

U.S. 422 BRIDGE OVER SCHUYLKILL RIVER & IMPROVEMENTS BETWEEN PA 363 AND PA 23 INTERCHANGES West Norriton Township – Upper Merion Township Montgomery County

A NEW U.S. 422 BRIDGE: Due to Act 89, Pennsylvania’s transportation funding plan, PennDOT began construction in February 2016 to rebuild and widen the U.S. 422 bridges over the Schuylkill River, Norfolk Southern Railroad, S. Trooper Road and the Schuylkill River Trail in West Norriton and Upper Merion townships, Montgomery County. This improvement is part of the Schuylkill River Crossing Complex of transportation improvement projects.



The Schuylkill River Crossing Complex consists of four separate projects to improve multi-modal travel and reduce congestion between the Route 363 (Trooper Road) and Route 23 (Valley Forge Road) interchanges.

The focal point of this program is the replacement and expansion of the U.S. 422 bridges and the widening of one mile of U.S. 422 between the Route 363 and Route 23 interchanges. This project, with a construction cost of \$97.4 million, began in February 2016 and is scheduled to finish in spring 2020. Without the passage of Act 89, construction would not have begun before 2018.

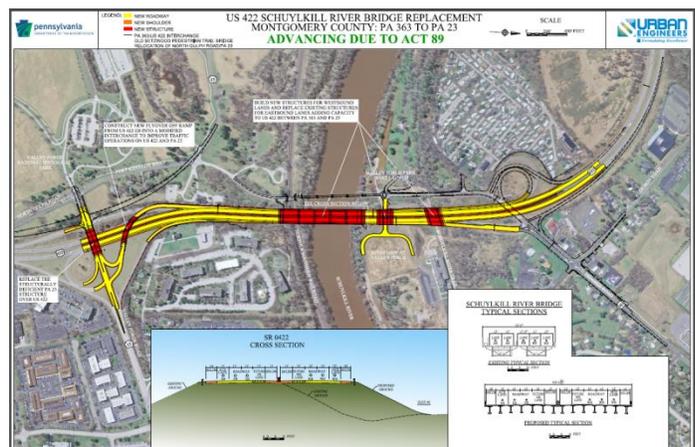
Each day 92,000 vehicles travel across the five lanes on U.S. 422 structure. Traffic backups occur weekdays on U.S. 422 in the area of this Schuylkill River crossing.

PennDOT’s contractor is currently building a new structure to carry U.S. 422 westbound traffic over the Schuylkill River, Norfolk Southern Railroad, S. Trooper Road, and the Schuylkill River Trail. The existing U.S. 422 bridges will then be rebuilt to provide new structures for eastbound travelers.

The existing U.S. 422 Schuylkill River bridge is 72 feet wide. The new bridges will provide a total width of approximately 146 feet, wide enough for eight travel lanes. When initially opened, the new bridge will carry six lanes - three eastbound and three westbound. There will be two through lanes in each direction plus a third lane on both sides for motorists to use to travel between the Route 363 and Route 23 interchanges. The new bridges will be wide enough for the possible addition of a third through lane in each direction sometime in the future.

U.S. 422 CORRIDOR IMPROVEMENTS: This project includes one mile of reconstruction and widening of U.S. 422 to provide three lanes in each direction between Route 363 and Route 23.

INTERCHANGE IMPROVEMENTS: Includes improvements to U.S. 422 west off-ramp to Route 363 and the Route 363 on-ramp to U.S. 422 east; replacing the Route 23 bridge over U.S. 422; realigning the U.S. 422 east off-ramp to Route 23 with the construction of a fly-over ramp; rebuilding 1,500 feet of Route 23 approaching the U.S. 422 Interchange; improving the Route 23 on-ramp to U.S. 422 west.



ADDITIONAL IMPROVEMENTS: Widening the U.S. 422 east off-ramp to First Avenue to accommodate two lanes and widening the intersection of North Gulph Road and First Avenue to accommodate a separate right-turn lane on southbound North Gulph Road at the intersection.

U.S. 422 SCHUYLKILL RIVER BRIDGE PROJECT DETAILS:

- Replace U.S. 422 bridges over the Schuylkill River and Norfolk Southern Railroad with twin bridges
- Replace U.S. 422 bridge over S. Trooper Road with twin bridges
- Replace U.S. 422 bridge over the Schuylkill River Trail with twin bridges
- Replace Route 23 bridge over U.S. 422
- Build new flyover off-ramp from U.S. 422 east to Route 23
- Rebuild and widen one-mile of U.S. 422
- Improve ramps at U.S. 422 interchanges at Route 363, Route 23 and First Avenue
- Expected Construction Start – February 2016
- Projected Completion – May 2020
- Expected Construction cost - \$97.4 million
- New Schuylkill River Bridge Facts: Pre-Stressed Concrete structure; 785 feet long; 146 feet wide; 5 spans

EXISTING U.S. 422 SCHUYLKILL RIVER BRIDGE DATA:

- Built: 1965
- Width: 72 feet
- Length: 803 feet
- Spans: 8 (2 approach spans and 6 main spans)
- Average Daily Traffic Volume: 92,000
- Structure Type - Welded steel girder bridge, floor beam, stringer system
- Last Repaired: 2009 to keep the bridge structurally sound until a new bridge is built
- 2009 Improvements: Repositioned median barrier to permit addition of third westbound lane; bridge deck repairs; new expansion joint; new guiderail; bridge beam repairs; expansion bearings reset and lubricated; new steel railing; and drainage system cleaning
- Sidewalk: A former 5-foot, 4-inch wide path on west side of the bridge was in use until the opening of Sullivan's Bridge in August 2016.
- Bridge Condition: Fair (Bridge Deck 5; Superstructure 5; Substructure 6)
- Structurally Deficient: No (U.S. 422 bridge over the Schuylkill River was structurally deficient until repairs were made in 2009.)

SCHUYLKILL RIVER CROSSING COMPLEX IMPROVEMENT PROGRAM: Program consists of replacing the U.S. 422 bridges over the Schuylkill River and improving the highway between Route 363 and Route 23; building two additional ramps to complete the U.S. 422/Route 363 Interchange, a project that was completed in December 2015; construction of Sullivan's Bridge - the pedestrian/bicycle trail bridge over the Schuylkill River in Valley Forge National Historical Park – which opened on August 19, 2016; and the relocation of North Gulph Road at Route 23 in VFNHP, which is expected to move to construction in 2019.

PROJECT BACKGROUND: U.S. 422 was opened in the mid-1960s between U.S. 202 and Route 363, and later extended towards Pottstown beginning in the mid-1970s. With development in the Valley Forge area and new developments extending west along U.S. 422, traffic congestion routinely impacts U.S. 422 commuters and motorists on adjacent roads as well.

The U.S. 422 river crossing at Valley Forge offers the only crossing of the Schuylkill River within two miles (and over three miles along the river to the I-476 crossing). This translates into an average of more than 90,000 vehicles per day using U.S. 422 to cross the Schuylkill River, with a large portion of those vehicles either entering or exiting at Route 363 and Route 23.