

# Carroll County Air Business Center

## **Background:**

The Carroll County Air Business Center stormwater management facility is an existing facility located near the intersection of Route 97 and Magna Way in Westminster. The facility was chosen under the NPDES permit to be brought up to current stormwater management standards. Additionally because of the condition of the pond, long term maintenance was taken into consideration during design.

## **Scope of Work:**

Our main goal when retrofitting this facility was to capture the entire drainage area and design the facility to the current stormwater management standards. Due to the size of the facility, the Maryland Department of the Environment and the Army Corps of Engineers were consulted early on in the design of the facility to insure that proper steps were taken to comply with their waterway and wetland permits. Since the surrounding drainage area is mostly impervious, the pond was designed to capture the 100 year storm. We also felt that due to the nature of the surrounding area, a dry hydrant would be practical along Magna Way for fire protection. The slopes were also taken into consideration to ensure that long term maintenance would not be an issue. A landscape plan was part of the design to mitigate for wetlands and for aesthetic purposes.

## **Sequence of Construction:**

The job was awarded to CJ Miller and was slated to begin in May of 2008. Construction began with the dewatering of the pond and removal of the sediment from the bottom of the facility. The sides of the pond were cleared of trees and brush. Guniting was removed from the forebay and the slopes were graded to 4:1. Blasting was necessary to achieve the final grade elevation and all pipe structures were lowered to allow discharge to occur along the bottom. Side slopes were graded at 4:1 and the facility was stabilized with seed and mulch. The landscape planting took place in the Fall of 2008. The wetland planting is expected to be completed in the Spring of 2009. The as-built was accepted on October 31, 2008.

## **Project Details:**

Watershed:	Liberty Reservoir
Drainage Area:	204.84 acres
Impervious Surface Treated:	182.31 acres
Costs: Engineering	\$94,142.19
Construction	\$931,372.00
Landscape	\$11,045.00
Time Frame:	6 Months

## **Submitted By:**

Laura Rankin, Watershed Restoration Specialist



Air Business Center SWM Pond

Pre-Construction

04/24/08











2008/07/07



