

**CENTRAL SUSQUEHANNA VALLEY  
TRANSPORTATION PROJECT  
S.R. 0015, SECTION 088  
SNYDER, UNION, AND  
NORTHUMBERLAND COUNTIES**

**REEVALUATION NO. 4 OF  
FINAL ENVIRONMENTAL IMPACT STATEMENT  
AND RECORD OF DECISION**

**SUBMITTED TO  
PENNSYLVANIA DEPARTMENT OF TRANSPORTATION**

**SUBMITTED BY  
SKELLY AND LOY, INC.**

**JULY 2018**



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Pennsylvania Division**

**JUL 18 2018**

228 Walnut Street, Room 508  
Harrisburg, PA 17101-1720  
(717) 221-3461

In Reply Refer To:  
HPD-PA

Northumberland, Union, Snyder Counties,  
Pennsylvania  
Central Susquehanna Valley Transportation Project  
SR 0015, Section 088  
NEPA Reevaluation #4

Mr. George W. McAuley, Jr., P.E.  
Deputy Secretary for Highway Administration  
Pennsylvania Department of Transportation  
Harrisburg, Pennsylvania  
ATTN: Ms. Melissa Batula, P.E., Chief, Highway Delivery Division

Dear Mr. McAuley:

The Federal Highway Administration (FHWA) has reviewed the written reevaluation of the Final Environmental Impact Statement and Record of Decision that was submitted electronically for the Central Susquehanna Valley Transportation Project. The referenced project includes proposed construction of approximately 13 miles of new four-lane limited access highway that will connect US Routes 11/15 near Selinsgrove to US Route 15 near Winfield to PA Route 147 near Montandon.

This NEPA reevaluation focuses on the Northern Construction Section and documents consideration impact changes due to described design modifications. A Final Environmental Impact Statement (FEIS) was approved and Record of Decision (ROD) was issued in 2003. An initial re-evaluation of the FEIS and ROD was approved by FHWA in 2006, a second re-evaluation was approved in 2015 and a third re-evaluation was approved in 2016. A supplemental Environmental Assessment was prepared and published in June 2018 to address a 2-mile shift in alignment in the Southern Construction section of the project. Comments are being assessed. The subject re-evaluation has been prepared to document changes in project design and impacts to resources since the 2016 re-evaluation. Consistent with 23 CFR 771.129, the documentation attached and the referenced records support the determination that the preparation of a supplemental NEPA document is not warranted.

Please share this documentation as appropriate. Should conditions change in final design or construction, please consult with this office promptly.

If you have any questions or need additional information, please contact Deborah Suci Smith of my staff at 717-221-3785 or [Deborah.Suci.Smith@dot.gov](mailto:Deborah.Suci.Smith@dot.gov).

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Keith Lynch', with a large, sweeping flourish at the end.

Keith Lynch  
Director of Program Development

Attachments: Re-evaluation # 4

ec: George W., McAuley, Jr., P.E. PennDOT  
Melissa Batula, P.E., PennDOT  
Sandra Tosca, P.E., PennDOT 3-0  
Matt Beck, P.E., PennDOT 3-0  
Luc Franzen, PennDOT 3-0  
Ryan VanKirk, P.E., PennDOT HDTS  
Christine Spangler, P.E., PennDOT HDTS  
Mark Lombard, PennDOT EPDS

**CENTRAL SUSQUEHANNA VALLEY  
TRANSPORTATION PROJECT  
S.R. 0015, SECTION 088  
SNYDER, UNION, AND  
NORTHUMBERLAND COUNTIES**

**REEVALUATION NO. 4 OF  
FINAL ENVIRONMENTAL IMPACT STATEMENT  
AND RECORD OF DECISION**

**SUBMITTED TO**

**PENNSYLVANIA DEPARTMENT OF TRANSPORTATION  
ENGINEERING DISTRICT 3-0  
715 JORDAN AVENUE, POST OFFICE BOX 218  
MONTOURSVILLE, PENNSYLVANIA 17754**

**SUBMITTED BY**

**SKELLY AND LOY, INC.  
ENGINEERING-ENVIRONMENTAL CONSULTANTS  
449 EISENHOWER BOULEVARD, SUITE 300  
HARRISBURG, PENNSYLVANIA 17111**

**JULY 17, 2018**

## TABLE OF CONTENTS

	PAGE
1.0 INTRODUCTION.....	3
1.1 PROJECT DESCRIPTION .....	3
1.2 NEPA HISTORY AND REEVALUATION STATUS .....	4
1.3 PROJECT PURPOSE AND NEED.....	5
2.0 PROJECT OVERVIEW .....	6
2.1 ANTICIPATED CONSTRUCTION SEQUENCING/SCHEDULE .....	6
2.2 DESIGN UPDATE/MODIFICATIONS.....	7
2.3 PERMITTING UPDATE.....	8
2.4 TRAFFIC ANALYSIS UPDATE .....	9
2.5 PROGRAMMING STATUS .....	9
2.6 PUBLIC INVOLVEMENT UPDATE .....	9
3.0 ENVIRONMENTAL UPDATE.....	11
3.1 NATURAL ENVIRONMENT .....	11
3.2 SOCIAL ENVIRONMENT.....	13
3.3 CULTURAL RESOURCES.....	13
4.0 SECTION 4(F) EVALUATION .....	15
5.0 MITIGATION UPDATE.....	16
5.1 NATURAL RESOURCE MITIGATION .....	16
5.2 RIVER MITIGATION .....	16
6.0 CONCLUSION .....	17
7.0 PROJECT MAPPING.....	18

## LIST OF TABLES

NO.	DESCRIPTION	PAGE
1	ENVIRONMENTAL IMPACT SUMMARY .....	12

## LIST OF FIGURES

NO.	DESCRIPTION
1	REGIONAL SETTING
2	LOD COMPARISONS (SOUTHERN SECTION)
3	LOD COMPARISONS (NORTHERN SECTION)
4	US ROUTE 15 INTERCHANGE
5	2044 TOTAL AVERAGE DAILY TRAFFIC VOLUMES
6	2044 TOTAL AVERAGE DAILY TRUCK VOLUMES

## 1.0 INTRODUCTION

The Central Susquehanna Valley Transportation (CSVT) project entails the construction of approximately 12.4 miles of new, limited-access, four-lane highway extending from the existing US Route 11/15 Interchange in Monroe Township (north of Selinsgrove) in Snyder County to PA Route 147 in West Chillisquaque Township (at a location just south of the PA Route 45 Interchange near Montandon) in Northumberland County. The new highway includes a connector to PA Route 61 in Shamokin Dam and a new bridge crossing over the West Branch Susquehanna River extending from Union Township, Union County to Point Township, Northumberland County. Refer to Figure 1, Regional Setting.

The Federal Highway Administration (FHWA) and the Pennsylvania Department of Transportation (PennDOT) completed an Environmental Impact Statement (EIS) for the project to fulfill the requirements of the National Environmental Policy Act (NEPA) of 1969. The Draft EIS (DEIS) and Final EIS (FEIS) documents were also prepared to serve as documentation required by the U.S. Army Corps of Engineers (USACE) for review and evaluation of the Clean Water Act Section 404 Permit application. A Record of Decision (ROD) was prepared and issued by FHWA in October 2003.

Since the ROD, PennDOT has completed a series of FEIS/ROD Reevaluations consistent with 23 CFR 771.129 as a continuation of the NEPA project development process to establish whether or not the project's NEPA documentation, including the ROD, remains valid for subsequent federal action. In addition, a Supplemental Environmental Assessment (EA), regarding the modification of the proposed highway alignment within the Ash Basin Focus Area in the project's Southern Section, was prepared and was published for public review and formal comment in June 2018. All past NEPA documentation for the CSVT project (i.e., the FEIS, ROD, Supplemental EA, and FEIS/ROD Reevaluations) can be accessed through the Resources page on the project's website (<http://www.csvt.com/resources/links/>).

This document, FEIS/ROD Reevaluation No. 4, has been completed to document design updates in the project's Northern Section, which is currently under construction.

## 1.1 PROJECT DESCRIPTION

The CSVT project involves the construction of approximately 12.4 miles of a new four-lane, limited-access roadway with two 12-foot-wide travel lanes in each direction, 12-foot-wide right shoulders, 10-foot-wide (4-foot paved and 6-foot graded) left shoulders, and a 36-foot-wide median on new alignment. The project's southern terminus is the end of the existing Selinsgrove Bypass, where the existing US Route 11/15 roadway changes from a four-lane, limited-access expressway to a five-lane (four lanes with center left-turn lane) free-access facility. The northern terminus is located just south of the PA Route 147 and PA Route 45 Interchange. In addition, a PA Route 61 Connector will be constructed as part of the CSVT project. This new two-lane, limited-access roadway will connect the CSVT mainline to the existing US Route 11/15 in Shamokin Dam Borough at the west end of the existing PA Route 61 Veterans Memorial Bridge. The mainline portion of the CSVT project is designed for a posted speed limit of 65 miles per hour (mph).

The CSVT project was separated into two sections during the development of alternatives for the EIS. The Southern Section extends from the existing US Route 11/15 Interchange near Selinsgrove, northward to the vicinity of the US Route 15/County Line Road (State Route 1022/2002) intersection, near the Snyder County/Union County border and just south of



Winfield. The Southern Section includes the existing US Route 11/15 Interchange and the new interchange and connecting roadway with PA Route 61 at Shamokin Dam.

The Northern Section of the project extends from US Route 15 near the Snyder County/Union County border to PA Route 147 near Montandon, just south of the PA Route 147 interchange with PA Route 45. The Northern Section includes the construction of a new bridge, approximately 4,500 feet long, to cross over the West Branch Susquehanna River. In addition, the Northern Section includes two new interchanges: the US Route 15 Interchange that is located near Winfield just north of the Snyder/Union County line in Union Township, Union County, and the PA Route 147 Interchange that includes a relocated Ridge Road (Township Road 703/State Route 1024) in Point Township, Northumberland County.

## **1.2 NEPA HISTORY AND REEVALUATION STATUS**

FHWA approved the project's FEIS for public review in July 2003. After consideration of the received comments, a ROD was prepared and issued by FHWA on October 31, 2003. The ROD identified Alternative DA Modified Avoidance (DAMA) in Section 1 (Southern Section) of the project and River Crossing 5 (RC5) in Section 2 (Northern Section) as the Selected Alternative for the CSVT project (see Figure 2 and Figure 3). The alternatives were jointly referred to as Alternative DAMA/RC5. Alternative DAMA/RC5 was identified as the Recommended Preferred Alternative in the FEIS. The DA Modified Avoidance was designed to avoid an historic property, the Simon P. App farm, determined to be eligible for the National Register of Historic Places (NRHP) on July 17, 2001. One of the commitments of the FEIS included a provision for PennDOT to reevaluate the areas of impact should conditions in the study area change prior to construction, particularly with respect to the Simon P. App Property.

The project's FEIS/ROD Reevaluation No. 1 was prepared throughout 2005 and identified the design changes and associated environmental impacts between what was approved in the FEIS in July 2003 and the further developed design plans. The most significant changes resulted from the NRHP non-eligibility determination for the Simon P. App Farm (in 2005) and the associated replacement of the DAMA Alternative with the DA Modified (DAM) Alternative in the Southern Section. The FEIS/ROD Reevaluation No. 1 also determined that the scope, resources, and potential impacts of the CSVT project in the Northern Section had not changed significantly since FHWA had issued the ROD and that the RC5 Alternative impacts presented in the FEIS were generally still valid. Accordingly, Reevaluation No. 1, which was approved on May 10, 2006, determined that a supplemental NEPA document was not warranted.

Throughout 2014 and early 2015, after the development of the project had been delayed for several years due to lack of funding, FEIS/ROD Reevaluation No. 2 was prepared to address environmental impact changes associated with continuing final design refinements in both the Northern and Southern Sections of the project. Reevaluation No. 2 concluded that the refined design did not result in any substantive additional adverse impacts to new or previously identified resources that would rise to the level of significance (when compared with the data presented in the FEIS for the Selected Alternative) and also determined that a supplemental NEPA document was not warranted. This Reevaluation was approved on June 30, 2015.

Construction activities began in the Northern Section in early 2016, when work started on the new bridge over the West Branch Susquehanna River. FEIS/ROD Reevaluation No. 3 was prepared to address environmental impact changes associated with final design refinements within the remaining portions of the Northern Section, including modifications to the proposed interchange configurations. That document, which was approved on June 22, 2016, concluded



that a supplemental EIS was not warranted since the refined design did not result in any substantive additional adverse impacts to new or previously identified resources that would rise to the level of significance (when compared with the data presented in the FEIS for the Selected Alternative).

Following the start of final design for the Southern Section, geotechnical studies performed in 2016 identified the need to modify the project alignment within the Ash Basin Focus Area to avoid previously unanticipated, significant engineering and environmental risks associated with two existing fly ash waste basins that the highway was previously proposed to cross. A Supplemental EA was prepared to assess the impacts associated with that design change and was published for public review and formal comment in June 2018. A Public Hearing on the Supplemental EA was held on June 21, 2018, and a Finding of No Significant Impact (FONSI) is anticipated to be issued in late Summer 2018. See Section 2.2, Design Update/Modifications for more information.

This Reevaluation (FEIS/ROD Reevaluation No. 4) documents further design updates in the project's Northern Section. It has been prepared consistent with 23 CFR 771.129 as a continuation of the NEPA project development process to establish whether or not the project's NEPA documentation, including the ROD, remains valid for subsequent federal action.

### **1.3 PROJECT PURPOSE AND NEED**

The previously determined transportation needs are still valid and the purposes of the CSVT project remain as follows:

- (1) Reduce current congestion on study area roadways.
- (2) Improve safety for the users of the roadway system through better accommodation of all traffic, with particular attention to separating trucks and through traffic from local traffic.
- (3) Ensure sufficient capacity for the growth in population and employment that is expected for the study area.

## 2.0 PROJECT OVERVIEW

As described in Section 1.1, Project Description, the CSVT project was divided into two sections, the Southern Section (see Figure 2) and the Northern Section (see Figure 3), to facilitate the development and evaluation of alternatives during the preliminary engineering and EIS process. Both project sections are proceeding separately through the final design and construction project development phases.

### 2.1 ANTICIPATED CONSTRUCTION SEQUENCING/SCHEDULE

Both sections of the CSVT project are planned to be constructed through multiple construction contracts to accommodate practical construction phasing and funding availability. Specifically, the Northern Section is currently anticipated to be constructed through the following four contracts:

- Contract N1 – Construction of the bridge crossing the West Branch Susquehanna River including approach roadway earthwork
- Contract N2 – Construction of the earthwork and non-river bridges east of the West Branch Susquehanna River, and tree clearing west of the river
- Contract N2.5 – Construction of the earthwork and non-river bridges west of the West Branch Susquehanna River
- Contract N3 – Construction of the CSVT mainline pavement and remaining appurtenances

The anticipated project schedule for construction of the Northern Section is summarized below, including when bids are anticipated to be opened for the various construction contracts (i.e., when each construction contract is anticipated to be “let”).

- Contract N1 (River Bridge) was let for Construction in September 2015
- Contract N2 (Earthwork and Non-river Bridges East of River, Tree Clearing West of River) was let for Construction in September 2016
- Contract N2.5 (Earthwork and Non-river Bridges West of River) was let for Construction in March 2017
- Let Contract N3 (Mainline Paving) for Construction – Late 2018
- Completion of Northern Section Construction and Open to Traffic – 2022

The anticipated construction contract phasing and schedule for the Southern Section is currently being reassessed due to the need to modify a portion of the previously proposed alignment, as explained in Section 2.2.1 below. However, the Northern Section has independent construction utility, providing a bypass of the congestion in Northumberland, and PennDOT currently plans to open it to traffic upon its completion while the Southern Section is still in development.

## **2.2 DESIGN UPDATE/MODIFICATIONS**

### **2.2.1 Southern Section – DAM Alternative**

Final design was initiated in the Southern Section in February 2015 and is ongoing; therefore, the Limit of Disturbance (LOD) for this section is the same as presented in Reevaluation No. 3 and impacts remain unchanged, as shown on Figure 2. However, modifications to an approximately two-mile-long portion of the proposed alignment have been assessed in order to avoid constructing the new highway on two existing fly ash waste basins as previously planned. Three alternative alignments have been evaluated between Fisher Road and Sunbury Road within a region referred to as the Ash Basin Focus Area. This modification has been assessed under a Supplemental EA that was published for public review and formal comment in June 2018.

In addition to the ash basin avoidance modification, other minor impact changes are occurring as final design progresses for the Southern Section. For example, design modifications are ongoing to account for temporary construction easements, permanent drainage easements, design of stormwater management facilities, local roadway improvements, structure refinements, and property/construction access issues.

Furthermore, design refinements are ongoing at the following locations for the general purposes of improving traffic operations, improving the constructability of the project, and/or addressing public input:

- US 11/15 – CSVT Interchange near Selinsgrove
- US 11/15 – CSVT/PA 61 Connector Interchange in Shamokin Dam
- US 11/15 split near Tedd's Landing
- CSVT/Fisher Road, Park Road and Colonial Drive
- CSVT/Mill Road, Airport Road, and App Road
- Cortland Drive/Chestnut Street Connector (over PA 61 Connector)
- US 522/Airport Road Intersection
- CSVT mainline between Attig Road and Fisher Road (to minimize acid-bearing rock excavation)

The LOD for the Southern Section shown in Figure 2 is identical to information presented in the Reevaluation No. 3, and the impacts remain the same. The Ash Basin Focus Area modifications are documented in the Supplemental EA, while the design refinements referenced above will be documented in a subsequent FEIS/ROD Reevaluation.

### **2.2.2 Northern Section – RC5 Alternative**

The Northern Section has progressed considerably further than the Southern Section (Contracts N1, N2, and N2.5 are currently under construction). Since FEIS/ROD Reevaluation No. 3, one design modification was made within Contract N2.5, and the associated LOD at the US Route 15 Interchange was altered slightly. Specifically, based on additional core boring data, the stability of the rock in that area was reevaluated and the proposed rock cut slope was flattened. This change resulted in the LOD being “bumped out” approximately 20 feet at two locations along Ramp S (see Figure 4). The southern “bump-out” area adjacent to the proposed park and ride is within previously studied LODs. Although the other “bump-out” area is not within any previously studied LODs, the additional impact area is insignificant from an environmental

perspective. These areas are clear of sensitive environmental resources and have been covered by previous Phase I archaeological investigations. This design modification has also been coordinated with appropriate environmental agencies through the permit modification process, as noted in Section 2.3 below.

As final design for the Northern Section has progressed nearly to completion, analysis of the overall earthwork balance has resulted in the highway construction being anticipated to generate a total of approximately 400,000 cubic yards of waste material (from the four planned construction contracts for the Northern Section combined). Beyond that anticipated amount of waste material, an additional total of approximately 500,000 cubic yards of unanticipated waste material has been generated during construction activities due to unforeseen field conditions (e.g., rock swelling differently than anticipated when excavated or soil shrinking differently than anticipated when placed as embankment). However, no additional adverse environmental impacts have resulted from the wasting of the approximately 900,000 cubic yards of total excess material during construction. All waste material has either been placed within the anticipated LOD or at a site that was cleared in advance by the construction contractor's qualified professional (with oversight by PennDOT's Environmental Monitor) and located in non-wooded upland areas in accordance with the USACE Section 404 Permit for the project.

In addition to the LOD modifications illustrated on Figure 4, the traffic model for the Northern Section was updated following FEIS/ROD Reevaluation No. 3 to account for previous analyses completed to project future traffic volumes along the Ridge Road (Township Road 703/State Route 1024) corridor in the area of the new PA Route 147 Interchange. These changes are outlined in Section 2.4, Traffic Analysis Update. The resulting updated projections of design-year traffic volumes were subsequently used for the pavement design and the final design noise analysis (summarized in Section 3.2) for the Northern Section.

## **2.3 PERMITTING UPDATE**

An Individual USACE Section 404 Permit was originally issued for the CSVT project in 2007 (with an expiration date of December 31, 2017), and a modification was most recently issued by the USACE on June 8, 2016, to update the permit conditions based on the further developed project design and current impacts. Water Quality Certification for the project, under Section 401 of the Federal Clean Water Act, was issued by the Pennsylvania Department of Environmental Protection (PA DEP) in 2004. The USACE issued an extension for the Section 404 Permit on October 4, 2017, and the new expiration date is December 31, 2024.

The CSVT project also requires Standard PA DEP Waterways Obstruction and Encroachment Chapter 105 permits and Individual National Pollutant Discharge Elimination System (NPDES) Chapter 102 permits, including detailed Erosion and Sedimentation Pollution Control Plans (ESPC Plans) and Post-Construction Stormwater Management Plans (PCSM Plans), prior to any associated earthmoving activities.

The Chapter 105 permits required for the Northern Section were originally issued by PA DEP on May 7, 2015. (Note that separate Chapter 105 Permits were issued for the Northern Section's impacts in each county: Snyder, Union, and Northumberland.) As the project has progressed through final design and construction, PA DEP has approved various permit amendments to reflect design modifications made since issuance of the original permits and to authorize construction of the remaining portions of the Northern Section. The Northumberland and Snyder County Chapter 105 Permits are currently scheduled to expire on December 31, 2018. The Union County Chapter 105 Permit is currently scheduled to expire on December 31, 2022.

The NPDES permit for the Northern Section was originally issued by PA DEP on May 7, 2015. As the project has progressed through final design and construction, PA DEP has approved permit revisions to reflect design modifications made since issuance of the original permit and to authorize construction of the remaining portions of the Northern Section. The NPDES permit for the Northern Section is currently scheduled to expire on June 16, 2021.

## **2.4 TRAFFIC ANALYSIS UPDATE**

As documented in FEIS/ROD Reevaluation No. 3, traffic analyses were previously completed to project future traffic volumes along the Ridge Road (Township Road 703/State Route 1024) corridor in the area of the new PA Route 147 Interchange. Specifically, Point Township officials, as well as other stakeholders involved with local and regional planning, provided current (2015) land use planning information that was then used to update previous projections of traffic anticipated to be generated by future development within the area. In addition, based on the travel times and lengths of various alternate routes, it was reasonably estimated that 50% of motorists traveling between Danville and Selinsgrove during the evening peak hour will divert from US Route 11 and use Ridge Road and the proposed PA Route 147 Interchange to access the new CSVT highway. (The other 50% of those motorists are anticipated to remain on US Route 11 and access the new highway via the PA Route 61 Connector or the existing US Routes 11/15 Interchange just north of Selinsgrove.)

Following FEIS/ROD Reevaluation No. 3, the traffic information described above, along with base traffic volumes for the Ridge Road area obtained from traffic counts in 2015, was used to update the traffic model for the CSVT project and thereby generate updated projections of design-year (2044) traffic volumes for the Northern Section. The resulting projected 2044 total average daily traffic volumes and total average daily truck volumes for the Northern Section are presented in Figure 5 and Figure 6, respectively. These projected design-year traffic volumes were subsequently used for the pavement design and the final design noise analysis (summarized in Section 3.2) for the Northern Section.

## **2.5 PROGRAMMING STATUS**

The SEDA-COG Metropolitan Planning Organization adopted its 2016-2040 Long Range Transportation Plan in July 2016, and the plan includes the CSVT project as a fiscally constrained project.

Portions of the CSVT project are included on SEDA-COG's Transportation Improvement Program (TIP) for Federal Fiscal Years (FFY) 2017-2020. The state's Twelve Year Program (TYP) for FFY 2017-2028 includes the TIP in its first four years (2017-2020) and additional funding required for the remaining portions of the CSVT project in its second four years (2021-2024). SEDA-COG and PennDOT are currently in the process of updating the TIP for FFY 2019-2022 and the TYP for FFY 2019-2030. Draft versions of these planning documents have been prepared for adoption by October 1, 2018. Both documents include funding for the remaining portions of the CSVT project as required based on current cost estimates for each project phase.

## **2.6 PUBLIC INVOLVEMENT UPDATE**

Since FEIS/ROD Reevaluation No. 3, general public outreach activities related to the Northern Section have included press releases regarding the status of the project, updates to the project

website, and responses to public and media inquiries regarding specific aspects of the project or its overall status. There has been considerable public involvement related to the Southern Section and the associated ash basin avoidance alternative analysis, which is documented within the Supplemental EA.



### **3.0 ENVIRONMENTAL UPDATE**

This FEIS/ROD Reevaluation No. 4 documents the changes in impacts to natural, cultural, and socioeconomic resources that have occurred based on the advanced design of the project's Northern Section, changes in regulations/procedures, and changes in existing conditions within the study area.

A summary of environmental impacts at various milestones related to the southern (DAMA and DAM) and the northern (RC5) alignments for the CSVT project area is included in Table 1. The FEIS documented the DAMA as the preferred Southern Section alternative, and FEIS/ROD Reevaluation No. 1 documented the change of the alignment from the DAMA alternative to the DAM alternative. Both the southern and northern section alignments underwent additional preliminary design as part of the Design Field View (DFV) process, and the footprint was modified slightly based on further refinements made during final design, as documented by FEIS/ROD Reevaluation Nos. 1, 2, and 3.

Environmental impacts are presented for those resources and subject areas that have experienced a change since the ROD, including changes in regulatory requirements and changes in impacts. All other subject areas outlined in the FEIS/ROD documents have either remained the same or had negligible changes that would not affect the decision-making process. As the Southern Section progresses through final design, the impact information and mitigation details will be refined and presented in future reevaluations.

### **3.1 NATURAL ENVIRONMENT**

As mentioned in Section 2.2, Design Update/Modifications, the Northern Section has progressed through a significant portion of final design and is currently under construction. The only design modifications (refer to Figure 4) that have affected the LOD in the Northern Section are two approximately 20-foot-wide "bump-outs" near the US Route 15 Interchange (totaling 0.5 acre).

Table 1 documents changes in environmental impacts. For the Northern Section, the LOD modifications referenced in this document resulted in 0.4 acre of additional productive farmland impact and 0.1 acre of additional wooded habitat impact compared to FEIS/ROD Reevaluation No. 3. No additional natural resources are present within the LOD "bump-outs."

#### **3.1.1 Endangered Species Act (Section 7 Consultation)**

The PA DCNR's PNDI-HGIS database was accessed to determine if the project area supports threatened or endangered species or their habitats. Through the development of the CSVT project, the USFWS has identified concerns regarding potential impacts to Indiana Bats and Northern Long-Eared Bats. Following the January 2016 announcement of the final 4(d) rule related to the Northern Long-Eared Bat, FHWA and PennDOT consulted with the USFWS for the remaining construction sections of the CSVT project and subsequently implemented the National Programmatic Biological Opinion (BO) to address the potential concerns regarding the Northern Long-Eared Bat. In accordance with the National Programmatic BO, tree clearing can occur from November 1 to March 31, and limited tree clearing (10% of the project total) can occur from April 1 to May 31 and August 1 to October 31. No tree clearing can occur from June 1 to July 31. Implementation of the National Programmatic BO concludes that the proposed CSVT project is likely to adversely affect Northern Long-Eared Bats but is not likely to jeopardize the continued existence of the species. The USFWS approved the use of the National Programmatic BO for the CSVT project in October 2016. Consultation with the USFWS regarding the use of the National Programmatic BO for the Southern Section will continue as project development proceeds.



**TABLE 1  
ENVIRONMENTAL IMPACT SUMMARY**

Environmental Impacts	2003 FEIS/ROD	2006 FEIS/ROD Reeval. No. 1	2015 FEIS/ROD Reeval. No. 2	2016 FEIS/ROD Reeval. No. 3	2018 FEIS/ROD Reeval. No. 4	Change from FEIS to Reeval. No. 4
<b>SOUTHERN SECTION***</b>						
Displacements (number)						
Residential	33	31	31	31	31	-2
Commercial Structures	4	1	1	1	1	-3
Agriculture (acres)						
Agricultural Security Areas	98.7	96.1	80.7	80.7	80.7	-18.0
Productive Farmland	151.6	111.9	91.4	91.4	91.4	-60.2
Habitat (acres)						
Wetlands (direct & temp acres)	4.79	4.05	3.33	3.33	3.33	-1.46
Forest Land (acres)	183.89	178.71	175.15	175.15	175.15	-8.74
Old Field (acres)	157.02	126.18	103.96	103.96	103.96	-53.06
Riverine Floodplain Forest (acres)	0.05	0	0	0	0	-0.05
Waste Sites (number)	5	3	3	3	3	-2
Surface Water Resources						
Stream Relocations (number)	3	-	3	3	3	0
Bridge Crossings (number)	2	-	3	3	3	+1
Culverts (number)	14	-	13	13	13	-1
Total Impacts (linear feet)	16,445	13,770	12,964	12,964	12,964	-3,481
T&E Species	No	No	Yes (NLE Bat)	Yes (NLE Bat)	Yes (NLE Bat)	Yes (NLE Bat)
Historic Properties	No	No	No	No	No	No
Section 4(f) Resources	No	No	No	No	No	No
Net Earthwork (Cut – Fill; CY)	2,357,000	202,912	321,088	321,088	321,088	-2,035,912
Construction/Right-of-Way/Utility Costs	\$114,027,492 (2003 \$)	\$110,250,000 (2005 \$)	\$213,650,000 (2014 \$)	\$222,100,000 (2015 \$)	\$227,200,000 (2017 \$)	---
<b>NORTHERN SECTION</b>						
Displacements (number)						
Residential	25	23	24	24	24	-1
Commercial Structures	0	0	0	0	0	0
Agriculture (acres)						
Agricultural Security Areas	49.0	49.0	49.9	50.0	50.0	+1.0
Productive Farmland	165.6	154.6	105.3	129.2	129.6	-36.0
Habitat (acres)						
Wetlands (direct & temp acres)	2.98	3.05	2.90	2.90	2.90	-0.08
Forest Land (acres)	181.13	182.01	219.42	225.92	226.02	+44.89
Old Field (acres)	38.92	34.25	53.04	52.74	52.74	+13.82
Riverine Floodplain Forest (acres)	5.66	6.23	9.40	9.40	9.40	+3.74
Waste Sites (number)	0	0	0	0	0	---
Surface Water Resources						
Stream Relocations (number)	2	2	1	1	1	-1
Bridge Crossings (number)	4	4	4	4	4	0
Culverts (number)	5	5	1	1	1	-4
Pipes (number)	*	*	8	8	8	---
Total Impacts (linear feet)	8,480	9,360	14,216	14,480	14,480	+6,000
T&E Species	No	No	Yes (NLE Bat)	Yes (NLE Bat)	Yes (NLE Bat)	Yes (NLE Bat)
Historic Properties	No	No	Yes	Yes	Yes	Yes
Section 4(f) Resources	No	No	Yes	Yes	Yes	Yes
Net Earthwork (Cut – Fill; CY)	2,108,000	28,602	44,685	400,000	400,000**	-1,708,000
Construction/Right-of-Way/Utility Costs	\$149,742,157 (2003 \$)	\$170,115,794 (2005 \$)	\$329,650,000 (2014 \$)	\$351,700,000 (2015 \$)	\$339,200,000 (2017 \$)	---
<p>* Pipe crossings were not identified in the FEIS.</p> <p>** This represents the quantity of anticipated waste based on final design. For additional information, see Section 2.2.2.</p> <p>*** Impacts presented for the Southern Section do not reflect those documented in the Supplemental EA for the Ash Basin Focus Area. Updated impacts for the Southern Section will be presented in a subsequent FEIS/ROD Reevaluation following the issuance of a FONSI.</p>						



In addition to the consultation regarding the Northern Long-eared Bat, the USFWS, in October 2016, identified potential concerns regarding the Indiana Bat in the Southern Section. FHWA and PennDOT, in consultation with the USFWS, performed a mist net survey in the summer of 2017 to address the potential Indiana Bat concerns. The mist net survey was completed in July and August 2017, and no state or federal threatened or endangered bats were captured, including Indiana Bats. A summary of the results of the mist net survey effort was forwarded to the USFWS in the fall of 2017, and a formal report was provided in January 2018 as part of the consultation efforts. Additionally, there is no critical bat habitat or hibernaculum within the CSVT project area. Based on the survey results, the USFWS concluded in February 2018 that the Southern Section may affect, but is not likely to adversely affect, the Indiana Bat.

## **3.2 SOCIAL ENVIRONMENT**

### **3.2.1 Noise**

A full reassessment of noise impacts was completed for the Northern Section as part of the final design phase of the project in compliance with 23 CFR 772 and PennDOT Publication 24, Project Level Highway Traffic Noise Handbook. Projected design-year (2044) traffic volumes, as outlined in Section 2.4, were used for the analysis. Twenty (20) Noise-Sensitive Areas (NSAs) were identified, and the ambient acoustical environment was measured to determine baseline conditions. FHWA's Traffic Noise Model (TNM2.5) was used to analyze the proposed build condition of the CSVT project. Noise predictions were made for the 2044 design year, and traffic noise impacts were identified in 14 of the 20 NSAs. Although potential noise abatement was analyzed for all impacted areas, there were no noise barriers that met all state/federal requirements. Most of the noise impacts are located within sparsely developed residential areas, and noise mitigation was determined to be not reasonable. Additional details of the noise analysis can be found within the Northern Section Final Noise Impact Analysis Report (March 2018), which can be accessed through the Resources page on the project's website (<http://www.csvt.com/resources/links/>).

## **3.3 CULTURAL RESOURCES**

### **3.3.1 Archaeological Resources**

As final design has progressed, minor changes to the roadway footprint have occurred outside the original Area of Potential Effect (APE) covered in the 2010 Phase I/II Archaeological Report. Consistent with the terms of the project-specific Programmatic Agreement (PA), these areas have undergone additional Phase I archaeological testing and were included in two addendums to the Phase I/II Archaeological Report. The first addendum report was transmitted to the federally recognized Tribes and the Pennsylvania State Historic Preservation Officer (PA SHPO) on January 5, 2015. No new archaeological sites were identified within the modified APE. On January 27, 2015, the PA SHPO concurred with the finding of no effect on archaeological resources.

The second addendum was prepared as a result of the additional final design adjustments in the Northern Section outlined in FEIS/ROD Reevaluation No. 3. No new archaeological sites were identified within the modified APE. This report was transmitted to the federally recognized Tribes and to the PA SHPO on July 22, 2016, and concurrence was issued by the PA SHPO with the finding of no effect on archaeological resources on August 9, 2016.

The modifications to the APE for this FEIS/ROD Reevaluation No. 4 include two "bump-out" areas along Ramp S at the US Route 15 Interchange (see Figure 4) associated with the flattening of the rock cut slope. The southern "bump-out" area adjacent to the proposed park

and ride is within the previously studied APE. The northern “bump-out” area extends the APE out 20 feet (total of 0.3 acre) and does not increase the overall size of the testable area to a point where additional shovel test pits would be necessary, and no additional analysis is warranted.

For the Northern Section of the CSVT project, all stipulations of the PA have been successfully fulfilled. As final design progresses in the Southern Section, additional addendums may be necessary and will be addressed in subsequent FEIS/ROD reevaluations.

### **3.3.2 Historic Resources**

Since the completion of the FEIS/ROD Reevaluation No. 3, no new historic resources listed or eligible for listing on the *National Register of Historic Places* have been identified in the project’s APE.

### **3.3.3 Programmatic Agreement (PA)**

The Second Amendment for the Section 106 PA was executed on December 22, 2015, to extend the agreement through the ongoing final design and construction phases, in accordance with the current anticipated project schedule. The current expiration date is December 22, 2025.



#### **4.0 SECTION 4(f) EVALUATION**

There has been no change to the status of Section 4(f) issues on this project.

## **5.0 MITIGATION UPDATE**

A Mitigation Commitment Tracking spreadsheet was prepared as part of the original NEPA Mitigation Report (predates PennDOT's Environmental Commitment and Mitigation Tracking System [ECMTS] procedures as defined in Strike-Off Letter 432-12-06) for the project to continuously track the commitments made and included in the project's FEIS, ROD, permits, and other project authorizations. These documents include all commitments and mitigation required, including items from the NEPA environmental reviews, the Section 4(f) Evaluation, and the Section 404/Chapter 105 and NPDES permit processes. Major mitigation items completed since FEIS/ROD Reevaluation No. 3 are discussed below.

### **5.1 NATURAL RESOURCE MITIGATION**

PennDOT has been providing regular post-construction monitoring for the Center Mitigation Site and the Vargo Mitigation Site. Specifics related to the mitigation requirements and monitoring are documented in the FEIS/ROD Reevaluation No. 2. Since that Reevaluation, PennDOT has implemented a PFO wetland remediation plan at Vargo in June 2015. PennDOT will develop a PFO-PSS wetland remediation plan to be submitted with the Section 404 permit modification/Chapter 105 permit application for the Southern Section.

### **5.2 RIVER MITIGATION**

There has been no change to the mitigation associated with the new crossing of the West Branch Susquehanna River. This portion of the project is currently under construction, and all construction-related mitigation commitments are being monitored by the Environmental Monitor. Relative to mitigating the bridge's impact on the State Water Trail and the National Recreation Trail, signs indicating the bridge's route designation and the river mile have been incorporated into the bridge pier design. In addition, signs are proposed on the highway approaching the bridge to highlight the river's National Recreation Trail status for motorists. The proposed boat launch remains under construction. Signs are also proposed at the boat launch, including a water trail orientation panel and a Susquehanna Greenway informational panel.

## 6.0 CONCLUSION

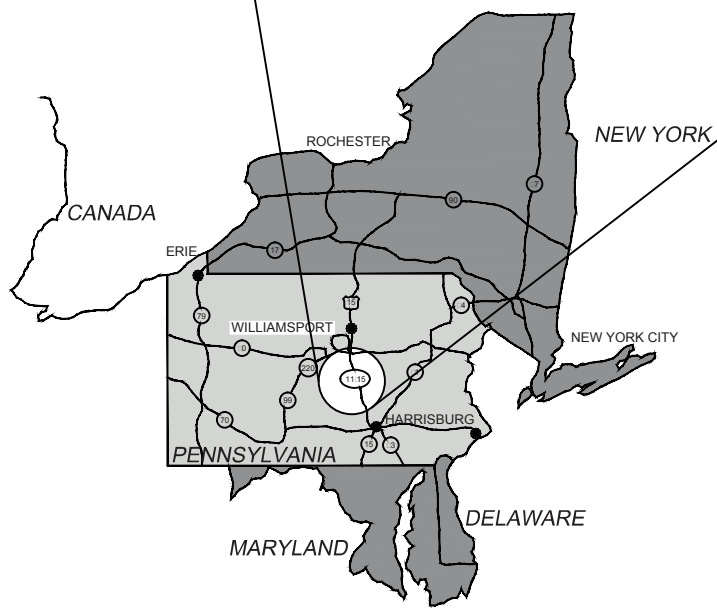
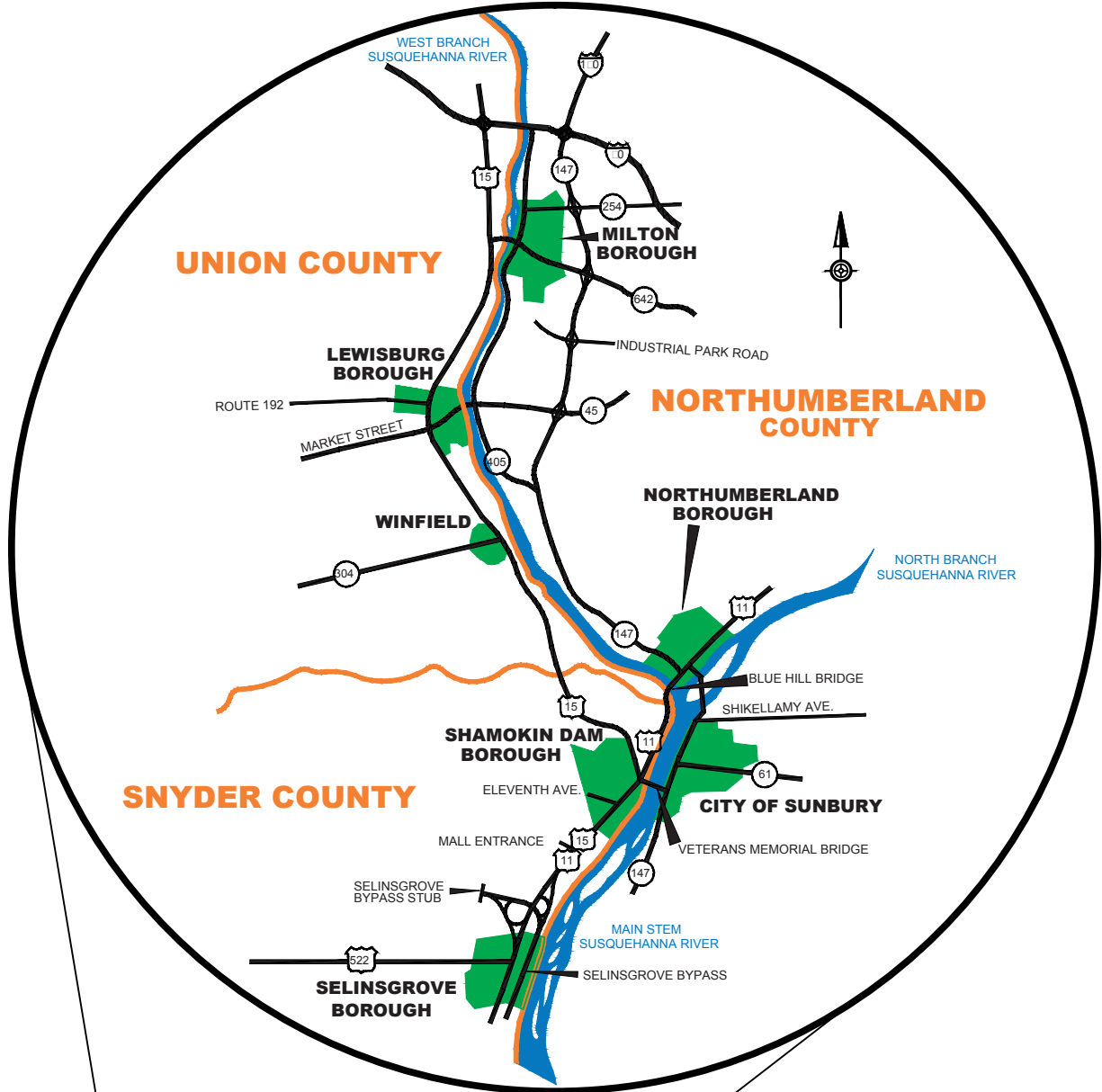
Based on the information presented in this FEIS/ROD Reevaluation No. 4, it has been determined that the design changes in the Northern Section of the CSVT project do not result in any new or additional adverse impacts when compared with the data presented in the FEIS for the Selected Alternative that would rise to the level of significance, therefore a supplemental NEPA document is not warranted at this time.

The updated design for the Northern Section of the CSVT project has resulted in minor increases to productive farmland impacts (0.4 acre) and wooded habitat impacts (0.1 acre). Given the context of the project area and resources and the fact that the current scope of the project and the magnitude of the impacts have not changed meaningfully with respect to the preliminary design of the Selected Alternative, a supplemental NEPA document is not warranted. General public involvement activities (website updates, meetings with public officials, etc.) and agency coordination have continued.

The environmental impact changes discussed herein have also been communicated to public officials, with whom the project team meets on a frequent basis. As all sections of the project proceed through final design, right-of-way acquisitions, utility relocation and construction, additional reevaluations will be undertaken. The need for additional written reevaluations will be determined as appropriate. This documentation of NEPA reevaluation is being undertaken consistent with 23 CFR 771.129(c).

## 7.0 PROJECT MAPPING





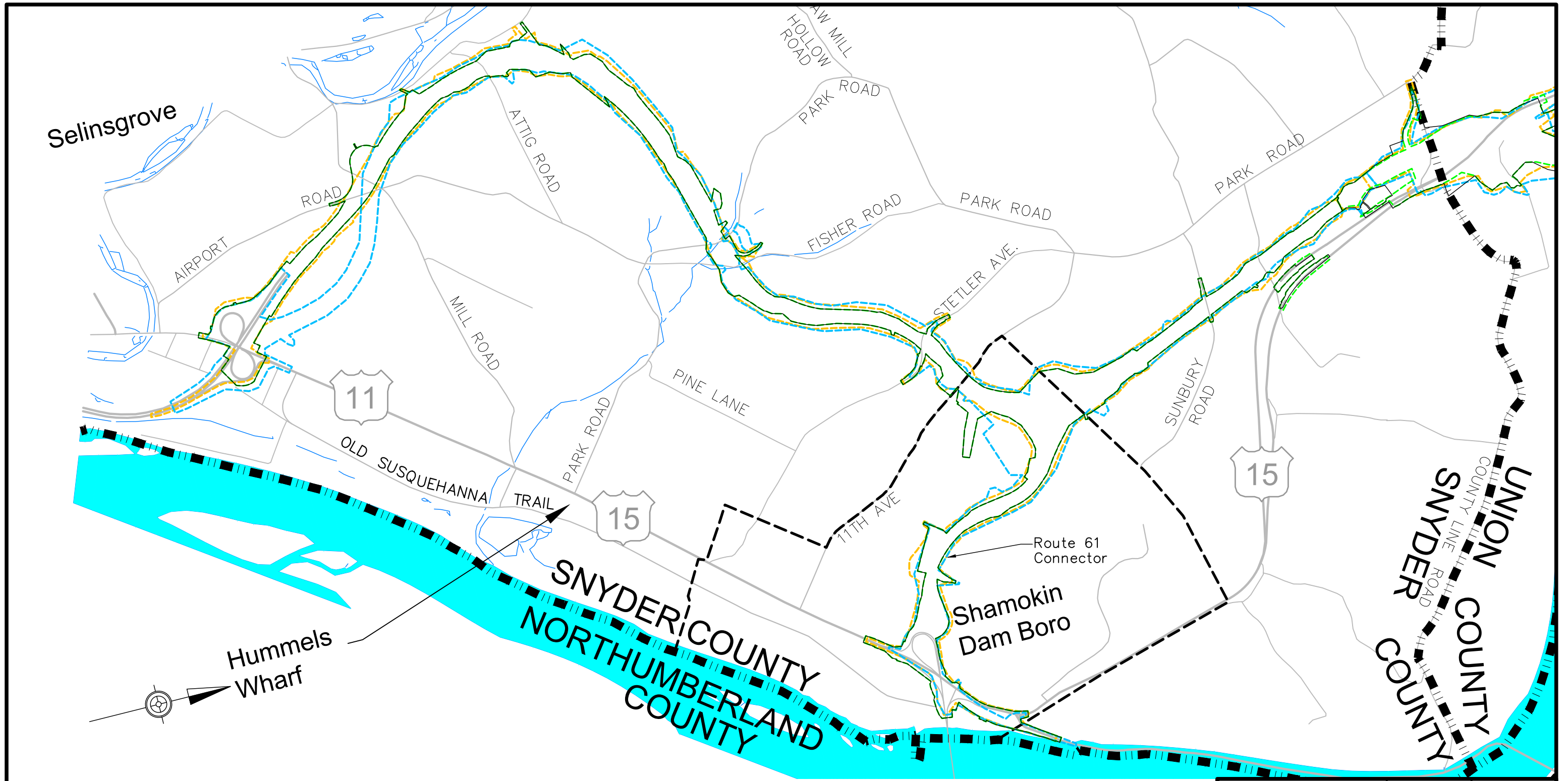
**Central Susquehanna Valley  
Transportation Project**

**Figure 1**

Regional Setting

0 2 4 6 8  
Scale in Kilometers

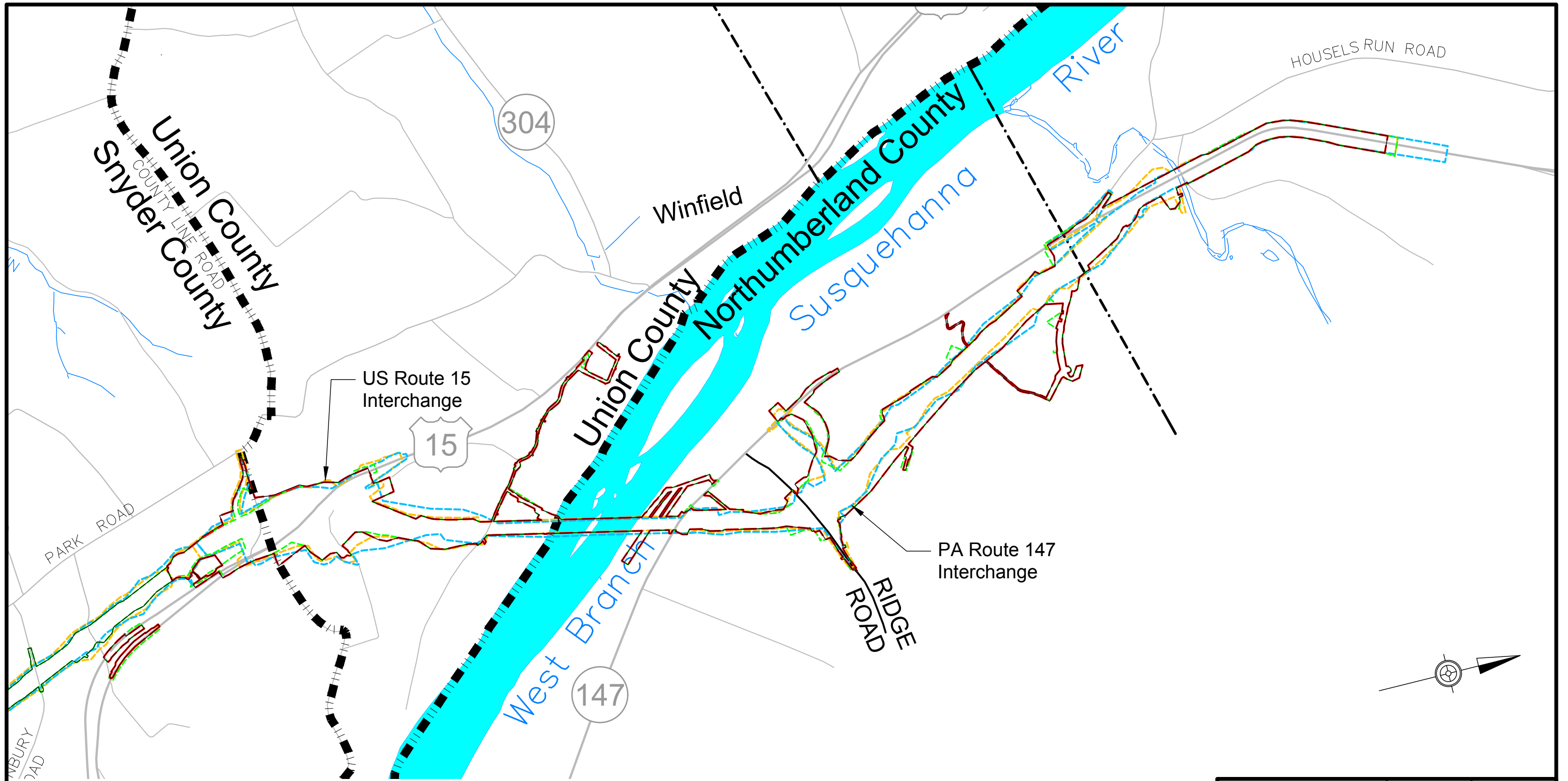
0 3 6 9  
Scale in Miles



**LEGEND**

- Current Design LOD (2018)
- - - Reevaluation No. 2 & 3 LOD (2014 & 2016)
- - - Reevaluation No. 1 LOD (2006)
- - - Final EIS LOD (2003)

SKELLY and LOY, Inc.	July, 2018	Figure 2
Pennsylvania Department of Transportation - District 3-0 Central Susquehanna Valley Transportation Project		
<b>LOD Comparisons (Southern Section)</b>		
Northumberland, Snyder, and Union County, Pennsylvania		
Job No.:R95-0129.000	Scale: 1" = 2,000'	

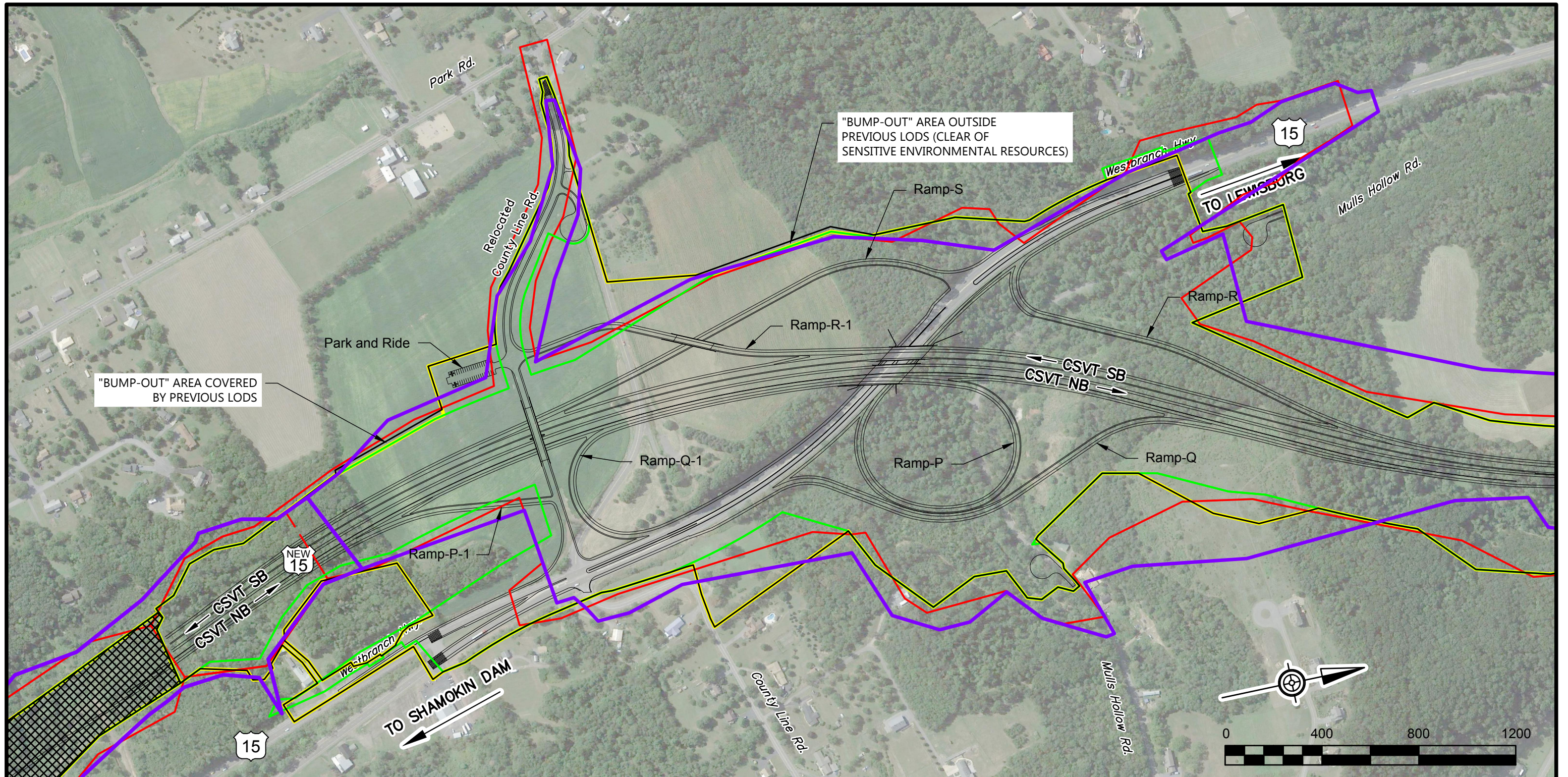


**LEGEND**




- Current Design LOD (2018)
- - - Reevaluation No. 3 LOD (2016)
- - - Reevaluation No. 2 LOD (2014)
- - - Reevaluation No. 1 LOD (2006)
- - - Final EIS LOD (2003)




SKELLY and LOY, Inc.	July, 2018	Figure 3
Pennsylvania Department of Transportation - District 3-0 Central Susquehanna Valley Transportation Project		
<b>LOD Comparisons (Northern Section)</b>		
Northumberland, Snyder, and Union County, Pennsylvania		
Job No.: R95-0129.000	Scale: 1" = 2,000'	





**LEGEND**

-  Current LOD and Roadway Design (2018)
-  FEIS ROD LOD (2003)
-  Reevaluation No. 1 LOD (January 2006)

-  Reevaluation No. 2 LOD (June 2015)
-  Reevaluation No 3 LOD (June 2016)
-  Current LOD Southern Section

SKELLY and LOY, Inc.	July, 2018	Figure 4
Pennsylvania Department of Transportation - District 3-0 Central Susquehanna Valley Transportation Project		
<b>US Route 15 Interchange</b>		
Snyder and Union County, Pennsylvania		
Job No.: R95-0129.000	Scale: 1" = 500'	

Plotted on: 2018-07-12



