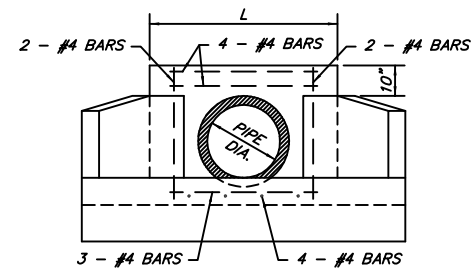


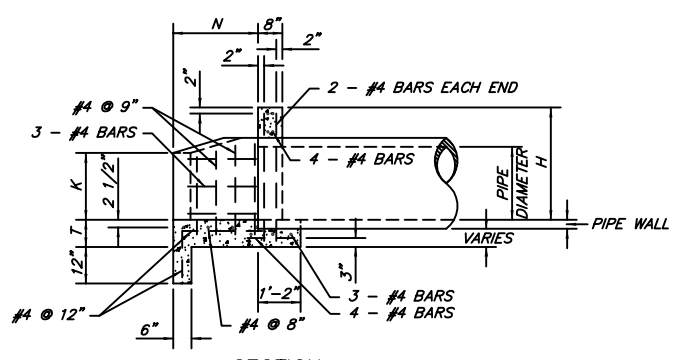
PLAN VIEW



ELEVATION

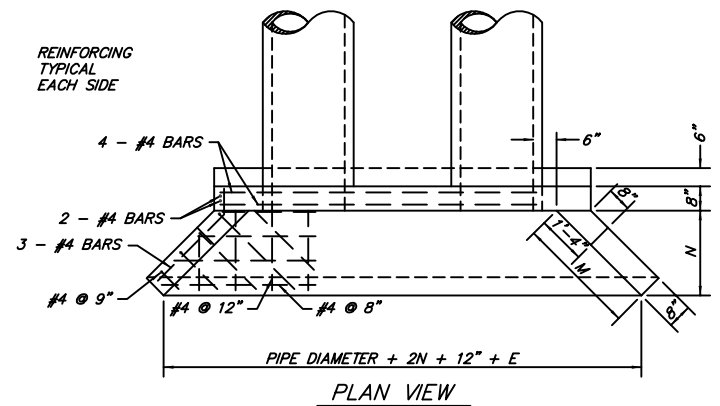
HEADWALL SINGLE PIPE
N.T.S.

DIAMETER	CONC. QTY CY	
	SINGLE PIPE	DOUBLE PIPE
18"	0.84	1.16
24"	1.19	1.65
30"	1.82	2.53
36"	2.29	3.26
42"	2.90	4.18
48"	4.02	5.86

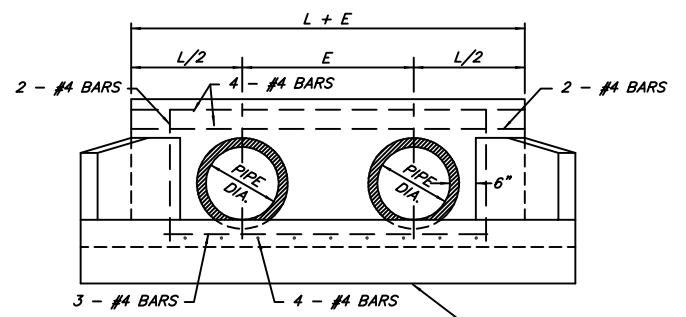


SECTION

HEADWALL WITH 45° WINGWALLS
N.T.S.
DR. 4.1



PLAN VIEW

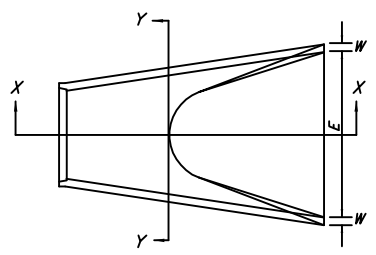


ELEVATION

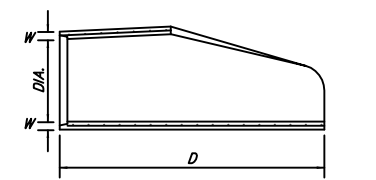
HEADWALL DOUBLE PIPE
N.T.S.

W= WALL THICKNESS OF PIPE

DIA.	D	E
18"	6'-1"	3'-0"
24"	6'-1 1/2"	4'-0"
30"	6'-1 3/4"	5'-0"
36"	8'-1 1/4"	6'-0"
42"	8'-2"	6'-6"
48"	8'-2"	7'-0"
54"	8'-4"	7'-6"
60"	8'-4"	8'-0"
72"	8'-4"	9'-0"



PLAN



SECTION X-X

FLARED END SECTION
N.T.S.
DR. 4.2



END VIEW



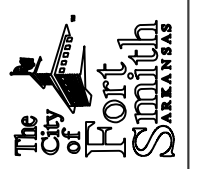
SECTION Y-Y

DIMENSIONS								
I.D.	E	L+E	T	H	K	L	M	N
18"	2'-6"	6'-6"	9"	2'-8"	1'-7"	4'-0"	2'-1 1/4"	1'-6"
24"	3'-0"	7'-6"	9"	3'-2"	1'-10"	4'-6"	2'-10"	2'-0"
30"	3'-9"	8'-10"	10"	3'-8"	2'-1"	5'-1"	3'-6 1/2"	2'-6"
36"	4'-6"	10'-4"	10"	4'-2"	2'-4"	5'-8"	4'-3"	3'-0"
42"	5'-3"	11'-6"	10"	4'-8"	2'-8"	6'-3"	4'-11 1/2"	3'-6"
48"	6'-0"	12'-10"	12"	5'-5"	3'-2"	6'-10"	5'-8"	4'-0"

- NOTES:
1. ALL CONCRETE SHALL BE CLASS "AAA" 4000 PSI.
 2. ALL EXPOSED CONCRETE SHALL HAVE A CLASS 2, RUBBED FINISH.
 3. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4".
 4. 2" DIAMETER WEEP HOLES SHALL BE INSTALLED 4'-0" O.C. AT BOTTOM OF HEADWALLS.
 5. WHERE HANDRAIL IS SPECIFIED, THE SUPPORTS SHALL BE CENTERED IN THE WALL PER DETAILS ON DWG FC3.
 6. HIGH POINT OF HEADWALL SHALL NOT PROJECT MORE THAN 3" ABOVE SLOPE.

By	Date	Revision

Standard Drawings - HEADWALLS
DRAINAGE IMPROVEMENTS - HEADWALLS
Public Works Construction



CITY OF FORT SMITH
Engineering Department
623 Garrison Avenue, Room 409
Fort Smith, Arkansas 72901
Phone (479)784-2225 Fax (479)784-2245

Project:	Details
Date:	NOV 2012
Scale:	As Shown
Drawn By:	RBR
Dwg. No.:	DR5
Sheet No.:	6