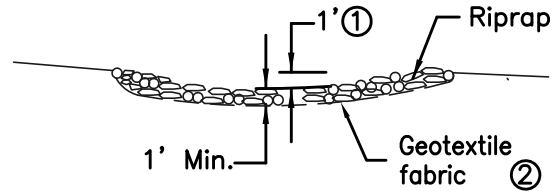
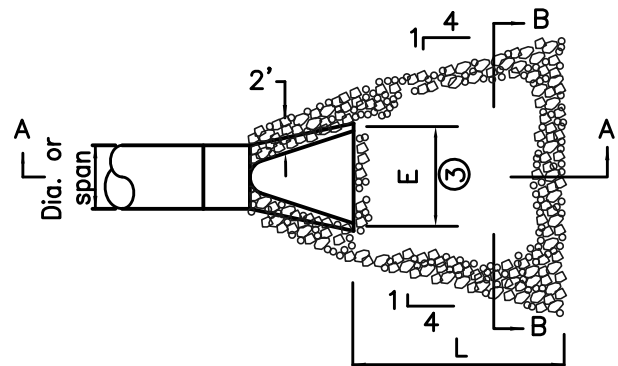


**TABLE OF QUANTITIES**  
**Riprap at RCP Outlets**

		Class II D <sub>50</sub> = 6"	Class III D <sub>50</sub> = 9"	Class IV D <sub>50</sub> = 12"
Dia. Pipe (In.)	L (Ft.)	12" Depth Riprap (Cu. Yd.)	18" Depth Riprap (Cu. Yd.)	24" Depth Riprap (Cu. Yd.)
12	8	3.0	4.4	5.9
15	8	3.2	4.8	6.4
18	10	4.3	6.4	8.5
21	10	4.7	7.1	9.4
24	12	6.2	9.2	12.3
27	12	6.6	9.9	13.2
30	14	8.2	12.3	16.4
36	16	10.6	15.8	21.1
42	18	12.5	18.7	24.9
48	20	14.8	22.2	29.6



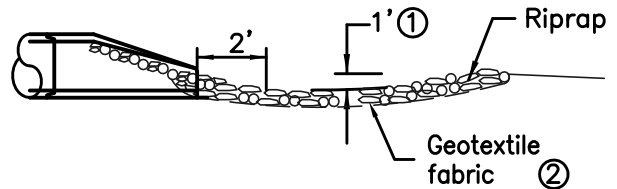
**SEC. B-B**



**PLAN VIEW**

**Riprap at RCPA Outlets**

		Class II D <sub>50</sub> = 6"	Class III D <sub>50</sub> = 9"	Class IV D <sub>50</sub> = 12"
Span Pipe Arch (In.)	L (Ft.)	12" Depth Riprap (Cu. Yd.)	18" Depth Riprap (Cu. Yd.)	24" Depth Riprap (Cu. Yd.)
22	10	4.1	6.1	8.1
28	12	5.7	8.5	11.3
36	14	7.5	11.2	14.9
43	16	9.5	14.3	19.0
51	18	11.3	16.9	22.5
58	20	13.2	19.8	26.4



**SEC. A-A**

Note:

1. For pipes greater than or equal to 30" use 1.5'
2. Geotextile fabric, Spec. 3601. The fabric should cover the area of the riprap and extend under the culvert apron 3 feet.
3. Requirements for riprap size is shown in the plans.

**RIPRAP AT RCP OUTLETS HL-480A1**

NOT TO SCALE