

SECTION 259 PERIMETER DIKE/SWALE

259.01 Description. This work consists of constructing, maintaining, and ultimately removing perimeter dike/swales Types A-1, A-2, and A-3 as a temporary measure to prevent clean runoff from entering disturbed areas by intercepting and diverting it to a stabilized outlet or to intercept sediment-laden runoff and divert it to a sediment trapping device. The types of perimeter dike/swales shall be constructed as shown on Standard Construction Detail, Perimeter Dike/Swale, at the locations shown on the Plans, and as directed by the Engineer.

MATERIALS.

259.02 Riprap. Riprap shall be R-4 conforming to the requirements of [Section 712](#).

259.03 Seed. Seed shall conform to the requirements of [Section 734](#).

259.04 Mulch. Mulch shall be straw conforming to the requirements of [Section 735](#).

259.05 Erosion Control Blanket. Erosion control blanket shall conform to the requirements of [Subsection 735.02\(c\)](#).

259.06 Geotextile. Geotextile shall conform to the requirements of [Section 827](#).

CONSTRUCTION METHODS.

259.07 Construction of Perimeter Dike/Swale. The length of the perimeter dike/swale shall be as indicated on the Plans. With approval from the Engineer, the location of the perimeter dike/swale may be adjusted to meet field conditions and use the most suitable outlet. The swale shall be shaped to the line, grade, and cross-section indicated on the Plans and Standard Construction Detail, Perimeter Dike/Swale. The Contractor shall construct the dike from the material excavated during the construction of the swale.

259.08 Stabilization of Perimeter Dike/Swale. Within seven days of the start of construction on the perimeter dike/swale, the Contractor shall stabilize the dike and all areas affected by the construction of the perimeter dike/swale with seed and mulch.

If riprap is required for swale stabilization, the Contractor shall place a minimum of 14" (350 mm) of riprap over the geotextile. If erosion control blanket is required for swale stabilization, the Contractor shall place the erosion control blanket as shown on Standard Construction Detail, Erosion Control Blanket, and according to [Section 735](#).

259.09 Perimeter Dike/Swale Drainage. The perimeter dike/swale shall have uninterrupted, positive drainage to an outlet. The outlet shall function with a minimum of erosion.

Diverted runoff from an undisturbed area shall outlet directly into an undisturbed stabilized area at non-erosive velocity. Diverted runoff from a disturbed area shall outlet into a sediment trapping device.

259.10 Maintenance of Perimeter Dike/Swale. Throughout the Project construction period, the Contractor shall maintain the perimeter dike/swale to the original dimensions and function of the swale and of the dike.

259.11 Sediment Removal. After each rainfall, the Contractor shall check for excessive buildup of sediment that must be removed so that the perimeter dike/swale continues to function as intended. The Contractor shall remove all accumulated sediment when it reaches 50% of the height of the swale.

259.12 Removal of Perimeter Dike/Swale. The perimeter dike/swale and all materials incidental to the perimeter dike/swale construction shall be removed at the end of the construction period or when directed by the Engineer. All areas affected by the construction of the perimeter dike/swale shall be restored to the original or plan contours and stabilized with seed and mulch.

259.13 Method of Measurement. The quantity of perimeter dike/swale Type A-1 will be measured as the actual number of linear feet (linear meters) of perimeter dike/swale constructed and accepted. Perimeter dike/swale Types A-2 and A-3 will be measured using the same method for measuring perimeter dike/swale Type A-1.

The quantity of sediment removal will be measured according to [Section 250](#).

259.14 Basis of Payment. The quantity of perimeter dike/swale Types A-1, A-2, and A-3 will be paid for at the Contract unit price per linear foot (linear meter). Price and payment will constitute full compensation for furnishing all materials; for excavating and placing the materials; for maintaining the perimeter dike/swale; for removing the perimeter dike/swale and all incidental materials; for restoring the area; for seeding and mulching; and for all labor, equipment, tools, and incidentals required to complete the work.

The quantity of sediment removal will be paid for according to [Section 250](#).

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