Practice: 356 - Dike

Scenario #1 - Dike

Scenario Description:

Construction a barrier of either earth or manufactured materials for the purpose of the protetion of people or property from floods or to control water levels in connection with crop production; fish and wildlife management; or wetland maintenance, improvement, restoration, or construction. Embankment structure to provide adequate freeboard, allowance for settlement, and foundation and embankment stability.

Before Situation:

Site is subject to flooding or indundation which poses a potential hazard to public safety, damage to land or property. Site may also require control of water level for purposes connected with crop production; fish and wildlife management; or wetland maintenance, improvement, restoration, or construction. An adequate quantity of soil suitable for constructing an earthen dike is available at an economical haul distance.

After Situation:

Water level is controlled by a stable earthen structure installed with compacted fill material. Material haul < 1 mile. Typical earthen dike assumed 1000 lineal feet, Class II (6 ft. in height, 8 ft. top width, 2H:1V side slopes). Potential hazard to public safety, land or property mitigated; environmental benefit provided. Scenario includes component for stripping and stockpiling base of dike. Associated practices include, but are not limited to: PS327 Conservation Cover, PS656 Constructed Wetland, PS342 Critical Area Planting, PS378 Ponds, PS382 Fence, PS464 Irrigation Land Levelling, PS500 Obstruction Removal, PS528 Prescribed Grazing, PS587 Structure for Water Control, PS620 Underground Outlet, PS645 Upland Wildlife Management, PS658 Wetland Creation, PS659 Wetland Enhancement, PS657 Wetland Restoration, PS644 Wetland Wildlife Habitat Management.

Feature Measure: Cubic Yards of Earthmoving

Scenario Unit:: Cubic Yard
Scenario Typical Size: 4,444.0

Scenario Total Cost: \$22,465.04

Scenario Cost/Unit: \$5.06

Cost Details:

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Component Name	ID	Description	Unit	Cost	QTY	Total
Equipment Installation						
Earthfill, Roller Compacted	49	Earthfill, roller or machine compacted, includes equipment and labor	Cubic Yard	\$4.30	5036	\$21,654.80
Stripping and stockpiling, topsoil	1199	Stripping and stockpiling of topsoil adjacent to stripping area. Includes equipment and labor.	Cubic Yard	\$0.92	592	\$544.64
Mobilization						
Mobilization, medium equipment	1139	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$265.60	1	\$265.60