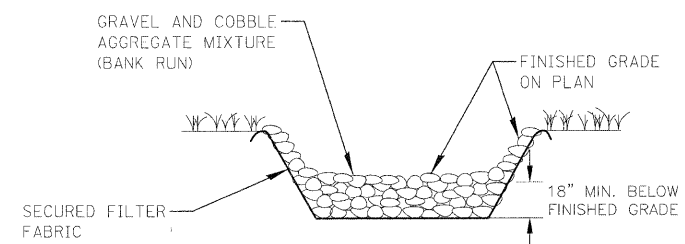


STONE RIPRAP DETAIL
1 OF 2

PIPE DIAMETER (IN.) D	STONE RIP RAP							BEDDING	
	QUALITY DESIGNATION	GRADATION NUMBER	MINIMUM THICKNESS (IN.) A	MINIMUM LENGTH (FT.) B	WEIGHT RANGE (#)	WEIGHT AVERAGE (#)	SIZE AVERAGE (IN.)	GRADATION	MINIMUM THICKNESS (IN.) C
12	A	3	12"	12'	1-50	10	4.5"	N/A	N/A
15	A	3	14"	14'	1-50	10	4.5"	N/A	N/A
18	A	4	16"	16'	1-150	40	7"	1 OR CA-3	6"
21	A	4	18"	18'	1-150	40	7"	1 OR CA-3	6"
24	A	4	20"	20'	1-150	40	7"	1 OR CA-3	6"
30	A	4	22"	22'	1-150	40	7"	1 OR CA-3	6"
36	A	5	24"	24'	3-400	90	10"	1 OR CA-3	8"
42	A	5	26"	26'	3-400	90	10"	1 OR CA-3	8"
48	A	6	28"	28'	6-600	170	12"	2 OR CA-1	10"
54	A	6	32"	32'	6-600	170	12"	2 OR CA-1	10"
60	A	6	36"	36'	6-600	170	12"	2 OR CA-1	10"
72	A	6	44"	44'	6-600	170	12"	2 OR CA-1	10"

- NOTE:**
- FOR PIPE SIZE 72" AND LARGER A SPECIAL DESIGN OF RIP RAP OR APRON IS REQUIRED.
 - GRADATION REFER TO IDOT SPECIFICATIONS AND STANDARDS.

STONE RIPRAP DETAIL
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RIPRAP, SPECIAL TYPICAL CROSS-SECTION
N.T.S.