Hickory Ridge Stormwater Management Facility Retrofit

Background:

The Hickory Ridge stormwater management facility is an existing facility located off Velvet Run Drive in Westminster. The facility was not functioning adequately for stormwater management control in the subdivision. All of the drainage that was coming into the facility was discharged directly out of the facility with no retention of the 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 was functioning for stormwater control. This retrofit provided access to the facility for the ease of maintenance.

Scope of Work:

The site was analyzed by Martin to determine if infiltration would be feasible. It was determined that the county's infiltration design would work well at this site. This design included a 30" layer of #57 stone with 6" HDPE type "SP" pipe laying on top to draw the excess water off the surface. The pipe was topped with 6" of #8 stone and then finished with 12" of a sand-soil mixture. All of the slopes were designed at 3:1 and an entrance road was designed to allow access for construction and easier maintenance. The facility was designed to meet and exceed all current county and state stormwater management regulations. Construction of the pond was done in a very efficient manner.

Sequence of Construction:

The owners of the facility were contacted about the retrofit in July of 2007 at that time staff members met with each property owner and went over the design and the easement that would need to be signed. The easement was signed in September to allow the county access to the property for construction and maintenance of the facility. A sediment control plan was prepared and sub-mitted to Carroll Soil Conservation for review and approval. The facility went out to public bid in mid-October with bids due back November 28,2007.

The job was awarded to While Pine Construction, Inc. Construction was slated to begin March 1, 2008 but due to wet weather it did not begin until late March. The project went very well, with both landowners delighted with the new pond when the contractor moved out on May 8, 2008. A few minor touch-up had to be make in August to the area, but with a few heavy rain storms this fall the facility seems to be working as designed. The as-builts were accepted on September 16, 2008. Landscaping was planted in September to restore vegetation that was removed during construction.

Project Details:

Watershed:	Liberty Reservoir
Drainage Area:	24.75 acres
Impervious Surface Treated:	4.8 acres
Costs:	\$ 105,138.00
Time Frame:	18 Months

Submitted By:

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