

Schaefferstown Bypass | SR 0501, Section 006

Lebanon County, PA

Entrant Stantec Consulting Services Inc.

Category H Transportation

Schaefferstown was a small 300-year-old village with a 21st-century traffic problem. For decades, the traffic congestion along SR 0501 in the village was a safety concern.

PennDOT District 8-0 assigned the Stantec Team this improvement project, which included traffic analyses, alternatives studies, environmental documentation, highway engineering, waterway permitting, and structural design. Stantec was supported by Hunt Engineering, which provided field survey, geotechnical investigations, hydrologic and hydraulic analysis, and foundation design.

Although small in comparison to other bypass projects, this project had numerous challenges and complexities.

Schaefferstown is surrounded by agriculture and historic properties, so right-of-way was an issue. There were multiple environmental concerns associated with wetlands, stormwater management, and threatened and endangered species habitat.

After conducting studies, Stantec determined that a bypass roadway was the best solution for the congestion and the team selected the most feasible of five alternatives. Key to the success of the project was Stantec's early coordination at every stage of the project to gain input from agencies and to ensure that the design satisfied all stakeholders.

Stantec was an early adopter of the creative use of BMPs in Pennsylvania and created a transformational stormwater management design. Other achievements were the cost-saving precast concrete arch structures for culverts, aesthetic treatments on structures to mitigate for environmental effects, and even a culvert so cattle could pass under the roadway to maintain their pasture connection.

The Schaefferstown bypass plans were successfully delivered by Stantec to PennDOT, putting the historic village one step closer to a safer 21st century.