.
- (I) ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL DETAILS.
- (J) SEE ROADWAY PLANS DRAINAGE TABULATION FOR PIPE INLET AND OUTLET ELEVATIONS. IF NEEDED, INVERT ELEVATIONS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER IN ORDER TO ACCOMMODATE INLET AND OUTLET PIPES.
- (K) FOR CASES WHERE THE OUTLET PIPE DIAMETER IS LARGER THAN THE INLET PIPE DIAMETER, A MINIMUM 23 INCH DEPTH SHALL BE MAINTAINED ABOVE THE OUTLET PIPE.
- (L) SEE STANDARD DRAWING D-CBB-13 FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.
- (M) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS 611-13.01 CATCH BASINS, TYPE 13, 0'-4' DEPTH THROUGH 611-13.03, CATCH BASINS, TYPE 13, > 8'-12' DEPTH PER EACH. PAYMENT INCLUDES RISER SECTION AND GRATE.

☐ MINOR REVISION -- FHWA
APPROVAL NOT REQUIRED.

REINFORCING STEEL LEGEND

The diagram illustrates the dimensions for reinforcing steel components. On the left, a vertical list of bar types (A500 to A505) is paired with their respective hook dimensions: A500 (45"), A501 (57"), A502 (30"), A503 (VARIABLE), A504 (10"), and A505 (11"). In the center, a large U-shaped hook detail is shown with dimensions: 42 1/2" for the top and bottom horizontal segments, 54 1/2" for the vertical segments, and 12" for the hook length. To the right, two smaller U-shaped hook details are shown for H500 and H502 bars. H500 has a top horizontal segment of 41 1/4" and vertical segments of 26". H502 has a top horizontal segment of 54 1/2" and vertical segments of 26". Both H500 and H502 hooks have a 6" MIN. dimension for the vertical segment and a 42 1/2" MAX. dimension for the top horizontal segment. At the bottom, a note states: 'DIMENSIONS SHOWN ON THIS LEGEND ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK AND TIE DETAILS SHALL APPLY, EXCEPT AS NOTED.' A box in the bottom right corner contains the text 'NOT TO SCALE'.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD PRECAST
RECTANGULAR
CONCRETE NO. 13
CATCH BASIN

| | |
|----------|----------|
| 12-18-96 | D-CB-13P |
|----------|----------|