

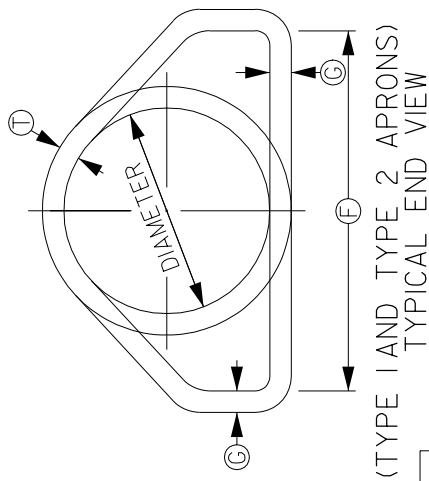
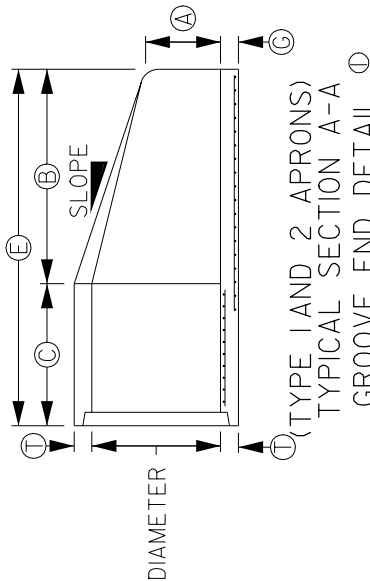
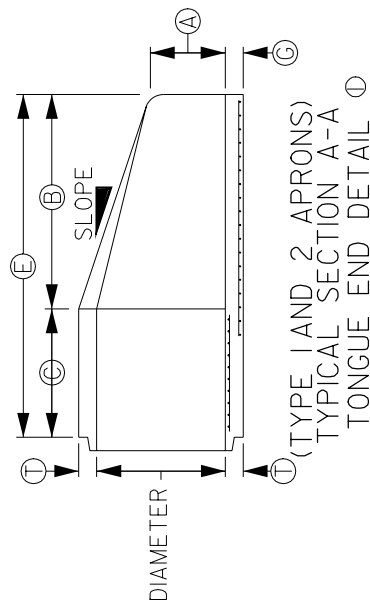
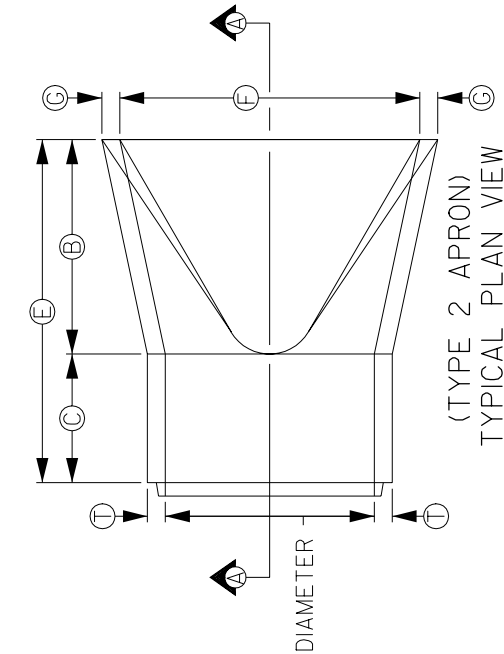
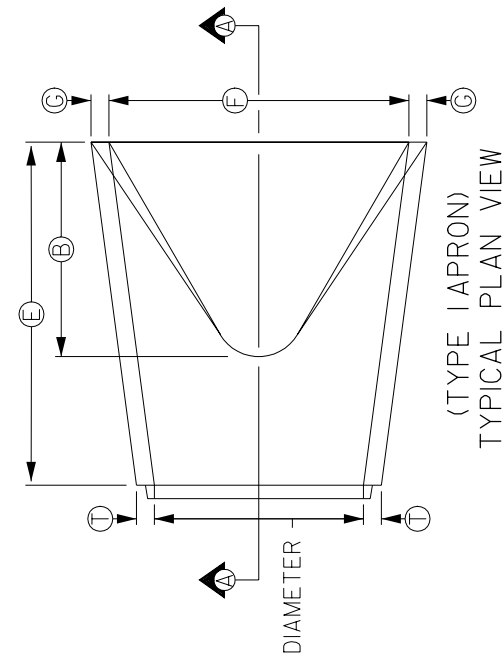


TABLE OF TYPE 1 APRON DIMENSIONS									
DIAM.	SLOPE	A	B	MINIMUM			F	G	T
				C	E				
12"	2.4:l	4"	2'-0"	4'-7/8"	6'-7/8"	2'-0"	2'-0"	2"	2"
15"	2.4:l	6"	2'-3"	3'-10"	6'-1"	2'-6"	2'-6"	2 1/4"	2 1/4"
18"	2.3:l	9"	2'-3"	3'-10"	6'-1"	3'-0"	2'-0"	2 1/2"	2 1/2"
24"	2.5:l	9 1/2"	3'-7 1/2"	2'-6"	6'-11/2"	4'-0"	3'-0"	3"	3"
30"	2.5:l	12"	4'-6"	1'-7 3/4"	6'-13/4"	5'-0"	3 1/2"	3 1/2"	3 1/2"
36"	2.5:l	15"	5'-3"	2'-9"	8'-0"	6'-0"	4"	4"	4"
42"	2.5:l	21"	5'-3"	2'-9"	8'-0"	6'-6"	4 1/2"	4 1/2"	4 1/2"
48"	2.5:l	24"	6'-0"	2'-0"	8'-0"	7'-0"	5"	5"	5"
54"	1.8:l	27"	5'-0"	3'-0"	8'-0"	7'-6"	5 1/2"	5 1/2"	5 1/2"
60"	1.6:l	29 1/2"	5'-0"	3'-0"	8'-0"	8'-0"	5 1/2"	6"	6"
66"	1.7:l	30"	6'-0"	2'-3"	8'-3"	8'-0"	5 1/2"	6"	6"
72"	1.6:l	30"	6'-6"	1'-9"	8'-3"	9'-0"	6"	7"	7"
78"	1.8:l	36"	7'-6"	1'-9"	9'-3"	9'-6"	6 1/2"	7 1/2"	7 1/2"
84"	1.3:l	29 1/2"	6'-9"	2'-6 1/2"	9'-3 1/2"	10'-0"	6 1/2"	8"	8"

TABLE OF TYPE 2 APRON DIMENSIONS									
DIAM.	SLOPE	A	B	MINIMUM			F	G	T
				C	E				
12"	2.4:l	4"	2'-0"	4'-7/8"	6'-7/8"	2'-0"	2'-0"	2"	2"
15"	2.4:l	6"	2'-3"	3'-10"	6'-1"	2'-6"	2'-6"	2 1/4"	2 1/4"
18"	2.3:l	9"	2'-3"	3'-10"	6'-1"	3'-0"	2'-0"	2 1/2"	2 1/2"
24"	2.5:l	9 1/2"	3'-7 1/2"	2'-6"	6'-11/2"	4'-0"	3'-0"	3"	3"
30"	2.5:l	12"	4'-6"	1'-7 3/4"	6'-13/4"	5'-0"	3 1/2"	3 1/2"	3 1/2"
36"	2.5:l	15"	5'-3"	2'-9"	8'-0"	6'-0"	4"	4"	4"
42"	2.5:l	21"	5'-3"	2'-9"	8'-0"	6'-6"	4 1/2"	4 1/2"	4 1/2"
48"	2.5:l	24"	6'-0"	2'-0"	8'-0"	7'-0"	5"	5"	5"
54"	1.9:l	24 1/2"	5'-5"	2'-7"	8'-0"	7'-6"	5 1/2"	5 1/2"	5 1/2"
60"	1.4:l	24 1/2"	5'-0"	3'-0"	8'-0"	8'-0"	5 1/2"	6"	6"
66"	1.7:l	30"	6'-0"	2'-3"	8'-3"	8'-0"	5 1/2"	6"	6"
72"	1.4:l	24"	6'-6"	1'-9"	8'-3"	9'-0"	6"	7"	7"
78"	1.8:l	36"	7'-6"	1'-9"	9'-3"	9'-6"	6 1/2"	7 1/2"	7 1/2"
84"	1.5:l	23 1/2"	7'-6 1/2"	1'-9"	9'-3 1/2"	10'-0"	6 1/2"	8"	8"

① TONGUE END USED ON INLET END SECTION.
GROOVE END USED ON OUTLET END SECTION.
DIMENSIONS FOR TONGUE AND GROOVE CONNECTIONS SHALL BE SAME AS FOR REINFORCED CONCRETE PIPE, SECTION 4020, 2.01A.

REV.	DATE	BY
DATE: 01/25/01		

GENERAL NOTES:

DETAILS ON THIS SHEET INDICATE TYPICAL REQUIREMENTS AND GENERAL INSTALLATION REQUIREMENTS OF CONCRETE APRONS. DESIGN OF THE BARREL PORTION OF APRONS SHALL CONFORM TO, OR EXCEED, THE REQUIREMENTS OF SECTION 4020, 2.01A. REINFORCEMENT OF THE FLARED PORTION OF APRON SHALL BE AS INDICATED OR AS OTHERWISE APPROVED BY THE JURISDICTIONAL ENGINEER.

DIMENSION 'E' SHOWN IS MINIMUM AND SHALL BE CONSIDERED THE DESIGN LENGTH. ANY DIFFERENCE BETWEEN THE ACTUAL LENGTH OF CONCRETE APRON INSTALLED AND THE LENGTH INDICATED HEREON SHALL BE APPROPRIATELY ADJUSTED FOR IN THE LENGTH OF CONCRETE PIPE CULVERT FURNISHED.

TIE BOLTS AND BOLT HOLES ARE NECESSARY ONLY WHEN SPECIFICALLY REQUIRED IN DETAIL PROJECT PLANS.

MANUFACTURE IN ACCORDANCE WITH APPLICABLE SECTIONS OF ASTM C76.

ALTERNATE DESIGNS FOR CONCRETE PIPE APRONS MAY BE SUBMITTED FOR APPROVAL. WELDED WIRE FABRIC SHALL MEET THE REQUIREMENTS OF A.S.T.M. A-185.

REFER TO PROJECT PLANS FOR ADDITIONAL DETAILS OF INDIVIDUAL CULVERT INSTALLATIONS.

PRICE BID FOR "CONCRETE PIPE APRONS", OF THE SIZE SPECIFIED SHALL BE CONSIDERED FULL COMPENSATION FOR FABRICATION AND INSTALLATION OF CONCRETE APRONS AS DETAILED HEREON.

			CONCRETE PIPE APRON	FIGURE: 4020.9
REV.	DATE	BY		SHEET 2 OF 2
DATE: 01/25/01				