ROCK CHANNEL PROTECTION

GENERAL

ROCK CHANNEL PROTECTION IS USED TO CONTROL EROSION AT THE OUTLET OF CULVERTS AND STORM SEWERS, OR FOR LINING DITCHES OR STEEP GRADES.

ROCK CHANNEL PROTECTION IS REQUIRED AT ALL STORM PIPE OUTLETS. A MINIMUM DEPTH OF 18-INCHES IS REQUIRED THE WIDTH OF THE ENDWALL AND THE MINIMUM LENGTH IS 5-FEET. THE MINIMUM TYPE IS TYPE C.

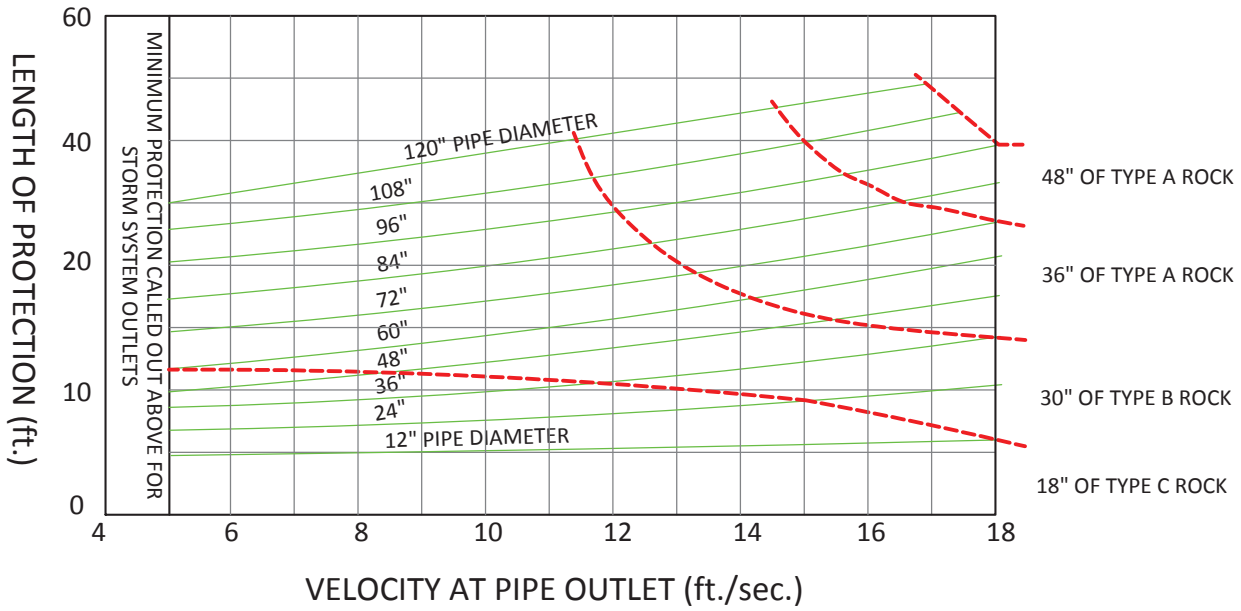
TYPES

THERE ARE FOUR TYPES OF ROCK CHANNEL PROTECTION THAT ARE USED IN VARIOUS SITUATIONS. THE USE OF THE PROPER TYPE AT CULVERT AND STORM SEWER OUTLETS CAN BE DETERMINED FROM THE FIGURE BELOW. TYPE A IS GENERALLY USED BEYOND THE OUTLET OF THE LARGER CONDUITS HAVING OUTLET VELOCITIES IN EXCESS OF 12 FEET PER SEC. AND TYPE B OR TYPE C FOR CONDUITS HAVING LESSER VELOCITIES. THE TYPE AND QUANTITY OF ROCK CHANNEL PROTECTION PROVIDED IN THE PLANS SHALL BE BASED ON THE PIPE ALTERNATE REQUIRING THE LARGEST SIZE AND QUANTITY OF ROCK CHANNEL PROTECTION. TYPE C AND TYPE D MAY BE USED TO LINE ROADSIDE DITCHES, AS REQUIRED, WHERE THE DITCHES ARE OUTSIDE THE DESIGN CLEAR ZONE WIDTH OR LOCATED BEHIND GUARDRAIL. ITEM 670 SEEDING AND EROSION CONTROL WITH MATTING MAY BE USED IN DITCHES AND CHANNELS IN LIEU OF ROCK WHERE AVERAGE FLOW VELOCITIES ARE LESS THAN 10 FEET PER SECOND AND CHANNEL SLOPES ARE LESS THAN 10%.

FILTER

A FILTER SHALL BE PROVIDED UNDER ALL ROCK CHANNEL PROTECTION.

A FABRIC FILTER IS REQUIRED OVER GRANULAR FILTER MATERIAL WHERE THE PROTECTED SLOPE IS STEEPER THAN 3:1. THE COST OF THE FILTER SHALL BE INCLUDED IN THE UNIT PRICE BID OF ITEM 601 ROCK CHANNEL PROTECTION WITH FILTER.



EST 1808
CITY OF
DELAWARE
OHIO
Public Works Department

STANDARD DETAIL

ROCK CHANNEL PROTECTION
DETAILS AND NOTES

UTILITY

SEWD-15.2

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