

CSVT

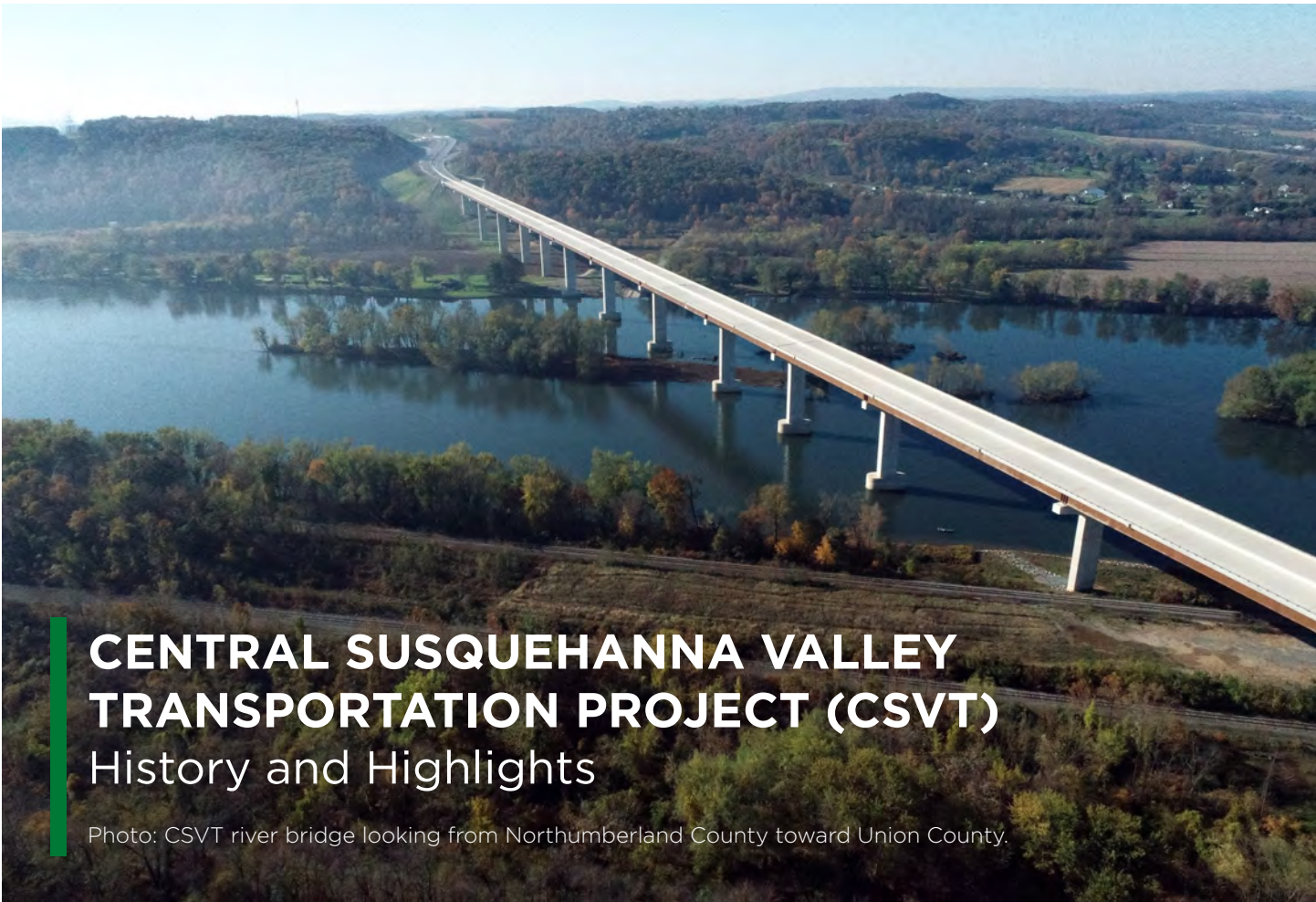
CENTRAL SUSQUEHANNA VALLEY
TRANSPORTATION PROJECT



**COMMEMORATION OF
NORTHERN SECTION OPENING AND
SOUTHERN SECTION GROUNDBREAKING**



Summer 2022



CENTRAL SUSQUEHANNA VALLEY TRANSPORTATION PROJECT (CSV) History and Highlights

Photo: CSVT river bridge looking from Northumberland County toward Union County.

Although construction of the Central Susquehanna Valley Transportation Project (CSV) officially began in December of 2015, the project has been in the works since the Route 15 corridor study was completed in 1959.

In the early 1970's, PennDOT designed a Selinsgrove-Shamokin Dam bypass, but only the Selinsgrove portion was completed. Since then, the section of Routes 11/15 through the Shamokin Dam area has developed into a congested commercial area that has seen increasing volumes of truck traffic.

In 1994, a needs study of the area was initiated that determined there was need to reduce congestion, accommodate growth, and improve safety throughout the region, by separating trucks and other through traffic from local traffic. The study was followed by years of preliminary engineering, environmental studies and public outreach. In 2003, the Federal Highway Administration approved the Final Environmental Impact Statement for the project.

Due to funding constraints, the project was put on hold in 2008. However, with the passage of Act 89 in 2013, funding was made available, and the project was reactivated, including the final detailed design of the project's Northern Section.

The CSVT involves the design and construction of approximately 13 miles of new 4-lane limited access highway. The total estimated cost of the project is \$900 million.

The project is divided into the Northern and Southern Sections. The Northern Section connects Route 147 south of Montandon in Northumberland County to Route 15 south of Winfield in Union County. The Southern Section will connect with the Northern Section south of Winfield and proceed to the existing Routes 11/15 interchange just north of Selinsgrove in Snyder County. The Southern Section also includes an interchange/connector to Route 61 (Veterans Memorial Bridge) and Routes 11/15 in Shamokin Dam.

This summer, we celebrate the opening of the Northern Section to traffic and the beginning of construction of the Southern Section. Although much work remains to be completed, these are significant milestones for this long-awaited project and major steps toward achieving its far-reaching benefits.

NORTHERN SECTION

The CSVT Northern Section starts at the south end of the existing 4-lane, limited access portion of Route 147 just south of Route 45 in West Chillisquaque Township, Northumberland County. It proceeds south to the new interchange with existing Route 147 at Ridge Road in Point Township. It then continues across the West Branch Susquehanna River to the new interchange with existing Route 15 near County Line Road in Union Township, Union County and Monroe Township, Snyder County.

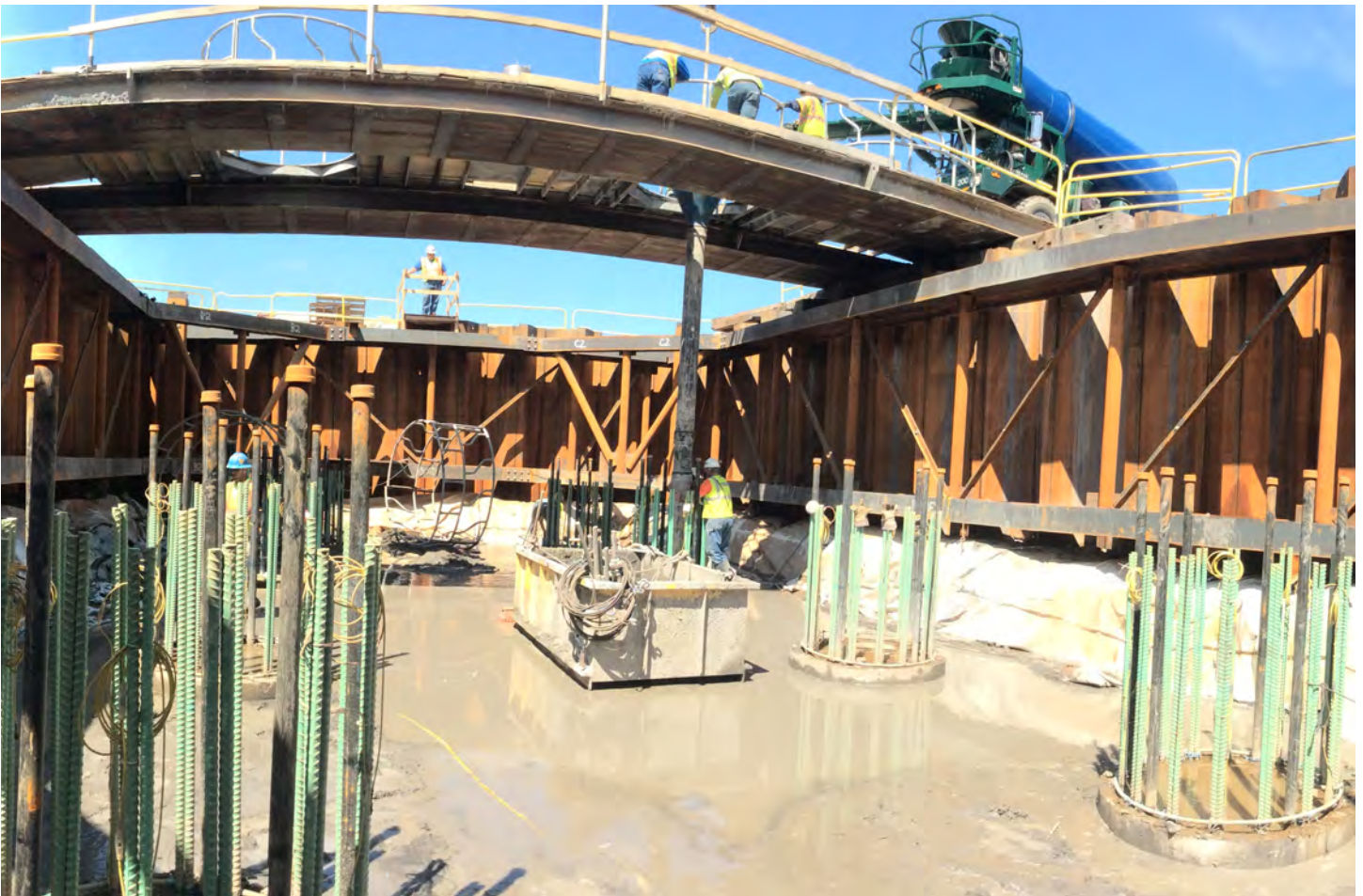
Construction of the Northern Section began in December 2015 and will be fully completed in late 2022. The work has been completed through four separate construction contracts as follows:

FIRST CONTRACT

The first contract was to construct the new river bridge that carries the CSVT highway over the West Branch Susquehanna River. It was awarded to Trumbull Corporation from Pittsburgh, Pennsylvania for \$156 million. Work began on the river bridge in 2015 and was completed in 2020.

FUN FACT

- 1 million cubic yards of earth were excavated and moved to construct this portion of the project.



Construction of a river pier foundation. Each river pier foundation has 8 caissons (drilled shafts filled with concrete) that are 5 feet in diameter and extend approximately 25 feet into the riverbed.



Construction of a land pier foundation.



A river pier foundation with 1,000 cubic yards of concrete and initial steel reinforcement for the pier stem in place.



Mechanical couplers being lifted into place for a pier stem. More than 10,000 mechanical couplers were used to join the steel reinforcement within the various concrete portions of the river bridge.



Circular temporary excavation support (shoring) systems used to construct several land pier foundations. A completed pier stem is also visible in the background.



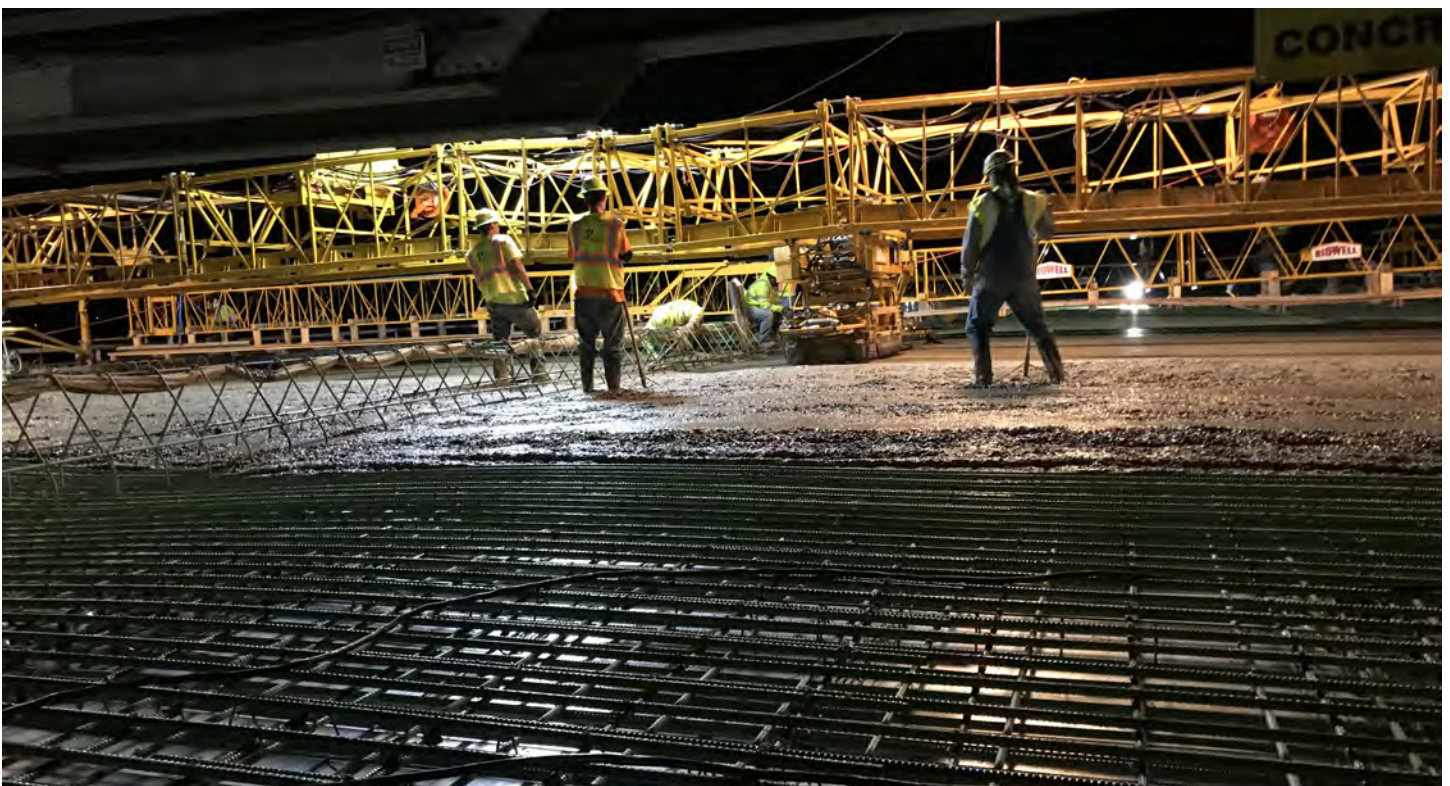
The first beams being set in place. The beams are 10-foot-high steel I-beams.



Beams set from the temporary causeway in the river.



The final beams being set in place.



Workers placing concrete for the bridge deck, using a conveyor to spread the concrete across the width of the bridge.



The finished concrete bridge deck, looking north in the southbound lanes.



Yearly progress of the river bridge construction.

CSVT RIVER BRIDGE FACTS

- The 4,545-foot-long bridge over the West Branch Susquehanna River is currently PennDOT's 8th longest bridge and has:
 - 15 spans
 - 60- to 180-foot-high piers
 - 10-foot-high steel beams
 - 20,000 tons of steel (which is equivalent to the weight of 133 blue whales)
 - 50,000 cubic yards of concrete (which would fill 15 Olympic swimming pools)

SECOND CONTRACT

The second contract was for earthwork and structures north of the river. It was awarded to Trumbull Corporation from Pittsburgh, Pennsylvania for \$61 million. Work began on this contract in 2016 and was completed in 2019.

FUN FACT

- 2.5 million cubic yards of earth were excavated and moved to construct this portion of the project.



100-ton haul trucks used for earthmoving operations. These trucks were typically loaded by an excavator with a 10-cubic-yard bucket.



Construction of the new 3-span bridge over Chillisquaque Creek (on the left) and the existing bridge that was later removed and replaced (on the right).



Completed piers for the bridges over Wooded Run and Hollow Road. The embankments shown were constructed and then quarantined and monitored for settlement prior to constructing the bridge abutments.

THIRD CONTRACT

The third contract was for earthwork and structures south of the river. It was awarded to New Enterprise Stone & Lime Co., Inc., from New Enterprise, Pennsylvania for \$37 million. Work began on this contract in 2017 and was completed in 2019.

FUN FACT

- 1.5 million cubic yards of earth were excavated and moved to construct this portion of the project.



An 84-inch diameter concrete stream culvert located south of County Line Road at the southern end of the CSVT Northern Section.



Construction of the bridges over existing Route 15.



An excavator loading a haul truck near Route 15.

FOURTH CONTRACT

The fourth and final contract for the Northern Section was for paving. It was awarded to New Enterprise Stone & Lime Co., Inc., from New Enterprise, Pennsylvania for \$52 million. Work began on this contract in 2019 and will be completed in late 2022.



Construction of the highway pavement. Shown on the right is the subbase course consisting of 2A aggregate, and shown on the left is the cement-treated permeable base course placed on top of the subbase, prior to the placement of concrete pavement.



Placement of the cement-treated permeable base course.



Concrete pavement being placed on the cement-treated permeable base course.

COMPOSITE PAVEMENT FACTS

- The CSVT highway is constructed of composite pavement, which is a type of pavement that uses both concrete and asphalt.
- The concrete base layer provides a strong, durable, long-lasting base.
- The asphalt top layers provide a renewable riding surface and distribute loads more effectively through the pavement structure.
- The intermediate asphalt layer (binder course) is designed for durability and stability. The surface asphalt layer (wearing course) is a high-end asphalt that is designed to protect the concrete from climate effects such as moisture intrusion and temperature differentials and to prevent rutting. The reduced distresses resulting from the composite pavement leads to improved and extended performance.
- While it is rare to see asphalt placed over new concrete pavement, this construction method is anticipated to result in a long-lasting roadway that needs reduced maintenance and that provides improved ride quality and noise reduction.
- It is anticipated that maintenance of the composite pavement will be less costly and completed more quickly than traditional pavements.



The intermediate asphalt layer (binder course) placed on top of the concrete pavement, looking north from the north end of the river bridge in Northumberland County.

NEW ROUTE DESIGNATIONS

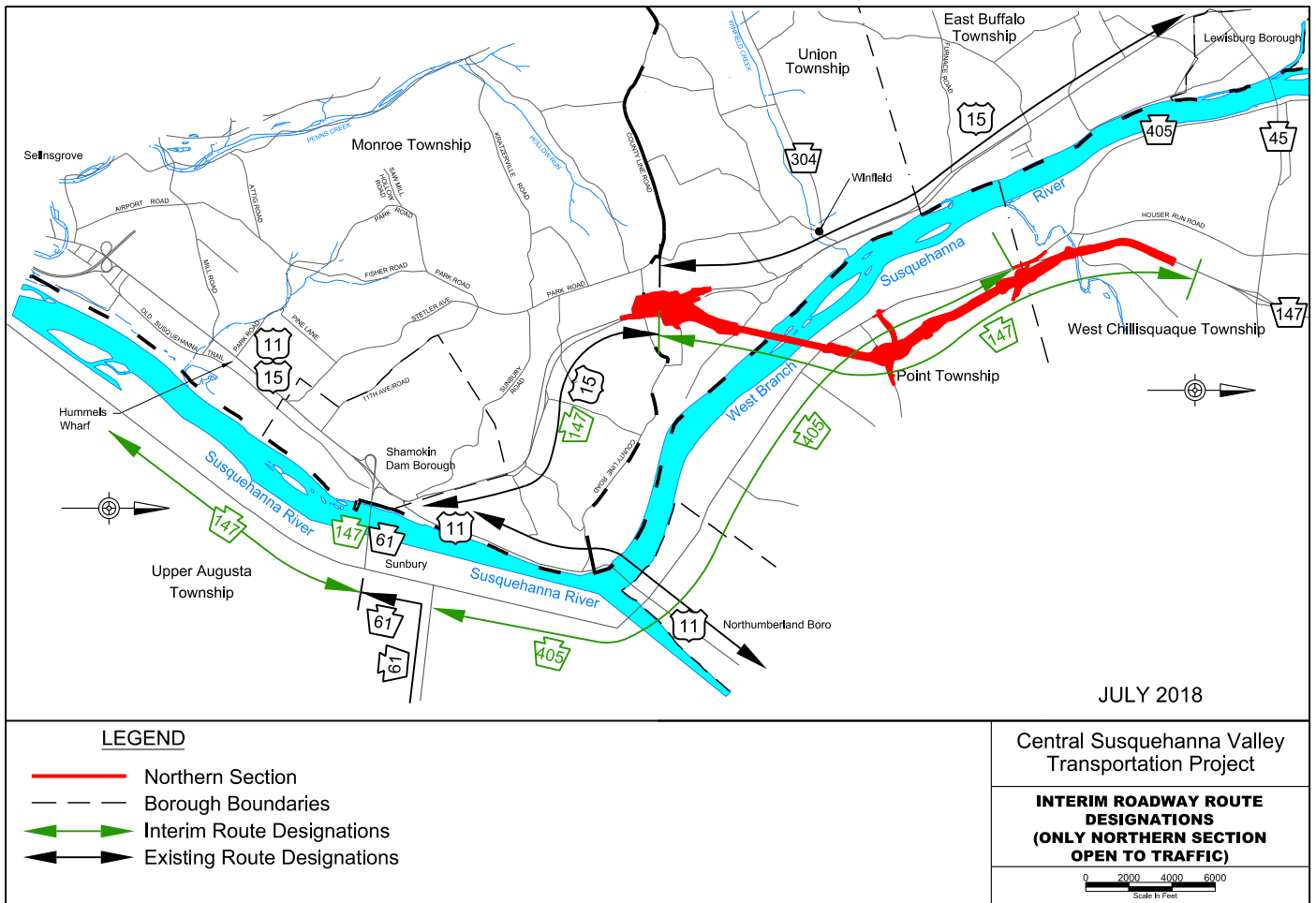
When the CSVT Northern Section is opened to traffic, some existing roadways will be impacted with a change in route designation.

Route 147

- Route 147 will now continue south from Montandon along the new CSVT highway and river bridge. From the new interchange south of Winfield, it will continue south along existing Route 15 and then across the Veterans Memorial Bridge to connect to existing Route 147 in Sunbury.
- The former Route 147, connecting Northumberland to Sunbury, will be redesignated Route 405.
- Motorists seeking to travel into Northumberland from the new Route 147 (CSVT) will be able to exit the new highway at the new interchange at Ridge Road.

Route 405

- Route 405 will continue south from its former intersection with Route 147 into Northumberland and Sunbury. At its former intersection with Route 147, Route 405 will be slightly realigned in late 2022.
- Motorists seeking to travel on the new Route 147 (CSVT) from the newly designated Route 405 will be able to enter the new highway at the new interchange at Ridge Road.



SOUTHERN SECTION

The CSVT Southern Section starts at the Northern Section's new interchange with existing Route 15 and proceeds south mostly through Monroe Township, Snyder County to connect to the existing Routes 11/15 interchange. It includes an interchange/connector to existing Route 61 (Veterans Memorial Bridge) and Routes 11/15 in Shamokin Dam.

Construction of the Southern Section is starting in 2022, and it is anticipated to be opened to traffic in 2027. The work is planned to be completed through three separate construction contracts as follows:

FIRST CONTRACT

The first contract is primarily for earthwork. It was awarded to Trumbull Corporation from Pittsburgh, Pennsylvania for \$115 million in May 2022.

In addition to the 5 million cubic yards of earthwork required for the Southern Section, the contract includes the new bridge that will carry Sunbury Road over the new CSVT highway, various stream culverts, and drainage features. It also includes improvements on existing local roads to accommodate the new highway, such as:

- Reconfiguring Park Road, Fisher Road, and Colonial Drive;
- Replacing the Mill Road/App Road/Airport Road intersection with two roundabouts; and
- A new traffic signal and turning lanes at the Route 204/Mill Road intersection.

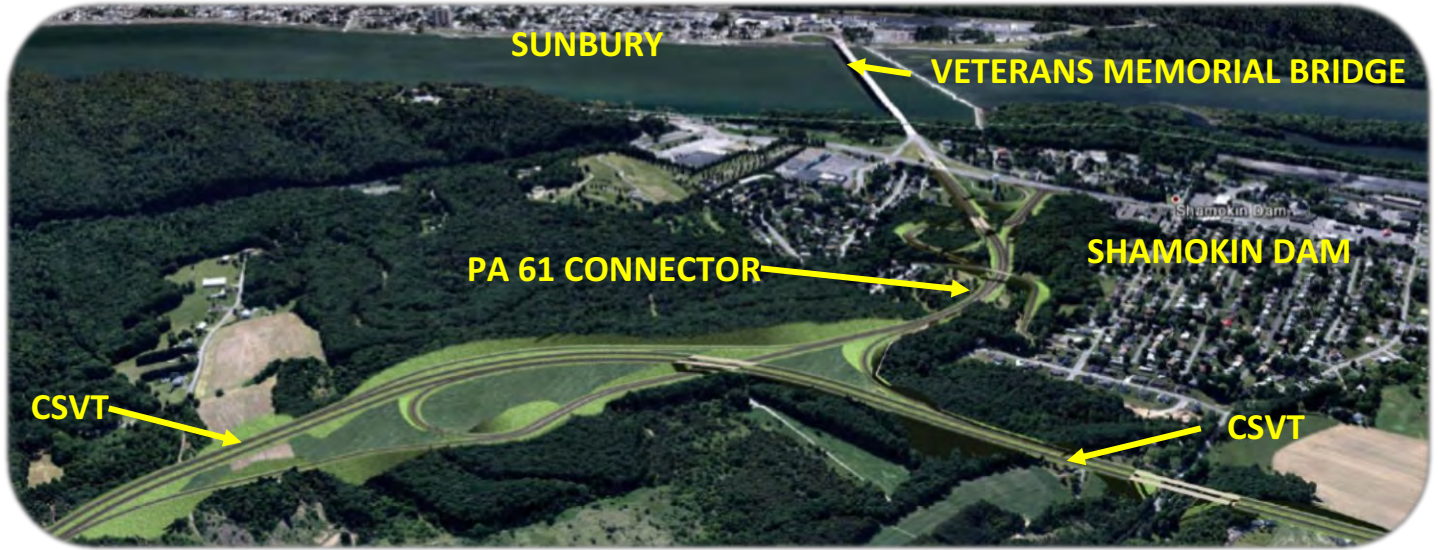
Work began in May 2022 with completion anticipated in 2025.



The north end of the Southern Section, prior to construction, where it will connect to the Northern Section just south of the new highway's interchange with Route 15.

SECOND AND THIRD CONTRACTS

The second contract will be for the other new structures in the Southern Section, and the third contract will be for paving. Final design work is ongoing to develop plans for these contracts. Construction bids for the second and third contracts are anticipated to be opened in 2024 and 2026, with the Southern Section anticipated to be opened to traffic by 2027.

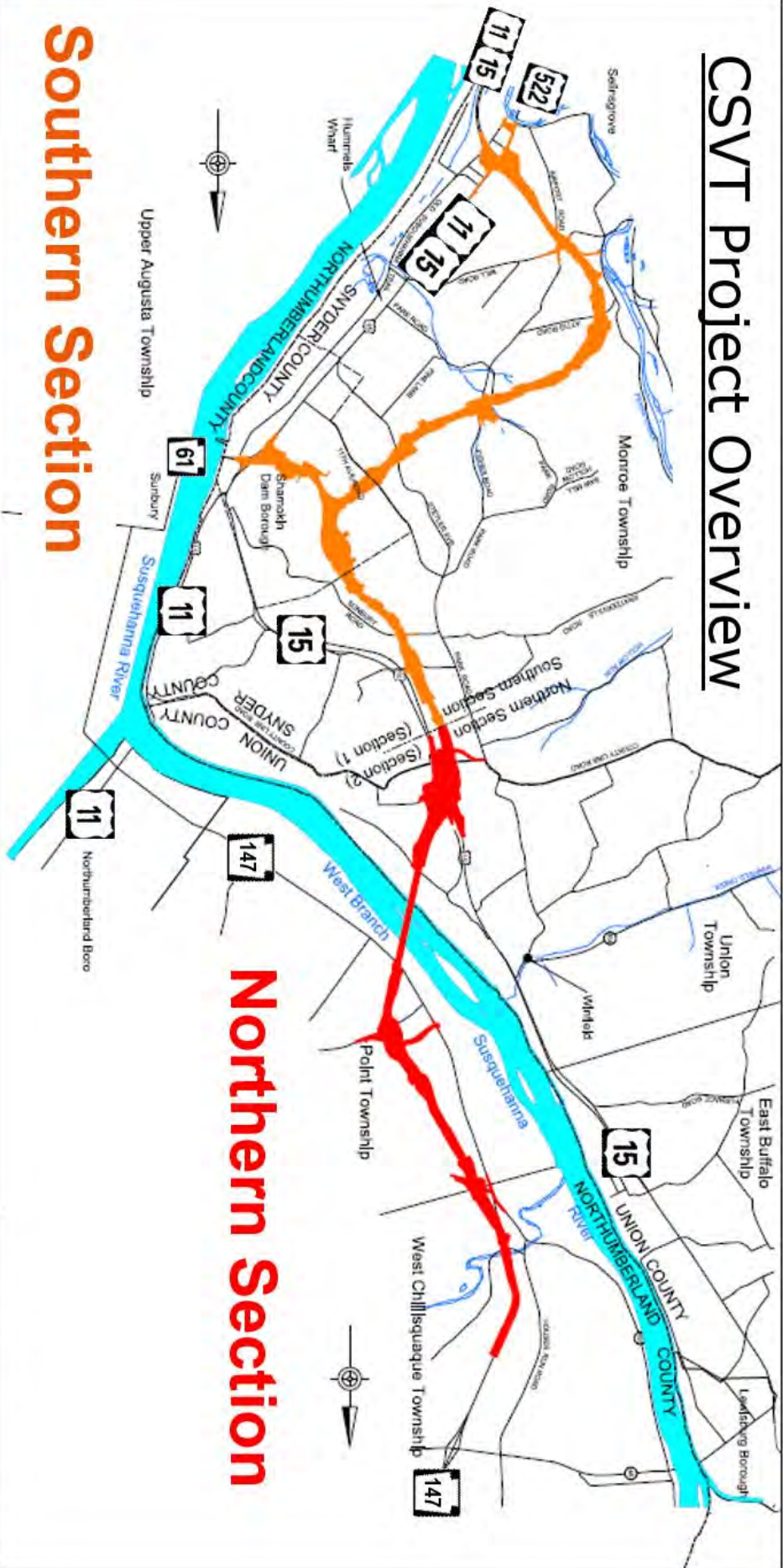


A rendering of the proposed interchange between CSVT and the Route 61 Connector, looking east over Shamokin Dam toward Sunbury.

FAST FACTS FOR CSVT OVERALL

- Approximately 13 miles of new 4-lane, limited access highway
- 21 bridges
(counting dual bridges as 1 bridge and including existing bridges being replaced/rehabilitated)
 - 9 bridges in the Northern Section
 - 12 bridges in the Southern Section
- \$900 million total estimated cost
(including design, right-of-way, utilities, mitigation, construction, and inflation)
- 800-acre footprint
- 4 interchanges
- 9 million cubic yards of earthwork
(which would fill Penn State's Beaver Stadium more than 10 times)

CSVT Project Overview



Southern Section

Northern Section

- Legend**
- Southern Section (Section 1)
 - Northern Section (Section 2)
 - Borough Boundaries

NOTE:
The proposed alignment shown on this map represents the design as of the January, 2019 approval of the Finding of No Significant Impacts.

**Central Susquehanna Valley
Transportation Project**

Project Overview

0 2000 4000 8000
feet

