

- **Owner:**
Montgomery County
- **Services:**
 - Bridge Design
 - Environmental Permitting
 - Construction Consultation
- **Year Completed:**
2022 (Anticipated Construction)

Montgomery County Bridge No. 172

Swamp Pike over Minister Creek, New Hanover Township, Montgomery County, PA



Stahl Sheaffer Engineering is currently designing a replacement structure for County Bridge No. 172 located on Swamp Pike over Minister Creek, New Hanover Township, in Montgomery County, PA.

The existing substructure is comprised of a two-span stone masonry arch with stone masonry wingwalls, and the existing superstructure is comprised of a reinforced concrete deck with stone masonry abutments. The existing structure has a clear span of approximately 28'-6" (one span at 14.0' and one span at 14.5') and roadway width of approximately 32'-6". Located at Station 16+92.00, the structure carries Swamp Pike over Minister Creek. The existing structure's geometry is a crest vertical curvature and a horizontal curvature across the structure.

The proposed replacement structure is a 42.0' x 11.0' single-span precast reinforced concrete arch culvert with concrete barrier on moment slabs. The roadway cross section consists of two 12'-0" lanes and two 10'-0" shoulders for a total roadway width of 44'-0". This option is the most economical compared to a conventional bridge, minimizing the construction duration and meeting hydraulic requirements. The arch culvert will also complement the surrounding area, replacing the twin cell existing arch culverts.



EXISTING STRUCTURE BEFORE CONSTRUCTION