

Elderwood Village Stormwater Management Facility Retrofit

Background:

The Elderwood Village stormwater management facility is an existing facility located off of Habitat Road and Elderwood Court in Eldersburg. This facility was a wet facility that was very over grown due to a lack of maintenance. The facility was not providing adequate quantity or quality control of the subdivision runoff. Because of the condition of the pond, the County wanted to retrofit the facility to bring it up to current standards thereby ensuring that the facility provides stormwater control and can be easily maintained.

Scope of Work:

The site was analyzed by CLSI to determine if infiltration would be feasible. It was determined that the county's standard infiltration design would work well at this site. This design included a 6" layer of #8 stone with 4" HDPE type "SP" pipe laying on top to draw any excess water off the surface. The pipe was topped with 6" of #8 stone and then finished with 12" of a sand-soil filter mixture. All of the slopes were designed at 3:1 to allow efficient machine mowing. A manhole was placed to tie into the existing stormdrain system and reduce the velocity that the stormwater discharges into the facility. An access road was graded into the site to allow for easy access for annual maintenance. The facility was designed to meet and exceed all current county and state stormwater management regulations. Construction of the pond was done in an efficient manner.

Sequence of Construction:

The homeowners around the facility were contacted about the retrofit in July of 2008. At that time staff members met with the adjoining property owners to discuss the proposed retrofit. The county acquired 0.46 acres from the Elderwood Homeowners Association to enlarge the facility. The facility went out to bid on November 11, 2008 with bids due back November 26, 2008.

The job was awarded to Magstone, LLC. and was slated to begin February of 2009. The contractor began working March of 2009. The contractor completed the project at the end of September, but had to return in early October to repair some minor erosion after a large rain storm. The as-built was accepted on September 25, 2009. The project received a final sediment control inspection on October 26, 2009.

Project Details:

Watershed:	Liberty Reservoir
Drainage Area:	15.28
Impervious Surface Treated:	4.94 acres
Costs: Engineering/Construction	\$ 24,326.30/ \$ 70,986.00
Tree Removal	\$ 4,750.00
Land Acquisition	\$ 1,000.00

Submitted By:

Janet Doody, Watershed Management Specialist



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