

PETER PAN RUN, URBANA POND RETROFITS – 15 PONDS



DESCRIPTION

PHOTOS

Frederick County, MD

BayLand was selected to provide engineering design, permitting and construction management for the retrofit of 15 existing stormwater management ponds within the Villages of Urbana community located in Frederick, Maryland. The facilities were selected for retrofit to contribute to meeting the requirements of Frederick County's National Pollutant Discharge Elimination System municipal separate storm sewer system permit and achieve the targeted wasteload allocations towards the Chesapeake Bay Total Maximum Daily Loads. The facilities were constructed as extended detention dry ponds prior to 2002 and did not provide water quality treatment consistent with the most current Maryland Department of the Environment design requirements.

BayLand's design approach to retrofitting the facilities was to maximize water quality treatment and channel protection volume, preserve the original design intent of flood control, create habitat enhancements, improve aesthetic features, and upgrade maintenance access. The amount of water quality volume provided by each facility was significantly increased with thorough grading plans and specific riser modifications. BayLand tailored the designs to meet the overall construction budget of \$1.3 million and achieve, at a minimum, the 103.5 acres of impervious treatment to meet Fredrick County's expectations for the project. A detailed sequence of construction plan was prepared to facilitate the different cut and fill requirements for the 15 facilities to reduce the amount of off-site export and attain considerable cost savings. BayLand also worked closely with the community association to develop detailed construction access plans for continued access to popular walking trails and to reduce the amount of construction truck traffic in the neighborhood.

The project was bid in January 2018 with construction scheduled started in early 2018.

Client | Frederick County Department of Public Works

Engineer | BayLand

Completed | 2018

Construction Cost | \$1,300,000

