

Braddock Manor West Stormwater Management Facility Retrofit

Background:

The Braddock Manor West stormwater management facility is located in the South Branch - Patapsco Watershed. The pond is currently functioning as a shallow marsh pond for the subdivision and is located off of Amantea Way. Due to the facilities current condition, the County is looking to retrofit this facility. The facility will be brought up to current standards thereby ensuring that the facility is capturing and adequately treating runoff from all of the drainage area which was intended to drain into the facility.

Scope of Work:

The site was analyzed by EA Engineering to determine if the facility was capturing the intended drainage area. The design for the facility included collecting drainage from two storm drain systems, and consolidating these into one outfall with a plunge pool. A new embankment with a cut off and core trench was constructed. The emergency spillway was graded so that all of the slopes were at least 4:1 to allow efficient machine mowing. The bottom of the facility included a 12” layer of #8 stone with 6” HDPE type “SP” pipe laying on top to draw any excess water off the surface. The pipe was topped with 18” of a 4:1:1 mixture of sand-soil and green wood chips. Three elliptical concrete pipes were installed in the downstream driveway to better convey drainage under the driveway. Overburden from this site was hauled to Shamrock Farms and the Maring Farm for disposal. The overburden was spread out per the approved Sediment and Erosion Control plans. The facility was designed to meet and exceed all current county and state stormwater management regulations.

Sequence of Construction:

The County contacted the adjoining property owners and a community meeting was held on November 19, 2013. The county entered into a license agreement with the downstream homeowners allowing the contractor to replace the culverts under their driveway. State and Federal permits were not required for the retrofit of this facility. The facility went out to bid on April of 2015 with bids due back March 4, 2015. The job was awarded to Stambaugh’s, Inc.

The contractor completed the project in September, but had to wait for a 2” stand of grass to be established before the grading completion certificate was issued. The grading completion certificate was issued on May 9, 2016. The as-built was accepted by the County on December 23, 2015.

Project Details:

Watershed:	South Branch Patapsco
Drainage Area:	49.3 acres
Impervious Surface Treated:	7.65 acres
Costs: Engineering	\$ 35,897.62
Construction	\$ 455,734.00
Time Frame:	Months

Submitted By:

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