

Executive Summary

I-83 Exit 4 Improvements

Category H

I-83 Exit 4 is a vital interchange connecting communities in Southern York County to the greater region. Gannett Fleming's challenging role in the design and construction consultation of a complex junction of connecting roadways required innovative solutions, including a unique diverging diamond interchange (DDI) design in a narrow transit corridor while protecting the environmental well-being of the local watershed.

The project design is only one of three DDIs currently built in the commonwealth. Replacing the existing diamond interchange with a DDI allows direct left turns from off-ramps and crossing roadways, thereby reducing congestion, and lowering the number of intersection conflict points. Other improvements include the project's stormwater management plan to protect the adjacent Shrewsbury Borough municipal water wells.

Gannett Fleming, Inc. achieved the goals initially set by PennDOT, including:

- Improving safety through a 46 percent reduction of intersection conflict points and lengthening of the exit and entrance ramps
- Reducing congestion with a DDI that efficiently moves traffic through the intersections
- Replacing a structurally deficient bridge and culvert
- Providing a safe passage for pedestrians and bicyclists

Exit 4 now provides improved safety, mobility, and aesthetics for regional and interstate travelers and is now a source of community pride for residents.