

# Oklahoma Phase I Stormwater Management Facility Retrofit

## **Background:**

The Oklahoma Phase I stormwater management facility is an existing facility located off of Monroe Avenue and Stillwater Court in Eldersburg. This facility was targeted because of the current condition of the existing dam, and the facility was not capturing all of the intended run-off from the subdivision. Due to the condition of the facility, the County wanted 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 the Specialized Engineering to determine if the existing dam was constructed of suitable material and if infiltration would be feasible. The investigation concluded that the existing dam would need to be replaced. The design for the facility was completed in-house and included a 14" 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 sand-soil wood chip mixture. A manhole was added so that the existing stormdrain could be connected and extended down to outlet into the facility. All of the slopes were designed at 4:1 and 3:1 to allow efficient machine mowing. A new emergency spillway was created and lined with 18" of Class I rip-rap. The facility was designed to meet and exceed all current county and state stormwater management regulations.

## **Sequence of Construction:**

The homeowners around the facility were contacted about the retrofit in June of 2009. At that time staff members met with adjoining property owners to discuss the proposed retrofit. The county worked to keep these neighbors informed of the project throughout the design process. The facility went out to bid on February 1, 2010 with bids due back February 16, 2010.

The job was awarded to Stambaugh, Inc. and was slated to begin in the Spring of 2010. The contractor began working in April of 2010. The contractor completed the project in October, and received its grading completion certificate on November 29, 2010. The as-built was accepted by the County on November 4, 2010.

## **Project Details:**

Watershed:	Liberty Reservoir
Drainage Area:	24.4 acres
Impervious Surface Treated:	7.27 acres
Costs: Tree Removal	\$ 11,918.00
Geo Technical	\$ 5,110.00
Construction	\$ 187,873.47
Time Frame:	17 Months

## **Submitted By:**

Janet O'Meara  
Watershed Management Specialist



05/11/2010







08/23/2010



10/20/2010