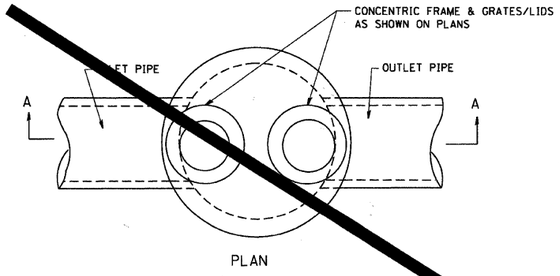
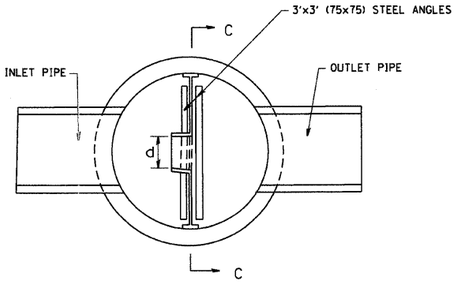
CONTRACT NO. 63522

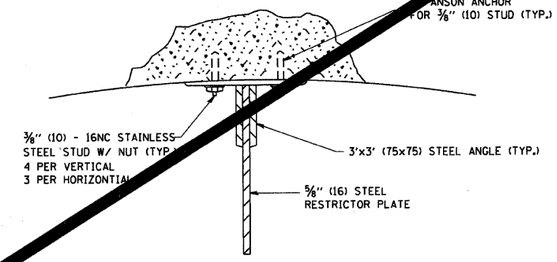
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0085	00-00246-02-FP	MCHENRY	292	213
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



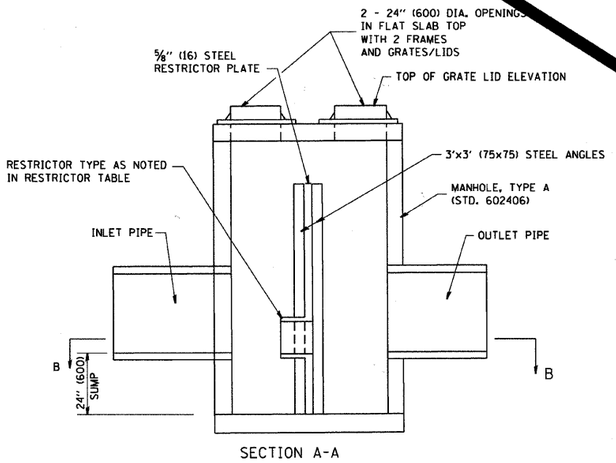
PLAN



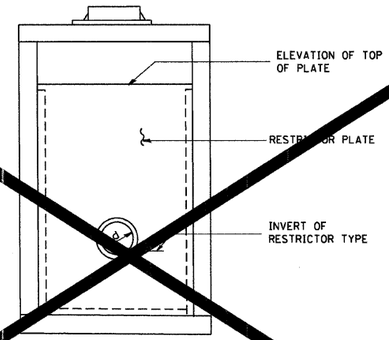
SECTION B-B



ANGLE FASTENER DETAIL



SECTION A-A



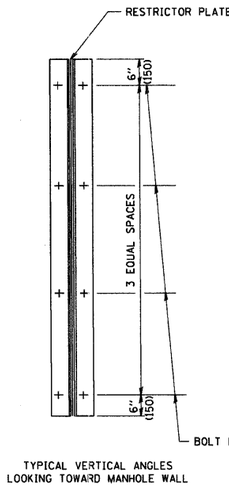
SECTION C-C

NOTES:

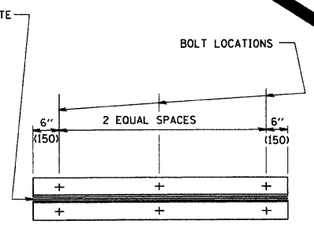
1. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.
2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.
3. BASIS OF PAYMENT: "MANHOLES ,TYPE A, 6 FT. (1.8 m)-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE" EACH

INLET TUBE DETAIL

STATION	MANHOLE DIAMETER	FRAME AND GRATE	RESTRICTOR TYPE	INSIDE RESTRICTOR TYPE DIAMETER in. (mm) (d)	INVERT OF RESTRICTOR TYPE	ELEVATION TOP OF PLATE OVERFLOW



TYPICAL VERTICAL ANGLES LOOKING TOWARD MANHOLE WALL



TYPICAL HORIZONTIAL ANGLES LOOKING TOWARD BOTTOM OF MANHOLE

TOTAL BOLTS REQUIRED: 22

NOTE:

1. ANGLES SHOULD BE 3x3x⅜ (75x75x75)
2. VERTICAL ANGLES SHOULD EXTEND FROM THE BOTTOM OF THE RESTRICTOR PLATE TO THE TOP.
3. HORIZONTIAL ANGLES SHOULD EXTEND FROM VERTICAL ANGLE TO VERTICAL ANGLE.

STEEL ANGLE BOLTING DETAILS

RESTRICTOR TYPE					
1	2	3	4	5	6
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SQUARE EDGED	ROUNDED
LENGTH: ½ TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-½ DIA.	LENGTH: 2-½ DIA.	
C=.52	C=.61	C=.61	C=.73	C=.82	C=.98

VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
R. SHAH	09/09/94
R. SHAH	10/25/94
E. GOMEZ	08/28/00
M. GOMEZ	01/08/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

MANHOLE WITH RESTRICTOR PLATE

SCALE: VERT. NONE HORIZ.

DRAWN BY

CHECKED BY

BD600-04 (BD-12)

PLOT DATE = 3/5/2007
FILE NAME = k:\dist6st\bd12.dgn
PLOT SCALE = 50.000 '/ IN.
USER NAME = bauerdl