

Derry Township Stormwater Improvement Project- Area 3

Project Description: Derry Township proposes a comprehensive upgrade to their current stormwater system, in areas with historical flooding and erosion problems. The proposed project includes the design of an integrated storm sewer, open channel, and roadway culvert elements in three distinct problem “areas” within Derry Township.

Area 3 (aka “Cocoa Ave”) of Derry Townships Stormwater Improvement Project will be located mostly in areas east of Cocoa Avenue, just north of the intersection of Cocoa Avenue and Governor Road and to the south of this intersection, in a farm field along an established waterway with adjacent wetlands. In Area 3, the Project will include realigning a tributary of Spring Creek to its historic alignment as show on historical topographic maps.

Area 3 is located on the east side of Hershey, in the area of the intersection of Governor Road (322 East) and Cocoa Avenue. Installation of new earthen channels and installation of new culverts is proposed to increase conveyance capacity and enhance water quality along Tributary 09510 of Spring Creek. New storm sewer is planned for installation along Cocoa Avenue to increase the rate of runoff capture from the ground surface, and increase conveyance capacity to the existing stormwater discharge.

The upstream extent of improvements to Area 3 is located on Cocoa Avenue between Governor Road and Fishburn Road. Rerouting Tributary 09510 of Spring Creek from the current location west of Cocoa Avenue, to the east side of Cocoa Avenue is proposed by way of installation of a new stream channel. This will also bring the stream channel back to its historical alignment as shown on historic topographic maps. The existing channel west of Cocoa Avenue will be partially piped and continue to carry localized stormwater to the relocated stream channel east of Cocoa Avenue. A 96” RCP culvert is proposed to convey the stream under Governor Road, east of Cocoa Avenue, and a 95’ (W) x 67” (H) culvert is proposed to convey the stream under the driveway of the antique barn located in the northeastern quadrant of the intersection of Governor Road and Cocoa Avenue. The stream channel relocation through the proposed section will depart from the existing channel near the existing culvert stream crossing under Cocoa Avenue upstream of Governor Road. It will rejoin the existing channel near the culvert stream crossing under Cocoa Avenue downstream of Governor Road, adjacent to Valley Road. The downstream limits of work for Area 3 are located near the intersection of Cocoa Avenue and Valley Road.

The Project will also include three (3) sanitary sewer stream crossings. The sanitary sewer stream crossings are associated with upgrades to the current sanitary sewer system within Area 3, due to periodic overloading during times of wet weather. The sewer system upgrades will take place within the proposed Project Area for Area 3. These upgrades are necessary to maintain the integrity of the system.

There are 0.835 acres of emergent wetlands within the Project Area and the project will permanently disturb a total of 3,400 square feet of emergent wetland. A total of 7,000 square feet of emergent wetland will be constructed in order to mitigate the unavoidable wetland disturbance and to compensate for any potential indirect wetland impacts.

Project Cost and Funding: The expected construction cost of this area is \$1.4 million that will be funded by a combination of state H2O grant and Pennsylvania Infrastructure bank loan secured by Derry Township.

Project Schedule: Construction will begin, (contingent of securing requisite permits from Pennsylvania Department of Environmental Protection and Pennsylvania Department of Transportation) during the late summer of 2010 and continue for approximately 12 months.