

Project Description

First 2 Phases of Athens Alley

The improvements are located along West Liberty Avenue, Kelton Avenue and Texas Avenue in Dormont Borough, Allegheny County. The existing site consists of bituminous roadway, maintained lawn area, residential area that drains to an UNT to Sawmill Run, and has consisted of the current conditions for the past 5 years. Historically, for the past 50 years the site has consisted of the current conditions.

Phase I of the project consists of rerouting the storm sewer system that collects runoff from the portion of the water shed north of West Liberty Avenue down Kelton Avenue via the installation of a 24" corrugated plastic pipe. This eliminates the storm sewer that is currently under the existing building along West Liberty Avenue and takes approximately 17 acres of runoff out of the storm sewer that conveys runoff through Athens Alley. This phase of the project will include the additional of storm sewers along Kelton Avenue to collect and convey runoff to the larger downstream storm sewer system. By doing so the runoff will be collected and conveyed into the storm sewers in lieu of the current overland flow to the downstream system. This phase of the project will remove approximately 52 CFS of stormwater from reaching the system located in Athens Alley.

Phase II of the project consists of collecting and conveying the runoff that drains down Texas Avenue via the existing storm sewer system and overland flow to an underground detention system within Texas Avenue. The Grades at the entrances to Athens Alley will be revised to minimize the amount of runoff that can drain down the Alley way. An additional inlet will be installed in the intersection to assist in the collection of runoff. The underground detention system will consist of two 6' diameter pipes that will be installed within Texas Avenue. A 36" corrugated plastic pipe will be installed to convey the outfall from the underground detention system down Kelton Avenue to the existing 36" storm sewer system.

The implementation of Phase I and Phase II of the Athens Alley Stormwater improvement project will reduce the runoff to Athens Alley from 73.4 CFS to 4.5 CFS for the 2 year storm event.