

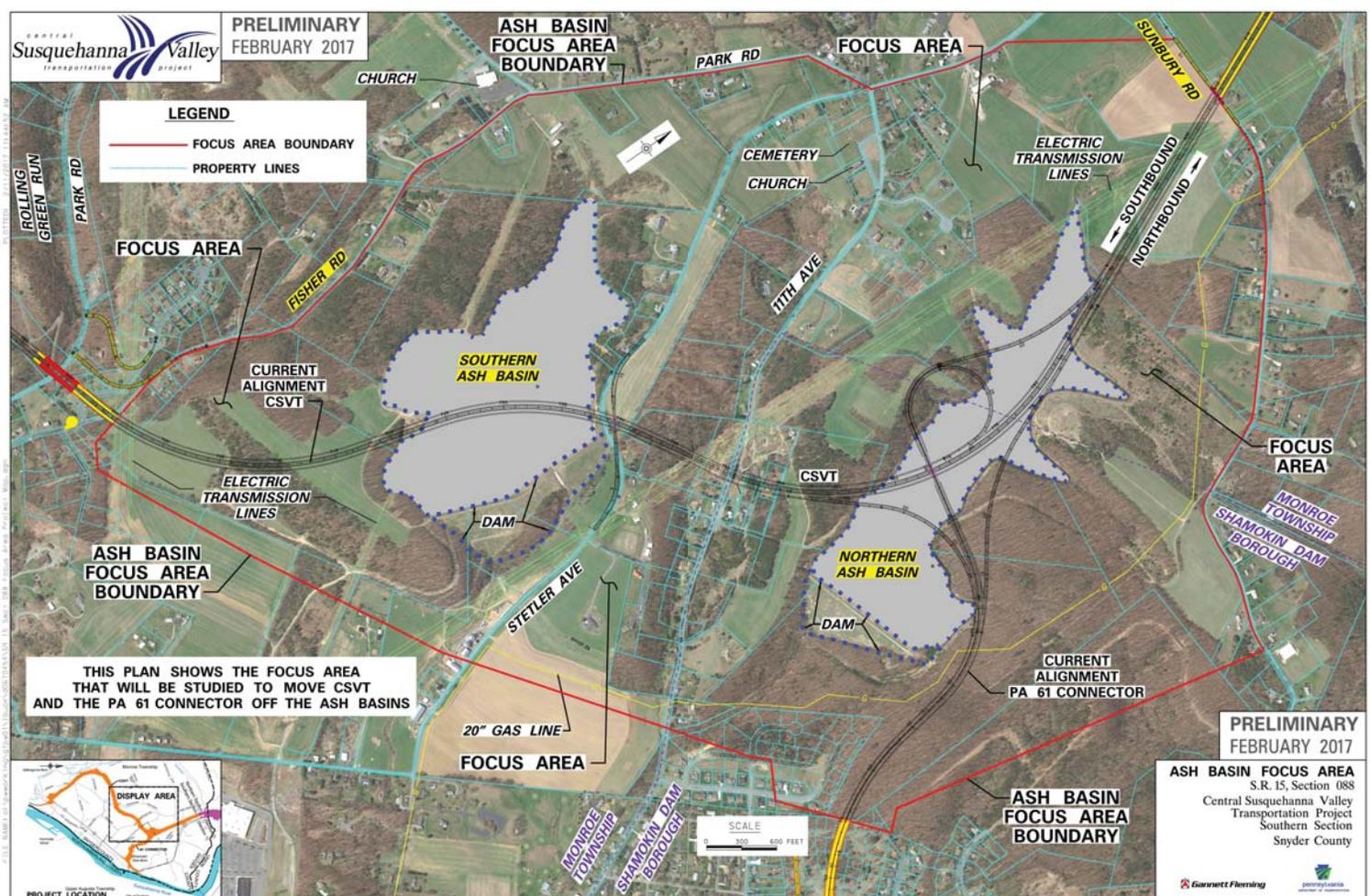


# Ash Basins (cont.)

## Why CSVT cannot be constructed on ash basins

Based on recent laboratory test results, the saturated fly ash within the basins is a soft, weak, and compressible material that cannot support the weight of a highway without excessive and potentially detrimental settlement and deformation. In addition, construction of the highway over the ash basins would present a risk of groundwater contamination in nearby wells and aquifers, both during and after construction, since there is no liner between the fly ash and the original ground below it. Ash basins throughout the country have come under increased scrutiny from government regulators, such as the United States Environmental Protection Agency (EPA), due to documented cases of contaminated groundwater around fly ash basins as well as a dam failure at one fly ash basin location. During final design coordination for the CSVT Southern Section, the Pennsylvania Department of Environmental Protection (PADEP) strongly recommended that PennDOT realign CSVT to avoid the fly ash basins. Additionally, if CSVT were to be constructed on the fly ash basins, the citizens of Pennsylvania would assume perpetual liability for the fly ash basins and their dams.

CSVT will be moved between Fisher Road and Sunbury Road to avoid the ash basins. To accomplish this, the project team will be developing alternatives within an ash basin focus area. This focus area is shown in the figure below and consists of the lands inside of the red line. We would like to know your thoughts or concerns that should be considered during the alternatives development and analysis. Please be sure to fill out a questionnaire or talk to a project team member to provide your input.

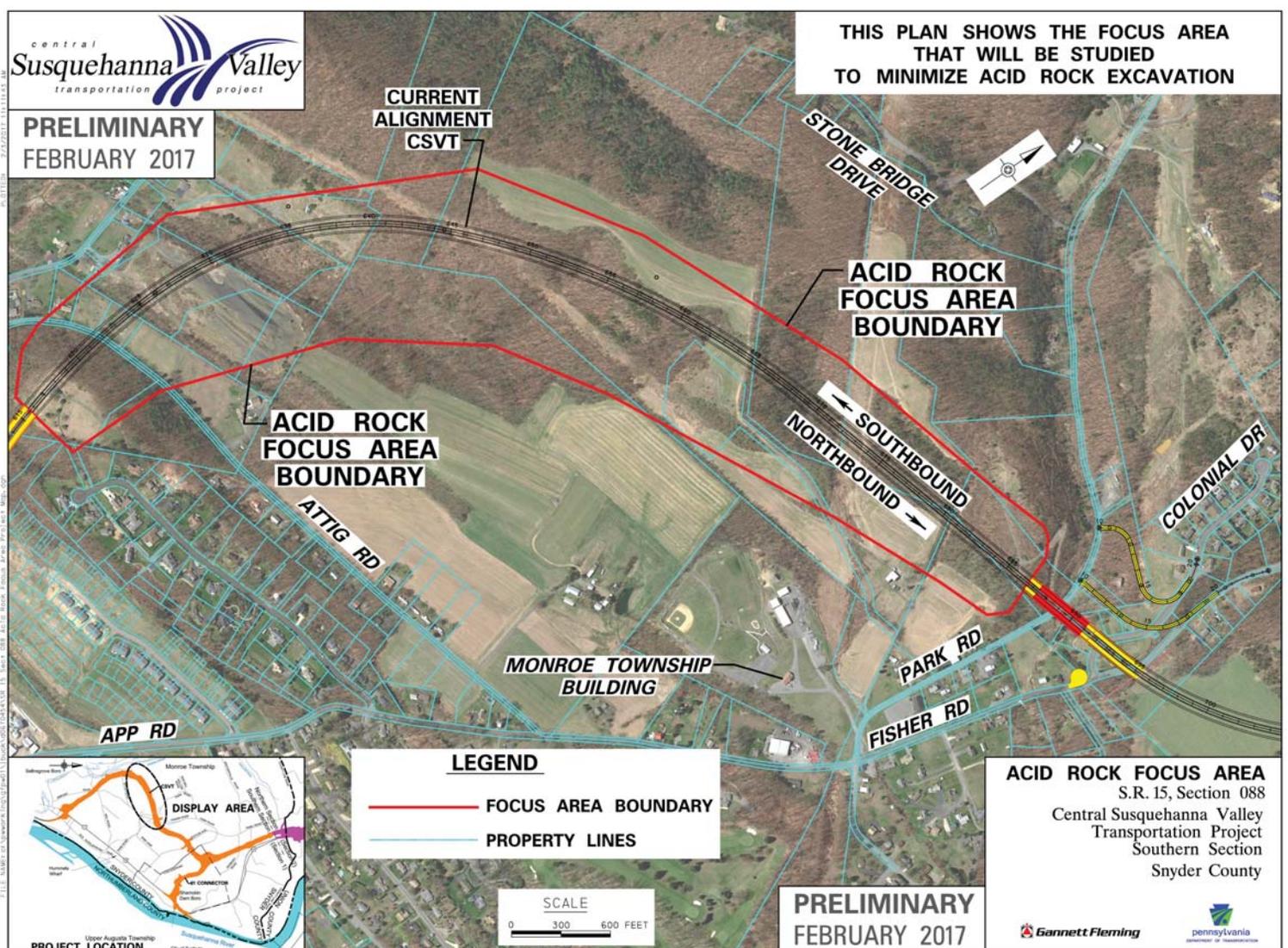


Ash Basin Focus Area

# Acid Rock

Geotechnical studies performed in 2016 revealed that there is acid bearing rock along the proposed CSVT alignment between Attig Road and Park Road. There is also a very small area of acid rock just south of Attig Road. Acid bearing rock contains iron sulfide. It can produce acid at a quick rate when it is excavated into smaller pieces and exposed to air and water, potentially causing environmental issues similar to acid mine drainage. While it is an unexpected development on CSVT, acid rock is straightforward to address.

The project team has coordinated with PADEP and developed a plan to address the acid rock challenge. The plan includes minimizing excavation of acid bearing rock, diverting stormwater around acid rock areas, and treating the excavated rock and stormwater runoff. In order to minimize excavation, the project team will look at shifting CSVT within an acid rock focus area between Attig Road and Park Road. The red line in the figure below shows the limits of the possible alignment adjustments.

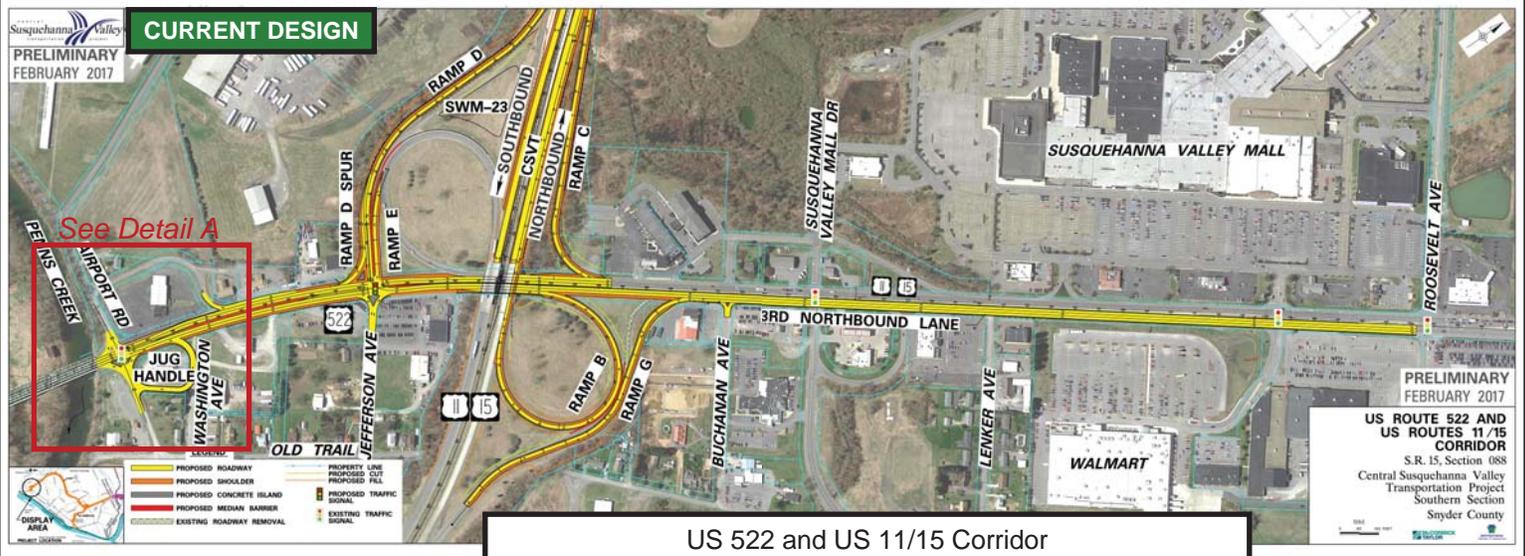


Acid Rock Focus Area

# Minor Design Changes

In contrast to the larger alignment change that is needed at the ash basins, several smaller changes have been made in other specific locations. These changes are the results of efforts to optimize the design that was proposed during preliminary engineering.

## US 522 and US 11/15 Corridor



US 522 and US 11/15 Corridor

At the interchange of CSVT, US 522 and US 11/15, ramps have been reconfigured to improve geometry and operations. Most notably, the existing northbound off ramp geometry has been improved to flatten the curve as the ramp merges with US 11/15 northbound. Two northbound US 522 lanes are needed through the interchange to accommodate projected future traffic volumes. Therefore, a third lane on US 11/15 northbound has been added to the design, extending from the interchange to Roosevelt Avenue.

## US 522 / Airport Road Intersection



Detail A - US 522 / Airport Rd Intersection

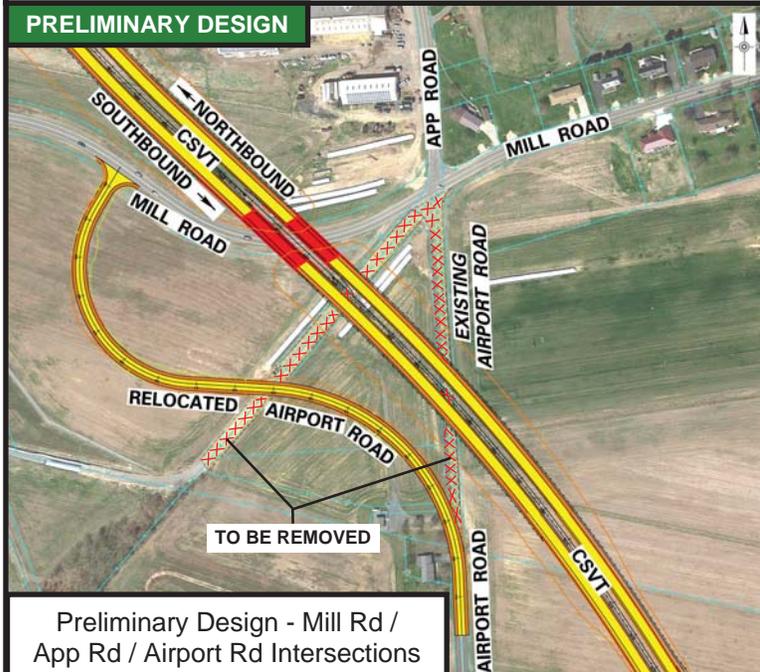
To ensure efficient traffic flow in the future, the existing two lane section of US 522 southbound will be extended from the interchange through the Airport Road intersection and carried across the existing truss bridge over Penns Creek toward Selinsgrove.

The existing US 522 northbound left turn lane to Airport Road will be removed and replaced with a jug handle at Washington Avenue. Northbound US 522 motorists who wish to turn left onto Airport Road will proceed straight through the signalized intersection and then turn right onto the jug handle at Washington Avenue. At the end of the jug handle, motorists will turn right onto Airport Road and proceed straight through the intersection.

## Minor Design Changes (cont.)

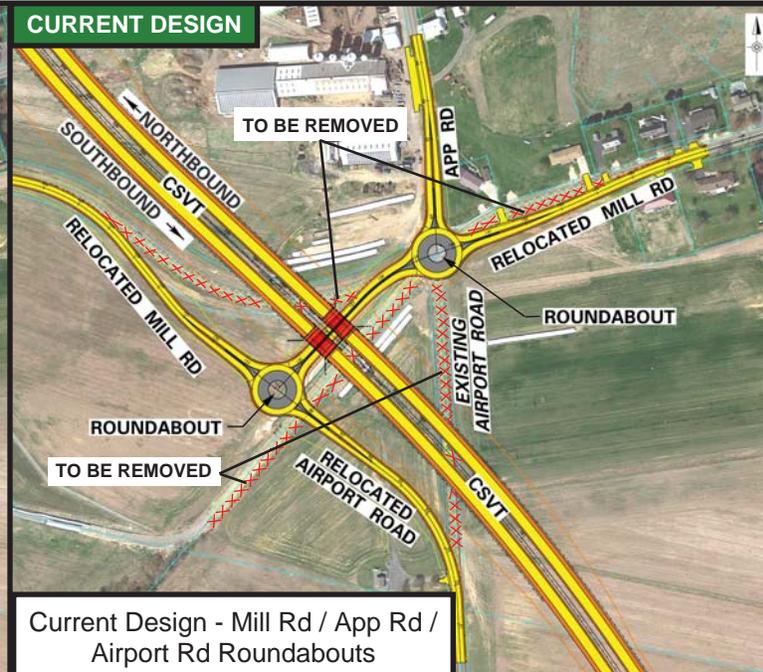
### Mill Road / App Road / Airport Road Roundabouts

#### PRELIMINARY DESIGN



Preliminary Design - Mill Rd / App Rd / Airport Rd Intersections

#### CURRENT DESIGN



Current Design - Mill Rd / App Rd / Airport Rd Roundabouts

#### Preliminary Design

The preliminary design (shown above on left) included two “T” intersections. Airport Road was relocated to intersect with Mill Road at a “T”. App Road and Mill Road formed another “T” intersection. This design raised safety concerns related to intersection sight distance. It also required more complicated bridges to be constructed due to the angle between CSVT above and Mill Road below.

#### Current Design

The design of the Mill Road / App Road / Airport Road area has been modified to include two roundabouts. One roundabout will serve the intersection of Mill Road and App Road and the other will serve the intersection of Mill Road and Airport Road. The modification improves intersection sight distance and safety and accommodates future traffic growth. Additionally, it simplifies the construction of the CSVT bridges over Mill Road.

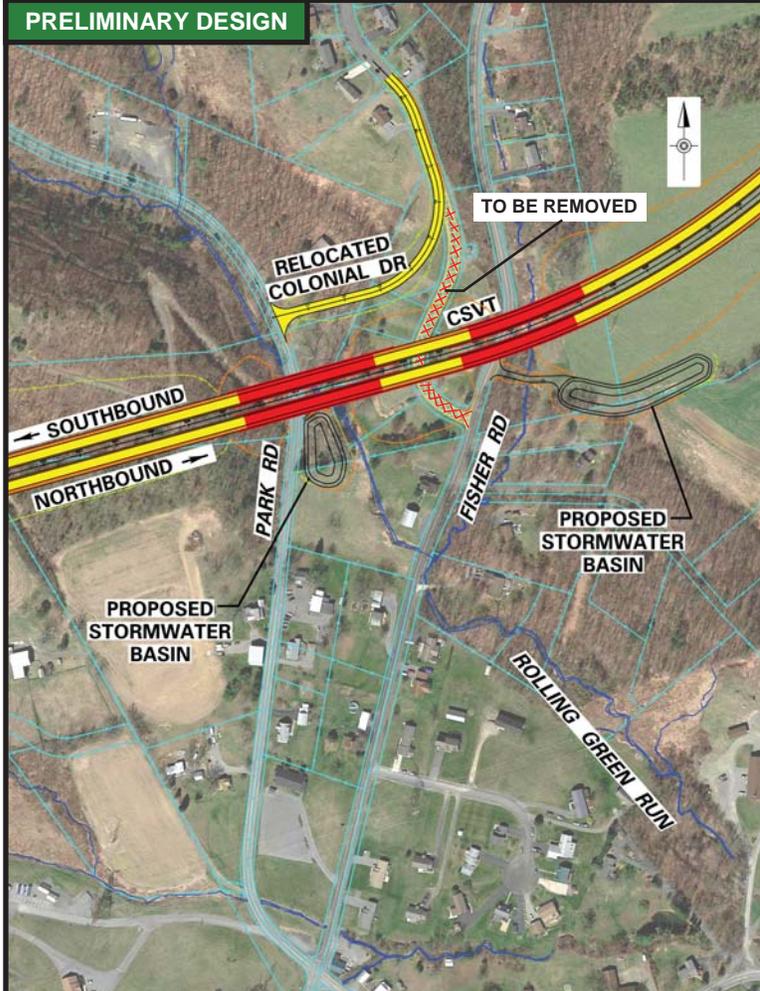
### Bridges Over Attig Road and Grangers Road to be Constructed

As a routine final design activity, an independent team of construction experts studied the preliminary design and made observations on possible ways to make the design more cost effective. Eliminating the proposed bridges carrying CSVT over Attig Road and Grangers Road, two local roadways with fairly low traffic volumes, was identified as a possible design modification. Before moving forward with that modification, PennDOT coordinated with Monroe Township who stressed the importance of constructing the bridges and keeping those roads open to maintain connectivity throughout the township. Therefore, the bridges over Attig Road and Grangers Road will be constructed, and those roads will remain open as previously planned.

## Minor Design Changes (cont.)

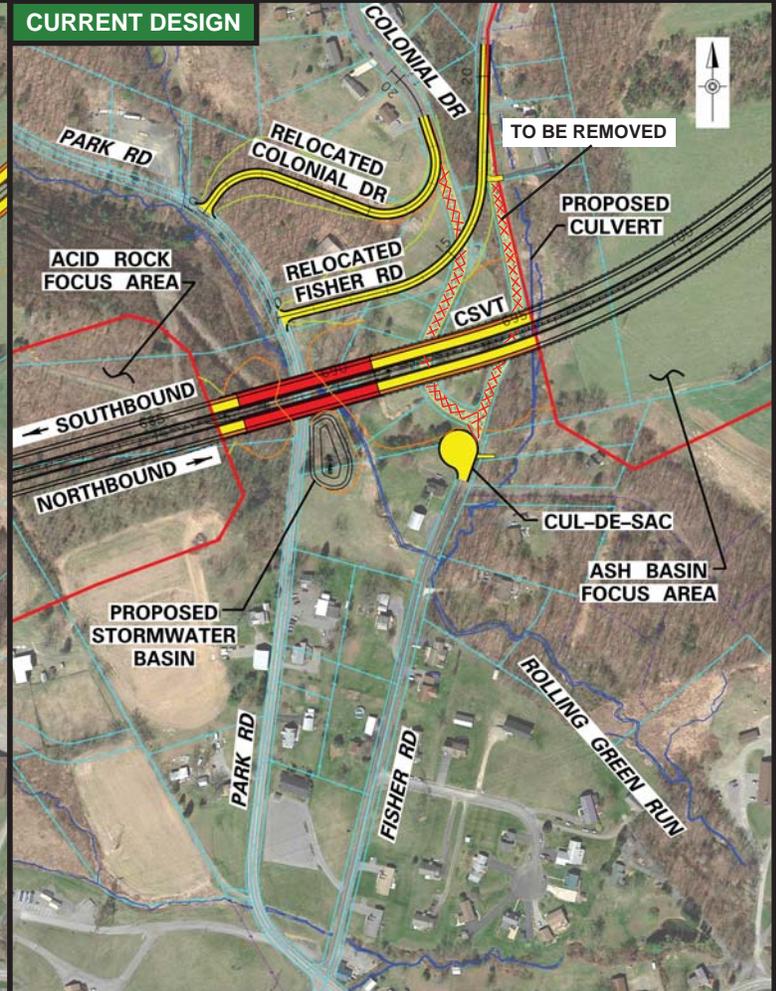
### Park Road and Fisher Road Crossing

#### PRELIMINARY DESIGN



Preliminary Design - Park Rd and Fisher Rd Crossing

#### CURRENT DESIGN



Current Design - Park Rd and Fisher Rd Crossing

#### Preliminary Design

The preliminary design in the Colonial Acres area called for two sets of bridges to be constructed back-to-back to carry CSVT over Park Road and Fisher Road. The design also called for Colonial Drive to be realigned to form a "T" intersection with Park Road.

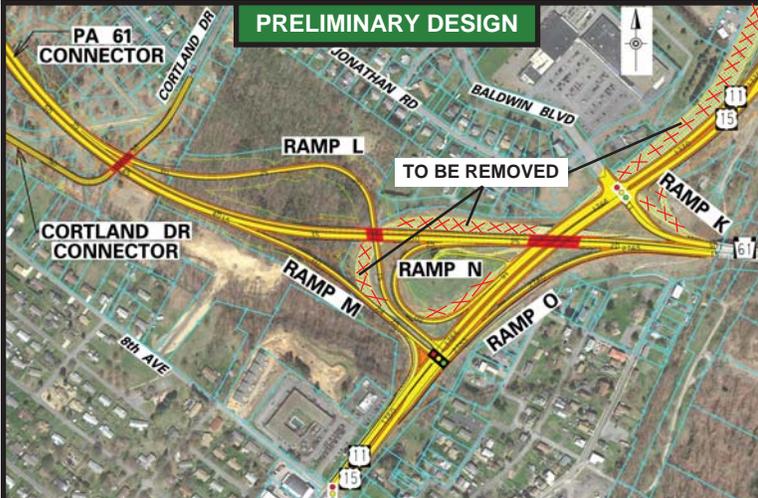
#### Current Design

Construction of back-to-back bridges would be difficult, requiring large temporary ramps to place the fill between the bridges. These temporary ramps would greatly increase the footprint and impacts of the project. Therefore, one set of three-span bridges will be constructed to carry CSVT over Park Road and Rolling Green Run. Fisher Road will be realigned to run parallel to CSVT and tie into Park Road just north of the new CSVT bridges. The southern portion of Colonial Drive will be realigned to intersect Park Road approximately 340 feet north of the new Park Road / Fisher Road Intersection. A cul-de-sac will be constructed at the end of the short portion of existing Fisher Road that will remain south of CSVT.

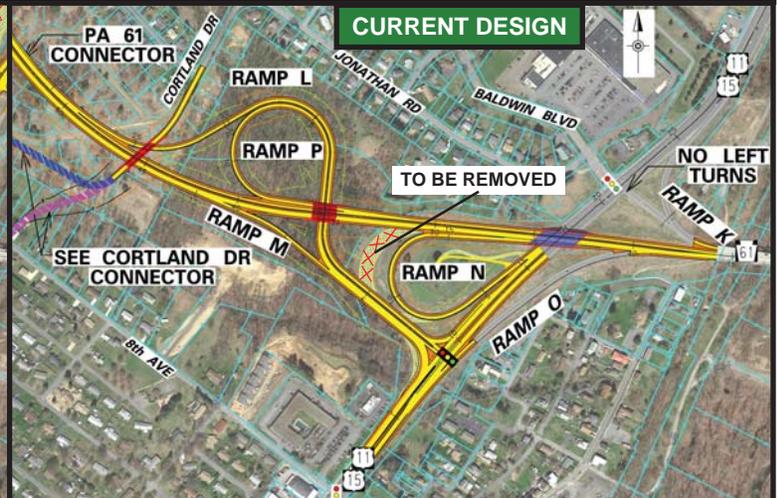
While the current design has eliminated the bridges carrying CSVT over Fisher Road, this design change should not be considered a closure of Fisher Road. Instead, the change simply shifts the intersection of Park Road and Fisher Road roughly 1/3 of a mile to the north, from one side of CSVT to the other. This reconfiguration of the local roads will not negatively impact traffic flow through the Colonial Acres area. The project team is currently working with Monroe Township to finalize the design at this location.

# Minor Design Changes (cont.)

## PA 61 and US 11/15 Interchange



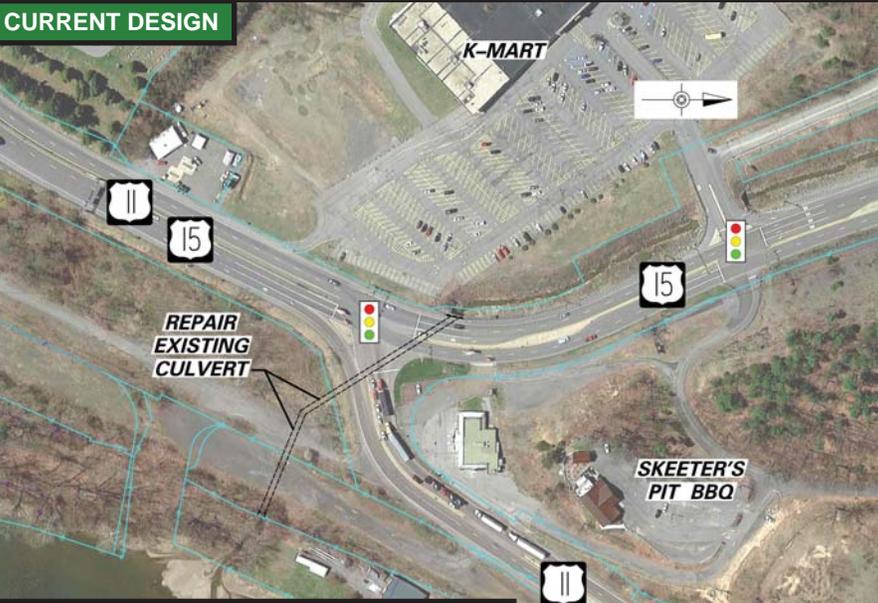
Preliminary Design - PA 61 & US 11/15 Interchange



Current Design - PA 61 & US 11/15 Interchange

This interchange has been modified to allow traffic to move more efficiently along US 11/15. The interchange has been changed to a full trumpet-style design to provide a more free-flowing movement for PA 61 northbound traffic from Sunbury exiting to US 11/15 southbound. With the preliminary design (shown above on left), this movement was served by exiting onto Ramp K at the end of the Veterans Memorial Bridge and then turning left at the signal at the bottom of the ramp. With the current design (shown above on right), the movement is served by continuing on the PA 61 Connector over US 11/15 and exiting onto a new loop ramp, Ramp P. At the end of the new ramp, traffic can turn right onto US 11/15 southbound.

## US 11/15 Split



US 11/15 Split

Analyses of traffic operations at the US 11/15 Split show that the intersection functions efficiently now and in the future after CSVT is open to traffic.

Therefore, the previously proposed reconfiguration of the intersection has been eliminated. After CSVT opens, PennDOT will evaluate the new traffic patterns in the area to determine if changes are required.

Since the previously proposed reconfiguration would have shifted US 11/15 substantially closer to the river, this change provides the benefit of not precluding potential development of the riverfront.

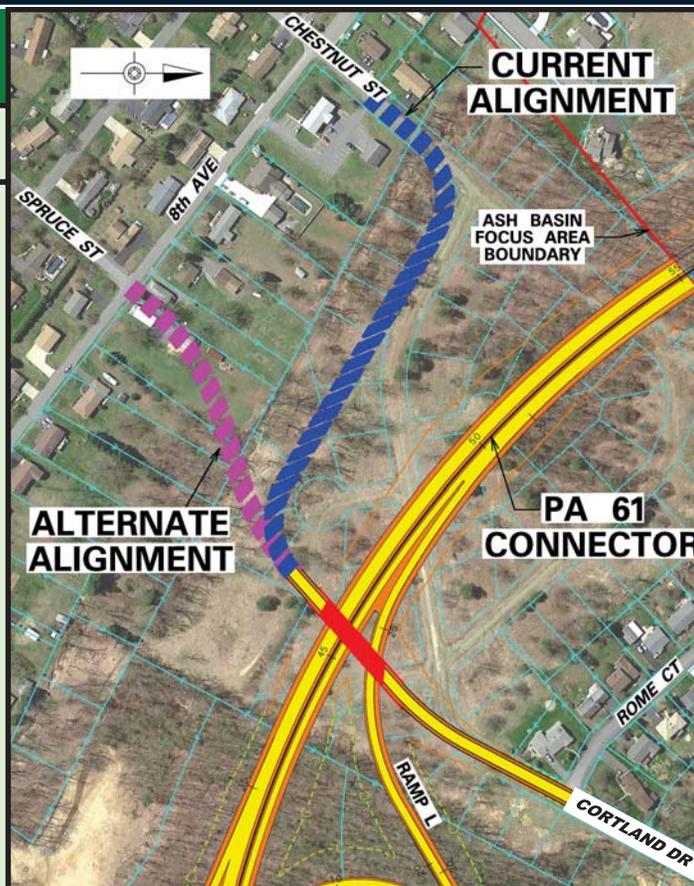
## Minor Design Changes (cont.)

### Cortland Drive Connector

Cortland Drive will be extended from its current endpoint, bridging over the PA 61 Connector to connect Orchard Hills to the Gunter development. Two options are being considered for this connection:

- Current Alignment – As approved in the Final Environmental Impact Statement for CSVT, Cortland Drive would be extended from its current endpoint to connect with Chestnut Street.
- Alternate Alignment – As requested by Shamokin Dam Borough, Cortland Drive would be extended from its current endpoint to connect with Spruce Street.

We are interested in knowing your thoughts or concerns regarding these options. Which one do you prefer and why? Please fill out a questionnaire or talk to a project team member. We will take your input into consideration and inform you which option is selected at a future meeting.



Cortland Drive Connector

## Anticipated Next Steps

- Public Meeting #1 - Tonight
  - ◆ Present design changes, engineering challenges, and next steps
  - ◆ Request feedback
- Public Meeting #2 - Spring 2017
  - ◆ Present alternatives developed from Public Meeting #1 feedback
  - ◆ Request feedback
- Detailed Studies - Summer 2017
  - ◆ Perform engineering and environmental studies
  - ◆ Coordinate with FHWA, environmental agencies, local officials, utilities, impacted land owners, and other stakeholders
- Public Meeting #3 - Fall 2017
  - ◆ Present results of detailed studies
  - ◆ Present preferred alternative and collect feedback

## Project Contact Information



Matthew Beck, P.E.  
PennDOT Assistant Plans Engineer  
matbeck@pa.gov  
(570) 368-4256

Full displays presented at the public meeting are available at [www.csvt.com](http://www.csvt.com).