

## **State Route 29 Sinkhole Remediation Project East Whiteland Township, PA**

### **Project Description**

This project involves the reconstruction of a portion of Route 29 (Morehall Road) in East Whiteland Township, Chester County, to correct existing sinkhole and pavement subsidence issues. The project work area is located along Route 29 (Morehall Road) between the Pennsylvania Turnpike ramps and the intersection of North Atwater Drive/General Warren Boulevard.

Reconstruction activities are driven by a history of reoccurring sinkholes located along this stretch of highway. The intent of the project is to minimize future sinkhole problems by constructing geotechnical treatments and roadway drainage improvements to prevent surface water infiltration and provide structural support to the roadway. The purpose of the project is to provide a safe and efficient roadway while decreasing future maintenance costs and traffic impacts associated with sinkholes.

### **Project Phasing**

The project phasing has been developed to reduce the overall duration of construction and to minimize impacts to the traveling public. Short term lane closures off-peak hours will be required while long term Temporary lane closures will be required for much of the roadway reconstruction during the summer months when traffic volumes are the lowest and schools are not in session.

The phasing will occur as follows (dates may be slightly adjusted due to weather conditions):

**Pre-Stage:** Starting February 26<sup>th</sup>, 2018, temporary work zone messaging signs will be placed at strategic location in and around the general project area. This signing will communicate work zone preparation start of work dates and construction activities. Preparation work with short term daily lane closures (during off-peak hours) will occur during spring 2018 (currently scheduled to begin on March 9<sup>th</sup>). This work will involve pavement and drainage improvements along the southbound shoulder as well as the relocation of underground utilities. The current traffic lane configuration will be maintained during AM and PM peak travel hours for this phase of construction. After this phase of construction is complete, the roadway will be returned to its existing conditions until the subsequent stages of construction begin in summer 2018.

**Stage 1:** Beginning on June 8<sup>th</sup>, 2018, Stage 1 construction work will commence. This work will include excavating and rebuilding the northbound travel lanes while performing sinkhole remediation work and other geotechnical treatments. During this phase of construction, only one lane of travel in each direction will remain open within the work zone. Temporary work zone messaging will be adjusted in the surrounding roadway network to communicate construction activities and expected traffic delays to the traveling public related to Stage 1 work. Throughout construction, various traffic control methods will be implemented to minimize traffic congestion. These methods include traffic signal retiming, message boards, local police assistance, and temporary flaggers. Stage 1 construction activities are scheduled to be completed by mid-July 2018.

**Stage 2:** Beginning mid-July 2018, Stage 2 construction work will commence. This work includes excavating and rebuilding the southbound travel lanes while performing sinkhole remediation work and other geotechnical treatments. During these construction activities, two northbound travel lanes will be maintained while the southbound travel lanes will be reduced to one lane within the work zone. Temporary messaging signs will be adjusted prior to Stage 2 work to inform drivers of the change in traffic control patterns and work area delays. Throughout Stage 2 construction activities, various temporary traffic control methods will be implemented to minimize traffic congestion. All construction activities that create significant temporary traffic impacts are scheduled to be completed prior to the end of August 2018.

