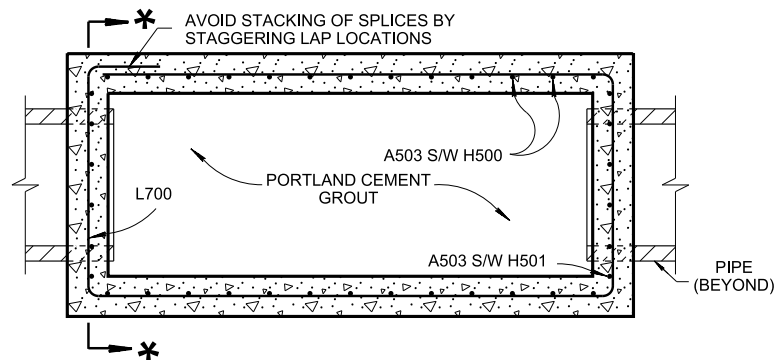


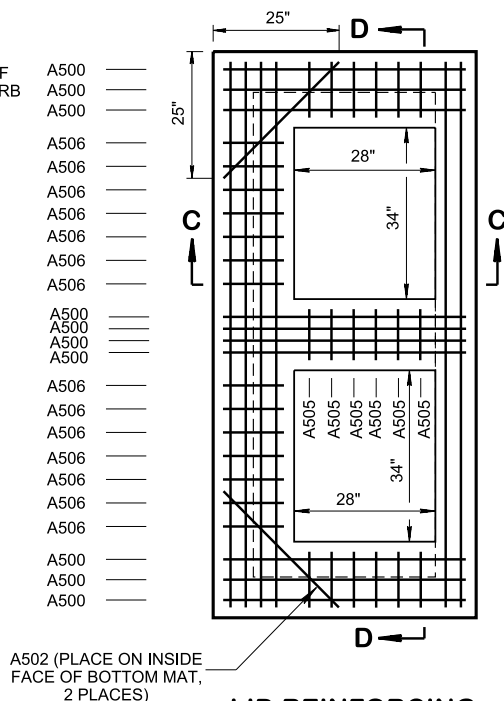
Weight (Net): 4088 lb
Volume (Net): 1.04cu.yd

PLAN VIEW

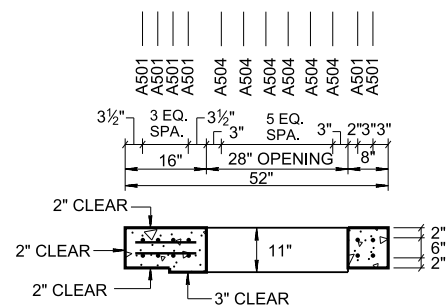
SECTION *-* ELEV. VIEW IS PROVIDED ON
STANDARD DRAWING D-CB-99
SHOWING REINFORCEMENT
REQUIREMENTS AROUND PIPE
OPENINGS



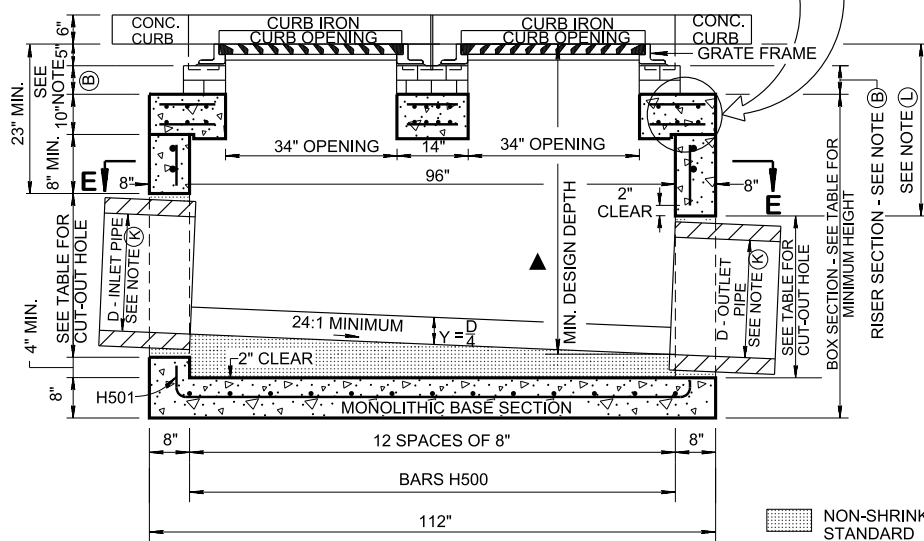
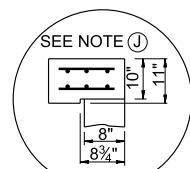
SECTION E-E



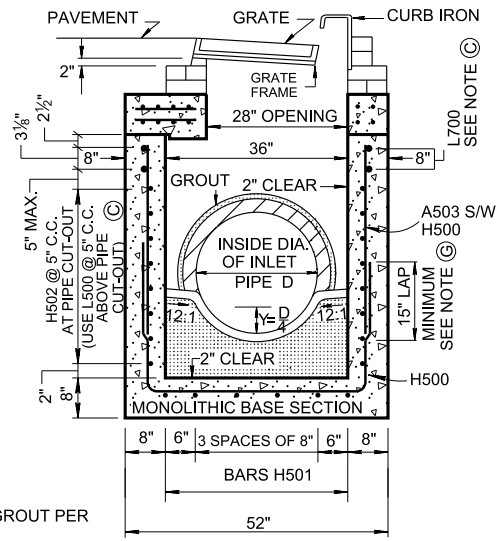
LID REINFORCING



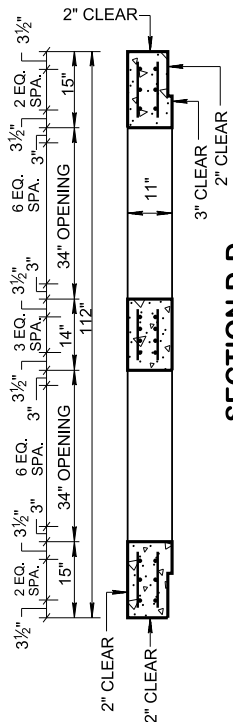
SECTION C-C



SECTION A-A



SECTION B-B



SECTION D-D

- 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 96 INCH INTERIOR WALLS ONLY.

CATCH BASIN MAXIMUM DEPTH NOTE
MAXIMUM DEPTH FOR THIS STRUCTURE IS 20.00'.

CATCH BASIN DIMENSIONS				 FOR DESIGN USE ONLY CATCH BASIN MINIMUM DESIGN DEPTH (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	55	4.07
24	3	32	62	4.61
④ 30	3½	39	69	5.15
④ 36	4	46	76	5.70
④ 42	4½	53	83	6.24
④ 48	5	60	90	6.78
④ 54	5½	67	97	7.32
④ 60	6	74	104	7.86

REINFORCING STEEL LEGEND

The diagram illustrates the dimensions for reinforcing steel bars and their hook/tie details. The bar types are listed on the left, and the hook/tie details are shown on the right. Dimensions are given in inches.

Bar Type	Dimensions
A500	48"
A501	108"
A502	33"
A503	VARIABLE
A504	11"
A505	10"
A506	12"

Hook/Tie Details:

- H500:** 26" (vertical), 42½" (horizontal), 26" (vertical)
- H501:** 26" (vertical), 102½" (horizontal), 26" (vertical)
- H502:** 41½" MAX. (vertical), 6" MIN. (horizontal), 101¼" (horizontal), 41½" MAX. (vertical)
- L500:** 41½" (vertical), 12" (horizontal), 101¼" (horizontal), 41½" (vertical)
- L700:** 44¼" (vertical), 12" (horizontal), 104¼" (horizontal), 44¼" (vertical)

DIMENSIONS SHOWN IN THIS LEGEND ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK AND TIE DETAILS SHALL APPLY, EXCEPT AS NOTED.

GENERAL NOTES

- (A) DRAWING TO BE USED FOR ALL CAST-IN-PLACE NO. 14 CONCRETE CATCH BASINS AND ALL PRECAST NO. 14 CONCRETE CATCH BASINS THAT ARE GREATER THAN TEN FEET IN DEPTH. SEE STANDARD DRAWING D-CB-14P FOR DETAILS OF PRECAST NO. 14 CONCRETE CATCH BASINS TEN FEET AND LESS 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) CAST-IN-PLACE CONCRETE CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, SECTION 611 AND/OR SPECIAL PROVISIONS UNLESS SUPERSEDED BY THIS DRAWING. 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.
- (E) THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR BOTH CAST-IN-PLACE AND PRECAST STRUCTURES:
- 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.
- (F) 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 THEIR OWN EXPENSE.
- (G) THE CONTRACTOR MAY ELIMINATE THE A503 BARS BY LENGTHENING THE VERTICAL LEG OF THE H500/H501 BARS SO THAT $1\frac{1}{2}$ INCHES OF CLEAR COVER IS PROVIDED AT THE TOP OF THE STRUCTURE.
- (H) APPROPRIATE SIZING AND LOCATION OF LIFTING DEVICES SHALL BE THE RESPONSIBILITY OF THE FABRICATOR.
- (I) 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.
- (J) ALTERNATIVE JOINT DETAILS MAY BE ACCEPTABLE. SEE STANDARD DRAWING D-CB-99 FOR ADDITIONAL DETAILS.
- (K) 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.
- (L) 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.
- (M) SEE STANDARD DRAWING D-CBB-12A FOR DETAILS REGARDING CAST IRON GRATES, FRAMES AND CURB INLETS.
- (N) PAY DEPTH MEASUREMENT MADE FROM TOP OF GRATE TO OUTLET FLOW ELEVATION. PAYMENT INCLUDES RISER SECTIONS AND GRATES. PAYMENT FOR CATCH BASIN WILL BE MADE UNDER ITEM NUMBERS:

611-14.02,	CATCH BASINS, TYPE 14, > 4'-8' DEPTH,	EACH,	(THROUGH)
611-14.05,	CATCH BASINS, TYPE 14, > 16'-20' DEPTH,	EACH.	

REV. 12-18-95: CHANGED VERTICAL
DEPTH REQUIREMENTS. ADDED
HANDLING AND CUT-OUT HOLE NOTES.

REV. 12-18-96: REMOVED 0.5"
PREMOLDED FIBER EXPANSION JOINT
FROM SECTION "B-B". REMOVED OLD
GENERAL NOTE (H). 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. 5-27-01: CHANGED PAY ITEMS
IN GENERAL NOTE (J). ADDED CATCH
BASIN MAXIMUM DEPTH NOTE.

REV. 7-29-02: CHANGED ASTM
SPECIFICATION IN GENERAL NOTE (C).

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.

REV. 05-15-18: REVISED CATCH BASIN
MINIMUM DESIGN DEPTH VALUES.
CORRECTED STANDARD SPECIFICATIONS
SECTION NUMBER TO 921 FOR NON
-SHRINK GROUT. ADDED DIMENSION IN
SECTION VIEW A-A FOR NOTE (B).
CORRECTED REBAR PLACEMENT IN LIDS.
ADDED DIMENSION IN SECTION VIEW A-A
FOR MINIMUM DESIGN DEPTH. ADJUSTED
BOX SECTION MINIMUM HEIGHTS.

REV. 02-20-2020: REDREW SHEET.

☐ APPROVED BY FHWA
(ALL OTHERS APPROVED BY TDOT)

STATE OF TENNESSEE
STANDARD
DRAWING
DEPARTMENT OF TRANSPORTATION

STANDARD
RECTANGULAR
CONCRETE
NO. 14
CATCH BASIN

05-27-1995

D-CB-14S