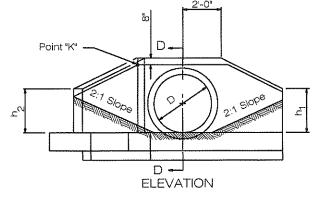
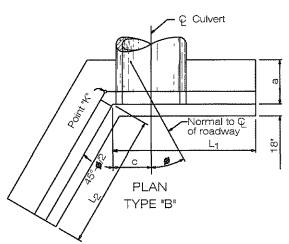
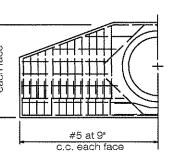


PLAN

TYPE "A"





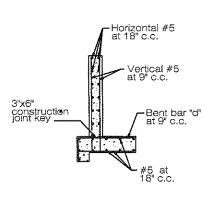


HALF-SECTION A-A

Line "K"



HALF-SECTION B-B



SECTION C-C

	 1		

REV No. DATE BY

SECTION D-D

NOTES

APPLICATION: Full-height haedwalls shall

#5 and epoxy coated.

corners 3/4".

width of the footing.

2:1 slope from Point "K"

be provided for skewed and non-skewed culverts having a diameter or rise of 42" to 84" inclusive. Type "A" is used when the skew angle (4) is ten degrees or less and Type "B" when the skew angle is over ten degrees.

CONCRETE: Concrete shall be Class C.

REINFORCING STEEL: Bars shall be

DETAILS AND QUANTITIES: Are shown for

nearest size circular pipe. The dimensions

circular sections only. When used with other pipe

material, it is necessary to adjust dimensions and

established by vertical diameter shall apply to rise, and dimensions established by horizontal diameter

shall apply to span. All calculated dimensions shall be rounded to the nearest 1". Chamfer all exposed

HEADWALL LOCATION: To be determined by the intersection of the embankment slope at the back of the headwall at Point "K". The slopes adjacent

Slope as shown on cross sections

FOUNDATION: Where soil borings indicate a bearing capacity of less than 2000 pounds per square foot, it will be necessary to increase the

For headwall outlet protection, see STM-13

and quantities to conform to those listed for the

CITY OF NORTH RIDGEVILLE, OHIO
DEPARTMENT OF ENGINEERING

DESCRIPTION

STM-11

STANDARD NO. 2 HEADWALL

CITY OF NORTH MOGEVILLE, ENGINEER D

SCALE: NOT TO SCALE

DATE: 10/01/08 DRWN BY: JAB/TEB

		FULL-HEIGHT HEADWALLS																														
PIP							ç	ø ≈ 0°)¢		Ø ≈ 15°							Ø ≈ 30°							Ø ≈ 45°							PIPE
DIA	\. F	а	Ь	С	Bar#	L ₂	h ₂	Conc CMP	Conc RCP	Steel	L ₁	L ₂	h₁	h ₂	Conc CMP	Conc RCP	Steel	L ₁	L ₂	h ₁	h ₂	Conc CMP	Conc RCP	Steel	L ₁	L ₂	h	h ₂	Conc CMP	Conc RCP	Steel	DIA. D
		j			l u			(cy)	(cy)	(lbs.)					(cy)	(cy)	(lbs.)					(cy)	(cy)	(lbs.)					(cy)	(cy)	(ibs.)	
42	* 4'-1	1" 3'-3"	1'-6"	2'-6"	#5	3'-7"	3'-1"	7.0	6.7	598	8'-9"	4'-6"	3'-8"	3'-2"	7.3	7.1	619	7'-10"	5'-9"	3'-2"	3'-3"	7.5	7.3	633	7'-10"	7'-9"	3'-2"	3'-3"	8.7	8.5	718	42"
48	" 5'-5	3'-6"	1'-6"	2'-9"			3'-4"							3'-5"	ŧ	8.7	776	8'-9"	6'-10"	3'-5"	3'-6"	9.1	8.8	801	8'-9"	9'-2"	3'-5"	3'-7"	10.6	10.3	925	48"
54	" 5'-1	1" 3'-9"	1'-6"	3'-0"			3'-8"	A	E							t .		1										3'-10"			1 1	
60	" 6'-6	" 4'-0"	1'-6"	3'-3"	#5	5'-11	3'-11'	I	L	\$		I .	ŧ		i	12.4	1,174	10'-7"	9'-0"	3'-10"	4'-1"	12.7	12.3	1,157	10'-7"	12'-0"	3'-10"	41-18	14.8	14.3	1,354	60"
72	" 7'-7	" 4'-6"	1'-7"	3'-9"			4'-5"	1		1,783		F	1		1	1	. ,	1		1	1 1		 	'		ı		4'-8"			2,076	1
84	" 8'~8	5'-0"	1'-10	4'-3"	#8	9'-0"	5'-0"	23.7	22.8	2,595	17'-7"	10'-9"	6'-4"	5'-1"	24.8	23.9	2,596	14'-7"	13'-4"	4'-10"	5'-2"	24.1	23.3	2,511	14'-3"	17'-8"	4'-8"	5'-2"	27.9	27.0	2,990	<i>8</i> 94"