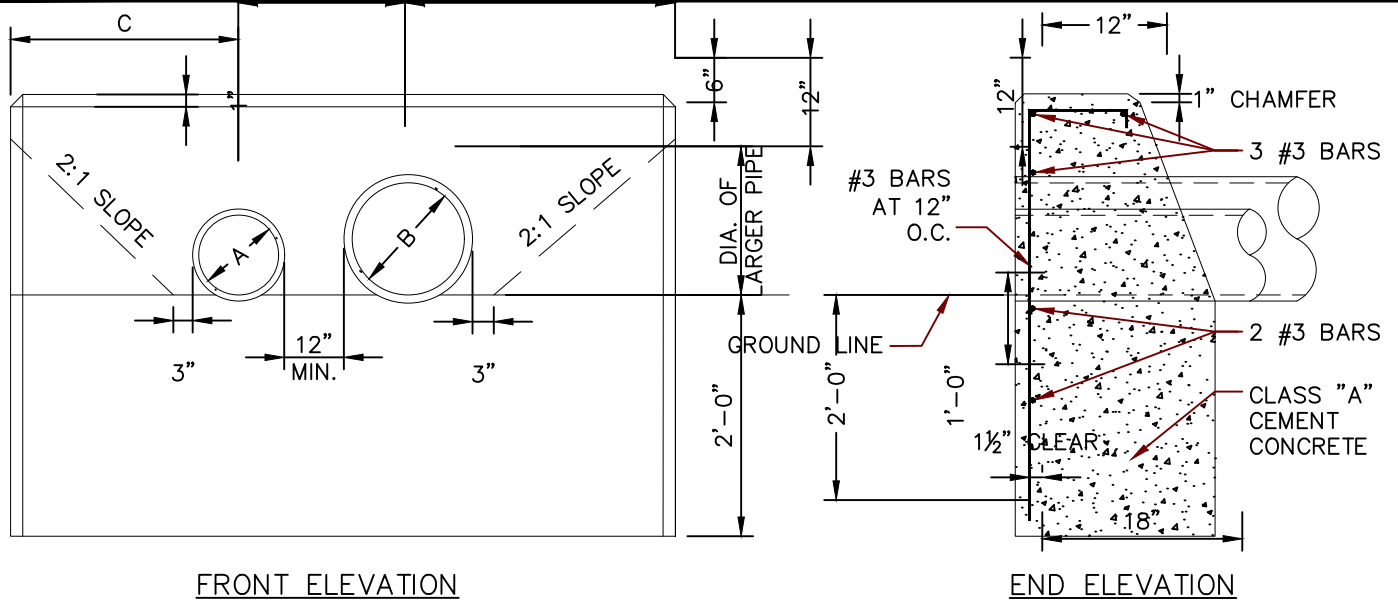
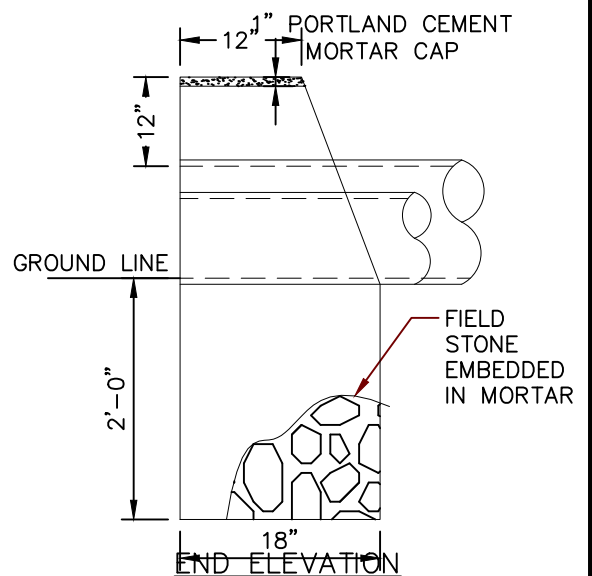




DESIGN NO.	DIAMETER IN INCHES		LENGTHS			CUBIC YARDS OF MASONRY	POUNDS OF STEEL	CU. FT. TRENCH EXC. 1'-0" DEPTH
	A	B	C	D	E			
1	12"	12"	3'-9"	2'-2"	3'-9"	1.89	37	40.85
2	12"	15"	4'-3"	2'-4"	4'-5"	2.27	42	45.50
3	12"	18"	4'-9"	2'-6"	5'-0"	2.65	48	49.88
4	12"	21"	5'-4"	2'-8"	5'-8"	3.12	54	54.85
5	12"	24"	5'-9"	2'-10"	6'-3"	3.54	59	58.91
6	12"	30"	6'-9"	3'-0"	7'-8"	4.48	71	67.38
7	15"	15"	4'-5"	2'-6"	4'-5"	2.32	41	46.66
8	15"	18"	4'-11"	2'-8"	5'-0"	2.72	48	51.03
9	15"	21"	5'-5"	2'-10"	5'-8"	3.16	54	55.72
10	15"	24"	5'-11"	3'-0"	6'-3"	3.60	60	60.10
11	15"	30"	6'-11"	3'-2"	7'-8"	4.54	72	68.53
12	18"	18"	5'-0"	2'-8"	5'-0"	2.72	48	51.35
13	18"	21"	5'-7"	2'-10"	5'-8"	3.17	52	56.28
14	18"	24"	6'-0"	3'-0"	6'-3"	3.58	60	60.38
15	18"	30"	7'-0"	3'-2"	7'-8"	4.53	72	68.85
16	21"	21"	5'-8"	3'-0"	5'-8"	3.20	53	57.19
17	21"	24"	6'-2"	3'-4"	6'-3"	3.69	61	62.13
18	21"	30"	7'-2"	3'-6"	7'-6"	4.65	73	70.60
19	24"	24"	6'-3"	3'-4"	6'-3"	3.67	61	62.40
20	24"	30"	7'-3"	3'-8"	7'-6"	4.69	74	64.47
21	30"	30"	7'-6"	4'-0"	7'-6"	4.76	75	73.50



NOTE:

1. FOR DESCRIPTIONS, MATERIALS AND CONSTRUCTION METHODS, SEE LATEST SPECIFICATIONS.
2. ALL CONCRETE DIMENSIONS SHOWN ARE MINIMUM.



**DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
TOWN OF BILLERICA,
MASSACHUSETTS**

**CONCRETE & FIELD STONE
MASONRY COMBINATION
ENDS FOR PIPES UP TO 30"
DIAMETER**

CREATED BY: DCW/KCS

SCALE: NTS

FILE:

CHECKED BY: GA/JT

DATE: 06/29/2015