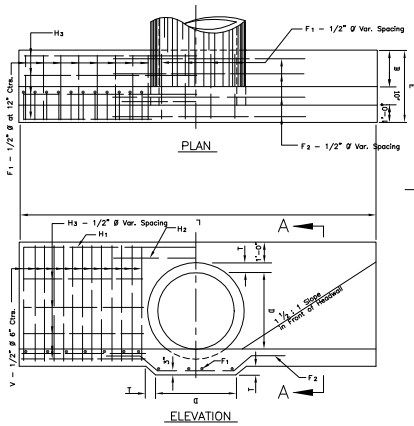
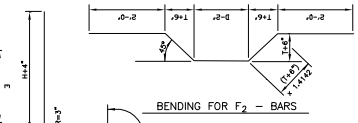
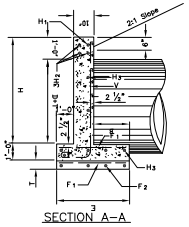
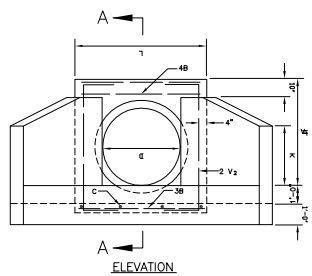
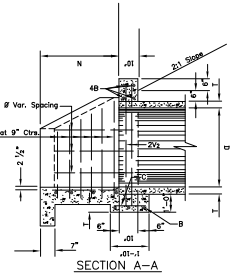
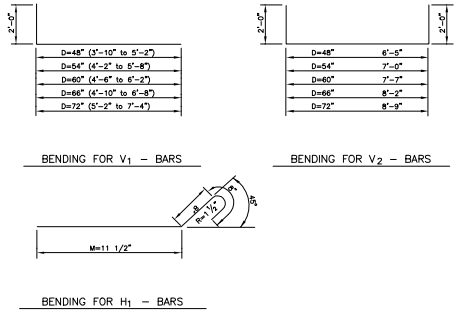


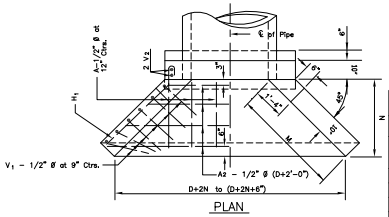












DIMENSIONS & QUANTITIES FOR HEADWALLS WITH 45° WINGS

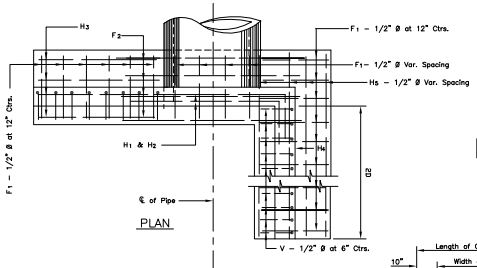
DIMENSIONS								REINFORCING STEEL														QUANTITIES *	
D	AREA SQ.FT.	T	H	K	L	M	N	A1 – 1/2" Ø		A2 – 1/2" Ø		B – 1/2" Ø		C – 1/2" Ø		H1 – 1/2" Ø		V1 – 1/2" Ø		V2 – 1/2" Ø		CLASS "A" CONC. C.Y.	REINF. STEEL, LBS.
								NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH		
48"	12.57	5"	5'-5"	3'-2"	6'-4"	5'-3 ½"	3'-9"	7	3'-5"	4	9'-0" Av.	7	6'-0"	5	1'-6"	8	5'-8"	12	6'-6" Av.	4	10'-5"	3.81	184
54"	15.90	5 ½"	5'-11½"	3'-6"	6'-10"	5'-10½"	4'-2"	7	3'-10"	5	9'-11" Av.	7	6'-6"	5	1'-6"	8	6'-3"	14	6'-11" Av.	4	11'-0"	4.54	214
60"	19.63	6"	6'-6"	3'-10"	7'-4"	6'-5 ½"	4'-7"	8	4'-3"	5	10'-10" Av.	7	7'-0"	6	1'-6"	10	6'-10"	16	7'-4" Av.	4	11'-7"	5.33	253
66"	23.76	6 ½"	7'-0 ½"	4'-2"	7'-10"	7'-1"	5'-0"	8	4'-8"	5	11'-9" Av.	7	7'-6"	6	1'-6"	10	7'-5"	18	7'-9" Av.	4	12'-2"	6.20	281
72"	28.27	7"	7'-7"	4'-6"	8'-4"	7'-9 ½"	5'-6"	9	5'-2"	6	12'-9" Av.	7	8'-0"	6	1'-6"	10	8'-2"	20	8'-3" Av.	4	12'-9"	7.22	325

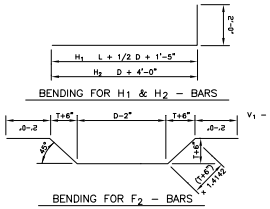
* FOR ONE HEADWALL

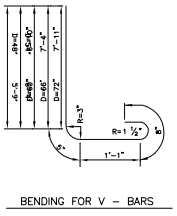
DIMENSIONS & QUANTITIES FOR STRAIGHT HEADWALLS

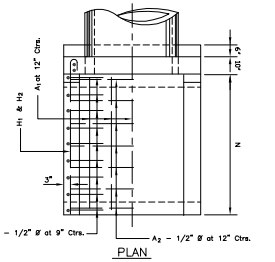
DIMENSIONS							REINFORCING STEEL												QUANTITIES *	
D	AREA SQ.FT.	T	H	L	E	B	F1 – 1/2" Ø		F2 – 1/2" Ø		H1 – 1/2" Ø		H2 – 1/2" Ø		H3 – 1/2" Ø		V – 1/2" Ø		CLASS "A" CONC. C.Y.	REINF. STEEL, LBS.
							NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH		
48"	12.57	5"	5'-5"	18'-0"	3'-9"	1'-11"	18	3'-5"	4	11'-0"	1	17'-8"	3	8'-0"	14	6'-5"	28	7'-11"	5.14	305
54"	15.90	5 ½"	5'-11½"	20'-0"	4'-0"	2'-2"	20	3'-8"	4	11'-0"	1	19'-8"	3	8'-8"	16	7'-1"	30	8'-6"	6.19	355
60"	19.63	6"	6'-6"	22'-0"	4'-3"	2'-5"	24	3'-11"	5	11'-8"	1	21'-8"	3	9'-0"	18	7'-10"	32	9'-0"	7.34	421
66"	23.76	6 ½"	7'-0 ½"	24'-0"	4'-6"	2'-8"	25	4'-2"	5	12'-3"	1	23'-8"	3	9'-6"	18	8'-6"	36	9'-6"	8.58	476
72"	28.27	7"	7'-7"	26'-0"	4'-10"	3'-0"	27	4'-6"	5	12'-10"	1	25'-8"	3	10'-0"	18	9'-3"	38	10'-1"	10.01	529

* FOR ONE HEADWALL





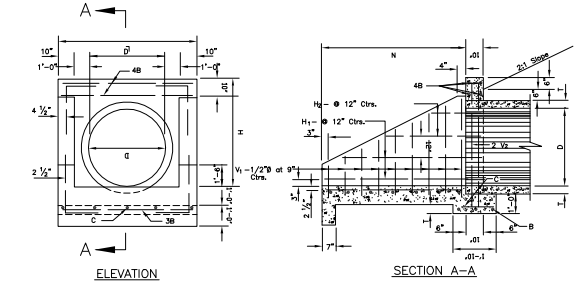


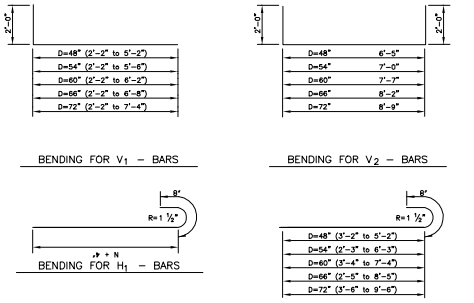


DIMENSIONS & QUANTITIES FOR HEADWALLS WITH U–TYPE WINGS

DIMENSIONS						REINFORCING STEEL																QUANTITIES *	
D	AREA SQ.FT.	T	H	L	N	A1 – 1/2" Ø		A2 – 1/2" Ø		B – 1/2" Ø		C – 1/2" Ø		H1 – 1/2" Ø		H2 – 1/2" Ø		V1 – 1/2" Ø		V2 – 1/2" Ø		CLASS "A" CONC. C.Y.	REINF. STEEL, LBS.
						NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH		
48"	12.57	5"	5'-5"	7'-8"	6'-6"	7	6'-2"	7	7'-4"	7	7'-4"	7	1'-6"	4	7'-6"	4	4'-10" Av.	18	5'-8" Av.	4	10'-5"	4.56	234
54"	15.90	5 ½"	5'-11½"	8'-2"	7'-7"	7	7'-3"	8	7'-10"	7	7'-10"	7	1'-6"	4	8'-7'	6	4'-11" Av.	20	5'-10" Av.	4	11'-0"	5.49	270
60"	19.63	6"	6'-6"	8'-8"	8'-8"	8	8'-4"	9	8'-4"	7	8'-4"	7	1'-6"	4	9'-8"	6	6'-0" Av.	24	6'-2" Av.	4	11'-7"	6.50	321
66"	23.76	6 ½"	7'-0 ½"	9'-2"	9'-9"	8	9'-5"	10	8'-10"	7	8'-10"	8	1'-6"	4	10'-9"	8	6'-1" Av.	26	6'-5" Av.	4	12'-2"	7.58	364
72"	28.27	7"	7'-7"	9'-8"	10'-10"	9	10'-6"	11	9'-4"	7	9'-4"	8	1'-6"	4	11'-10"	8	7'-2" Av.	30	6'-9" Av.	4	12'-9"	8.75	423

* FOR ONE HEADWALL





DIMENSIONS & QUANTITIES FOR HEADWALLS WITH 90° WINGS

DIMENSIONS							REINFORCING STEEL																QUANTITIES *	
D	AREA SQ.FT.	T	H	L	E	B	F1 – 1/2" Ø		F2 – 1/2" Ø		H1 – 1/2" Ø		H2 – 1/2" Ø		H3 – 1/2" Ø		H4 – 1/2" Ø		H5 – 1/2" Ø		V – 1/2" Ø		CLASS "A" CONC. C.Y.	REINF. STEEL, LBS.
							NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH		
48"	12.57	5"	5'-0"	9'-0"	3'-9"	1'-11"	22	3'-5"	4	10'-5"	1	14'-5"	3	10'-0"	7	6'-5"	4	8'-6"	4	10'-5"	30	7'-11"	6.14	347
54"	15.90	5 ½"	5'-11½"	10'-0"	4'-0"	2'-2"	24	3'-8"	4	11'-0"	1	15'-8"	3	10'-6"	8	7'-1"	4	9'-6"	5	11'-8"	33	8'-6"	7.39	410
60"	19.63	6"	6'-6"	11'-0"	4'-3"	2'-5"	26	3'-11"	5	11'-8"	1	16'-11"	3	11'-0"	9	7'-10"	5	10'-6"	5	12'-11"	36	9'-0"	8.75	482
66"	23.76	6 ½"	7'-0 ½"	12'-0"	4'-6"	2'-8"	30	4'-2"	5	12'-3"	1	18'-2"	3	11'-6"	9	8'-6"	5	11'-6"	5	14'-2"	40	9'-6"	10.23	551
72"	28.27	7"	7'-7"	13'-0"	4'-10"	3'-0"	31	4'-6"	5	12'-10"	1	19'-5"	3	12'-0"	9	9'-3"	5	12'-6"	5	15'-6"	43	10'-1"	11.95	612

* FOR ONE HEADWALL

GENERAL NOTES

1. All Construction shall be in accordance with City of Chickasha Standard Specifications.
2. All Exposed Concrete Surfaces shall have a Carborundum Finish.
3. All Exposed Concrete Edges shall have a 3/4" Chamfer.
4. Reinforced Concrete Pipe shall conform to the Requirements of AASHO M–170 (ASTM C–76) Class III unless Otherwise Designated.
5. Minimum Depth of Fill over Culverts shall be 1'–0".
6. Wall Thickness (Dimension "T") of Pipes shown, are taken from "Wall B" Column of ASTM and AASHO Tables.

CITY OF CHICKASHA
COMMUNITY PLANNING & DEVELOPMENT

CAST–IN–PLACE CONCRETE HEADWALLS FOR 48" TO 72" REINF. CONC. PIPE

APPROVED BY: _____ DATE _____	DRAWN:	DATE:	DWG.NO. D–407