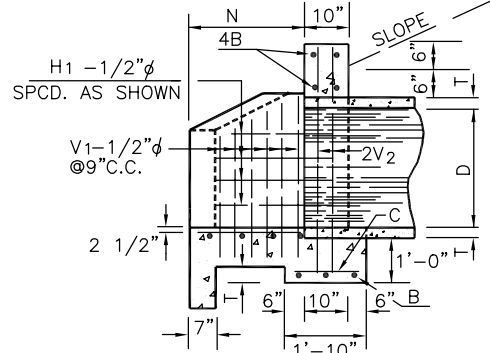
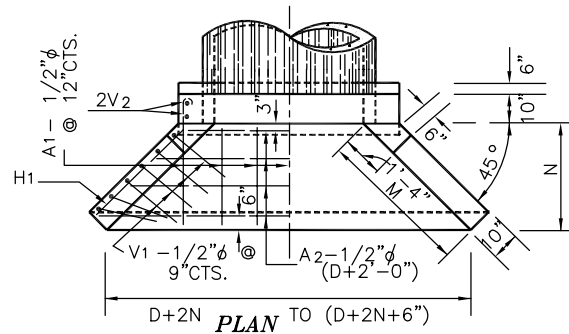


ELEVATION



SECTION A-A



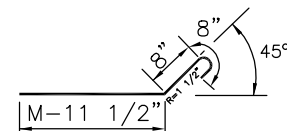
PLAN TO (D+2N+6")

D=48"	(3'-10" to 5'-2")
D=54"	(4'-2" to 5'-8")
D=60"	(4'-6" to 6'-2")
D=66"	(4'-10" to 6'-8")
D=72"	(5'-2" to 7'-4")

BENDING FOR V1 BARS

D=48"	6'-5"
D=54"	7'-0"
D=60"	7'-7"
D=66"	8'-2"
D=72"	8'-9"

BENDING FOR V2 BARS

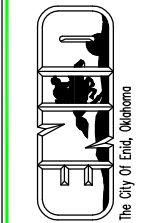


BENDING FOR H1 BARS

DIMENSIONS & QUANTITIES FOR HEADWALLS WITH 45° WINGS																							
DIMENSIONS							REINFORCING STEEL						QUANTITIES*										
D	AREA SQ.FT.	T	H	K	L	M	N	A1-1/2" NO. LGTH.	A2-1/2" NO. LGTH.	B-1/2" NO. LGTH.	C-1/2" NO. LGTH.	H1-1/2" NO. LGTH.	V1-1/2" NO. LGTH.	V2-1/2" NO. LGTH.	CLASS 'A' CONC. CU. YD.	REINF. STEEL LBS.							
48"	12.57	5"	5'-5"	3'-2"	6'-4"	5'-3 1/2"	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"	4.56	234.
54"	15.90	5 1/2"	5'-11 1/2"	3'-6"	6'-10"	5'-10 1/2"	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 1/2"	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 1/2"	7'-0 1/2"	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 1/2"	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

The City of Enid  
401 West 1st St., Enid, Oklahoma 73701  
Telephone: (505) 234-8446 Fax: (505) 234-8446  
Contacts:  
Robert Hill, Director of Engineering Services, Est. 344  
Joan Bihary, Civil Engineer, Est. 348



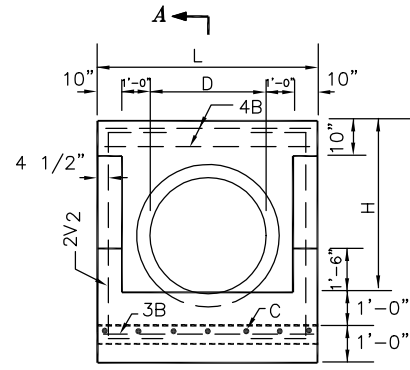
REVISIONS	Number	Date	Description

Project Number: DD - 12 SHT. 1  
Project Location: STANDARD CONCRETE PIPE CULVERTS & HEADWALLS 45° TO 72° REINFORCED CONCRETE PIPES

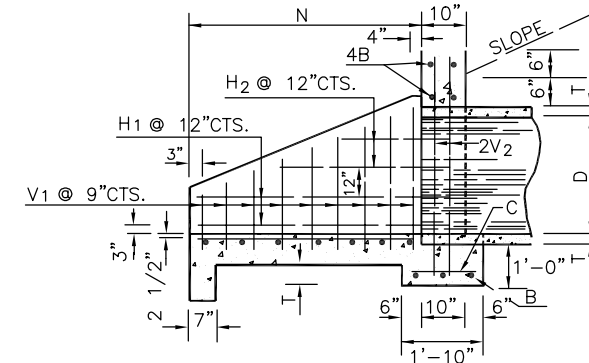
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Project Title: STANDARD CONCRETE PIPE CULVERTS & HEADWALLS 45° TO 72° REINFORCED CONCRETE PIPES



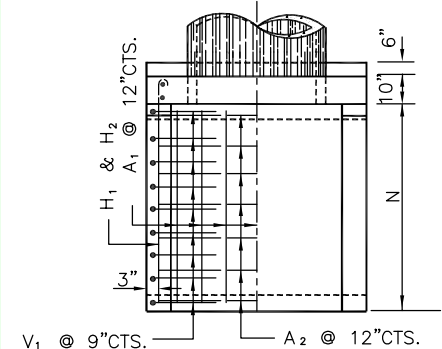
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Drawn By: P.B./C.L.H.  
Designed By: R.H.  
Approved By: R.H.  
Sheet: of



ELEVATION



SECTION A-A



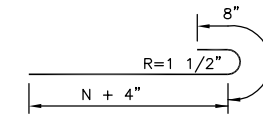
PLAN

D=48"	(2'-2" to 5'-2")
D=54"	(2'-2" to 5'-6")
D=60"	(2'-2" to 6'-2")
D=66"	(2'-2" to 6'-8")
D=72"	(2'-2" to 7'-4")

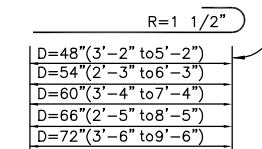
BENDING FOR V1 BARS

D=48"	6'-5"
D=54"	7'-0"
D=60"	7'-7"
D=66"	8'-2"
D=72"	8'-9"

BENDING FOR V2 BARS



BENDING FOR H1 - BARS



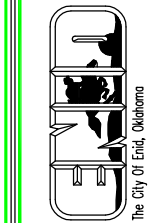
BENDING FOR H2 - BARS

DIMENSIONS & QUANTITIES FOR HEADWALLS WITH U-TYPE WINGS																							
DIMENSIONS					REINFORCING STEEL										QUANTITIES*								
D	AREA SQ.FT.	T	H	L	N	A1-1/2" NO. LGTH.	A2-1/2" NO. LGTH.	B-1/2" NO. LGTH.	C-1/2" NO. LGTH.	H1-1/2" NO. LGTH.	H2-1/2" NO. LGTH.	V1-1/2" NO. LGTH.	V2-1/2" NO. LGTH.	CLASS 'A' CONC. CU. YD.	REINF. STEEL LBS.								
48"	12.57	5"	5'-5"	7'-8"	6'-6"	7	6'-2"	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 1/2"	5'-11 1/2"	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 1/2"	7'-0 1/2"	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

GENERAL NOTES  
ALL CONSTRUCTION AND MATERIALS REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS.  
ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER.  
UNLESS OTHERWISE SPECIFIED, ALL EXPOSED CONCRETE SURFACES SHALL HAVE A FINISH IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS.

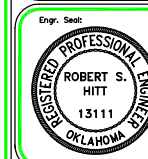
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Telephone: (505) 234-8446 Fax: (505) 234-8446  
Contacts:  
Robert Hill, Director of Engineering Services, Est. 344  
Joan Bihary, Civil Engineer, Est. 348



REVISIONS	Number	Date	Description

Project Number: DD - 12 SHT. 2  
Project Location: STANDARD CONCRETE PIPE CULVERTS & HEADWALLS 45° TO 72° REINFORCED CONCRETE PIPES

Sheet Title: DD - 12 SHT. 2  
Project Title: STANDARD CONCRETE PIPE CULVERTS & HEADWALLS 45° TO 72° REINFORCED CONCRETE PIPES



Date: 6/1/00  
Scale: NO SCALE  
Cad File: G:\DATA\SPECS\0012  
Drawn By: P.B./C.L.H.  
Designed By: R.H.  
Approved By: R.H.  
Sheet: of