



NOTES

1. PLANS SHALL SPECIFY:
 - A) ROCK CLASS AND THICKNESS (T)
 - B) FILTER MATERIAL, NUMBER OF LAYERS AND THICKNESS.
2. RIP RAP SHALL BE EITHER QUARRY STONE OR BROKEN CONCRETE (IF SHOWN ON THE PLANS). COBBLES ARE NOT ACCEPTABLE. SEE DETAIL SWM ST-10.1 FOR SIZING.
3. RIP RAP SHALL BE PLACED OVER FILTER BLANKET WHICH MAY BE EITHER GRANULAR MATERIAL OR PLASTIC FILTER CLOTH.
4. PLACEMENT
 - A) MINIMUM DEPTH = 1-1/2 TIMES AVERAGE STONE SIZE.
 - B) ROCKS SHALL BE PLACED TO PROVIDE A MINIMUM OF VOIDS.
 - C) SURFACE ROCKS SHALL PROTRUDE AT LEAST 1/2 THEIR VERTICAL DIMENSION.
 - D) RIPRAP IS TO BE PLACED OVER A GEOTEXTILE FABRIC ON A NATURAL BEDDING, OR IT MAY BE GROUTED OR PLACED OVER A GRAVEL BEDDING AS REQUIRED BY THE DISTRICT.



CLACKAMAS COUNTY
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

APPROVAL DATE: 2013 SCALE: N.T.S.

**STORM -
OUTFALL RIP RAP**

STANDARD
DRAWING

**SWM
ST-10.0**