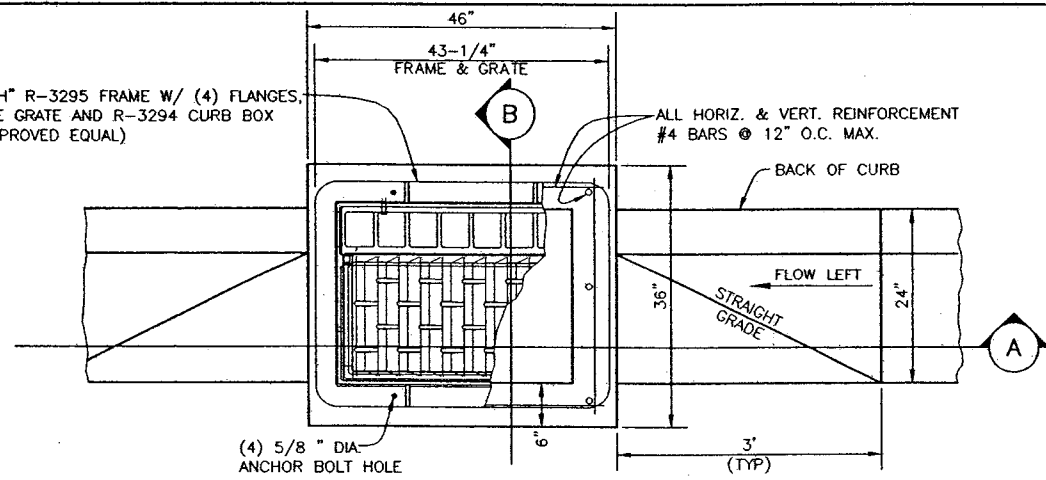
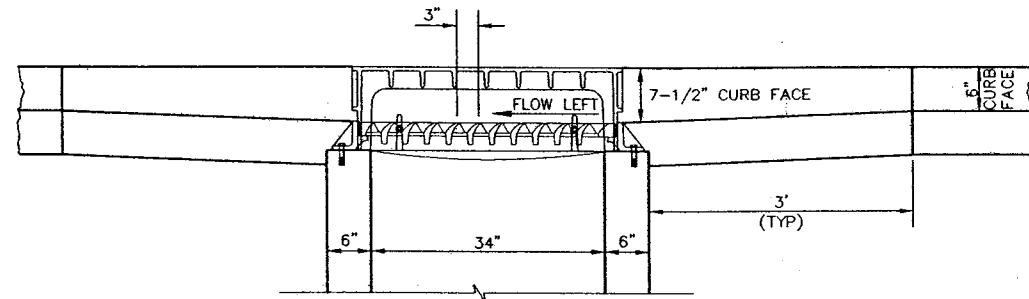


"NEENAH" R-3295 FRAME W/ (4) FLANGES,
L STYLE GRATE AND R-3294 CURB BOX
(OR APPROVED EQUAL)



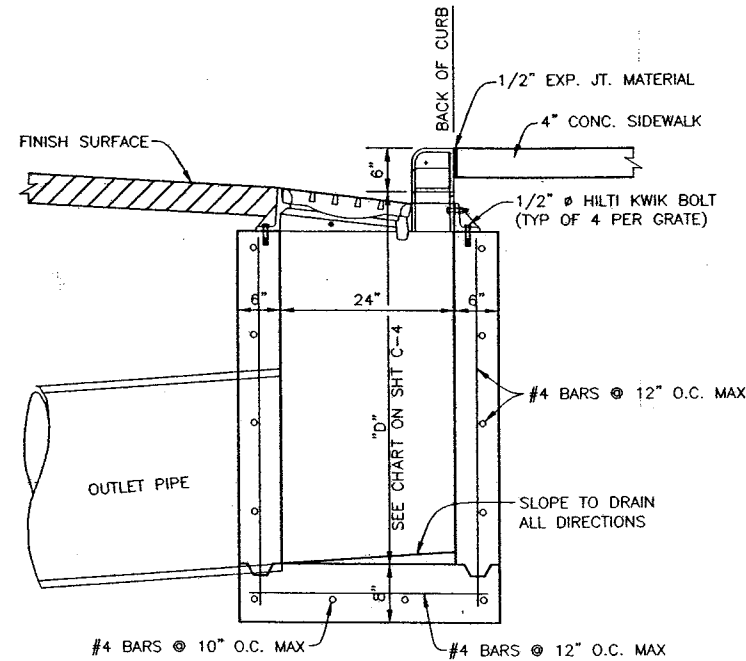
PLAN VIEW - TYPE "E" INLET

NO SCALE



SECTION A

NO SCALE

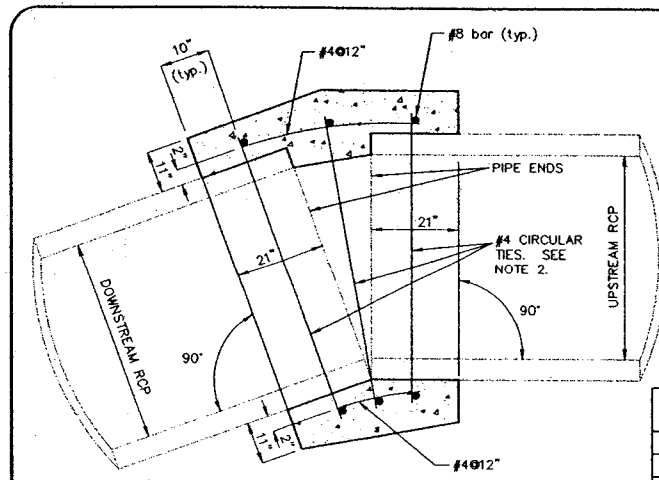


SECTION B

NO SCALE

NOTES:

1. CONCRETE SHALL BE CLASS "D" OR "DA".
2. OUTLET PIPE SHALL BE TRIMMED FLUSH WITH INSIDE FACE OF INLET.
3. GRATES SHOWN ON THIS SHEET ARE FOR FLOW LEFT CONDITIONS. FLOW CONDITIONS ARE SHOWN FOR EACH TYPE "E" DROP INLET ON SHEETS SD1-SD15. CONTRACTOR MUST SPECIFY FLOW LEFT OR FLOW RIGHT WHEN ORDERING L STYLE GRATES.



ELEVATION

STORM DRAIN CONCRETE COLLAR DETAIL (2)

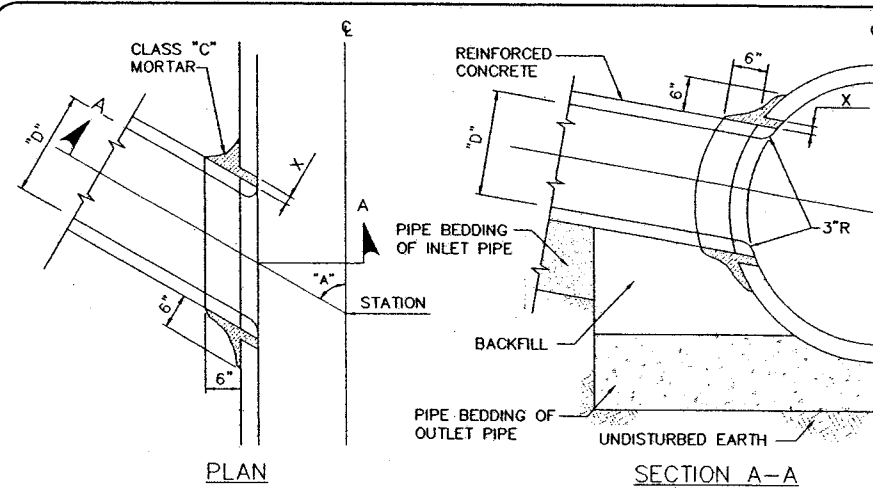
NO SCALE

NOTE:

WHERE THE LARGEST GAP BETWEEN PIPE ENDS EXCEEDS 2 1/2 INCHES, THE NUMBER OF CIRCULAR TIES SHALL BE INCREASED TO MAINTAIN A MAXIMUM SPACING OF 6 INCHES CENTER TO CENTER. CIRCULAR TIES SHALL HAVE A DIAMETER 5 INCHES GREATER THAN THE OUTSIDE DIAMETER OF THE PIPE.

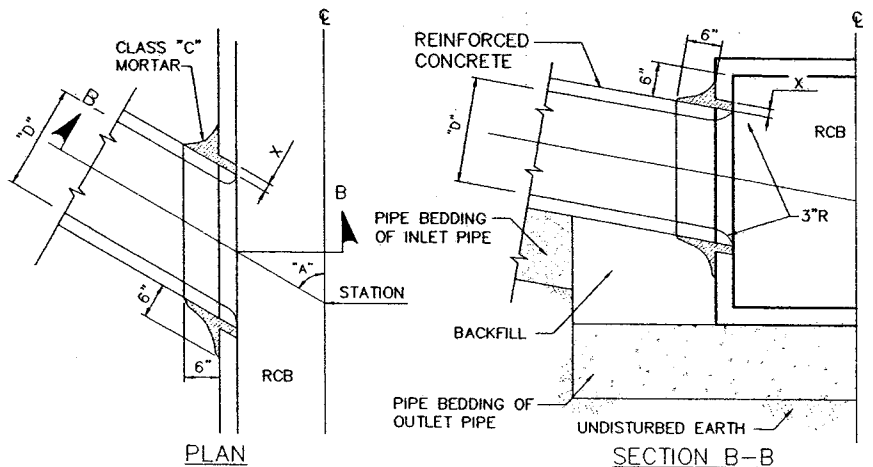
CIRCULAR TIES:

PIPE DIAMETER	LARGEST GAP BETWEEN PIPES	NO. OF CIRCULAR TIES
21" or less	2 1/2"	3
24" to 30"	2 1/2" or less	3
33" to 57"	2 1/2" or less	4
60" to 66"	2 1/2" or less	5



PIPE TO PIPE JUNCTION STRUCTURE DETAIL (4)

NO SCALE



PIPE TO RCB JUNCTION STRUCTURE DETAIL (5)

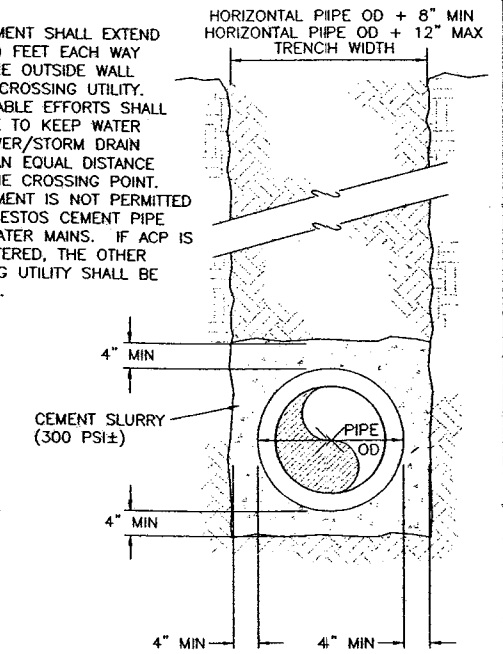
NO SCALE

NOTES:

1. ANGLE "A" SHALL BE BETWEEN 45° AND 90°.
2. DIMENSION "D" SHALL BE EQUAL TO OR LESS THAN 1/2 THE INSIDE DIAMETER OF THE MAINLINE PIPE.
3. DIMENSION "X" SHALL BE 1" MINIMUM AND 3" MAXIMUM.
4. BURN OR CHIP END OF INLET PIPE FLUSH WITH INNER SURFACE OF MAINLINE PIPE, ROUND EDGES OF MAINLINE AND INLET PIPES.

NOTES:

1. ENCASEMENT SHALL EXTEND 10 (TEN) FEET EACH WAY FROM THE OUTSIDE WALL OF THE CROSSING UTILITY.
2. REASONABLE EFFORTS SHALL BE MADE TO KEEP WATER AND SEWER/STORM DRAIN JOINTS AN EQUAL DISTANCE FROM THE CROSSING POINT.
3. ENCASEMENT IS NOT PERMITTED FOR ASBESTOS CEMENT PIPE (ACP) WATER MAINS. IF ACP IS ENCOUNTERED, THE OTHER CROSSING UTILITY SHALL BE ENCASED.



CONCRETE ENCASEMENT DETAIL (3)

NO SCALE

APPROVED FOR CONSTRUCTION

[Signature] 6/16/03
LAS VEGAS VALLEY WATER DISTRICT DATE

DEPARTMENT OF PUBLIC WORKS
400 EAST STEWART
LAS VEGAS, NEVADA, NV 89101
(702) 229-8278

G. C. WALLACE, INC.
Engineers/Planners/Surveyors
150 SOUTH PARKWAY BLVD./LAS VEGAS, NEVADA 89146
(702) 864-2000

ENGINEER

SEAL

ENGINEER - CIVIL
RANDALL K. GREMLICH
Exp. 6/20/03
No. 8312 KVVN 30

2/10/03

SHEET
SD18
48 OF 93 SHEETS
DRAWING NO.
107-V3593

PROJECT NO.: 412.405

SCALE: 1" = 4' HOR VERT

DATE: 2/10/03

DESIGNED BY: BRG 2/10/03

CHECKED BY: JBR 2/10/03

DRAWN BY: SXL 2/10/03

SHEET

BUFFALO DRIVE
STORM DRAIN DETAILS
DROP INLET TYPE E

BUFFALO DRIVE
CHEYENNE TO LONE MOUNTAIN

REVISION

GCW PROJ # 412.405

15967