

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

REEVALUATION NO. 3 OF
FINAL ENVIRONMENTAL IMPACT STATEMENT
AND RECORD OF DECISION

**SUBMITTED TO
PENNSYLVANIA DEPARTMENT OF TRANSPORTATION**

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

JUNE 2016



U. S. DEPARTMENT
OF TRANSPORTATION

Federal Highway
Administration

Pennsylvania Division

JUN 22 2016

228 Walnut Street, Room 508
Harrisburg, PA 17101-1720

In reply refer to:
HPD-PA

Snyder, Union & Northumberland Counties,
Pennsylvania
Central Susquehanna Valley Transportation (CSVT)
Project
S.R. 15, Section 088
NEPA Reevaluation #3

Mr. Scott Christie, 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. Christie:

The Federal Highway Administration (FHWA) has reviewed the written reevaluation of the Final Environmental Impact Statement and Record of Decision prepared for the advancement of the second construction contract for the CSVT project. The referenced project includes the construction of approximately 13 miles of new, four-lane, limited access highway that will connect U.S. Routes 11/15 Near Selinsgrove to U.S. Route 15 near Winfield to PA Route 147 near Montandon, Pennsylvania. 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 continue to ensure that all design and mitigation commitments are implemented and documented appropriately.

The approved documentation is located at http://www.skellyloy-gis.com/downloads/CSVT_FEIS_REEVAL_No_3_6_14_16.pdf. Please share this documentation as appropriate. Should conditions change in final design or construction, please consult with this office promptly. We anticipate continuing to work with your office as this and the other construction stages advance through design and construction.

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.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'K. Lynch', written in a cursive style.

Keith Lynch
Director of Project Development

Attachments

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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.
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JUNE 14, 2016

TABLE OF CONTENTS

	PAGE
1.0 INTRODUCTION.....	1
1.1 PROJECT DESCRIPTION	1
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.....	9
2.4 TRAFFIC ANALYSIS UPDATE	14
2.4.1 Ridge Road Projected Future Traffic Volumes	14
2.4.2 Interchange Traffic Operations Analyses.....	15
2.5 PROGRAMMING STATUS	17
2.5.1 Long-Range Transportation Plan.....	17
2.5.2 Transportation Improvement Program.....	17
2.6 PUBLIC INVOLVEMENT UPDATE	17
2.7 LOCAL PLANNING INITIATIVES/STUDIES	18
3.0 ENVIRONMENTAL UPDATE.....	19
3.1 NATURAL ENVIRONMENT	19
3.1.1 Wetland	19
3.1.2 100-Year Floodplains.....	21
3.1.3 Streams	21
3.1.4 Agricultural Resources.....	21
3.1.5 Vegetation and Wildlife.....	21
3.2 SOCIAL ENVIRONMENT, ECONOMIC, AND LAND USE EFFECTS	23
3.2.1 Population and Housing.....	24
3.2.2 Major Utility Involvement.....	24
3.2.3 Waste and Hazardous Materials.....	24
3.2.4 Noise	25
3.2.5 Indirect and Cumulative Impacts	25
3.2.6 Public Recreational Resources.....	25
3.3 CULTURAL RESOURCES.....	25
3.3.1 Archaeological Resources.....	25
3.3.2 Historic Resources.....	26
3.3.3 Programmatic Agreement (PA).....	26
4.0 SECTION 4(f) EVALUATION	27
5.0 MITIGATION UPDATE.....	28
5.1 NATURAL RESOURCE MITIGATION	28
5.2 ENDANGERED SPECIES ACT (SECTION 7 CONSULTATION).....	28
5.3 RIVER MITIGATION	28
6.0 CONCLUSION	29

LIST OF FIGURES

NO.	DESCRIPTION	PAGE
1	REGIONAL SETTING	2
2	LOD COMPARISONS (SOUTHERN SECTION)	10
3	LOD COMPARISONS (NORTHERN SECTION)	11
4	US ROUTE 15 INTERCHANGE COMPARISON	12
5	PA ROUTE 147 INTERCHANGE COMPARISON	13

LIST OF TABLES

NO.	DESCRIPTION	PAGE
1	2044 BUILD CONDITION – ESTIMATED RIDGE ROAD TRAFFIC VOLUMES	15
2	ENVIRONMENTAL IMPACT SUMMARY	20

LIST OF APPENDICES

- A AGENCY CORRESPONDENCE - THREATENED AND ENDANGERED SPECIES
- B AGENCY CORRESPONDENCE - HISTORICAL AND ARCHAEOLOGICAL RESOURCES
- C ENVIRONMENTAL COMMITMENT MITIGATION TRACKING SPREADSHEETS

1.0 INTRODUCTION

The Central Susquehanna Valley Transportation (CSVTV) 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. PennDOT prepared an FEIS/ROD Reevaluation No. 1 in 2005-2006 to identify design changes and associated environmental impacts between what was approved in the FEIS/ROD and the further developed design plans. The FEIS/ROD Reevaluation No. 1 was approved on May 10, 2006.

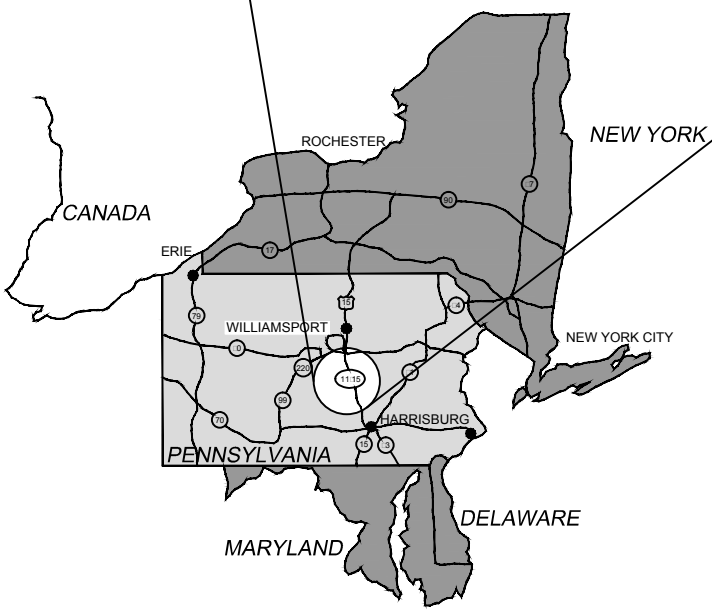
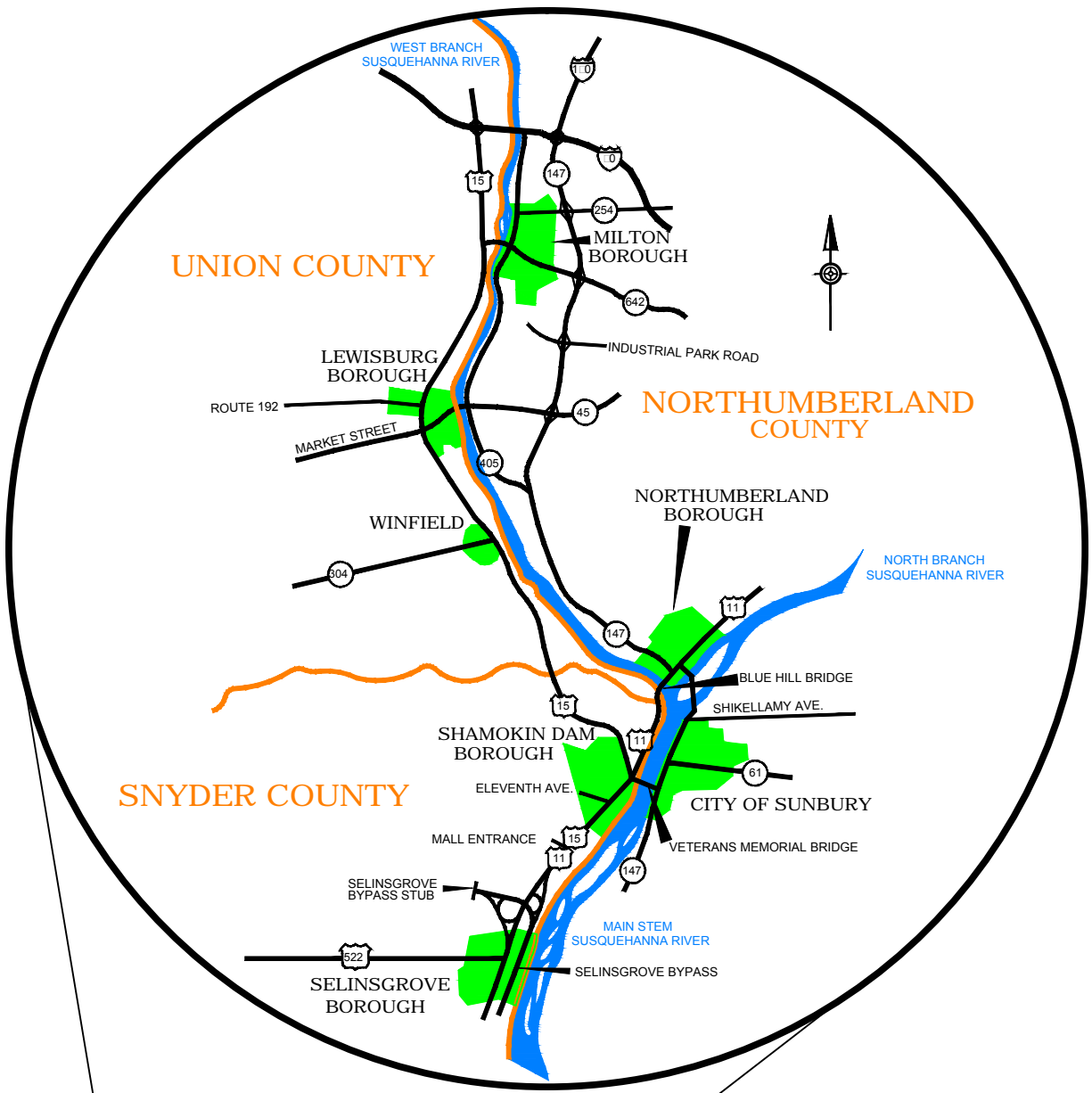
Following the approval of the FEIS/ROD Reevaluation No. 1, pre-construction activities progressed. However, in July 2008, PennDOT placed the project on hold because there was no funding for the CSVTV Project on its 2009-2012 Transportation Improvement Program (TIP) and there were no sufficient other dedicated funds identified for the project's construction. The project was placed on hold to allow additional time to pursue other funding options without losing the past investment in the project.

As documented in the FEIS/ROD Reevaluation No. 2 (approved on June 30, 2015), funding opportunities changed in the following years, particularly with Pennsylvania's passage of a comprehensive transportation funding plan (Act 89) in November 2013. As a result, PennDOT subsequently reactivated all pre-construction activities for the project. Final design activities for the Northern Section resumed in late 2013, and final design activities for the Southern Section began in early 2015.

This Reevaluation report (FEIS/ROD Reevaluation No. 3) has been completed consistent with 23 CFR 771.129 as a continuation of the National Environmental Policy Act (NEPA) project development process to establish whether or not the project's NEPA documentation, including the Record of Decision, remains valid for subsequent federal action.

1.1 PROJECT DESCRIPTION

The CSVTV 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 (10-foot paved and 2-foot graded) 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



**Central Susquehanna Valley
Transportation Project**

Figure 1

Regional Setting

0 2 4 6 8
Scale in Kilometers

0 3 6 9
Scale in Miles

CSV T project. This new one-mile, two-lane limited access roadway will connect the CSV T 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 CSV T project is designed for a posted speed limit of 65 mph.

The CSV T 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 a 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 across the West Branch Susquehanna River to PA Route 147 near Montandon, just south of the PA Route 147 interchange with PA Route 45. The northern project terminus was initially identified as the PA Route 147 interchange with I-80, north of the Borough of Milton. At this location, PA Route 147 widened from a two-lane, limited access facility on a four-lane right-of-way, to a four-lane, limited access roadway once it crossed I-80 and where PA Route 147 becomes I-180 to serve the Williamsport metropolitan area. Following the completion of the Phase 1 (preliminary) alternatives analysis phase of the CSV T project development process, the northern terminus for the Northern Section was revised to the current terminus. On October 7, 1997, FHWA granted approval to separate the newly named "2-on-4" Section (extending from the Northern Section to I-80) from the CSV T project and advance the widening of this section as an independent project on its own merits. Construction of this section (widening from two to four lanes) was completed in 2004.

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 to the new bridge across the West Branch Susquehanna River, 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.

In Pennsylvania, US Route 15 travels through the mid-state. It is the only major north-south corridor in this part of central Pennsylvania and one of the major north-south highways in the Commonwealth that extends from Maryland to New York. The location of US Route 15 makes it strategically important, not only to Pennsylvania but to the entire northeast and Canada. It provides the most direct route between the Baltimore-Washington metropolitan area and Harrisburg to the south and Williamsport, Rochester, Buffalo, and Canada to the north. For this reason, a significant proportion of its traffic is interstate and international, and it is a vital route for long distance carriers. Over 50% of the cars and over 90% of the trucks surveyed during the project's origin/destination survey did not have an origin or destination in the study area. However, the project region also contains a large number of manufacturing and commercial industries that generate truck traffic, particularly to the north and east of Northumberland. The Average Daily Traffic (ADT) on the corridor is currently approximately 50,000 vehicles (based on traffic counts completed in 2014) and is projected to increase to over 100,000 vehicles by 2044.

The proposed CSV T project will separate trucks and other through traffic from local traffic and will thereby improve safety by reducing traffic conflicts, reduce congestion, provide better access to the region, and support population and economic growth that is expected in the



region. The roadways in the corridor bind together the towns of Selinsgrove, Shamokin Dam, Sunbury, Northumberland, Milton, and Lewisburg.

1.2 NEPA HISTORY AND REEVALUATION STATUS

The FHWA approved the project's FEIS for public review in July of 2003. After consideration of the received comments, a Record of Decision (ROD) was prepared and issued by the 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.

In 2005, based on new research information and methodology, the FHWA determined that the Simon P. App Property was no longer eligible for listing on the NRHP under the new historic context that had been developed for the region. The Pennsylvania State Historic Preservation Officer concurred with this finding. The Keeper of the National Register also concurred with the non-eligible finding and rescinded the Determination of Eligibility previously issued for the App farm.

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 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 determined that a supplemental EIS was not warranted. The FEIS/ROD Re-evaluation No. 1 was approved on May 10, 2006.

Throughout 2014 and early 2015, 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. Project scope, resource and impact changes since the approval of FEIS/ROD Reevaluation No. 1 were quantified and documented. Reevaluation No. 2 concluded that the refined design did not result in any substantive additional adverse impacts to new or previously identified resources, when compared with the data presented in the FEIS for the Selected Alternative, that would rise to the level of significance. Accordingly, Reevaluation No. 2 also determined that a supplemental EIS was not warranted. This Reevaluation was approved on June 30, 2015.

Since the approval of Reevaluation No. 2, construction activities have commenced on Contract N1, consisting of the construction of the bridge over the West Branch Susquehanna River. As final design of the remaining portions of the Northern Section has continued, additional design refinements have been made, including modifications to the proposed interchange configurations based on operational analyses. This Reevaluation (FEIS/ROD Reevaluation No.

3) has therefore been prepared to address environmental impact changes associated with those design refinements and is required for the issuance of further funding authorizations.

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 and the Northern Section, to facilitate the development and evaluation of alternatives during the preliminary engineering and EIS process. Both project sections have been granted Design Field View Approval and are proceeding separately through the final design and construction project development phases.

2.1 ANTICIPATED CONSTRUCTION SEQUENCING/SCHEDULE

The Southern and Northern Sections are both planned to be constructed through multiple construction contracts to accommodate practical construction phasing and funding availability. The Southern Section is currently anticipated to be constructed through the following three contracts:

- Contract S1/S2 – Construction of the CSVT mainline earthwork and bridges,
- Contract S3 – Construction of the CSVT mainline pavement and remaining appurtenances, and
- Contract S4 – Construction of the PA Route 61 Connector.

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, and
- Contract N3 – Construction of the CSVT mainline pavement and remaining appurtenances.

The anticipated project schedule for the remaining project development phases 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”).

- Final Design of Northern Section is ongoing.
- Final Design of Southern Section was initiated in February 2015.
- Contract N1 (River Bridge) was let for Construction in September 2015.
- Let Contract N2 (Earthwork and Non-river Bridges East of River, Tree Clearing West of River) for Construction – August 2016

- Let Contract N2.5 (Earthwork and Non-river Bridges West of River) for Construction – Spring 2017
- Let Contract S1/S2 (Mainline Earthwork and Bridges) for Construction - Mid-2019
- Let Contract N3 (Mainline Paving) for Construction – Early 2020
- Let Contract S3 (Mainline Paving) for Construction – Mid-2022
- Let Contract S4 (PA Route 61 Connector) for Construction – Early 2023
- Completion of Construction and Open to Traffic – 2024

PennDOT intends to open the entire project to traffic at one time. However, the Northern Section has independent construction utility, providing a bypass of the congestion in Northumberland, and PennDOT will consider opening it prior to the completion of the Southern Section if the Southern Section is delayed. Since final design was initiated for the Southern Section only roughly one year ago and significant work remains to be completed, the design impacts and associated avoidance and minimization information reflect the best available information based on preliminary engineering work completed for the Southern Section. As the Southern Section advances through final design, changes in project impacts will be addressed through the submission of additional FHWA/PennDOT coordination documents to be developed prior to construction of the Southern Section. An additional NEPA reevaluation will be prepared accordingly.

2.2 DESIGN UPDATE/MODIFICATIONS

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. 2 and impacts remain unchanged, as shown on Figure 2.

It is anticipated that as Final Design progresses for the Southern Section, minor changes to the impacts will occur, such as to account for temporary construction easements, permanent drainage easements, design of stormwater management facilities, local roadway improvements, structure refinements, and property/construction access issues.

In addition, design refinement analyses are currently underway at the following locations;

- 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)

The LOD for the Southern Section is identical to information presented in the Reevaluation No. 2 and impacts remain the same. Design refinements will be documented in subsequent FEIS/ROD Reevaluations.

Northern Section – RC5 Alternative

The Northern Section has progressed considerably further into Final Design (Contract N1 is under construction and Contract N2 is anticipated to be let in August 2016) than the Southern Section, and therefore design modifications have resulted in changes to the LOD (see Figures 3, 4 and 5). Minor changes to the LOD have occurred to account for property/construction access issues, but the most significant changes from the FEIS/ROD Reevaluation No. 2 are associated with design modifications made to an area of roadway excavation (rock cut) on the river bridge's south approach and to the two proposed interchanges.

As construction of the river bridge has proceeded, geotechnical conditions have been encountered on the south approach (between approximately Stations 886+00 and 898+00 on the right) that indicated the originally proposed rock cut slope would not be as stable as expected based on previously obtained core borings. The design for the roadway excavation was therefore modified, primarily flattening the proposed rock cut slope from a 1:1 slope to a minimum 1.5:1 slope. The flattened slope results in the LOD encroaching further onto two properties that were previously impacted, and additional right-of-way will be required from both properties.

For the US Route 15 Interchange and the PA Route 147 Interchange at Ridge Road, detailed analyses of traffic operations were performed during Final Design. Those analyses indicated that reconfiguration of the interchanges was warranted to improve their safety, capacity, and operations (levels of service). The primary design modifications made to each interchange are summarized below.

- **US Route 15 Interchange (See Figure 4)**
 - Ramp P-1 was added to eliminate left turns from Ramp P (CSV T northbound) onto US Route 15 southbound. (From Ramp P-1, traffic will instead make a right turn onto County Line Road and then a right turn onto US Route 15 southbound.)
 - Ramp Q-1 was added to eliminate left turns from US Route 15 southbound onto Ramp Q (CSV T northbound).
 - Ramp R-1 was added to eliminate left turns from Ramp R (CSV T southbound) to US Route 15 southbound. (From Ramp R-1, traffic will instead make a left turn onto County Line Road and then a right turn onto US Route 15 southbound.)
 - A collector-distributor (C-D) lane was added along CSV T northbound throughout the interchange area to separate through traffic from ramp diverge, merge, and weave maneuvers. (Separating through traffic from the ramp maneuvers simplifies driver decision-making and improves safety, capacity, and operations.)
 - An acceleration lane was added along US Route 15 northbound to facilitate Ramp P and Ramp R traffic merging into US Route 15 northbound traffic.
 - An acceleration lane was added along US Route 15 southbound from County Line Road to accommodate the right turns that Ramp R-1 and Ramp P-1 traffic must make to travel southbound on US Route 15.

- **PA Route 147 Interchange at Ridge Road (See Figure 5)**
 - Ramp W-1 was added to eliminate left turns from Ridge Road westbound onto Ramp W (CSV T southbound). This includes the addition of a dedicated lane on Ridge Road westbound for traffic entering Ramp W-1.

- An additional left turn lane (now dual left turn lanes) was added to Ridge Road eastbound for traffic entering Ramp U (CSVN northbound).
- A climbing lane was added to Ridge Road eastbound between PA Route 147 and the interchange.

The design modifications identified above to address unforeseen field conditions and safety and operational needs on the project's Northern Section have been coordinated with appropriate environmental agencies through the permit modification process, as noted in Section 2.3 below. These modifications require considerable excavation (cut) and therefore impact the overall earthwork balance for the section, As noted later in Table 2, with these design modifications incorporated, the earthwork required for the Northern Section will result in approximately 350,000 cubic yards of additional waste material (beyond that identified in the FEIS/ROD Reevaluation No. 2). As final plans are developed for the remaining Northern and Southern Section construction contracts, PennDOT will investigate additional design modifications or construction techniques to reduce the amount of waste material generated, consistent with the mitigation commitments documented in the FEIS/ROD. In addition, in accordance with the United States Army Corps of Engineer Section 404 Permit for the project, any waste sites ultimately required will be reviewed by the construction contractor's qualified professional (with oversight by PennDOT's environmental monitor) to determine whether wetlands exist on the site, and any associated necessary permits will be obtained for the site.

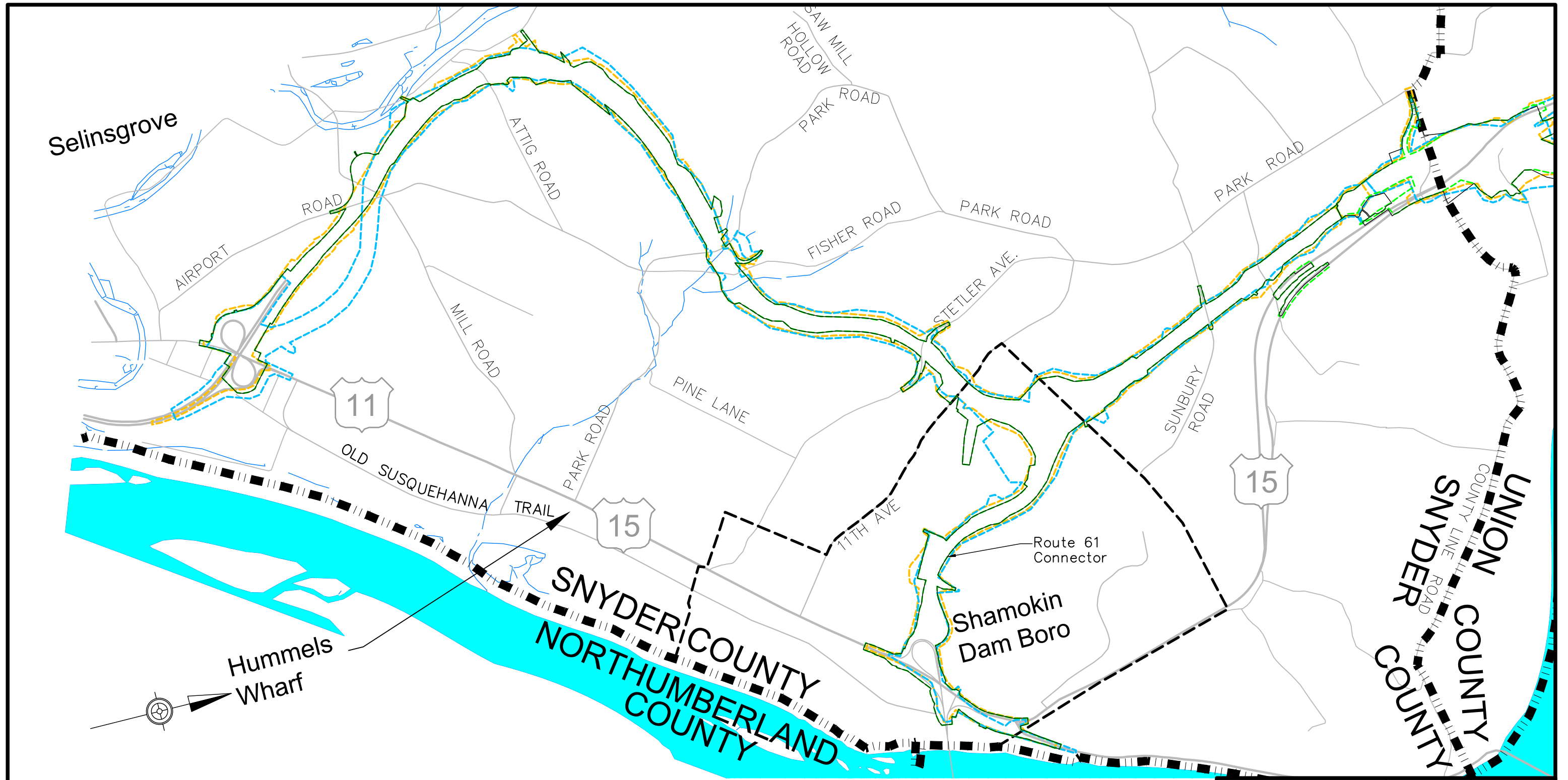
2.3 PERMITTING UPDATE

An Individual United States Army Corps of Engineers (USACE) Section 404 Permit was issued for the CSVN project in 2007 (Expiration December 31, 2017), and a modification was issued by the USACE on June 17, 2015, 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 CSVN 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 issued by PA DEP on May 7, 2015. (Note that separate Chapter 105 Permits were issued for the Northern Section's impacts by each county, Snyder, Union and Northumberland.) In December 2015, applications were submitted to PA DEP and the USACE for modifications to the Chapter 105 and Section 404 permits, respectively, to reflect the above described design modifications (made since issuance of the original permits) and to request authorization for construction of the remaining portions of the Northern Section (e.g., Contracts N2 and N2.5).

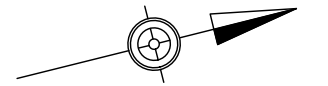
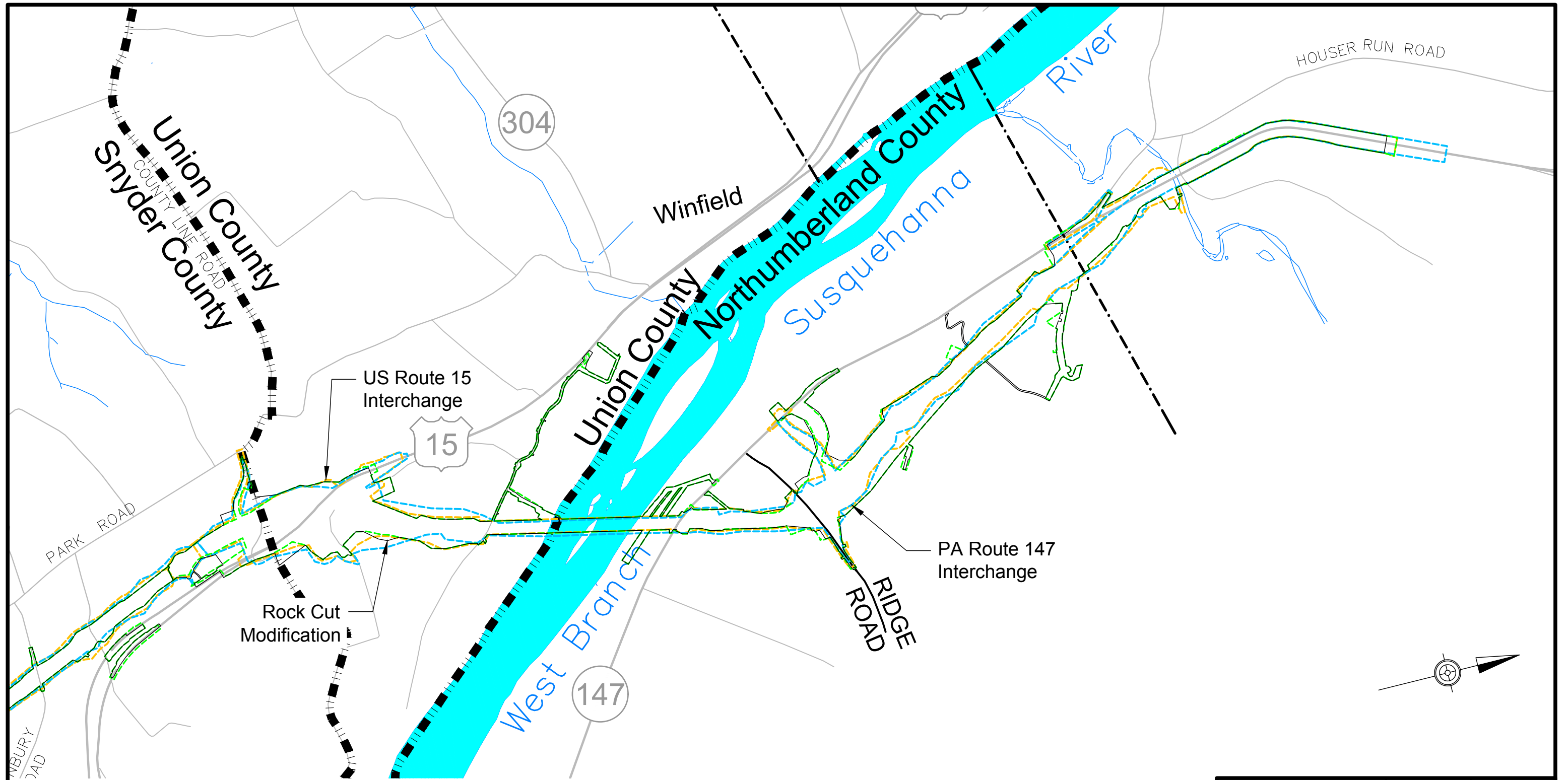
The NPDES permit for the Northern Section was issued by PA DEP on May 7, 2015. In December 2015, an application was submitted to PA DEP for a modification to the NPDES permit to reflect the above described design modifications (made since issuance of the original permit) and to request authorization for construction of the remaining portions of the Northern Section (e.g., Contracts N2 and N2.5).



LEGEND

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

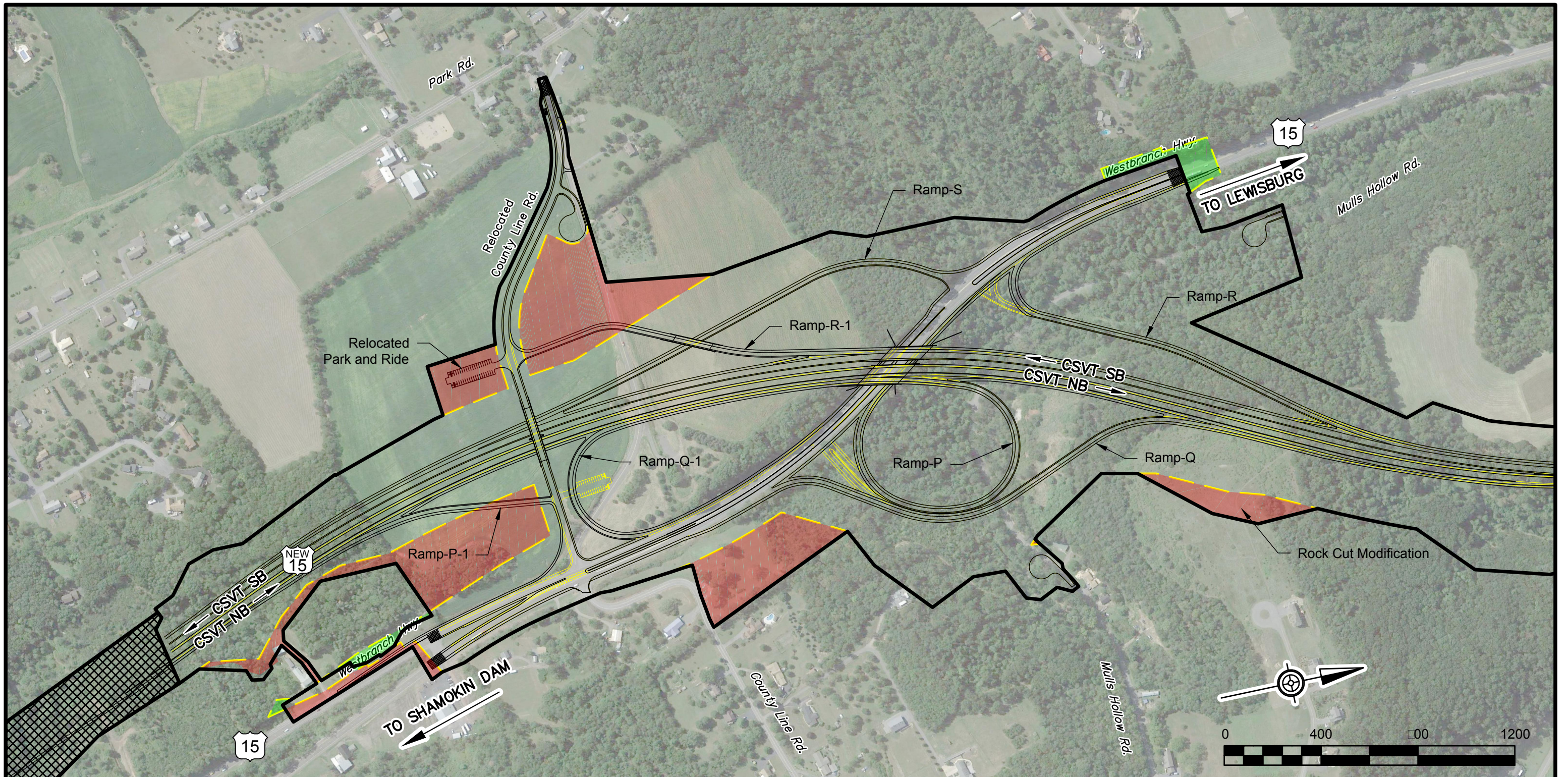
SKELLY and LOY, Inc.	June, 2016	Figure 2
Pennsylvania Department of Transportation - District 3-0 Central Susquehanna Valley Transportation Project		
LOD Comparisons (Southern Section)		
Northumberland, Snyder, and Union County, Pennsylvania		
Job No.:R95-0129.000	Scale: 1" = 2,000'	



LEGEND

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

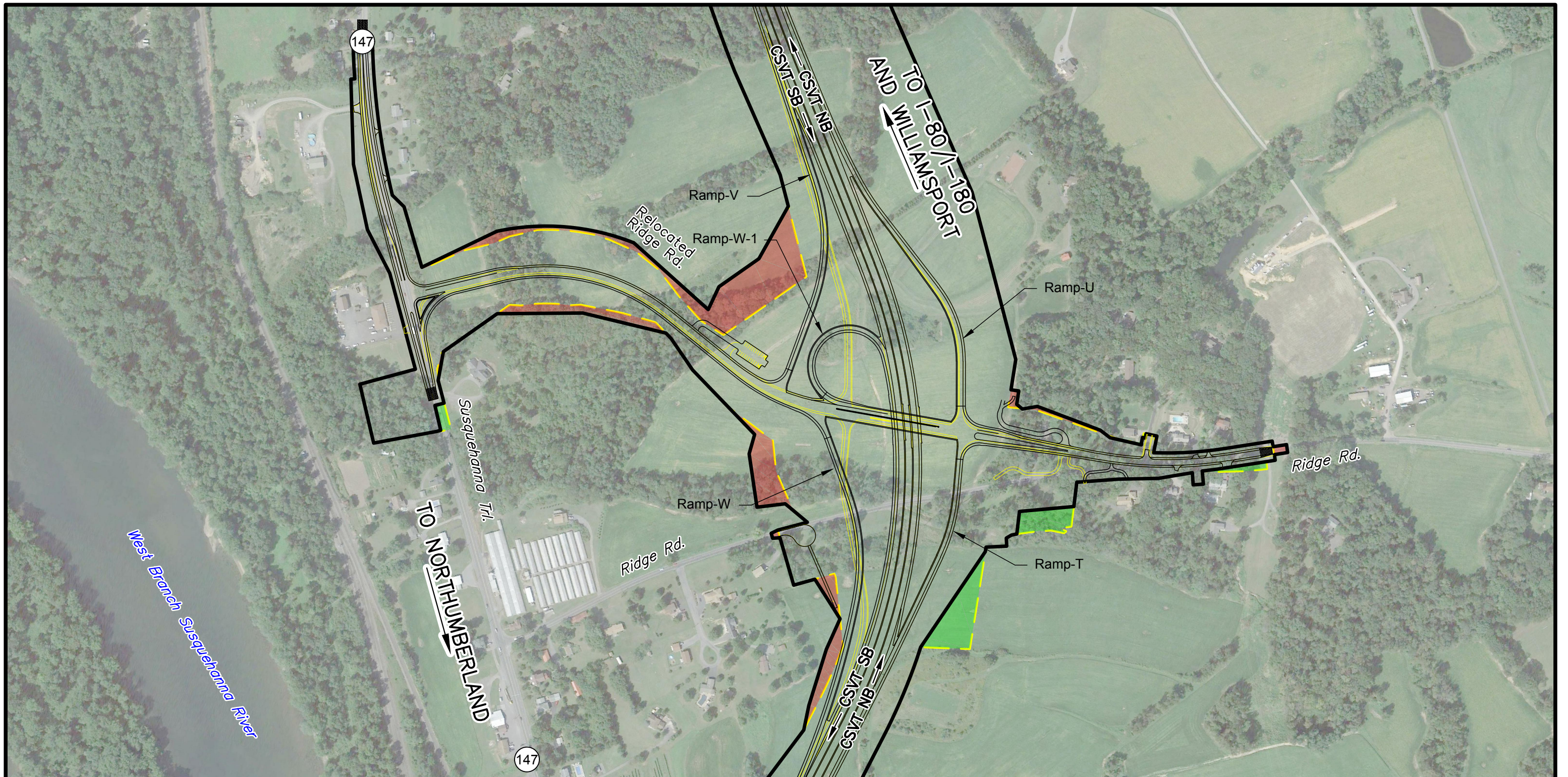
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Pennsylvania Department of Transportation - District 3-0 Central Susquehanna Valley Transportation Project		
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Job No.:R95-0129.000	Scale: 1" = 2,000'	



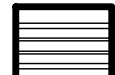



LEGEND

-  Current LOD and Roadway Design [2016]
-  Reevaluation No. 2 LOD and Roadway Design [2014]
-  LOD Additional Impact Area
-  LOD Reduced Impact Area
-  Current LOD Southern Section

SKELLY and LOY, Inc.	June, 2016	Figure 4
Pennsylvania Department of Transportation - District 3-0 Central Susquehanna Valley Transportation Project		
US Route 15 Interchange		
Snyder and Union County, Pennsylvania		
Job No.: R95-0129.000	Scale: 1" = 500'	



LEGEND

-  Current LOD and Roadway Design (2016)
-  Reevaluation No. 2 LOD and Roadway Design (2014)
-  LOD Additional Impact Area
-  LOD Reduced Impact Area

SKELLY and LOY, Inc.	June, 2016	Figure 5
Pennsylvania Department of Transportation - District 3-0 Central Susquehanna Valley Transportation Project		
PA Route 147 Interchange at Ridge Road		
Northumberland County, Pennsylvania		
Job No.: R95-0129.000	Scale: 1" = 500'	

2.4 TRAFFIC ANALYSIS UPDATE

Since the FEIS/ROD Reevaluation No. 2, additional traffic analyses were performed to further address previously raised concerns about potential increases in traffic on Ridge Road in Point Township following the completion of the CSVT project and to analyze traffic operations at the two proposed interchanges in the Northern Section. The results of these additional analyses are summarized below.

2.4.1 RIDGE ROAD PROJECTED FUTURE TRAFFIC VOLUMES

As documented in the FEIS/ROD Reevaluation No. 2, some residents of Point Township expressed concern about potential increases in traffic on Ridge Road (Township Road 703/State Route 1024) caused by the proposed new interchange intended to connect the new highway (CSVT) to PA Route 147. No signs are proposed that would direct traffic to use Ridge Road as a connection between the new highway and US Route 11 (east of Northumberland Borough) upon completion of the project.

Following an initial assessment of the potential diversion of existing traffic that may use Ridge Road as a connection between the new highway and US Route 11 (as documented in the FEIS/ROD Reevaluation No. 2), coordination and traffic analysis continued in order to also consider the effects of potential future local development and to thereby fully estimate the future traffic volume on Ridge Road. 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. To estimate the total future traffic volume on Ridge Road, those projections were then combined with base traffic volumes (obtained from traffic counts in 2015) and an estimated volume of traffic potentially diverted from US Route 11. 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 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.) Table 1 below shows the resulting estimate of future (2044) traffic volumes on Ridge Road east of the proposed PA Route 147 interchange in Point Township.

As shown in Table 1, Ridge Road traffic is anticipated to increase from a current (2015) volume of approximately 2,100 vehicles per day to approximately 9,100 vehicles per day by 2044. Of the total future traffic volume, it is estimated that traffic generated by future local development will account for approximately 4,200 vehicles per day (47%), while the diversion of traffic from US Route 11 will account for only approximately 2,800 vehicles per day (30%). This estimated increase in future traffic on Ridge Road attributable to the CSVT project is not large enough to warrant the inclusion of improvements to Ridge Road (east of the proposed PA Route 147 Interchange) in the overall CSVT project.

**Table 1
2044 Build Condition – Estimated Ridge Road Traffic Volumes**

	2044 PM Peak Hour Volume	2044 Average Daily Traffic (ADT) Volume	% of total
Base Traffic*	147	2070	23
Traffic Diverted from US Route 11**	196	2760	30
Traffic Generated by Future Development***	<u>300</u>	<u>4226</u>	<u>47</u>
Total Estimated Future Traffic	643	9056	100

*Based on traffic counts conducted on Ridge Road in 2015

**Based on assumption that 50% of motorists traveling between Danville and Selinsgrove would divert off US Route 11 and use Ridge Road to access CSVT

***Based on land use planning information provided by Point Township in 2015; traffic generated by anticipated future development consists of the following:

Residential	43%
Office	8%
Industrial (not including Furmano's)	13%
Furmano's Expansion	3%
Retail	33%
Total	100%

The total estimated future traffic volume was presented to Point Township officials on March 2, 2016, and PennDOT and the township officials again agreed that the future traffic volume will be manageable without the need for major improvements to Ridge Road (e.g., additional lanes or significant realignment).

As an independent project on its own merits, PennDOT will continue to study the Ridge Road corridor to identify its future transportation needs. PennDOT will also continue to coordinate with Point Township officials, local residents, and SEDA-COG (consistent with the statewide transportation project planning process) to determine how to best meet those needs.

2.4.2 INTERCHANGE TRAFFIC OPERATIONS ANALYSES

During Final Design, traffic operations at each of the two proposed interchanges in the Northern Section were analyzed using projected future traffic volumes (for the design year of 2044), and the results are summarized below.

2.4.2.1 US Route 15 Interchange – Final Design Traffic Operations Analysis

For the previous US Route 15 Interchange design (as presented in the FEIS/ROD Reevaluation No. 2), the analysis of traffic operations indicated that a poor level of service (LOS) would occur on various ramps in the design year (2044). Furthermore, the analysis also identified the following traffic movements of additional concern:

- The merge movement from Ramp P (CSVT northbound) to US Route 15 northbound, due to the high projected traffic volumes
- The left turn movements from Ramp P (CSVT northbound) and Ramp R (CSVT southbound) to US Route 15 southbound and the left turn movement from US Route 15 southbound to Ramp Q (CSVT northbound), due to the steep grade on US Route 15, the availability of gaps in oncoming traffic, and the operations of heavy vehicles making these maneuvers

To address these concerns and improve the safety, capacity, and operations of the interchange, its design was modified as described in Section 2.3 and shown on Figure 4. The three left turn movements noted above were eliminated through the addition of three proposed new ramps (P-1, Q-1, and R-1), and a collector-distributor lane was added along CSVT northbound throughout the interchange area to separate through traffic from ramp diverge, merge, and weave maneuvers. In addition, an acceleration lane was added along US Route 15 northbound to facilitate Ramp P and Ramp R traffic merging into US Route 15 northbound traffic. With these modifications incorporated, an updated analysis of traffic operations indicated that all ramps at the interchange will operate at LOS C or better with acceptable queue lengths in the design year (2044).

2.4.2.2 PA Route 147 Interchange at Ridge Road – Final Design Traffic Operations Analysis

The previous PA Route 147 Interchange design (as presented in the FEIS/ROD Reevaluation No. 2) consisted of a diamond interchange configuration with three lanes proposed on Ridge Road between the ramps and unsignalized intersections on Ridge Road at the ramps and at PA Route 147. However, the analysis of traffic operations indicated that unacceptable queues would result throughout the interchange in the design year (2044). Specifically, extensive queues would occur on Ridge Road westbound due to left turns entering CSVT southbound (Ramp W) and on Ridge Road eastbound due to left turns entering CSVT northbound (Ramp U). Extensive queues would also occur on both CSVT off-ramps (Ramps T and V) due to left turns entering Ridge Road, with back-ups potentially extending onto the CSVT roadway.

To address these concerns and improve the safety, capacity, and operations of the interchange, its design was modified as described in Section 2.4 and shown on Figure 5. A loop ramp (Ramp W-1) was added to provide access from Ridge Road westbound to CSVT southbound without the need for a left turn, and a dedicated lane was added on Ridge Road westbound for traffic entering the new ramp. With this modification incorporated, the CSVT southbound off-ramp (Ramp V) will operate at LOS C with an acceptable queue length in the design year (2044). In addition, a traffic signal was added to the intersection of the CSVT northbound ramps and Ridge Road, and Ridge Road was widened (to a total of five lanes) under the CSVT roadway to provide dual eastbound left turn lanes for traffic entering CSVT northbound (Ramp U). With these modifications incorporated, the proposed signalized intersection of the CSVT northbound ramps and Ridge Road will operate at an overall LOS C in the design year (2044).

To determine the most effective design for the intersection of PA Route 147 and Ridge Road, several modified intersection configurations were analyzed, including unsignalized and signalized configurations and a roundabout. A signalized configuration was ultimately selected as the proposed design. The resulting intersection will provide protected green time to allow all vehicles to safely maneuver through the intersection while minimizing delays and queues, particularly for the highest volume movements of PA Route 147 northbound right turns and Ridge Road westbound left turns. The proposed signalized intersection will operate at an overall LOS B in the design year (2044).

2.5 PROGRAMMING STATUS

2.5.1 Long-Range Transportation Plan

The SEDA-COG Metropolitan Planning Organization (MPO) updated its 2011-2035 Long Range Transportation Plan (LRTP), through an amendment adopted on July 18, 2014, to include the CSVT project as a fiscally constrained project. SEDA-COG typically updates its LRTP every five years and is currently undergoing a comprehensive update process, in coordination with its member counties, PennDOT, and the public. The new (2016-2040) plan is anticipated to be adopted in July 2016, and it will again include the CSVT project as a fiscally constrained project.

2.5.2 Transportation Improvement Program

Portions of the CSVT project are included on SEDA-COG's Transportation Improvement Program (TIP) for Federal Fiscal Years (FFY) 2015-2018, as summarized in Table 2 of the FEIS/ROD Reevaluation No. 2.

The state's Twelve Year Program (TYP) for FFY 2015-2026 includes the TIP in its first four years (2015-2018) and additional funding required for the remaining portions of the CSVT project in its second four years (2019-2022), as summarized in Table 3 of the FEIS/ROD Reevaluation No. 2.

SEDA-COG and PennDOT are currently in the process of updating the TIP for FFY 2017-2020 and the TYP for FFY 2017-2028. Draft versions of these planning documents have been prepared for adoption by October 1, 2016. Both documents include funding for the remaining portions of the CSVT project as required based on updated cost estimates for each project phase, which are generally consistent with the cost estimates used to allocate funding on the current TIP and TYP.

2.6 PUBLIC INVOLVEMENT UPDATE

Since the FEIS/ROD Reevaluation No. 2, general public outreach activities 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. In addition, listed below are specific public involvement activities that have occurred since the FEIS/ROD Reevaluation No. 2.

- Project updates provided by PennDOT representatives at monthly meetings of the Greater Susquehanna Valley Chamber of Commerce's (GSVCC's) Transportation Committee and roughly quarterly meetings of the GSVCC's CSVT Project Task Force
- Project update provided by PennDOT representatives at the annual Snyder County Township Officials Association Meeting on October 7, 2015
- Project update provided by PennDOT representatives at the annual Union County Township Officials Association Meeting on October 15, 2015
- Project update provided by PennDOT representatives at the annual Northumberland County Township Officials Association Meeting on October 22, 2015
- Project update provided by PennDOT representatives at the request of PA State Representative Culver during a meeting of local municipal officials on December 4, 2015

- January 26, 2016 meeting with Penn Valley Airport and Aqua Pennsylvania to review design refinements at the Mill Road/Airport Road/App Road intersection in the project's Southern Section
- Project update provided by PennDOT representatives during the Pennsylvania Motor Truck Association's North Central Chapter Meeting on February 3, 2016
- Project updates provided by PennDOT representatives during 1070 WKOK's "On The Mark" radio call-in program on February 3, 2016 and June 2, 2016
- February 15, 2016 meeting with local property owners in Union Township to discuss anticipated temporary river impacts during the construction of the proposed new river bridge
- March 2, 2016 meeting with Point Township Supervisors to discuss projected future traffic volumes on Ridge Road, design modifications at the PA Route 147 Interchange at Ridge Road, future ownership and maintenance of Ridge Road and Service Road A, an anticipated detour of Ridge Road during construction of the Northern Section, and access to the Oakview development during construction
- March 9, 2016 meeting with the Susquehanna River Sports Park Steering Committee to review design refinements and potential future riverfront development at the US Routes 11/15 split in the project's Southern Section
- March 24, 2016 meeting with Union and Monroe Township Supervisors to discuss design modifications at the US Route 15 Interchange and the stormwater management design for the project
- April 4, 2016 meeting with West Chillisquaque Township Supervisors to discuss future ownership and maintenance of Service Road A, access to the Oakview development during construction, and the stormwater management design for the project
- April 28, 2016 meeting with local property owners in Point and West Chillisquaque Townships to discuss future ownership and maintenance of Service Road A and access to the Oakview development during construction
- May 11, 2016 meeting with local public officials to review the ongoing Final Design of the project's Southern Section, including various design refinements under consideration
- May 20, 2016 public groundbreaking ceremony to commemorate the start of the river bridge construction

2.7 LOCAL PLANNING INITIATIVES/STUDIES

A summary of recent local planning documents can be found in the FEIS/ROD Reevaluation No. 2. The status of these planning documents has remained the same.

The Susquehanna Greenway Partnership (SGP) is working with SEDA-COG and other local stakeholders on the potential development of a Susquehanna River Sports Park and riverfront bicycle and pedestrian facilities in Shamokin Dam Borough and Monroe Township. This planned development is within the Southern Section of the CSVT study area. The SGP and other stakeholders in this planned development have requested a re-design of the proposed US Routes 11/15 split intersection to accommodate future riverfront improvements. At this time, their plans are not yet fully designed, permitted, or funded. A coordination meeting was held with representatives of the SGP and other stakeholders on March 9, 2016. Additional coordination will occur as final design advances and the subsequent FEIS/ROD Reevaluation is pursued for design refinements in the Southern Section.

3.0 ENVIRONMENTAL UPDATE

This FEIS/ROD Reevaluation No. 3 documents the changes in impacts to the environmental, cultural and socioeconomic resources that have occurred based on the advanced design of the project, changes in regulations/procedures and land cover changes within the study area.

A summary of environmental issues at various milestones related to the southern (DAMA and DAM) and the northern (RC5) alignments for the CSVT project area is included in Table 2. The FEIS documented the DAMA as the preferred Southern Section alternative since it avoided a historic farmstead. Conditions subsequently changed related to this resource, and the 2006 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 the advanced design (e.g., stormwater management basin placement, inclusion of temporary construction easements, etc.). (See discussion in Section 2.2, Design Update/Modifications, of this document.)

Environmental consequences are presented primarily 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.

3.1 NATURAL ENVIRONMENT

As mentioned in Section 2.2 Design Update/Modifications, the Northern Section has progressed through a significant portion of the final design whereas the Southern Section is in the initial stages of that phase. The following information is presented in more detail for the Northern Section since the design and permitting is advanced. As the Southern Section progresses in the design, the impact and mitigation details will be refined and presented in future reevaluations. Table 2 documents changes and comparisons in impacts to the natural environment.

3.1.1 Wetlands

The total wetland impacts (direct and temporary) associated with the Northern Section have slightly decreased as the design plans have been refined. The total impacts have decreased from 2.98 acres as presented in the 2003 FEIS/ROD to 2.90 acres for the final design as presented in this Reevaluation.

The total wetland impacts (direct and temporary) associated with the Southern Section have had a greater decrease, from 4.79 acres presented in the 2003 FEIS/ROD to 3.33 acres for the final design as presented in Reevaluation No. 2. The impacts in Reevaluation No. 3 are the same as the impacts in Reevaluation No. 2.

**TABLE 2
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	Change from FEIS to Reeval. No. 3
SOUTHERN SECTION					
Displacements (number)					
Residential	33	31	31	31	-2
Commercial Structures	4	1	1	1	-3
Agriculture (acres)					
Agricultural Security Areas	98.7	96.1	80.7	80.7	-18.0
Productive Farmland	151.6	111.9	91.4	91.4	-60.2
Habitat (acres)					
Wetlands (direct & temp acres)	4.79	4.05	3.33	3.33	-1.46
Forest Land (acres)	183.89	178.71	175.15	175.15	-8.74
Old Field (acres)	157.02	126.18	103.96	103.96	-53.06
Riverine Floodplain Forest (acres)	0.05	0	0	0	-0.05
Waste Sites (number)	5	3	3	3	-2
Surface Water Resources					
Stream Relocations (number)	3	-	3	3	0
Bridge Crossings (number)	2	-	3	3	+1
Culverts (number)	14	-	13	13	-1
Total Impacts (linear feet)	16,445	13,770	12,964	12,964	-3,481
T&E Species	No	No	Yes(NLE Bat)	Yes(NLE Bat)	Yes(NLE Bat)
Historic Properties	No	No	No	No	No
Section 4(f) Resources	No	No	No	No	No
Net Earthwork (Cut – Fill; CY)	2,357,000	202,912	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 \$)	---
NORTHERN SECTION					
Displacements (number)					
Residential	25	23	24	24	-1
Commercial Structures	0	0	0	0	0
Agriculture (acres)					
Agricultural Security Areas	49.0	49.0	49.9	50.0	+1.0
Productive Farmland	165.6	154.6	105.3	129.2	-36.4
Habitat (acres)					
Wetlands (direct & temp acres)	2.98	3.05	2.90	2.90	-0.08
Forest Land (acres)	181.13	182.01	219.42	225.92	+44.79
Old Field (acres)	38.92	34.25	53.04	52.74	+13.82
Riverine Floodplain Forest (acres)	5.66	6.23	9.40	9.40	+3.74
Waste Sites (number)	0	0	0	0	---
Surface Water Resources					
Stream Relocations (number)	2	2	1	1	-1
Bridge Crossings (number)	4	4	4	4	0
Culverts (number)	5	5	1	1	-4
Pipes (number)	*	*	8	8	---
Total Impacts (linear feet)	8,480	9,360	14,216	14,480	+6,000
T&E Species	No	No	Yes(NLE Bat)	Yes(NLE Bat)	Yes(NLE Bat)
Historic Properties	No	No	Yes	Yes	Yes
Section 4(f) Resources	No	No	Yes	Yes	Yes
Net Earthwork (Cut – Fill; CY)	2,108,000	28,602	44,685	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 \$)	---

***Note: Pipes crossings were not identified in the FEIS.**



3.1.2 100-Year Floodplains

There have been no changes to the design that affects the findings of previous hydraulic analyses, and the new bridge over the West Branch Susquehanna River is under construction.

3.1.3 Streams

The total stream impacts (direct and temporary) associated with the Northern Section have increased from 8,480 linear feet as presented in the 2003 FEIS/ROD to 14,480 linear feet for the final design as presented in this Reevaluation. This increase of 6,000 feet is primarily associated with the approach in quantifying the impacts associated with the river bridge. The FEIS/ROD assessed the linear feet of impacts to the river by considering the width of the bridge and a buffer length upstream and downstream. During the USACE Section 404 permit application process, the agencies now required the linear feet of impacts to the river to be redefined as the width of the river which was determined to be 1,600 feet. This approach was applied to both the quantification of the permanent impacts and the temporary impacts associated with the construction causeway. In addition, the impacts to John Deere Run (CHN-43) were revised (increased) to account for the portion of the channel that remained following the draining of a pond that previously was assessed as an open water wetland. Lastly, the final design plans included additional temporary construction easements that increased the impacts to the streams.

The total stream impacts (direct and temporary) associated with the Southern Section have decreased from 16,445 linear feet presented in the 2003 FEIS/ROD to 12,964 linear feet for the final design as presented in Reevaluation No. 2. The impacts in Reevaluation No.3 are the same as the impacts in Reevaluation No. 2.

3.1.4 Agricultural Resources

No significant changes have occurred related to the agricultural operations or project impacts as documented in the FEIS/ROD and FEIS/ROD Reevaluations No. 1 and 2. While a slight increase is noted in productive farmland impacts between FEIS/ROD Reevaluations No. 2 and 3 (e.g., 23.9 acres) as a result of interchange design modifications in the Northern Section, the impacts have been reduced by 36.4 acres since the 2003 FEIS/ROD.

3.1.5 Vegetation and Wildlife

Land Cover (Wildlife Habitat)

No major new increases to land cover have occurred with the design refinements. The impacts in Reevaluation No. 3 are essentially the same as the impacts in Reevaluation No. 2.

Threatened and Endangered Species

The CSVT project has been designed to avoid and minimize impacts to threatened and endangered (T&E) species. Threatened and/or endangered species clearance coordination remains ongoing, and impacts to the T&E species are anticipated to be avoided and/or mitigated. There are no sanctuaries or refuges in the vicinity of the project area.

The following potential conflicts were identified by each agency at various points during the project's development and the specific agency coordination is described below:

- PFBC identified a potential concern regarding the Eastern Spadefoot Toad (PA Threatened) and Mussel species of concern;
- USFWS identified potential concerns regarding the Indiana Bat (Federal Endangered) (*Myotis sodalis*) and the Northern Long-eared Bat (Federal Threatened) (*Myotis septentrionalis*);
- PGC identified potential concerns regarding the Bald Eagle and Northern Long-eared Bat; and
- DCNR identified concerns regarding several botanical species.

PFBC Coordination: No changes have occurred since the Reevaluation No. 2. The most recent response from PFBC (May 19, 2016) stated that “there have been no changes in the project or on-site biological information; therefore, the Commission’s comments regarding potential impacts to rare, candidate, threatened, or endangered species under our jurisdiction, as detailed in our letter of November 24, 2014 for SIR# 40845, remain unchanged.”

USFWS Coordination: The Biological Opinion (BO) issued by the USFWS, dated June 11, 2015, concludes that the proposed CSVT project may affect and is not likely to adversely affect Indiana bats and may affect and is likely to adversely affect Northern Long-eared bats, but is not likely to jeopardize the continued existence of the species.

In January 2016, the USFWS announced the final 4(d) rule as it applies to the protection of the Northern Long-eared bat. Based upon the new 4(d) rule, FHWA re-initiated consultation with the USFWS to determine how the new rule affects the CSVT project. This correspondence is located in Appendix A.

FHWA and PennDOT will ensure that Reasonable and Prudent Measures and Terms and Conditions are addressed as stipulated in the Biological Opinion or updated based upon anticipated 2016 consultation with the USFWS. Commitments made as a result of Section 7 formal consultation will be incorporated into the construction contracts for the project and tracked through the Environmental Commitment Mitigation Tracking Spreadsheets.

PGC Coordination: The PGC identified the potential for impacts to the Northern Long-eared Bat. Refer to discussions under USFWS Coordination related to this species.

DCNR Coordination: Review coordination with DCNR was conducted in 2001, 2003, 2007, 2009, 2010, 2012, 2013, 2014 and 2016.

The most recent response from DCNR (May 16, 2016) stated that, based on the information submitted concerning the nature of the project, the immediate location, and the botanical surveys completed between 1996 and 2011, and in 2014, the DCNR has determined that no impact is likely. No changes have occurred since the Reevaluation No. 2. Consultation will be ongoing.

Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The USFWS also identified potential concerns regarding compliance with the Migratory Bird Treaty Act (MBTA). To avoid the potential for avian mortality from habitat alteration, the USFWS recommended that all clearing of vegetation for the CSVT project occur between September 1 and March 31.

PennDOT provided an overview of actions that had been fulfilled with regard to the Migratory Bird Treaty Act during the development of the FEIS. The FEIS provided an analysis of impacts to major forest patch networks associated with the project as well as mitigation actions that are to be undertaken as compensation, including the development of the project's Center and Vargo mitigation sites.

To address potential concerns raised by USFWS and PGC, PennDOT has completed yearly bald eagle nest surveys in the vicinity of the proposed West Branch Susquehanna River bridge crossing, with the most recent survey completed in April 2016. Given that a previously identified bald eagle nest is located approximately 8,300 feet, or 1.5 miles, upstream of the CSVT bridge crossing, the proposed project is considered to be compliant with the USFWS National Bald Eagle Management Guidelines, and no impacts to the bald eagle are anticipated. Apart from continued (annual) monitoring of eagle nests in the project area that will be tracked as a mitigation commitment, no further avoidance or minimization measures are proposed by PennDOT at this time.

Migratory Fishes

The USFWS also requested (in July 2013) that PennDOT coordinate with the USFWS Susquehanna River Coordinator (SRC). PennDOT coordinated with the USFWS SRC in February 2014. The SRC requested a description of the proposed bridge construction work and plans showing the in-river construction. This information was subsequently sent to the SRC and the National Marine Fisheries Services (NMFS). The NMFS responded August 17, 2015 indicating they don't expect anadromous fish to occur in the project area due to the number of blockages downstream and indicated "no resources under the jurisdiction of NOAA Fisheries are expected to occur within the project area". This correspondence is located in Appendix A.

3.2 SOCIAL ENVIRONMENT, ECONOMIC, AND LAND USE EFFECTS

The number of proposed displacements has stayed the same since the FEIS/ROD Reevaluation No. 2. The current estimated number of displacements in the Southern Section includes 31 residential structures (down from 33 in the 2003 FEIS/ROD) and 1 commercial structure (down from 4 in the 2003 FEIS/ROD). As Final Design progresses for the Southern Section, changes to the project's right-of-way impacts are anticipated, such as to account for design refinements currently under investigation, temporary construction easements, permanent drainage easements, design of stormwater management facilities, local roadway improvements, structure refinements, and property/construction access issues. Updated right-of-way impacts will be documented in subsequent FEIS/ROD Reevaluations.

The Northern Section will not cause any commercial displacements. Since the 2003 FEIS/ROD, there has been a decrease in the anticipated residential displacements, from 25 to 24. This current impact number includes 3 previously anticipated seasonal residence displacements. Following the Design Field View there was one additional seasonal residence acquisition required to comply with FEMA regulations related to the floodplain impact of the proposed new

river bridge. All residential properties within the Northern Section have been acquired by PennDOT.

Census Data and Environmental Justice Populations

Since the FEIS/ROD and subsequent FEIS/ROD Reevaluation No. 1, the 2010 census data were released. As part of the preparation of the FEIS/ROD Reevaluation No. 2, this information was reviewed for Northumberland, Union, and Snyder Counties and compared with the 2000 census data. The findings are documented in the Reevaluation No. 2, and have not changed as part of Reevaluation No. 3.

3.2.1 Population and Housing

There is no change in the number of displacements required by the project.

3.2.2 Major Utility Involvement

There is no change in the number of major utility relocations required by the project.

3.2.3 Waste and Hazardous Materials

The changes to the LOD outlined in this FEIS/ROD Reevaluation No. 3 do not affect any new or additional waste sites.

Since the Southern Section alignment will cross PPL Ash Basins 2 and 3, coordination has been ongoing among PA DEP Northcentral Region, PA DEP Dam Safety Division, PA DEP Central Office, Talon Energy, and PennDOT. These discussions are related to the design issues associated with constructing the new highway over the ash basins. Coordination meetings were held on July 1, 2014, September 12, 2014 and via conference call November 20, 2015. Additional coordination will be ongoing as the Southern Section Final Design progresses, and any changes in impacts to these sites will be addressed in future reevaluations, as appropriate.

Geotechnical investigations associated with potential Acid Bearing Rock (ABR) have progressed in the Northern Section since the FEIS/ROD and are discussed below.

There are no new issues related to ABR since the FEIS/ROD Reevaluation No. 2. A Pyritic Material Handling Plan (PMHP) has been prepared for the Northern Cuts Area. The plan addresses the requirements for identifying and testing potential ABR during construction in addition to specifications for the management and disposal of ABR. Special provisions for the construction contract are also included and it is anticipated that the ABR excavated in these cut areas will be managed on-site through treatment and encapsulation.

The PMHP also includes provisions to monitor the ground and surface water within the Northern Section. A groundwater sampling protocol will be implemented to document baseline conditions pre-construction (6 months prior) as well as during construction and 1 year post-construction. All wells within ¼ mile of the northern cuts and potential encapsulation locations will be incorporated into the groundwater monitoring plan. In addition, surface water quality sampling will occur during the same time periods and durations, at locations approved by PA DEP. The pre-construction monitoring was started in spring of 2016.

Potential ABR associated with the new river bridge has been handled with disposal at an approved landfill via special provision in the construction contract.

3.2.4 Noise

A full reevaluation of noise impacts is being completed for both the Northern and Southern Sections as part of the Final Design phase of the project. This Final Design traffic noise study will completely reevaluate the traffic noise impacts and mitigation according to PennDOT Publication 24, Project Level Highway Traffic Noise Handbook, which is in accordance with FHWA Federal-Aid Policy Guide Title 23 CFR 772. The final design assessment for both sections will take into account the current design and the most recent policy, methodology and latest Traffic Noise Model version. The Final Design Noise Analysis for the Northern Section is in progress. Draft results indicate noise mitigation is likely in one location where the Northern and Southern Sections meet near County Line Road. This area will likely be further explored in the noise assessment to be conducted for the Southern Section.

3.2.5 Indirect and Cumulative Impacts

There is no change in the potential indirect or cumulative impacts. During the development of the FEIS/ROD Reevaluation No. 2, concerns related to traffic growth east of the CSVT highway along Ridge Road in Point Township were raised by local residents and Point Township officials. Additional analysis was performed to determine the estimated future traffic volume on Ridge Road caused by the construction of the proposed PA Route 147 Interchange at Ridge Road as well as the need for additional roadway improvements to safely accommodate the projected volume. The additional traffic analysis and public outreach associated with the Ridge Road traffic concerns are discussed in Section 2.4 of this Reevaluation. In summary, the estimated increase in future traffic on Ridge Road attributable to the CSVT project is not large enough to warrant the inclusion of improvements to Ridge Road (east of the proposed PA Route 147 interchange) in the overall CSVT project.

3.2.6 Public Recreational Resources

Since the completion of the FEIS/ROD Reevaluation No. 2, no new public recreational resources have been identified in the project's area of potential effect.

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 a 2014 addendum to the Phase I/II Archaeological Report. This report was transmitted to the federally recognized Tribes and to the PA State Historic Preservation Officer (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. PennDOT also received a response from The Delaware Nation on February 10, 2015, stating that the project does not endanger cultural or religious sites of interest to the Delaware Nation. The Nation also noted that if the project inadvertently uncovers an

archaeological site or object(s), construction and ground disturbance activities are to be halted and the appropriate consultation be undertaken.

As a result of additional Final Design adjustments in the Northern Section as outlined in this Reevaluation, a second addendum to the Phase I/II Archaeological Report has been prepared. No new archaeological sites were identified within the modified APE and this report will be transmitted to the federally recognized Tribes and the PA SHPO in June 2016.

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 NEPA reevaluations.

3.3.2 Historic Resources

Since the completion of the FEIS/ROD Reevaluation No. 2, 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. The Executed PA Second Amendment is located in Appendix B.

Upon the successful review of the second addendum to the Phase I/II Archaeological Report, no outstanding actions will remain to be completed under the PA. However, the PA is a legally binding document signed by the FHWA, PHMC and PennDOT and it dictates how the Section 106 consultation process will be undertaken.

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 are provided in Appendix C and 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 to-date 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 is documented in the FEIS/ROD Reevaluation No. 2. Since the last 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 ENDANGERED SPECIES ACT (SECTION 7 CONSULTATION)

In January 2016, the USFWS announced the final 4(d) rule as it applies to the protection of the Northern Long-eared bat. Based upon the new 4(d) rule, FHWA re-initiated consultation with the USFWS to determine how the new rule affects the CSVT project. This correspondence is located in Appendix A.

FHWA and PennDOT will ensure that Reasonable and Prudent Measures and Terms and Conditions are addressed as stipulated in the Biological Opinion or updated based upon anticipated 2016 consultation with the USFWS. Commitments made as a result of Section 7 formal consultation will be incorporated into the construction contracts for the project and tracked through the Environmental Commitment Mitigation Tracking Spreadsheets. The BO can be accessed at the following [FHWA Link](#).

5.3 RIVER MITIGATION

There has been no change to the mitigation associated with 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.

6.0 CONCLUSION

Based on the information presented in this FEIS/ROD Reevaluation No. 3, it has been determined that the current design does 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 Southern and Northern Sections of the CSVT has resulted in minor increases and decreases to overall environmental, cultural, and socioeconomic resource impacts.

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 EIS is not warranted. General public involvement activities (website, township meetings, 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).

**APPENDIX A - AGENCY CORRESPONDENCE - THREATENED AND ENDANGERED
SPECIES**



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Pennsylvania Field Office
110 Radnor Road, Suite 101
State College, Pennsylvania 16801

June 6, 2016

RECEIVED
JUN 06 2016

Sandra Basehore
Skelly and Loy
449 Eisenhower Boulevard, Suite 300
Harrisburg, PA 17111-2302

BY:

RE: USFWS Project #2007-1654

Dear Ms. Basehore:

Thank you for your letter of May 11, 2016, which requests updated information on fish and wildlife resources within the area affected by the proposed Central Susquehanna Valley Transportation Project (CSV, S.R. 0015, Section 88) located in Snyder, Union, and Northumberland Counties, Pennsylvania. Pennsylvania Department of Transportation (PennDOT) proposes to construct the CSV project, including SR 15, Section 088, from Selinsgrove to Chillisquaque. The project includes the construction of a new 10-mile (northern section is about 5.26 miles), four-lane, roadway; roadway rehabilitation; roadway realignments; a new large stream crossing over the West Branch Susquehanna River, three additional smaller stream crossings over ridge and wooded runs, and Chillisquaque River; and, four new interchanges.

The following comments are provided pursuant to the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to ensure the protection of endangered and threatened species and the Migratory Bird Treaty Act (MBTA, 16 U.S.C. 703-712; Ch. 128; July 13, 1918; 40 Stat. 755, as amended) to ensure the protection of migratory bird species, and the Bald and Golden Eagle Protection Act (54 Stat. 250, as amended; 16 U.S.C. 668-668d) to ensure the protection of bald and golden eagles, and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) to ensure protection of other fish and wildlife resources. We have previously written letters on this project dated July 28, 2010, June 8, 2012, September 23, 2014, and June 11, 2015 (Biological Opinion).

Federally Listed and Proposed Species

The proposed project is located within the range of the federally threatened, northern long-eared bat (*Myotis septentrionalis*). On February 16, 2016, the final rule that tailors protections for the northern long-eared bat under the Endangered Species Act became effective (81 FR 1900; see: <http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/FRnlebFinal4dRule14Jan2016.pdf>).

The Service has provided a biological opinion on this project with respect to the northern long eared bat. However, we understand that the Federal Highway Administration will likely request to reinstate formal consultation with the Service, in light of the new 4(d) Rule. We await further communication in the near future.

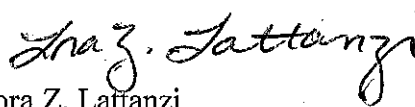
Other resources

Based on the information provided, it appears that there have no changes in the project scope. Therefore, the Service's comments with regard to eagles, migratory birds, and migratory fish, as detailed in our letter of September 23, 2014, remain unchanged.

To avoid potential delays in reviewing your project, please use the above-referenced USFWS project tracking number in any future correspondence regarding this project.

If you have any questions regarding these comments, please contact Jennifer Kagel of my staff at 814-234-4090.

Sincerely,



Lora Z. Lattanzi
Field Office Supervisor



Pennsylvania Fish & Boat Commission

Division of Environmental Services
Watershed Analysis Section
450 Robinson Lane
Bellefonte, PA 16823

May 19, 2016

IN REPLY REFER TO
SIR# 46075

SKELLY AND LOY, INC.
Sandra Basehore
449 Eisenhower Boulevard
Suite 300
Harrisburg, Pennsylvania 17111

RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 603833
S.R. 0015, Section 088
CSVT Project
NORTHUMBERLAND County: Point Township, West Chillisquaque Township - SNYDER
County: Monroe Township, Shamokin Dam Borough, Union Township - UNION County:

Dear Sandra Basehore:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

According to this submission and our records there have been no changes in the project or on-site biological information; therefore, the Commission’s comments regarding potential impacts to rare, candidate, threatened, or endangered species under our jurisdiction, as detailed in our letter of November 24, 2014 for SIR# 40845, remain unchanged.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or

Our Mission:

www.fish.state.pa.us

To protect, conserve and enhance the Commonwealth’s aquatic resources and provide fishing and boating opportunities.

proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

If you have any questions regarding this review, please contact Bill Savage at 814-359-5145 and refer to the SIR # 46075. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in dark ink that reads "Bill Savage". The signature is written in a cursive, flowing style.

Bill Savage, Fisheries Biologist
Watershed Analysis Section

WS/sh

1. PROJECT INFORMATION

Project Name: **CSVT Project**

Date of Review: **5/16/2016 09:39:02 AM**

Project Category: **Transportation, Roads, New construction/ New alignment**

Project Area: **2,354.18 acres**

County(s): **Northumberland; Snyder; Union**

Township/Municipality(s): **MONROE; POINT; SHAMOKIN DAM; UNION; WEST CHILLISQUAQUE**

ZIP Code: **17847; 17850; 17857; 17870; 17889**

Quadrangle Name(s): **NORTHUMBERLAND; SUNBURY**

Watersheds HUC 8: **Lower Susquehanna-Penns; Lower West Branch Susquehanna**

Watersheds HUC 12: **Chillisquaque Creek-West Branch Susquehanna River; Hallowing Run-Susquehanna River; Lower Penns Creek-Susquehanna River; West Branch Susquehanna River-Susquehanna River**

Decimal Degrees: **40.853267, -76.838910**

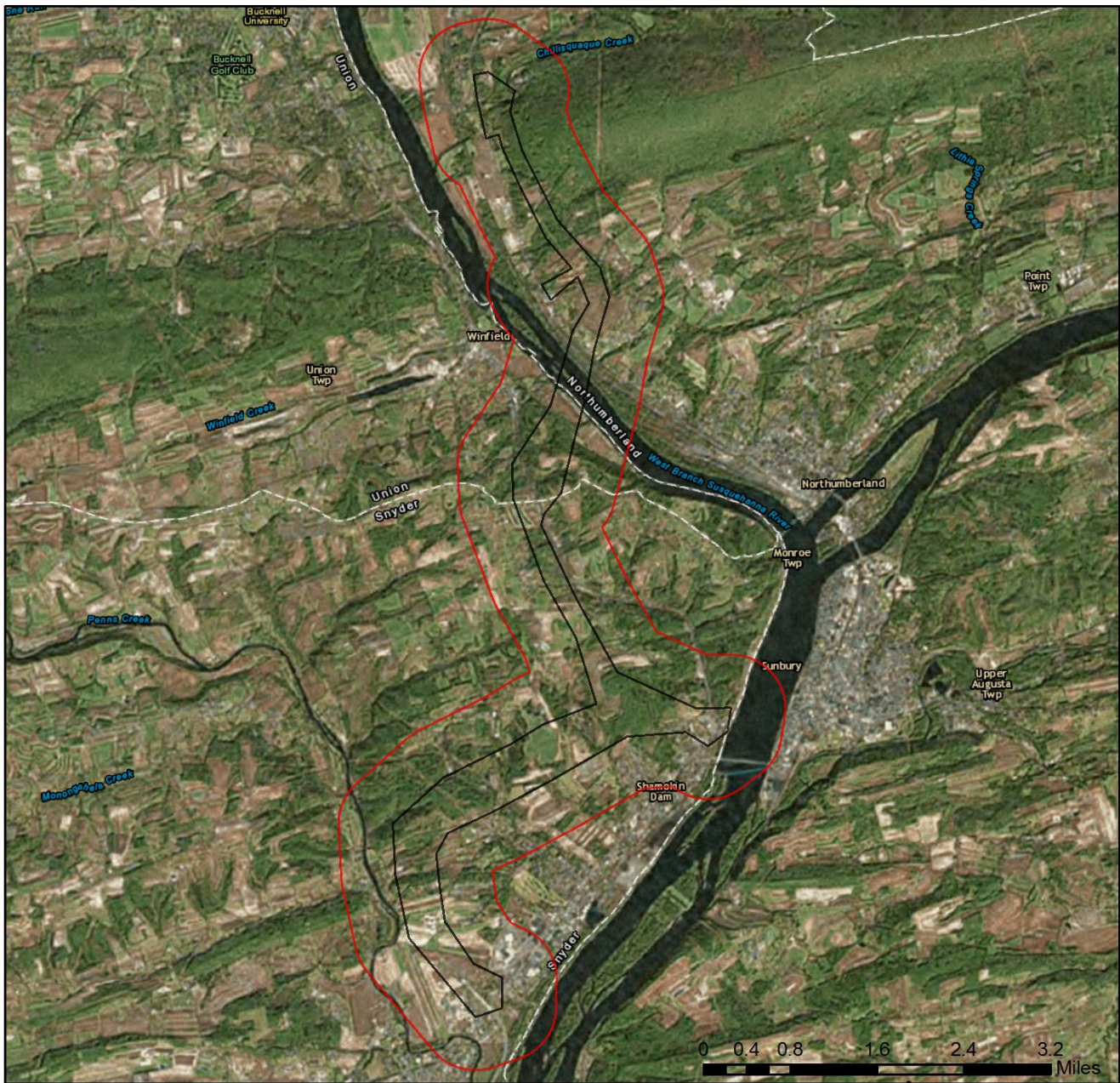
Degrees Minutes Seconds: **40° 51' 11.7597" N, 76° 50' 20.749" W**

2. SEARCH RESULTS

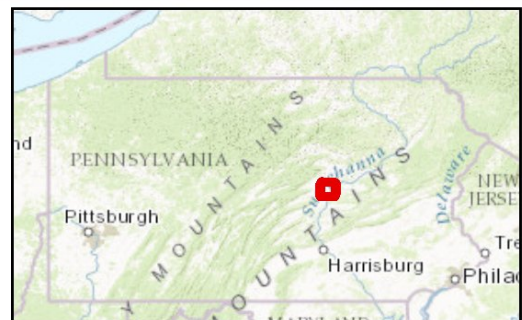
Agency	Results	Response
PA Game Commission	Conservation Measure	No Further Review Required, See Agency Comments
PA Department of Conservation and Natural Resources	Conservation Measure	No Further Review Required, See Agency Comments
PA Fish and Boat Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
U.S. Fish and Wildlife Service	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

CSVT Project

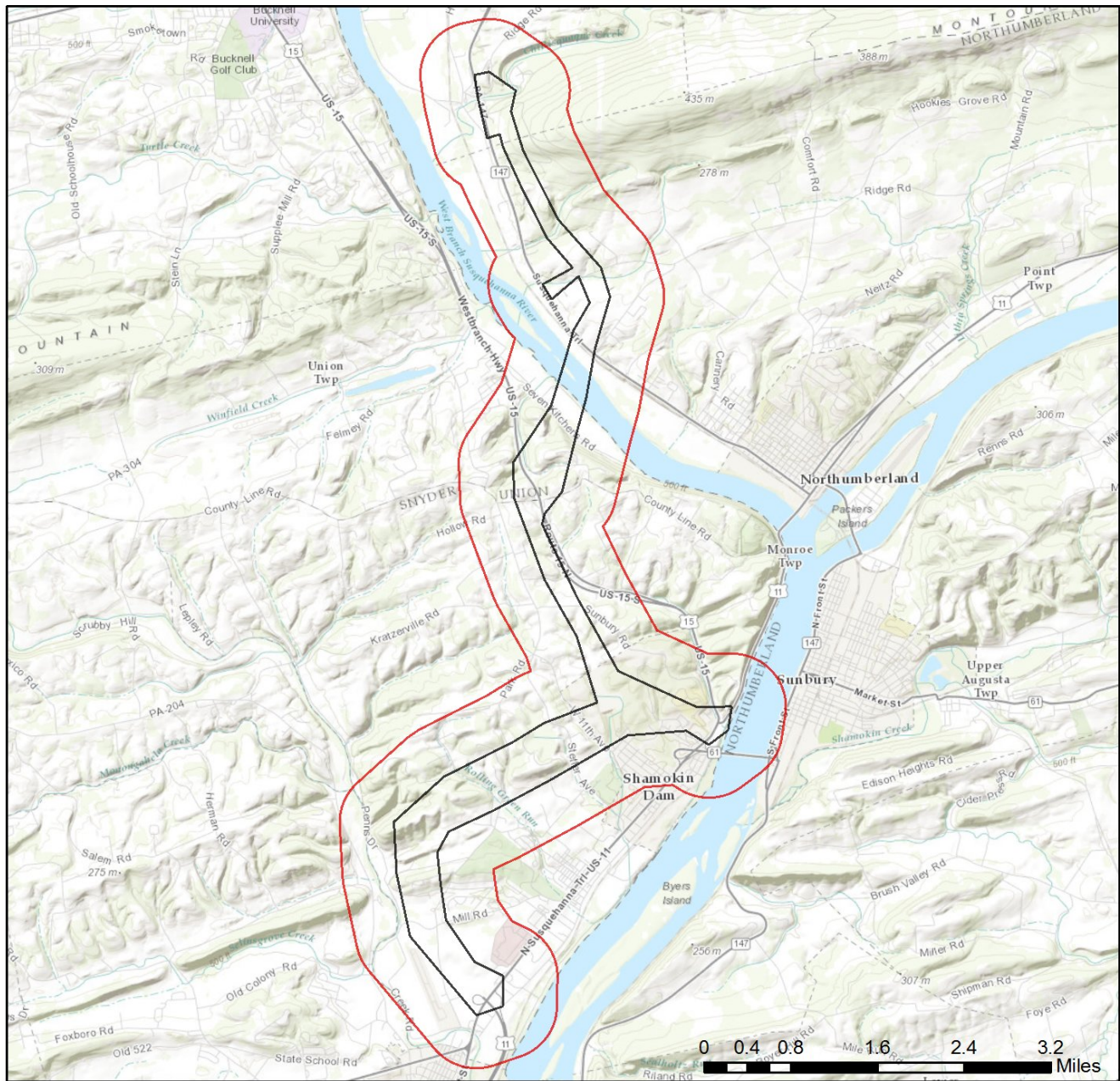


- Project Boundary
- Buffered Project Boundary



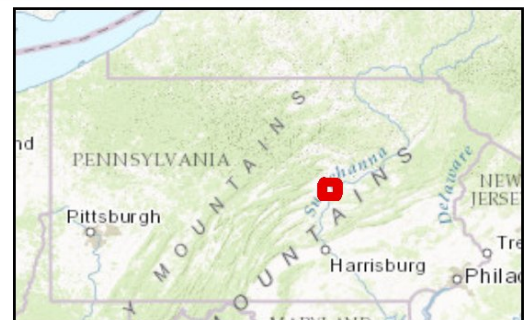
Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA,

CSVT Project



- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



RESPONSE TO QUESTION(S) ASKED

Q1: Will the project require permanent alteration or removal of natural vegetation, soils, water (streams, ponds, vernal pools, etc.)?

Your answer is: Yes

Q2: The proposed project is in the range of federally-listed bats. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this.

Your answer is: The project will affect more than 200 acres of forests, woodlots and trees.

Q3: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

Your answer is: Yes

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

Conservation Measure: Potential impacts to state and federally listed species which are under the jurisdiction of both the Pennsylvania Game Commission (PGC) and the U.S. Fish and Wildlife Service may occur as a result of this project. As a result, the PGC defers comments on potential impacts to federally listed species to the U.S. Fish and Wildlife Service. No further coordination with the Pennsylvania Game Commission is required at this time.

PA Department of Conservation and Natural Resources

RESPONSE:

Conservation Measure: Minimize project footprint to limit adverse impacts to the plant community of concern. Use stringent erosion and sedimentation controls before, during, and after project implementation to ensure that sediment and contaminants do not enter any waterway(s) (rivers, creeks, streams, tributaries) or waterbodies (lakes, ponds). To the extent possible provide a natural vegetated buffer between the project activities and any aquatic or wetland plant community of concern, if present. Do not alter stream flow, lake or pond, levels, or extract groundwater near wetland plant communities. Avoid the introduction of invasive species in order to protect the integrity of nearby plant community of concern. Voluntary cleaning of equipment/vehicles, using clean fill and mulch, and avoiding planting invasive species (<http://www.dcnr.state.pa.us/forestry/plants/invasiveplants/index.htm>) will help to conserve sensitive plant habitats.

Conservation Measure: One or more geologic features of special concern is known on or near your site. There are voluntary options to augment, restore or reduce the impact to these resources. We encourage you to contact the PA Bureau of Topographic and Geologic Survey (jshaulis@pa.gov or 717-702-2037) for more information on the feature and specific recommendations.

DCNR Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below. After desktop review, if a botanical survey is required by DCNR, we recommend the DCNR Botanical Survey Protocols, available here: http://www.gis.dcnr.state.pa.us/hgis-er/PNDI_DCNR.aspx.)

Scientific Name	Common Name	Current Status	Proposed Status	Survey Window
Calcareous opening/cliff		Special Concern Resource*	Special Concern Resource*	
Sand dune	Sand Dune	Special Concern Resource*	Special Concern Resource*	

PA Fish and Boat Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Alasmidonta marginata	Elktoe	Special Concern Species*
Lasmigona subviridis	Green Floater	Special Concern Species*
Sensitive Species**		Threatened
Sensitive Species**		Special Concern Species*

U.S. Fish and Wildlife Service

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email* the following information to the agency(s). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies. Alternatively, applicants may email or mail their project materials (see AGENCY CONTACT INFORMATION).

***Note:** U.S.Fish and Wildlife Service requires applicants to mail project materials to the USFWS PA field office (see AGENCY CONTACT INFORMATION). USFWS will not accept project materials submitted electronically (by upload or email).

Check-list of Minimum Materials to be submitted:

___ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

___ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

___ **SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

___ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

___ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov
Fax:(717) 772-0271

PA Fish and Boat Commission

Division of Environmental Services
450 Robinson Lane, Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
NO Faxes Please

PA Game Commission

Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: _____
Company/Business Name: _____
Address: _____
City, State, Zip: _____
Phone:(_____) _____ Fax:(_____) _____
Email: _____

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

applicant/project proponent signature

date



U. S. DEPARTMENT
OF TRANSPORTATION

Pennsylvania Division

228 Walnut Street, Room 508
Harrisburg, PA 17101-1720

FEB 10 2016

Federal Highway
Administration

In reply refer to:
HPD-PA

Central Susquehanna Valley Transportation (CSVT)
Project
S.R. 15, Section 88A
Re-Initiation of Formal Consultation
Under the Final 4(d) Rule

USFWS Project #2007-1654

Lora Zimmerman
Field Service Supervisor
U.S. Fish and Wildlife Service
110 Radnor Rd, Suite 101
State College, PA 16801

Dear Ms. Zimmerman:

The Federal Highway Administration Pennsylvania Division (FHWA) acknowledges the publication of the Final 4(d) Rule for the threatened Northern Long Eared Bat (*Myotis septentrionalis*). The Final 4(d) Rule, effective on February 16, 2016, identifies prohibitions under the Endangered Species Act (ESA) that focus on protecting the bat's sensitive life stages in areas affected by white-nose syndrome (*USFWS Northern Long-Eared Bat – Final 4(d) Rule Questions and Answers*).

The FHWA, in coordination with the Pennsylvania Department of Transportation (PennDOT), is moving forward with the Central Susquehanna Valley Transportation project (CSVT), which is currently in the Final Design and Construction stages. The USFWS issued a Biological Opinion (BO) for the CSVT project on June 11, 2015, which addresses the effects of the proposed project on the Northern Long-Eared Bat and documents Reasonable and Prudent Measures and Terms and Conditions to avoid, minimize, and mitigate for those effects. The BO also includes a Reinitiation Notice that identifies those instances in which Section 7 Formal Consultation should be reinitiated, to include when "new information reveals the agency action may affect listed species or critical habitat in a manner or to an extent not considered in the opinion."

The publication of the Final 4(d) Rule represents new information not previously addressed in the BO and the FHWA is hereby requesting reinitiation of Section 7 Formal Consultation for the CSVT project. A meeting with staff from your office is currently being scheduled. However, the FHWA and PennDOT believe the following will need to be considered under this reinitiation:

- Implications of the Final 4(d) Rule on the CSVT project
- Available habitat data
- Overall 'Effect' on the species

- Avoidance, Minimization, and Mitigation

Further, the FHWA would like to coordinate with the USFWS to determine whether the consultation process introduced under the Final 4(d) Rule to address potential effects on the species would be acceptable for the CSVT project. This includes utilization of the Biological Opinion issued by the USFWS for the Final 4(d) Rule, itself.

Enclosed is a project map identifying the locations of (3) known hibernacula and their proximity to the project. None of the hibernacula are within the designated ¼ mile radius of the action area. We have no data indicating maternity roost trees are in the action area. Additional information is forthcoming pending the results of discussions between the FHWA, USFWS, and PennDOT.

Should you have any questions, please contact Deborah Suci Smith at (717) 221-3785 or Deborah.Suci.Smith@dot.gov.

Sincerely,

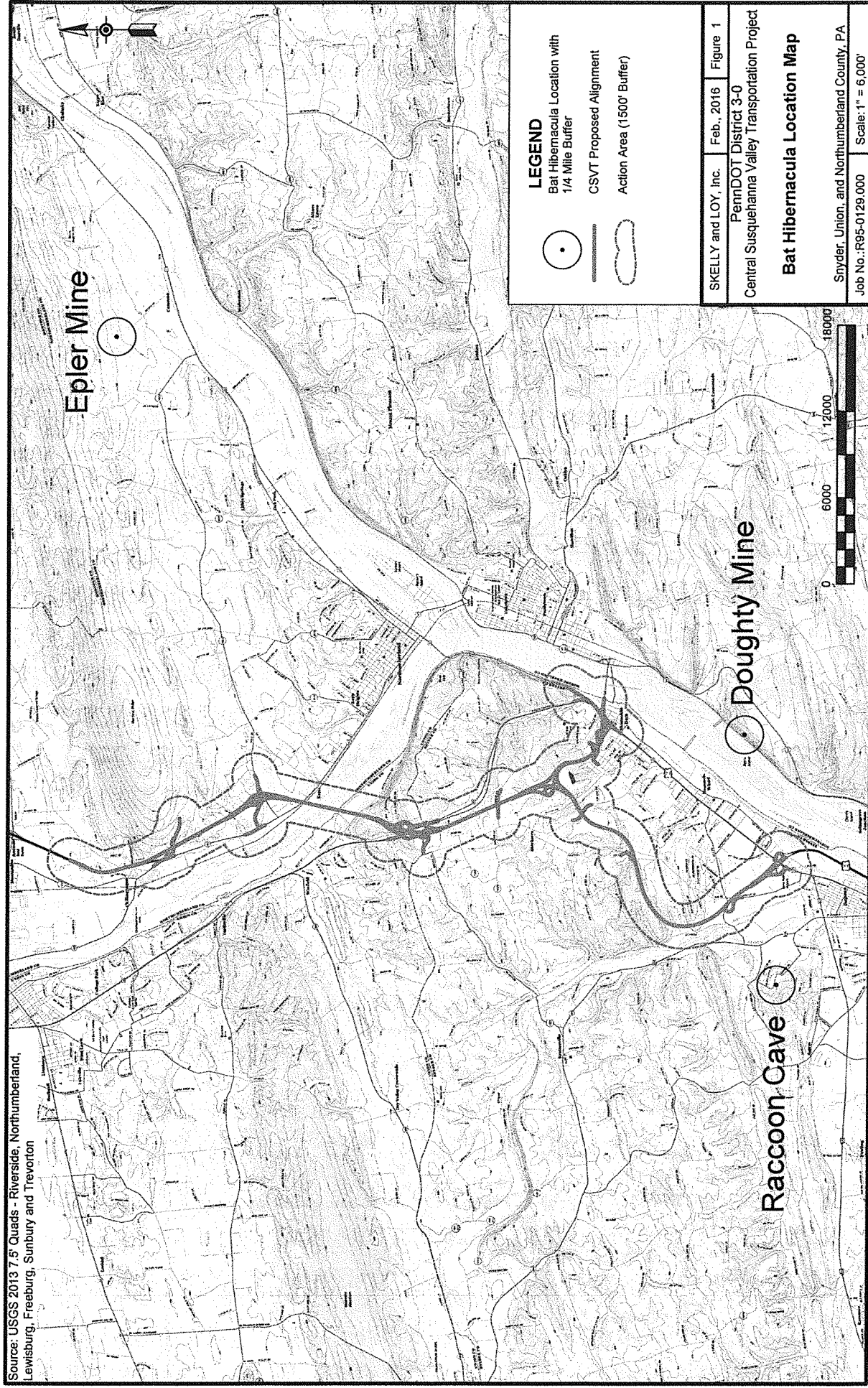


Keith Lynch
Director of Program Development

Enclosure

ec: Christine Spangler, PennDOT
Mark Lombard, PennDOT
Matt Beck, PennDOT District 3-0
Ray Kennedy, PennDOT District 3-0
Deborah Suci Smith, FHWA

Source: USGS 2013 7.5' Quads - Riverside, Northumberland, Lewisburg, Freeburg, Sunbury and Trevorton



- LEGEND**
- Bat Hibernacula Location with 1/4 Mile Buffer
 - CSVT Proposed Alignment
 - Action Area (1500' Buffer)

SKELLY and LOY, Inc. Feb., 2016 Figure 1
PennDOT District 3-0
Central Susquehanna Valley Transportation Project
Bat Hibernacula Location Map
Snyder, Union, and Northumberland County, PA
Job No.: R95-0129.000 Scale: 1" = 6,000'

Doc: C:\R95-0129\2014\BIBEGACT\BIBEGACT\BIBEGACT\BIBEGACT.dwg By: C:\admin

August 17, 2015

TO: Sandra K. Basehore
Skelly and Loy
449 Eisenhower Boulevard, Suite 300
Harrisburg, PA 17111

SUBJECT: Migratory Fish Coordination Package
PennDOT, CSVT Project

 X Michelle Magliocca
(Reviewing Biologist)

We have reviewed the information provided to us regarding the above subject project. We offer the following preliminary comments pursuant to the Endangered Species Act, the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act:

Endangered Species Act

No threatened or endangered species under the jurisdiction of NOAA Fisheries are expected to occur in the project area. Further consultation by the federal action agency is not required. However, should project plans change that would alter the basis for determination, or if new species or critical habitat is designated, consultation should be reinitiated. Please contact Daniel Marrone (daniel.marrone@noaa.gov) in our Protected Species Division.

Fish and Wildlife Coordination Act

No resources under the jurisdiction of NOAA Fisheries are expected to occur within the project area. Further coordination with NOAA Fisheries is not necessary unless project plans change and alter the basis for this determination.

Magnuson-Stevens Fishery Conservation and Management Act
Essential Fish Habitat

No Essential Fish Habitat (EFH) has been designated within the project area. As a result, further EFH consultation by the federal action agency is not necessary as part of the federal permit process. Should project plans change that would alter the basis for determination, or if new species or EFH is designated, consultation should be reinitiated. For a listing of EFH and further information, please go to our website at: <http://www.greateratlantic.fisheries.noaa.gov/habitat/index.html>. If you wish to discuss this further, please call 410-573-4559 or e-mail michelle.magliocca@noaa.gov.

**APPENDIX B -AGENCY CORRESPONDENCE - HISTORICAL AND ARCHAEOLOGICAL
RESOURCES**



U. S. DEPARTMENT
OF TRANSPORTATION

Pennsylvania Division

228 Walnut Street, Room 508
Harrisburg, PA 17101-1720

JAN 8 2015

Federal Highway
Administration

In reply refer to:
HPD-PA

Snyder, Union, Northumberland Counties,
Pennsylvania
Central Susquehanna Valley Transportation
(CSVT) Project
Executed Programmatic Agreement
2nd Amendment

Mr. Reid J. Nelson
Office of Federal Agency Programs
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, #803
Washington, DC 20004

Dear Mr. Nelson:

Please find enclosed a copy of the executed 2nd amendment to the Programmatic Agreement (PA) with copies of the 1st amendment and the original agreement for the above referenced project. The original agreement expired on October 6, 2008, and the first amendment will expire on April 14, 2016. This second amendment extends the PA until December 22, 2026. This amendment was necessary in response to funding limitations and associated construction delays. Several of the *WHEREAS* clauses have been updated, and the time-to-complete the project has been extended. To date, all stipulations have been met.

If you have any questions, please contact Deborah Suci Smith at deborah.suciu.smith@dot.gov or 717-221-3785 for assistance.

Sincerely,

Deborah Suci Smith
Environmental Specialist

Enclosure

ec: Christine Spangler, P.E., PennDOT BOD (w/enclosure)
Christine Kula, PennDOT BPD (w/enclosure)
Andrea MacDonald, PHMC/SHPO (w/enclosure)
Matthew Beck, P.E., PennDOT 3-0 (w/enclosure)

OS-600 (3-89)



DATE: December 21, 2015

SUBJECT: Snyder, Union, Northumberland Counties
Central Susquehanna Valley Transportation (CSVT) Project
Second Amendment to the Programmatic Agreement
MPMS 7588

TO: Deborah Suci Smith
Pennsylvania Division
Federal Highway Administration

FROM: Brian Thompson, PE
Director
Bureau of Project Delivery

Joe

Christine Kula

Enclosed for your signature is the Second Amendment to the Programmatic Agreement (PA) for the above referenced project. The original PA was executed in 2003, the First Amendment in 2009. The 2009 amendment extended the time to complete mitigation commitments until April 14, 2016. The project was on hold for several years due to lack of funding, and PennDOT will not be able to complete the mitigation by the expiration date.

The Second Amendment extends the time to complete all commitments until 2026, an additional ten years. Several WHEREAS clauses were also added to document progress since 2009.

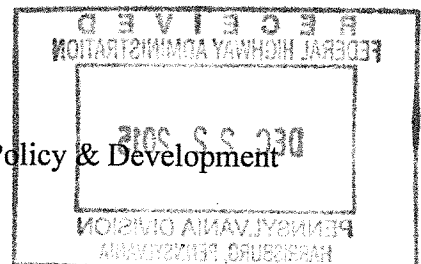
The PA Amendment has been signed by PennDOT and the SHPO. Please sign and distribute copies to the signatories and the ACHP.

If you have any questions, please contact Christine Kula at 783-9700 or ckula@pa.gov.

Enclosure

4843/CAK/ck

Cc: Scott Shaffer, District 2-0
Matt Hamel, District 3-0
Christine Kula, Bureau of Project Delivery, Environmental Policy & Development



R E C E I V E D
FEDERAL HIGHWAY ADMINISTRATION

DEC 22 2015

PENNSYLVANIA DIVISION
HARRISBURG, PENNSYLVANIA

**SECOND AMENDMENT TO THE
PROGRAMMATIC AGREEMENT BETWEEN
THE FEDERAL HIGHWAY ADMINISTRATION (FHWA)
AND
THE PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER (SHPO)

REGARDING THE S.R.0015, SECTION 088,
CENTRAL SUSQUEHANNA VALLEY TRANSPORTATION (CSV T) PROJECT
SNYDER, UNION, AND NORTHUMBERLAND COUNTIES, PENNSYLVANIA**

WHEREAS, a Programmatic Agreement (PA) was executed for the Central Susquehanna Valley Transportation (CSV T) Project on October 6, 2003, and an Amendment to the PA was executed on April 14, 2009; and

WHEREAS, the duration of the effective period of the Amendment to the Programmatic Agreement (PA) will expire on April 14, 2016; and

WHEREAS, the Central Susquehanna Valley Transportation Project (Project) has not been completed and an extended duration for the PA is required; and

WHEREAS, archaeological studies were conducted for the DAM/RC5 Alternative's Area of Potential Effect (APE) per Stipulation 1 of the original PA; and

WHEREAS, a Phase I Archaeology and Phase II Archaeological Investigation of Site 36UN16 was submitted to the PA SHPO in May 2010; and

WHEREAS, PA SHPO has concurred that through a regimen of site encapsulation, preservation in place, there will be no adverse effect to Site 36UN16; and

WHEREAS, the Phase I/II Report indicates impacts to all identified archaeological sites in the APE will be avoided and the FHWA received no concerns from the PA SHPO with these findings, and

WHEREAS, design modifications made during final design of the DAM/RC5 Alternative have resulted in modifications to the APE, and

WHEREAS, archaeological studies continue to be completed on the modified APE in order to recommend NRHP eligibility which will be made by FHWA in consultation with the SHPO and Tribe(s), and

WHEREAS, these additional studies have been transmitted via Phase I/II addendums to the federally recognized Tribes and to the PA SHPO, and will continue to be as final design continues if additional modifications to the DAM/RC5 APE are necessary, and

WHEREAS, no new historic resources listed or eligible for listing on the NRHP have been identified in the DAM/RC5 Alternative's APE during a review in 2014 for any new potentially eligible historic properties, and

WHEREAS, the FHWA and PA SHPO agreed a new impact (pier foundation) to a previously identified eligible resource (Sunbury-to-Erie Division of the Pennsylvania Railroad) will not adversely affect the property, and

WHEREAS, the FHWA's responsibility to carry out all actions under the PA, not altered through execution of the first or this amendment, shall remain unchanged.

NOW THEREFORE, for and in consideration of the foregoing premises and mutual promises set forth below, the parties agree, with the intention of being legally bound, to amend the original Agreement as follows:

1. Administrative Condition G is amended to read:

This Agreement is designed to implement final design and construction of the preferred alternative, DAM/RC5 or modifications thereto. Should this alternative not be selected or should FHWA not otherwise approve Federal funding for this alternative, this Agreement shall be null and void. Further, if the stipulations have not been implemented within seven (7) years after execution of this Amendment, the parties to this agreement shall review the Agreement to determine whether revisions are needed. Periodic status reports will document implementation. If revisions are needed, the parties to this Agreement shall consult in accordance with 36 CFR § 800 to make such revisions.

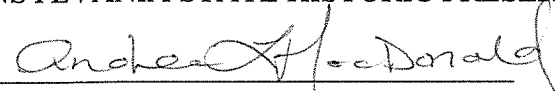
2. Administrative Condition H is amended to read:

If the terms of this Agreement have not been implemented by ten (10) years from date of signed Amendment, or if no significant action has taken place on the project in at least five (5) years, this Agreement shall be considered null and void. In such event the FHWA shall so notify the parties to this Agreement, and if it chooses to continue with the undertaking, shall reinitiate review of the CSVT Project in accordance with 36 CFR §800.

FEDERAL HIGHWAY ADMINISTRATION

By:  Date: 12-22-2015

PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER

By:  Date: 12/18/2015

CONCUR:

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

By: *Bruce E. Shupm* Date: 12/14/15

**AMENDMENT TO THE
PROGRAMMATIC AGREEMENT BETWEEN
THE FEDERAL HIGHWAY ADMINISTRATION (FHWA)
AND
THE PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER (SHPO)**

**REGARDING THE S.R.0015, SECTION 088,
CENTRAL SUSQUEHANNA VALLEY TRANSPORTATION (CSV T) PROJECT
SNYDER, UNION, AND NORTHUMBERLAND COUNTIES, PENNSYLVANIA**

WHEREAS, the duration of the effective period of the Programmatic Agreement (PA) expired on October 6, 2008; and

WHEREAS, the Central Susquehanna Valley Transportation Project (Project) has not been completed and an extended duration for the PA is required; and

WHEREAS, a Phase I Archaeological survey was conducted for the DAM/RC5 Alternative mitigation per Stipulation 1 of the original PA; and

WHEREAS, the FHWA's responsibility to carry out all actions under the PA, not altered through execution of this amendment, shall remain unchanged.

NOW THEREFORE, for and in consideration of the foregoing premises and mutual promises set forth below, the parties agree, with the intention of being legally bound, to amend the original Agreement as follows:

1. Administrative Condition G is amended to read:

This Agreement is designed to implement final design and construction of the preferred alternative, DAM/RC5 or modifications thereto. Should this alternative not be selected or should FHWA not otherwise approve Federal funding for this alternative, this Agreement shall be null and void. Further, if the stipulations have not been implemented within five (5) years after execution of this Amendment, the parties to this agreement shall review the Agreement to determine whether revisions are needed. Periodic status reports will document implementation. If revisions are needed, the parties to this Agreement shall consult in accordance with 36 CFR § 800 to make such revisions.

2. Administrative Condition H is amended to read:

If the terms of this Agreement have not been implemented by seven (7) years from date of signed Amendment, or if no significant action has taken place on the project in at least five (5) years, this Agreement shall be considered null and void. In such event the FHWA shall so notify the parties to this Agreement, and if it

chooses to continue with the undertaking, shall reinstate review of the CSVT Project in accordance with 36 CFR §800.

3. Administrative Condition J is added as follows:

If at any time during the course of the Project, should the Project be cancelled, or PennDOT's request for federal funding is withdrawn, PennDOT will so notify the FHWA. The FHWA will notify the other signatories to the Amendment and the Advisory Council on Historic Preservation that it is terminating the agreement. The FHWA, in consultation with those parties, will consider the effects of any project related activities undertaken to date and will assess its responsibilities and obligations pursuant to 36 CFR 800 and determine steps to terminate the Agreement.

FEDERAL HIGHWAY ADMINISTRATION

By: David W. Conpl Date: 4/14/09

PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER

By: Jean H. Cretler Date: 1/30/2009

CONCUR:

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

By: Ben F. Thypen Date: 1/16/09



U. S. DEPARTMENT
OF TRANSPORTATION

Federal Highway
Administration

Pennsylvania Division

OCT - 7 2003

228 Walnut Street, Room 508
Harrisburg, PA 17101-1720

In reply refer to:
HEV-PA.1

OFE+C - J. McNamee
C-OJA
JJA
OK → KIR - 2 FILE

Snyder, Union and Northumberland
Counties, Pennsylvania
Central Susquehanna Valley
Transportation Project
S.R. 0015, Section 088
Programmatic Agreement
FPN: 315-X030-002

Mr. Dean Schreiber, P.E.
Acting Chief Engineer for Highway Administration
Pennsylvania Department of Transportation
Harrisburg, Pennsylvania

Dear Mr. Schreiber:

The enclosed Programmatic Agreement has been executed in accordance with 36 CFR 800 for the above referenced project. Copies are being provided to the Pennsylvania State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP) per copy of this letter. Please ensure the undertaking of the stipulations during final design and construction.

If you have any questions, please contact Deborah Suci Smith at (717) 221-3785.

Sincerely yours,

James A. Cheatham
Division Administrator

fr

RECEIVED

OCT 09 2003

Enclosure

BUREAU OF DESIGN
Contract Management Div.

cc: S.L. McDonald, PENNDOT
Karen Theimer Brown, ACHP (w/enclosure)
Jean Cutler, PA SHPO (w/enclosure)

**PROGRAMMATIC AGREEMENT
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION
AND
THE PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER
PURSUANT TO 36 CFR § 800.14(b)(1)**

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

WHEREAS the Federal Highway Administration (FHWA), in order to relieve traffic congestion and to improve safety, proposes to construct a new highway along the existing S.R. 0015, S.R. 0011, S.R. 0011/0015, and S.R. 0147 roadways in Snyder, Union, and Northumberland Counties, Pennsylvania; and

WHEREAS, the FHWA has involved and will continue to involve the public and Native American Tribes with cultural affiliations to the project area, as stipulated under the National Environmental Policy Act (NEPA) of 1969, as amended, in a manner consistent with Pennsylvania Department of Transportation's (PENNDOT) Public Involvement Procedures and the National Historic Preservation Act (NHPA) as amended [16 U.S.C. § 470], and its implementing regulations (36 CFR § 800); and

WHEREAS the FHWA has established that the S.R. 0015, Section 088, Central Susquehanna Valley Transportation (CSVT) Project's area of potential effect (APE), as defined at 36 CFR § 800.16(d), includes all potential direct or indirect impacts to historic resources located within audible and visual distance of the proposed construction area. This is an area extending south from the existing S.R. 0147 and S.R. 0045 Interchange (the northern terminus) to the end of the existing Selinsgrove Bypass (the southern terminus). The Selinsgrove Bypass is where the existing S.R. 0011/0015 changes from a four-lane, limited access expressway to a five-lane (four lanes plus center turn lane), free access facility; and

WHEREAS the FHWA, pursuant to 36 CFR § 800.4(c), has determined that the Simon P. App Farm, an historic property located within the APE, is eligible for inclusion in the National Register of Historic Places; and

WHEREAS the FHWA has determined that the CSVT Project's preferred alternative in Section 1, the DA Modified Avoidance Alternative (DAMA), will have no adverse effect on the Simon P. App Farm, the only historic architectural resource that could potentially be affected by the preferred alternative, as detailed in the Determination of Effect Report (April 2000) prepared for the project; and

WHEREAS the FHWA has determined that there are no architectural resources listed in or eligible for inclusion in the National Register of Historic Places adversely affected by the proposed CSVT Project's preferred alternatives DAMA in Section 1 and River Crossing 5 (RC5) in Section 2; and

WHEREAS for purposes of this agreement, the term 'Tribe(s)' shall mean any Federally Recognized Tribe that may attach religious and/or cultural significance to historic properties that may be located within the project APE; and

WHEREAS Tribes that may attach religious and/or cultural significance to historic properties that may be located within the project APE have been invited to consult on this undertaking; and

WHEREAS the FHWA has consulted with the Pennsylvania State Historic Preservation Officer (SHPO) to develop and test a predictive model for archaeological resources (August 1999); and

WHEREAS the model was applied to a large study area, through which a range of reasonable alternatives meeting the needs of the Project passed; and

WHEREAS the areas identified by the predictive model as having a high sensitivity for archaeological resources were avoided, where possible, during the development of the alternatives; and

WHEREAS the FHWA has requested the comments of the Tribes on the proposed predictive model for archaeological resources;

WHEREAS the FHWA has determined that the Project may have an effect on NRHP-eligible archaeological sites; and

WHEREAS archaeological studies have not been completed for the CSVT Project and the FHWA has elected to comply with the NHPA through execution and implementation of a Programmatic Agreement (Agreement) pursuant to 36 CFR § 800.14; and

WHEREAS the FHWA has invited the Tribes to participate in the consultation and to concur in this Programmatic Agreement (Agreement); and

NOW, THEREFORE, the FHWA, the Tribes and the SHPO agree that, upon FHWA's decision to proceed with the CSVT Project, the project shall be administered in accordance with the following stipulations so as to take into consideration potential effects to archaeological sites eligible for inclusion in the National Register of Historic Places.

Stipulations

The FHWA shall ensure that the following stipulations are carried out:

1. PENNDOT shall conduct an archaeological identification survey of the Selected Alternative of the CSVT project in a manner consistent with the *Secretary of the Interior's Standards and Guidelines for Identification* (46 FR 44720-23), also taking into account the National Park Service's publication *The Archaeological Survey: Methods and Uses* (1978: GPO stock #024-016-00091) and the Bureau for Historic Preservation (BHP)/Pennsylvania Historical and Museum Commission's (PHMC) *Cultural Resource Management in Pennsylvania: Guidelines for Archaeological*

Investigations (July 1991). The archaeological predictive model developed for the CSVT Project (*Archaeological Predictive Model Development and Testing, August 1999*) as presented and/or amended through consultation with Tribes and other consulting parties will be used as a guide in conducting field investigations and subsequent site analysis.

2. PENNDOT will evaluate archaeological resources identified within the APE in accordance with 36 CFR § 800.4(c), in order to recommend NRHP eligibility which will be made by FHWA in consultation with the SHPO and Tribe(s). If any archaeological sites are determined to be eligible for listing in the NRHP, PENNDOT will consider design alternatives that would avoid or minimize the project impacts on these resources. If eligible archaeological sites cannot be avoided the FHWA will ensure that they are treated in accordance with Stipulation 3.

3. If eligible archaeological sites cannot be avoided, PENNDOT, in consultation with the SHPO and the Tribe(s) will apply the Criteria of Adverse Effect in accordance with 36 CFR § 800.5. If it is determined that the CSVT project will have an adverse effect on archaeological resources important chiefly for the information it contains and does not warrant preservation in place, PENNDOT will develop a data recovery plan or a plan for alternative mitigation in consultation with the SHPO and Tribe(s). The views of the public will be considered in the development of the plan. Any data recovery plan will be consistent with the *Secretary of the Interior's Standards and Guidelines for Archaeological Documentation* (48 FR 44734-37) and the BHP/PHMC's *Cultural Resource Management in Pennsylvania: Guidelines for Archaeological Investigations* (July 1991). If archaeological resources are important chiefly for values other than for the information contained and do warrant preservation in place, then PENNDOT shall comply with 36 CFR § 800.6.

4. If eligible archaeological sites cannot be avoided, PENNDOT, in consultation with the SHPO and the Tribe(s) may develop additional creative mitigation options. The views of the public will be considered in the development of any creative mitigation options.

5. If archaeological data recovery or other alternative mitigation is necessary, PENNDOT will ensure that the mitigation plan includes dissemination of the results to the public and the Tribe(s). The materials for public distribution will be determined individually for each archaeological site and may include pamphlets, brochures, artifact displays, lectures, or exhibits. Drafts of all public education materials will be submitted to FHWA, the Tribe(s) and SHPO for comment during development and prior to distribution.

6. PENNDOT will ensure that any human remains and grave-associated artifacts encountered during the archaeological investigations are brought to the immediate attention of the FHWA, the ACHP, the Tribe(s) and the SHPO. Notification will be within 24 hours of the discovery. A field view of the site will take place within 72 hours of notification. No activities that might disturb or damage the remains will be conducted until the FHWA, in consultation with the appropriate parties, has determined whether excavation is necessary and/or desirable. All procedures will take into account the guidance outlined in the National Park Service publication *National Register Bulletin 41: Guidelines for Evaluating and Registering Cemeteries and Burial Places*, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (PL 101-601) and the Pennsylvania Historical and Museum Commission's *Policy for the Treatment of Burials and Human Remains*

(1993).

7. PENNDOT shall insure that all archaeological reports and public information materials resulting from actions pursuant to this Agreement will be provided to the FHWA, the Tribe(s) and the SHPO for review and comment. The review period will be 30 days. Reports may include a Phase I Identification Report, an Identification and Evaluation (Phase I & II) Report, a Mitigation Plan, a Data Recovery Report, and Management Summaries, as appropriate. Draft Data Recovery reports shall be submitted for review within two years of completion of archaeological fieldwork. All final Data Recovery reports will be completed and provided to FHWA, the Tribe(s) and SHPO within three years of the completion of the archaeological fieldwork.

8. PENNDOT shall ensure that all records and materials resulting from the archaeological investigations that are not privately-owned shall be curated in accordance with 36 CFR 79 and the curation guidelines developed by the Pennsylvania State Museum. Curation will be arranged at an appropriate facility, after consultation with the FHWA, the Tribe(s), the SHPO and the public. For artifacts recovered from privately owned land, PENNDOT shall ask the property owner to donate the artifacts to the Pennsylvania State Museum.

Administrative Conditions

A. Personnel Qualifications

PENNDOT shall ensure that all archaeological investigations carried out pursuant to this Agreement will be by or under the direct supervision of a person or persons meeting at a minimum the *Secretary of the Interior's Professional Qualification Standards for Archaeologists* (48 FR 44738-9).

B. Archaeological Sites

If an archaeological site is encountered during the project, an effort will be made to determine the cultural affiliation of any artifacts recovered from the site. Should cultural affiliation be linked with any federally recognized Native American tribes that might attach religious and cultural significance to the property, those tribes will be contacted.

C. Late Discovery

If any unanticipated discoveries of historic properties or archaeological sites are encountered during the implementation of this undertaking, work shall be suspended in the area of the discovery and the FHWA shall comply with 36 CFR, 800.13 by consulting with the Tribe(s) and the SHPO. The FHWA will notify the SHPO and the Tribe(s) within twenty-four (24) hours of the discovery. The FHWA will invite the SHPO and the Tribe(s) to meet at the location within seventy-two (72) hours of the initial notification to determine appropriate treatment of the discovery prior to the resumption of construction activities in the area of the discovery.

D. Amendments

Any party to this Agreement may propose to the FHWA that the Agreement be amended, whereupon the FHWA shall consult with other parties to this Agreement to consider such an amendment in accordance with 36 CFR § 800.6(c)(7).

E. Resolving Objections by the Signatory Parties

1. Should any party to this Agreement object in writing to the FHWA regarding any action carried out or proposed with respect to the Project or implementation of this Agreement, the FHWA shall consult with the objecting party to resolve the objection. If after initiating such consultation, the FHWA determines that the adequately justified objection cannot be resolved through consultation, the FHWA shall forward all documentation relevant to the objection to the ACHP including the FHWA's proposed response to the objection. Within thirty (30) days after receipt of all pertinent documentation, the ACHP shall exercise one of the following options:

- Advise the FHWA that the ACHP concurs in the FHWA's proposed response to the objection, whereupon the FHWA shall respond to the objection accordingly; or
- Provide the FHWA with recommendations, which the FHWA shall take into account in reaching a final decision regarding its response to the objection; or
- Notify the FHWA that the objection will be referred for comment pursuant to 36 CFR 800.7, and proceed to refer the objection and comment. The FHWA in accordance with 36 CFR 800.7(c) (4) and Part 110(1) of the NHPA shall take the resulting comment into account.

2. Should the ACHP not exercise one of the above options within thirty (30) days after receipt of all pertinent documentation, the FHWA may assume the ACHP's concurrence in its proposed response to the objection.

The FHWA shall take into account any ACHP recommendation or comment provided in accordance with this stipulation with reference only to the subject of the objection; the FHWA's responsibility to carry out all actions under this Agreement that are not the subjects of the objection shall remain unchanged.

F. Resolution of Objections by the Public

Should an objection pertaining to historic preservation or implementation of the terms of this Agreement be raised by a member of the public in a timely and substantive manner, the FHWA shall notify the parties to this Agreement and take the objection into account, consulting with the objector and, should the objector so request, with any of the parties to this Agreement to resolve the objection.

G. Review of Implementation

This Agreement is designed to implement final design and construction of the preferred alternative, DAMA/RC5 or modifications thereto. Should this alternative not be selected or should FHWA not otherwise approve Federal funding for this alternative, this Agreement shall be null and void. Further, if the stipulations have not been implemented within three (3) years after execution of this PA, the parties to this agreement shall review the Agreement to determine whether revisions are needed. Periodic status reports will document implementation. If revisions are needed; the parties to this Agreement shall consult in accordance with 36 CFR, 800 to make such revisions.

H. Sunsetting/Duration

If the terms of this Agreement have not been implemented by five (5) years from date of signed Agreement, or if no significant action has taken place on the project in at least three (3) years, this Agreement shall be considered null and void. In such event the FHWA shall so notify the parties to this Agreement, and if it chooses to continue with the undertaking, shall reinitiate review of the CSVT Project in accordance with 36 CFR § 800.

I. Termination

1. If the FHWA determines that it cannot implement the terms of this Agreement or SHPO opinions that the Agreement is not being properly implemented, the FHWA or the SHPO may propose to the other parties to this Agreement that it be terminated.
2. The party proposing to terminate this Agreement shall so notify all parties to this Agreement, explaining the reasons for termination and affording them at least thirty (30) days to consult and seek alternatives to termination. The parties shall then consult.
3. Should consultation fail, the FHWA or the SHPO may terminate the Agreement by so notifying all parties.
4. Should this Agreement be terminated, the FHWA shall either:
 - a) Consult in accordance with 36 CFR § 800.6(a)(1) to develop a new Agreement; or
 - b) Request the comments of the ACHP pursuant to 36 CFR § 800.7(a)(1). The ACHP shall have forty-five (45) days to respond with comments.
5. The FHWA and the ACHP may conclude the Section 106 process with an Agreement between them if the SHPO terminates consultation in accordance with 36 CFR § 800.7(a)(2).

Execution of this Agreement by the FHWA and the SHPO, and implementation of its terms, evidence that the FHWA has taken into account the effects of the undertaking on historic properties and fulfilled its responsibilities under Section 106 of the 1966 National Historic Preservation Act (as amended).

FEDERAL HIGHWAY ADMINISTRATION

By: David W. Cough Date: 10-6-03

PENNSYLVANIA STATE HISTORIC PRESERVATION OFFICER

By: Jean A. Cutler, DSHPO Date: 5/28/03

CONCUR:

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

By: Dean A. Schuler Date: 5/19/03

**APPENDIX C - ENVIRONMENTAL COMMITMENT MITIGATION TRACKING
SPREADSHEETS**

CSVT NORTHERN SECTION FINAL DESIGN - MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				Commitment Origin	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken		
			N1	N2	N2.5										
Population and Housing	When feasible, complete the demolition of remaining structures between October 1 and March 31. If not possible, pre-demolition surveys to assess for bats may be required.	Final Design/Construction	N1	N2	N2.5		BA/BO				District 3-0		Construction restriction added to N2 to require structure demolition to occur between October 1 and March 31		
Community Facilities and Services - Churches	Provide fair market value for acquisition of property from the Ridgeview Evangelical Free Church (Ridge Road relocation)	Final Design		N2			FEIS/ROD	Pg. 32	Ridge Rd Relocation Vicinity	-----	District 3-0		Ridge Road Relocation has been revised to avoid taking the Ridgeview Church and/or its septic system. District 3-0 ROW specialists will provide fair market value for partial acquisition.		
Community Facilities and Services - Public Parks and Recreational Facilities	PENNDOT will attempt to limit the number of bridge piers in the river	Final Design	N1				FEIS/ROD	Pg. 32	4+000	-----	STV		A single structure is proposed to carry both directions of traffic rather than two separate structures thereby minimizing the number of piers required to be placed in the river. Additionally, a structure that uses maximum conventional span lengths achievable by the current construction industry is proposed, also minimizing the number of piers in the river.		
	Continue to coordinate with the PFBC regarding the construction of a public boat ramp in Union County along the west side of the West Branch of the Susquehanna River, in the vicinity of the RC-5 crossing	Final Design	N1							3+750	-----	STV/S&L		Coordination has continued with the PFBC on the location and design of the boat ramp. The PFBC support for this site was outlined in a letter received by PennDOT on 4-10-14. A field view was conducted with PFBC, DEP and the design team on 8-11-14 to discuss design and permitting issues. Final design of the boat ramp was approved by the PFBC on . ADD DATE	
	Coordinate with Union Township regarding improvements to the access road to the boat ramp site.	Final Design	N1							Union Township	-----	District 3-0/STV		Dialogue is ongoing with Union Township on the required improvements to the local road providing access to the boat launch. This local road will also provide construction access to the bridge. A commitment has been made to reconstruct the local roadway from U.S. Route 15 to the boat launch.	
	The docking facility shall be equipped with proper lighting which meets the visibility requirements of the Pennsylvania Fish & Boat Commission.	Final Design	N1				105 Permit Condition #26 (Boat Ramp)					STV		PFBC did not require lighting at the boat launch	
	Develop Aid to Navigation (ATON) Plan to ensure boater safety	Final Design	N1	N2			Section 4(f) Evaluation					STV		ATON developed and coordinated with PFBC in 2014. Accepted by PFBC 9-19-14. Coordinated with PFBC in 2016 for Chilli bridge ATON plan. Chilli bridge ATON plan approved on	
	Coordinate with PFBC to get construction information posted on PFBC website prior to construction and sent out in joint press release with PFBC.	Final Design/Construction	N1										District 3-0		Public notice was posted on PFBC water trails guide website during design http://www.fishandboat.com/watertrails/trailindex.htm
	Coordinate the content of proposed recreational bridge and launch signs with appropriate parties.	Final Design				N3							S&L		
Notify water trail managers of West Branch Susquehanna River of construction prior to the start of construction	Final Design	N1										District 3-0		Susquehanna Greenway Partnership was notified of construction at our October 2014 with them at SEDA-COG	
Agricultural Resources	Continue to investigate minimization measures to reduce impacts to agricultural land (minimize required right-of-way width, control runoff/erosion damages)	Final Design	N1	N2	N2.5		FEIS/ROD	Pg. 37	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Median width was reduced from 90' to the minimum requirements to reduce the footprint of the highway and minimize ag impacts.		
	Evaluate replacement of disrupted water supplies necessary for continued agricultural operations	Final Design	N1	N2	N2.5				Pg. 37	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		To date, no water supplies for ag uses are known to be impacted.	
Visual Quality	Form a public advisory committee of community members and public officials to review and comment on context sensitive design features and options related to the proposed bridge over the Susquehanna River	Final Design	N1				FEIS/ROD	Pg. 37	4+000	-----	District 3-0		A public advisory committee (consisting of community members and public officials) was convened in 2005 to review and comment on context features related to the proposed river bridge. Multiple meetings were held leading to the following: <ul style="list-style-type: none"> • Single structure is proposed to carry both directions of traffic rather than be two separate structures thereby minimizing piers in the river. • For the portion of bridge over the river, the ratio of the proposed beam spans (which range from approximately 250 feet to 350 feet) to proposed pier heights (which range from approximately 130 feet to 180 feet) varies between 1:6:1 and to 2:6:1. Those ratios bracket the value of 2:1 that was identified as desirable by advisory committee. • PA HT Barrier (consisting of metal railing on top of a short concrete barrier) is proposed to be installed. This type of barrier offers an enhanced view of the river (from the bridge) and results in a more slender profile view of the bridge (from the river or ground below). These items were incorporated into the structure design. See structure plans, sheet 129.		
	Consider using a bridge design that blends with the landscape. Minimize depth of cuts along hillsides. Revegetate cuts, landscape fills, and use vegetative screening wherever possible. Consider planting cluster of trees to screen bridge piers.	Final Design	N1						Pg. 37	4+750	-----	STV			Revegetation of cuts and fills and plantings have been incorporated into the design. See E&S plan. Evergreen trees are being used for revegetation along the cut areas. Native grasses will be planted in the 50-foot buffer areas along the roadway.
	Consider visual renderings of bridge alternatives	Final Design	N1						Pg. 37	4+000	-----	STV			Visual renderings of the bridge were developed during final design and were shared with the members of the Gateway Bridge Committee
Advanced Compensation Natural Resource Mitigation Proposal	Attempt to provide a total ecosystem approach to natural resource mitigation by completing all compensatory mitigation activities at one location	Final Design	N1	N2	N2.5		FEIS/ROD	Pg. 38	Monroe Twp	-----	S&L	Done	These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD		
	Obtain potentially suitable mitigation areas primarily through amicable (voluntary) easement agreements or acquisition	Final Design	N1	N2	N2.5				Pg. 38	Monroe Twp	-----			These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD	
	Use a hierarchical approach to evaluate relevant mitigation opportunities within and adjacent to the project study area	Final Design	N1	N2	N2.5				Pg. 38	Monroe Twp	-----			These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD	
	Create approximately 7 acres of wetlands	Final Design	N1	N2	N2.5				Pg. 38	Monroe Twp	7 acres				These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD
	Restore, enhance, or reconstruct approximately 1,000 to 4,000 linear feet of stream	Final Design	N1	N2	N2.5				Pg. 38	Monroe Twp	1,000 - 4,000'				These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD

CSVT NORTHERN SECTION FINAL DESIGN - MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				Commitment Origin	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken
			N1	N2	N2.5	N3							
	Provide approximately 55 acres of old field mitigation	Final Design	N1	N2	N2.5		Pg, 38	Monroe Twp	55 acres			These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD	
	Provide approximately 150 acres of forestland mitigation	Final Design	N1	N2	N2.5		Pg, 38	Monroe Twp	150 acres			These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD (In partial fulfillment of the NEPA ROD, PennDOT constructed 82 acres of forested area at the Center Site in conjunction with the stream and wetland mitigation areas. It is anticipated that the balance of the terrestrial mitigation will be completed in conjunction with future bat mitigation resulting from the Endangered Species Act Section 7 consultation process.)	
	FHWA and PennDOT will provide an Environmental Monitor that has appropriate authority and professional experience to ensure complete compliance with relevant conservation commitments (particularly regarding areas of tree removal) and other applicable environmental rules and regulations. The Environmental Monitor will monitor and report acreage of forest impacts. An anticipated or actual exceedance of forest impacts is a trigger for re-initiation of consultation.	Final Design/Construction	N1	N2	N2.5	N3	BO Condition 3.a					Skelly and Loy is the Departments Environmental Monitor	
	During the bidding process, prospective project contractors will be notified regarding the presence of endangered species in the project area and the special provisions necessary to protect them. The successful contractor(s) will be instructed on the importance of the natural resources in the project area and the need to ensure proper implementation of the tree-cutting restrictions, erosion and sedimentation controls, and spill avoidance/remediation practices.	Final Design	N1	N2	N2.5	N3	BO Condition 1.e					Covered under special provision "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE"	
	The following conditions (language) will be included in all construction and demolition contracts awarded for project implementation: 1. Endangered species are present in the project area and there is a risk of take (Endangered Species Act section 9 violation) if the Terms and Conditions of the Service's biological opinion are not closely followed. 2. Any trees greater than or equal to 3 inches diameter at breast height (d.b.h.) will only be cut from October 1 and March 31. 3. Best Management Practices for erosion and sedimentation control will be in place before, during, and after any work is conducted. 4. The Service will be notified immediately of any failures of erosion and sedimentation control measures or spills of hazardous materials.	Final Design	N1	N2	N2.5		BO Condition 1.i					Covered under special provision "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE"	
Terrestrial Community and Wildlife Habitats	PennDOT, or their contractor, will develop a Pollution Prevention and Contingency Plan which details strict implementation of siltation and erosion measures, off-site storage of toxic materials, hazardous material handling and disposal (i.e. oils, fuels, lubricants, cement and concrete materials, asphalt materials, herbicides, pesticides, and the like), contingency plans for unintended catastrophic events, equipment refueling (i.e., 300 feet away from aquatic resources and not on causeways), and construction crew education.	Final Design/Construction	N1	N2	N2.5		BO Condition 1.f					Covered under special provision "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE" and "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
	PennDOT or their contractors will develop and implement a plan for treatment of the wastewater from the interior of the bridge pier cofferdams that contain "green concrete" materials, residue or low pH water (i.e. Susquehanna River, Chillisquaque Creek, and Hollow Run). The plan will be provided to the Service for concurrence and comment.	Final Design/Construction	N1	N2	N2.5		BO Condition 1.g					Covered under special provision "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE" and "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
	PennDOT or their contractors will develop a dust control strategy, reviewable by the Service. The plan will detail how they intend to eliminate or ameliorate the effects of changes in air quality conditions during construction, and control dust.	Construction					BO Condition 1.h					Covered under special provision "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE" and "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
	Implement all mitigation commitments for NLE Bats as presented in the Bat Conservation Plan	Final Design/Construction	N1	N2	N2.5		BO Condition 2			TBD		The mitigation measures outlined in the Biological Opinion and discussed in detail in the Bat Conservation Plan will be incorporated into the Environmental Commitment Mitigation Tracking Spreadsheet once they are negotiated with the USFWS and the PGC.	
	Consider minor alignment shifts to minimize terrestrial habitat impacts		N1	N2	N2.5					STV	DFV	ROW impact area has been minimized as much as possible in these areas.	

CSVT NORTHERN SECTION FINAL DESIGN - MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION			Commitment Origin	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken
	Consider final design modifications to stormwater management facilities	Final Design	N1	N2	N2.5	FEIS/ROD	Pg. 39	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		The footprints of the Stormwater Management facilities have been minimized as much as possible in these areas. In addition, some facilities have been relocated to avoid impacts in these areas. Additionally, the design of a proposed stormwater management basin near the Chillisquaque Creek was modified to avoid direct and indirect impacts to Eastern Spadefoot Toad
	Verify locally important wildlife habitats have been avoided or impacts minimized	Final Design	N1	N2	N2.5		Pg. 39	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	S&L		Important habitat has been analyzed during Final Design. Impacts to locally important wildlife habitats have been avoided and/or minimized during final design as much as possible. However, some land cover impacts have increased including impacts to forested compartments. The increases in impacts are generally related to modifications made to the LOD as a result of refined engineering, including temporary construction access roads, local road and permanent access road improvements, drainage easements and stormwater management design. Following coordination with the various resource agencies, it has been determined that these impacts can be mitigated through the implementation of the mitigation requirements required for the Northern long-eared bat.
	Design vegetative clear zones along the edge of roadway and add safety measures (such as deer crossing signs) to avoid motorist/animal collisions	Final Design	N1	N2	N2.5		Pg. 39	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		A 50' vegetative clear zone has been added along the edge of the roadway. Add deer crossing signs in PS&E 3?
	Limit the use of concrete median barriers where safety is not adversely affected	Final Design	N1	N2	N2.5		Pg. 39	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Use of concrete median barrier and median guide rail limited where safety is not adversely affected.
	Notify PAFBC the summer before Susquehanna Bridge construction starts to perform mussel survey/relocation.	Final Design	N1				na	Susquehanna Bridge		District 3-0		On September 11, 2014 PennDOT mailed a letter to PAFBC notifying them construction was over nine months away.
	Prior to construction, survey the project area each spring for the presence of the Bald Eagle (federal threatened and state endangered species)	Final Design	N1				Pg. 39	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	S&L		Ongoing - Nest surveys conducted annually on the project area.
	Continue annual coordination to update threatened and endangered species information in the project area until the start of construction	Final Design	N1	N2	N2.5		Pg. 39	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	S&L		Effective July 2, 2012, PNDI receipts and clearance letters issued by the jurisdictional agencies will be valid for two years. Our current letters from the jurisdictional agencies are dated 2014 (PGC letter =7/7/14, PA DCNR letter=9/8/14, PFBC letter=11/24/14, USFWS letter=9/19/14), therefore we will performing agency outreach again in 2016. Additionally, a Biological Opinion for the Indiana Bat and the NLE bat was issued June 11, 2015
	Include an 18" silt barrier fence or 24" compost filter sock in the design along the western side of PA Route 147 near the Chillisquaque Creek to prevent Eastern Spadefoot Toads (EST) from entering construction areas. The barrier should extend in a continuous line from the southern bank of the Route 147 Bridge over the Chillisquaque south to Hidden Paradise Road habitat and the intersection of Routes 147 and 405.	Final Design		N2						STV		EST Coordination submitted to PFBC November 2014. Filter sock shown on E&S plans and included in special provision "r030433 CONSTRUCTION RESTRICTIONS "
Wetlands	Coordinate with natural resource agencies to design a bridge crossing over Wooded Run that avoids direct impacts to the stream and its wetlands.	Final Design		N2		FEIS/ROD	Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV/S&L		The design of the box culvert over Wooded Run was coordinated with USACE during a July 2014 Meeting. Direct impacts to the stream and wetlands are unavoidable. A mitigation plan was developed to offset the impacts.
	Consider minor alignment shifts to avoid impacts, where practical	Final Design					Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.		STV		Alignment shifts were considered to avoid impacts.
	Minimize the width of the project footprint to reduce encroachments	Final Design					Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Median width was reduced from 90' to the minimum requirements to reduce the footprint of the highway
	Implement a Stormwater Management Plan	Final Design					Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		A Stormwater Management Plan has been developed and will be approved and implemented for the project.
	Implement an approved Erosion and Sedimentation Pollution Control Plan	Final Design					Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		An E&SPC plan has been developed and was approved on May 7, 2015. The E&SPC Plan revision was approved on
	Develop special drainage methods to minimize indirect impacts (case-by-case basis)	Final Design					Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		PCSM plan was developed and will be approved and implemented. Indirect impacts to wetlands and waterways were minimized wherever possible.
	PennDOT will add a special condition to require the contractor to have a qualified professional investigate any proposed borrow/waste sites to determine whether wetlands exist on the site and to be responsible for obtaining permits from the Corps and PADEP.	Final Design	N1	N2	N2.5		FEIS / ROD 404 Permit Condition 20			STV		A special condition was developed in the contract to verify that the contractor has a qualified professional investigate the sites prior to submitting the E&SPC plans to the CCDs since borrow areas have not been identified on the contract ESPC plans. (Included standard Special Provision "a01150 REQUIRED REPORTING FOR ALL WASTE AND BORROW SITES REQUIRING AN NPDES PERMIT" in bid package)
	Mitigation for the 0.157 acre permanent wetland impact shall be deducted from the John Vargo Wetland Mitigation and Bank Site. All future balance sheets and monitoring reports must reflect this deduction for permit number E55-230.	Final Design				Snyder Co 105 Permit Condition 23			District 3-0/S&L			
	Mitigation for the temporary and permanent wetland impacts (0.439 PEM, 0.567 PSS, 0.196 PFO, 0.011 POW) shall be accounted for at the John Vargo Wetland Mitigation and Bank Site. All future balance sheets and monitoring reports must reflect this amount for permit number E60-223..	Final Design				Union Co 105 Permit Condition 22			District 3-0/S&L			
	Mitigation for the temporary and permanent wetland impacts (0.905 PEM, 0.012 PSS, 0.332 PFO, 0.063 POW) shall accounted for at the John Vargo Wetland Mitigation and Bank Site. All future balance sheets and monitoring reports must reflect this deduction for permit number E49-333.	Final Design				Northumberland Co 105 Permit Condition 28			District 3-0/S&L			

CSVT NORTHERN SECTION FINAL DESIGN - MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION			Commitment Origin	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken
Surface Water/Aquatic Resources	Consider the use of bridges in place of culverts where practical and feasible	Final Design				FEIS/ROD	Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Bridges were considered
	Minimize the number of bridge piers in the waterway	Final Design	N1				Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	DBB Contractor/STV		Maximum span lengths were used based on industry standards.
	Employ fish passage strategies for culvert crossing structures, including standardized construction details	Final Design					Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Fish passage strategies including depressing the culverts by 6" and burying riprap were used in the design. (Seven Kitchens road over Mulls Hollow Run arch pipe is depressed 6". See sheet 30 of construction plan)
	Implement an approved Erosion and Sedimentation Pollution Control Plan	Final Design					Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		An E&SPC plan has been developed and was approved on May 7, 2015. The E&SPC Plan revision was approved on
	Minimize length of stream restoration as possible. Where not possible, employ current methodologies such as fluvial geomorphology to design the relocated stream	Final Design					Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Fluvial geomorphology design criteria was used for the stream relocation design.
	Address measures to separate highway surface water runoff from clean upslope runoff as detailed in referenced FHWA documentation	Final Design					Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Bypass channels were added in all cut slope areas (see E&SPC plans).
	The use of silt, soil, and other erodible fine materials in the cofferdam and causeway construction is prohibited. The Susquehanna River Causeway will be constructed using R-3 stone for the top six inches or less of the causeway and no smaller than R-7 stone for the armor and the interior of the causeway. A plan showing the stages and dimensions of the causeway shall be submitted to the Corps prior to installation. The causeway opening can be no less than 25% of the river width at any one time. If the causeway is extended beyond this point a dam breach analysis and causeway stability analysis may be required to be submitted to the Corps for review and approval prior to the installation of the causeway.	Final Design	N1			404 Permit Condition 16				STV		The causeway detail on the E&SPC Plan shows the causeway constructed of R-8 rock, topped with 12" of R-3 rock. The plan will be submitted to USACE prior to installation and is included in the Chapter 105 Permit Submission. A causeway overtopping analysis was included in the H&H report.
	Bridges will be constructed in lieu of culverts at the following locations: Susquehanna River, Chillisquaque Creek, Wooded Run (Channel 41 and relocated 42), Rolling Green Run (Channel 22 and 23), Channel 25, Channel 34. PADOT will provide additional information related to the need to relocate Channel 42 (tributary to Wooded Run) in the JPA.	Final Design				404 Permit Condition 20						
	PennDOT will add a special condition to require the contractor to have a qualified professional investigate any proposed borrow/waste sites to determine whether wetlands exist on the site and to be responsible for obtaining permits from the Corps and PADEP.	Final Design	N1	N2	N2.5	404 Permit Condition 20				STV		A special condition was developed in the contract to verify that the contractor has a qualified professional investigate the sites prior to submitting the E&SPC plans to the CCDs since borrow areas have not been identified on the contract E&SPC plans (included Standard Special Provision a01150 REQUIRED REPORTING FOR ALL WASTE AND BORROW SITES REQUIRING AN NPDES PERMIT in bid package).
	Mitigation for the 1,850 linear foot stream impact to Mulls Hollow shall be deducted from the Selinsgrove Center Wetland and Stream Mitigation and Bank Site. All future balance sheets and monitoring reports must reflect this deduction for permit number E60-223.	Final Design				105 Permit Union Condition 23				District 3-0/S&L		
Mitigation for the 864 linear foot stream impact to John Deere Run shall be accounted for at the Selinsgrove Center Wetland and Stream Mitigation and Bank Site. All future monitoring reports must reflect this amount for permit number E49-333.	Final Design				105 Northumberland Co Condition 29				District 3-0/S&L			
Geology and Soils	Prepare a detailed Erosion & Sedimentation Plan for inclusion in the National Pollutant Discharge Elimination System (NPDES) Permit(s) required by DEP	Final Design				FEIS/ROD	Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Detailed E&SPC plans were prepared and included in the NPDES permit application. NPDES permit application submitted December 12, 2014. Approved on May 7, 2015. The revised plan was approved on
	Conduct a detailed Geotechnical Survey to ascertain site-specific information on geology and soils as well as groundwater conditions	Final Design					Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		A geotechnical survey was completed in 2010.
	Investigate alternatives that are underlain by limestone bedrock for the presence of solution features (Karst Topography).	Final Design					Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Alternatives were investigated in the Karst Topography areas and areas with high groundwater to determine the extent of the Karst geology. A detailed plan of the Karst condition is included in App F, Volume 1 of the PCSM Report.
	Boring coverage should be consistent with findings of the Geotechnical Engineering Report. Seal all drill holes upon completion	Final Design					Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		As per the PCSM Report, 8 verification boring were taken based on original findings of the ARM Group, and it was determined that, although Karst exists, it is not severe. Periodic inspection and repairs or the roadways and embankments are recommended. Minimizing the flow of surface runoff to areas not previously receiving runoff and groundwater percolation will assist in reducing future sinkhole development.
	Design roadcuts according to characteristics of the local lithology.	Final Design					Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Roadcuts were developed according to characteristics of local lithology.
	Design and locate stormwater detention structures to prevent aquifer degradation due to sinkholes	Final Design					Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		A PCSM plan was developed and approved and will be implemented.
Cultural Resources	Complete a Phase I archaeological survey to identify historic and prehistoric resources	Final Design	N1	N2	N2.5		Pg. 44	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	S&L		Consistent with the ROD and Programmatic Agreement (PA), Phase I and limited Phase II archaeological testing has been conducted on the northern section. Phase I / II Archaeological Survey completed and approved by PHMC in May 2010.

CSVT NORTHERN SECTION FINAL DESIGN - MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				Commitment Origin	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken
	Complete a Phase II archaeological survey of test sites identified in Phase I	Final Design	N1	N2	N2.5		FEIS/ROD Programmatic Agreement (PA)	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	S&L		As final design has progressed, minor changes to the roadway footprint have occurred outside the original APE covered in the 2010 report. These areas have undergone additional testing and were included in a 2014 addendum to the Phase I/Phase II report. This addendum was submitted to PHMC January 5, 2015. PHMC has concurred with report on January 27, 2015. There are no new archaeological impacts.	
	Apply Criteria of Effect and Adverse Effect and undertake a Phase III program if avoidance of National Register eligible sites is not feasible	Final Design	N1	N2	N2.5			Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	S&L		No Phase III needed	
	Consult with FHWA and PA SHPO to insure satisfactory design and completion of archaeological studies	Final Design	N1	N2	N2.5			Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	S&L		PHMC concurred with determination of no effect on archaeological resources on 1/27/15	
	National Register eligible sites should be avoided if feasible	Final Design	N1	N2	N2.5			Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	S&L		A Phase I archaeological survey was conducted. One prehistoric site on the western bank of the West Branch Susquehanna River was identified for a Phase II investigation. The Phase II investigation indicated that this prehistoric archaeological site was not NR-eligible. During the Phase I investigation, a historic period archaeological site was identified and excavated and determined potentially NR-eligible. However, as an alternate to additional research, consultation with the PHMC resulted in a decision to preserve the historic period component of the site by placing geotextile and fill over the site as it is incorporated into a proposed parking lot and boat ramp. Therefore, as a result, no historic or pre-historic NR-eligible archaeological sites are impacted. Additionally, in the summer of 2014, it was determined that a small portion of a railroad determined NR-eligible in the original Determination of Eligibility Report would be impacted by a pier foundation of the West Branch Susquehanna River Bridge. An Addendum to the Determination of Effect report was submitted and the PHMC concurred on in November 2014 that the impacts to the railroad grade will not adversely affect the NR-eligible property.	
	Maintain coordination with all Federally Recognized Tribes with ancestral ties to Pennsylvania	Final Design	N1	N2	N2.5	N3				-----	District 3-0		Tribal coordination is ongoing
	A potentially eligible historic archaeological site was identified as potentially impacted by the boat launch construction. On October 30, 2006 an onsite meeting was held and the following recommendations were made: <ul style="list-style-type: none"> Cover area of concern with geotextile and approximately 1' of small stone Complete a compaction analysis Place deed restriction on property limiting future earth disturbance at property w/o coordination with PHMC PennDOT CRP monitor placement of geotextile fabric and fill No portion of the site is to be used as a staging area. 	Final Design/Construction	N1				PHMC Meeting Minutes from 10-30-06			Team		Compaction Analysis conducted by STV Wording was added to the Declaration of Covenants to restrict excavation on the property Reference special provision "r030433 CONSTRUCTION RESTRICTIONS"	
Floodplains	Conduct a detailed hydrologic and hydraulic analyses for flood plain encroachments and for drainage areas greater than .5 acres.	Final Design	N1	N2			FEIS/ROD	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Detailed H&H reports have been prepared for floodplain encroachments and drainage areas over 0.5 acres.	
	Minimize encroachments on the 100-year floodplain and minimize backwater increases.	Final Design	N1	N2				Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	HNTB/STV		A structure that uses maximum conventional span lengths achievable by the current construction industry is proposed, thus minimizing piers in the river. The piers will be generally located outside of the area of deepest flow as required by FEMA to minimize backwater increases.	
	Coordinate with FEMA to provide information needed for map revisions	Final Design	N1					Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV/NTM		A CLOMR application was submitted on October 15, 2014 (resubmitted to address comments on April 2, 2015). Approval is anticipated in May 2015.	
	Obtain approval of PA DEP and USACE through completion of Joint Permit application for river crossing	Final Design	N1	N2	N2.5	N3		4+000		STV		105 Permit Application submitted November 26, 2014 (anticipated resubmission to address comments on April 20, 2015). DEP Approval was received May 7th 2015	
Waste Sites	An Asbestos Containing Material (ACM) survey will be completed. If asbestos is present, undertake removal, handling, and proper disposal	Final Design	N1	N2	N2.5		FEIS/ROD	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	District 3-0		ACM surveys are completed by qualified individuals prior to all building demolitions. If present, the contractor completing the demo is required to remove, handle, and dispose of the asbestos properly	
	Inspect buildings slated for acquisition but not demolition for lead based paint	Final Design	N1	N2	N2.5			Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	District 3-0		All aquired buildings are planned to be demolished	
	Include Special Provision to specs to assure contractor has qualified professionals to investigate proposed disposal areas	Final Design	N1	N2	N2.5			Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		As noted in the E&SPC Plan General Notes #10, all off-site waste and borrow areas must have an E&SPC Plan approved by the local County Conservation District and be fully implemented prior to being activated. A special condition was developed in the contract to verify that the contractor has a qualified professional investigate the sites prior to submitting the E&SPC plans to the CCDs since borrow areas have not been identified on the contract ESPC plans (included Standard Special Provision a01150 REQUIRED REPORTING FOR ALL WASTE AND BORROW SITES REQUIRING AN NPDES PERMIT in bid package).	
	Use PENNDOT's Specifications, Publication 408, which provides contract requirements assuring necessary approvals are secured prior to waste disposal	Final Design						Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Special Provision "a01150 REQUIRED REPORTING FOR ALL WASTE AND BORROW SITES REQUIRING AN NPDES PERMIT" included in bid package.	
Traffic and Transportation Network	Coordinate with the local and state police departments, medical and fire emergency services, and school districts to develop a Maintenance and Protection of Traffic (MPT) Plan	Final Design	N1	N2	N2.5		FEIS/ROD	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	District 3-0/STV		Met with Union Township officials in December 2014, January 2015 and March 2016. Met with Point Township April 2015 and March 2016. A MPT plan as been developed	
	Continue working with SEDA-COG to address traffic congestion issues that will persist after construction on CSVT is completed	Final Design	N1	N2	N2.5	N3		Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	District 3-0/STV		Reviewing designs of Winfield Interchange and Ridge Road Interchange designs based on updated traffic modeling. Met with Point Township in April 2015 to discuss planned future development, most notably along Ridge Road. Added three new ramps at the Winfield interchange to eliminate left turns across traffic. Added an additional loop ramp at the Ridge Road interchange to improve safety and level of service.	

CSVT NORTHERN SECTION FINAL DESIGN - MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION			Commitment Origin	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken	
	Evaluate Ridge Road/PA 147 intersection to ensure sight distance is appropriate	Final Design		N2			Pg. 46	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		The intersection of ridge Road and PA Route 147 has been modified to assure appropriate sight distance is achieved.	
Scenic Rivers	Consider using materials on the bridge to reflect the natural character of the surrounding area (context-sensitive bridge design)	Final Design	N1			FEIS/ROD	Pg. 46	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		After working with the Gateway Bridge Committee, PennDOT noted that the final structure was based on economics. Context sensitive features such as plantings and screening will be provided.	
	Maintain access to the river for potential development of the Susquehanna River Greenway	Final Design	N1				Pg. 46	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV/S&L		Access to the river is maintained and enhanced by the construction of the new boat launch.	
	Attempt to minimize the number of bridge piers placed in the river, and consider the effect of the piers on ice flow.	Final Design	N1				Pg. 46	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		A single structure is proposed to carry both directions of traffic rather than two separate structures thereby minimizing the number of piers required to be placed in the river. Additionally, a structure that uses maximum conventional span lengths achievable by the current construction industry is proposed, also minimizing the number of piers in the river. As noted in the H&H Report for the River Bridge, ice is not expected to be a significant concern due to the long span lengths and 100' high clearance to the low chord of the bridge.	
	Incorporate an approved identification sign on the bridge parapet (upstream) identifying it as the State Route 15 bridge.	Final Design					N3	Pg. 46	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		
	Construction staging areas should be screened from the river by a vegetative buffer and set back as far as possible from the river's edge	Final Design/Construction	N1					Pg. 47	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV/Contractor		Existing vegetative buffer along the river's edge to remain. Work must be within limit of disturbance on E&S Plan. Special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF" included.
Construction Impacts Related to Earthwork Balance	Use geotechnical survey to adjust the design of cut/fill sections to reduce project-wide surplus earthwork waste where possible (raising profile, steeper rock cut slopes)	Final Design	N1	N2	N2.5	FEIS/ROD	Pg. 47	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		The RC5 alignment was modified for the DFV to minimize waste fill., resulting in a 2,000,000 CY reduction in excess fill. The design modifications identified during final design to address unforeseen field conditions and safety and operational needs have been coordinated with appropriate environmental agencies through the permit modification process. These modifications require considerable excavation (cut) and therefore impact the overall earthwork balance for the section. These design modifications will result in approximately 350,000 cubic yards of additional waste material (total of ~400,000cy). As final plans are developed for the remaining Northern and Southern Section construction contracts, PennDOT will investigate additional design modifications or construction techniques to reduce the amount of waste material generated. In addition, in accordance with the 404 Permit for the project, any waste sites ultimately required will be reviewed by the construction contractor's qualified professional (with oversight by PennDOT's environmental monitor) to determine whether wetlands exist on the site, and any associated necessary permits will be obtained for the site.	
	Continue coordination with local municipalities to identify other potential surplus waste disposal sites	Final Design	N1	N2	N2.5		Pg. 47	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV/District 3-0			
	Include Special Provision to specs to assure contractor has qualified professionals to investigate proposed disposal areas	Final Design	N1	N2	N2.5		Pg. 47	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		As noted in the E&SPC Plan General Notes #10, all off-site waste and borrow areas must have an E&SPC Plan approved by the local County Conservation District and be fully implemented prior to being activated. A special provision was developed in the contract to verify that the contractor has a qualified professional investigate the sites prior to submitting the E&SPC plans to the CCDs since borrow areas have not been identified on the contract ESPC plans (included Standard Special Provision "a01150 REQUIRED REPORTING FOR ALL WASTE AND BORROW SITES REQUIRING AN NPDES PERMIT").	
Miscellaneous	Investigate alignment modifications at Bingman Property, Kohl Property and D Mertz Property	Final Design		N2		FEIS/ROD	Pg. 48	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV		Horizontal alignment modifications were investigated at these properties and incorporated into the design (Bingaman - shift to avoid house; D Mertz - shift, but also avoid historic property; Kohl - shift to minimize impact to adjacent property).	
	Should conditions in the study area change prior to construction of the CSVT project, PennDOT is committed to re-evaluating the areas of impact. If conditions warrant, alignment modifications may be made to minimize project impacts.	Final Design	N1	N2	N2.5	FEIS/ROD	Pg. 48	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	S&L/District 3-0		The historic eligibility status of the App Farmstead has changed and the DAM alignment is now a viable alternative over the DAMA. The 2006 FEIS/ROD Reevaluation No 1 addressed this change and DAM is currently in final design.	
	PennDOT will coordinate with the National Geodetic Survey (NGS) to identify locations of geodetic control monuments. PENNDOT will notify NGS 90 days prior to required relocation of any monuments.	Final Design	N1	N2	N2.5	FEIS/ROD	Pg. 48	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----	STV/District 3-0		Coordination with NGS has occurred. No monuments will be affected by the CSVT construction	

CSVT NORTHERN SECTION CONSTRUCTION- MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				COMMITMENT ORIGIN	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken	
Community Facilities and Services - Public Schools and Educational Facilities	Coordinate with School District transportation directors regarding construction activities that may impact daily school bus runs	Construction	N1	N2	N2.5	N3	FEIS/ROD	Pg. 31	Lewisburg Area and Milton Area School Districts	-----			Covered as a general note on page 1 of the traffic control plan. Also covered in special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMETS) REVIEW AND SIGN-OFF"	
Community Facilities and Services - Public Parks and Recreational Facilities	Implement ATON Plan to ensure boater safety and maintain throughout duration of the bridge construction	Construction	N1	N2			105 Permit Condition (Union # 28, Northumberland #30, Boat Ramp # 28)						Chillisquaque Creek ATON plan approved on	
	Place signs in each travel direction on the river bridge as well as at the proposed launch highlighting the recreational significance of the West Branch Susquehanna River.	Construction					Section 4(f) Evaluation							
	Install temporary protective fencing on the island at the limits of the aerial easement to protect the recreating public during project construction.	Construction	N1											
Community Facilities and Services - Emergency Response Service Providers	Coordinate with emergency service providers and agencies in implementing MPT Plan	Construction	N1	N2	N2.5	N3	FEIS/ROD	Pg. 33	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Covered as a general note on page 1 of the traffic control plan. Also covered in special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMETS) REVIEW AND SIGN-OFF"	
Noise	Limit construction activities to daylight hours to minimize construction noise impacts (if possible to maintain construction schedule)	Construction	N1	N2	N2.5	N3	FEIS/ROD	Pg. 35	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Covered in special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMETS) REVIEW AND SIGN-OFF"	
Advanced Compensation Natural Resource Mitigation Proposal	PennDOT will utilize construction procedures that minimize the likely introduction of invasive species into the mitigation areas in accordance with FHWA guidance related to Executive Order #13112	Construction	N1	N2	N2.5		404 Permit Condition 22						Covered in special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMETS) REVIEW AND SIGN-OFF"	
	PennDOT will designate an independent environmental monitor that may include the District Environmental Manager, their staff, or qualified designee. The monitor will oversee the construction phases of the project to ensure that permit conditions are met. The role of the independent environmental monitor will include: (a) monitoring the construction to ensure that the work is in compliance with this permit, (b) informing PennDOT and this office of any problems that arise concerning construction in waters of the U.S., including jurisdictional wetlands, (c) recommending measures to bring the project into compliance, (d) identify ongoing unresolved compliance issues for reference to the USACE. e) Notify the USACE State College Field Office of ongoing unresolved compliance issues within 48 hours	Construction	N1	N2	N2.5	N3	404 Permit Condition 27						Skelly and Loy is the Environmental Monitor	
Terrestrial Community and Wildlife Habitats	The permittee shall remove trees for this project that have a diameter equal to and greater than three (3) inches at breast height (DBH) between November 1 and March 31 of any given calendar year to prevent killing or injuring bats. Where possible, shagbark hickory trees, dead and dying trees, and large diameter trees (greater than 12 inches DBH) shall be retained to serve as roost trees for bats. A written waiver must be acquired from the Pennsylvania Game Commission prior to cutting trees between April 1 and October 31.	Construction	N1	N2	N2.5		105 Permit Condition (Snyder #24, Boat Ramp #25, Union # 29, Northumberland # 21) BO Condition 1a	Pg. 39	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Reference special provisions "r030433 CONSTRUCTION RESTRICTIONS " and "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE".	
	The proposed project is located within the known range of the Eastern Spadefoot (Scaphiopus holbrookii). In order to avoid potential impacts to the Eastern Spadefoot, the following measures must be implemented to provide protection to this Pennsylvania threatened species: 1. A standard 18-inch high silt fence or a 24-inch silt sock must be installed as an exclusionary device starting on the southern shoulder of Hidden Paradise Road near the intersection of SR 147 and continue south paralleling SR 147 for approximately 750 feet. 2. The exclusion barrier must be monitored daily and any deficiencies repaired immediately. 3. All construction entrances or interruptions in the exclusion fence must be blocked with hay bales or a suitable gate at the conclusion of each work day. 4. All reptiles and amphibians encountered within the worksite must be photographed and safely moved outside the worksite. If an Eastern Spadefoot is identified within the work area, the applicant or their representative must contact the Pennsylvania Fish and Boat Commission's Natural Diversity Section at 814-359-5237 or 814-359-5147.	Construction		N2			Northumberland Co 105 Permit Condition 31						Reference special provisions "r030433 CONSTRUCTION RESTRICTIONS " and "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE".	
	To avoid killing or injuring northern long-eared bats that may be roosting in buildings or structures, all demolition activities shall occur between October 1 and March 31, unless a Service approved emergence survey is completed (e.g., See Appendix E of 2015 Range-wide Indiana Bat Summer Survey Guidelines, April 2015) that support the conclusion that either bats are absent trapping studies demonstrate an absence of northern long-eared bats.	Construction	N1	N2	N2.5		BO Condition 1.b.						Reference special provisions "r030433 CONSTRUCTION RESTRICTIONS " and "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE".	
	Pile driving activities shall only occur during daylight hours.	Construction	N1	N2	N2.5		BO Condition 1.c						Reference special provisions "r030433 CONSTRUCTION RESTRICTIONS " and "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE"	
	No project-related or project-generated materials, waste, or fill will be deposited in areas that would result in additional forest clearing or sedimentation to any streams in the action area or areas providing habitat to northern long-eared bats.	Construction	N1	N2	N2.5	N3	BO Condition 1.d						Covered under special provision "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE"	
	Any dead northern long-eared bats found in the action area will be reported to the Department, the Environmental Monitor, and the U.S. Fish and Wildlife Service's (Service's) Pennsylvania Field Office (110 Radnor Road, Suite 101, State College, PA 16801; telephone 814 234 4090) and Region 5 Division of Law Enforcement (300 Westgate Center Drive, Hadley, MA 01035 9589; telephone 413 253 8343) within 48 hours of discovery. Notification must include the date, time, and location of the carcass, and any other pertinent information. Northern long-eared bats that are accidentally killed, or that are moribund, are to be preserved in a cold location until properly identified (date of collection, complete scientific and common name, latitude and longitude of collection site, description of collection site). Specimens will be transferred to the Service or a Service-approved facility.	Construction	N1	N2	N2.5	N3	BO						Covered under special provision "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE"	
	Ensure that clearing and disturbance remains within the right-of-way and within areas cleared by the contractor. Consider habitat features that should be avoided and mark areas to remain unaltered.	Construction	N1	N2	N2.5			Pg. 39	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----				
	Review all contractor proposed off-site areas required during construction	Construction	N1	N2	N2.5			Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----				Included in special provision "a01150 REQUIRED REPORTING FOR ALL WASTE AND BORROW SITES REQUIRING AN NPDES PERMIT"
	Avoid the salvage of topsoil from areas containing invasive plant species	Construction	N1	N2	N2.5			Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----				In accordance with Publication 756 (11/13), before earth moving begins, the LOD will be inspected by the Environmental Monitor for major areas of invasive species. If discovered, the contractor should develop a containment and disposal plan, paid incidental of the earthwork
	Install silt barrier fence or filter sock to protect EST during construction	Construction		N2			EST T&E Commitments						Reference special provisions "r030433 CONSTRUCTION RESTRICTIONS " and "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE"	
Rigorously maintain silt fence/sock during construction; no holes, rips or gaps that could potentially allow ingress of EST into the work area will be permitted. The barrier should extend in a continuous line from the southern bank of the Route 147 Bridge over the Chillisquaque south to Hidden Paradise Road habitat and the intersection of Routes 147 and 405.	Construction		N2										Reference Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMETS) REVIEW AND SIGN-OFF"	
Wetlands	PennDOT will make available construction schedule information prior to construction, and revised occasionally, to facilitate the Corps' monitoring of environmental impacts associated with the highway construction. The construction schedule should identify, to the extent possible, additional impacts to Waters of the United States not included in this authorization resulting from contractor work areas.	Construction	N1	N2	N2.5		404 Permit Condition 12						Reference Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMETS) REVIEW AND SIGN-OFF"	
	No concrete trucks will be washed off in a manner that would allow the cement laden wash water to enter a wetland	Construction	N1	N2	N2.5	N3	404 Permit Condition 14						This commitment has been added to the E&S plan note 31 on page 8.	
	If a contractor chooses to use an area outside of the project limits for waste / borrow, staging or service, access or haul roads, the contractor is responsible for obtaining any necessary permits and coordinating with the Environmental Monitor.	Construction	N1				FEIS / ROD Permit Condition 20	404					As noted in the E&SPC Plan General Notes #10, all off-site waste and borrow areas must have an E&SPC Plan approved by the local County Conservation District and be fully implemented prior to being activated. Coordination with Environmental monitor covered in Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMETS) REVIEW AND SIGN-OFF"	
Install high visibility fencing around all waters of the US adjacent to construction	Construction	N1	N2	N2.5		404 Permit Condition 4						is Chilli creek a water of the us?		

CSVT NORTHERN SECTION CONSTRUCTION- MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION			COMMITMENT ORIGIN	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken	
Surface Water/Aquatic Resources	Conduct structure installation during low-flow conditions	Construction	N1	N2	N2.5	FEIS/ROD	Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Structures to be installed during low flow conditions, if possible, to maintain construction schedule. Reference special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
	Avoid or minimize the siting of construction within stream reaches. If unable to avoid stream siting, use clean rock for causeways to avoid sedimentation impacts to stream	Construction	N1	N2	N2.5		Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Reference Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
	Use clean rock material and filter fabric for all erosion and sedimentation control measures, diversion channels, and causeways	Construction	N1	N2	N2.5		Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Reference Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
	Evaluate, design, and construct crossing structures and in-stream improvements that will reduce the effects of bedload disposition and subsequent maintenance	Construction	N1	N2	N2.5		Pg. 41	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Addressed in the drainage design, plans and details. Inlet and outlet ends of in-stream culverts are depressed 6" to control deposition. Inlet and outlet ends of crossing structures are normal to direction of flow to improve hydraulic capacity. Self-cleaning velocities are provided in the proposed crossing structures and structural and non-structural BMPs are proposed at the outlets to minimize erosion and future maintenance.	
	Minimize the area to be devegetated to reduce sediment in the stream	Construction	N1	N2	N2.5		Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Limit of disturbance on E&S plan and covered under special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
	Locate all construction fueling stations outside of the reaches of the aquatic habitat to avoid accidental discharge of toxic pollutants	Construction	N1	N2	N2.5		Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Reference Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
	Any causeways shall be constructed of clean durable R-7 or larger rock, with a riding surface of R-3, and will contain minimum fine materials. Earthen material will not be permitted in streams for the construction of causeways, cofferdams, or stream diversions. Upon completion of any temporary stream or wetland crossing, all excess materials, including stream diversion materials and sediment and erosion control measures, will be removed in their entirety to an upland site, and disturbed areas will be permanently stabilized.	Construction	N1	N2		404 Permit Condition 2						Reference Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
	All off-site discharges shall be monitored by the Permittee to evaluate impacts to adjacent properties. Monitoring shall be performed on a quarterly basis to document seasonal changes. The monitoring reports shall contain information describing the site at the time of inspection, stability of the channels and banks, photographs and the location and orientation of each of the photographs, and a written plan to correct any issues identified. Reports shall be submitted to the Department annually. The permittee may request a reduction in the monitoring and reporting frequency to the Department, in writing, for review and approval.	Construction	N1	N2	N2.5	N3	NPDES Condition 10						
	PennDOT will make available construction schedule information prior to construction, and revised occasionally, to facilitate the Corps' monitoring of environmental impacts associated with the highway construction. The construction schedule should identify, to the extent possible, additional impacts to Waters of the United States not included in this authorization resulting from contractor work areas.	Construction	N1	N2	N2.5		404 Permit Condition 12						PennDOT has coordinated with the Corps on the anticipated construction schedule and Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF" requires further coordination from the contractor
	PennDOT will evaluate the integrity of the causeway after each overtopping event and will provide the Corps with a report on the findings of each post-flood evaluation. The report shall include: (1) information on any storm damage to the causeway, and any remediation measures deemed necessary by PennDOT to restore the authorized dimensions of the causeway; or to modify its authorized causeway dimensions, if deemed appropriate. Repairs to the causeway: which are necessary to restore the authorized causeway dimensions will not require additional authorization by the Corps, however, the Corps will be notified in the subject report. All proposed modifications to the authorized dimensions of the causeway or the channel openings will require a permit modification, and the modification request must include a dam breach analysis if the opening in the causeway is less than 25% of the width of the river at any one time. (2) Information on any remediation or protection measures required at the or new bridges, if such work requires Corps authorization. Corps authorization would be required for any previously unauthorized work that results in a discharge of fill in the river or that result in a permanent or temporary structure, obstacle, or obstruction in the river. (3) Quantify the maximum flow encountered during the storm event based on the nearest stream gauge upriver of the causeway.	Construction	N1				404 Permit Condition 17						
	The Pennsylvania Fish and Boat Commission, will be contacted prior to installation of the causeway in the Susquehanna River, to ensure that proper advanced warning devices are utilized to warn canoe and boat users in the area of the causeway.	Construction	N1				404 Permit Condition 18						
	With the exception of lubricants for pile drivers, no easily mobile equipment will be fueled or lubricated on the causeway within the river banks, or near any wetlands or streams.	Construction	N1	N2	N2.5		404 Permit Condition 19						Reference Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
	If a contractor chooses to use an area outside of the project limits for waste / borrow, staging or service, access or haul roads, the contractor is responsible for obtaining any necessary permits and coordinating with the Environmental Monitor.	Construction	N1	N2	N2.5		404 Permit Condition 20						As noted in the E&SPC Plan General Notes #10, all off-site waste and borrow areas must have an E&SPC Plan approved by the local County Conservation District and be fully implemented prior to being activated. Coordination with Environmental monitor covered in Special Provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
	No in-stream disturbance shall be conducted in the West Branch Susquehanna River between May 1 and June 15 without the prior written approval of the Pennsylvania Fish and Boat Commission to limit impact to the small mouth bass reproduction..	Construction	N1				June 3 2014 Agency Field View \ 105 Permit Condition (Union #26, Northumberland # 23, Boat Launch #24)						
	A suitable concrete washout facility must be provided for the cleaning chutes, mixers, and hoppers of the delivery vehicles. Under no circumstances may any concrete wash water be allowed to enter any surface waters. The washout facilities should not be placed within 50 feet of storm drains, open ditches or surface waters.	Construction	N1	N2	N2.5	N3	404 Permit Condition 14 105 Permit Condition 21 (Union Co Condition 20)						Covered under special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
	All synthetic erosion control features (e.g., silt fencing, netting, mats), which are intended for temporary use during construction, will be completely removed and properly disposed of after their initial purpose has been served. Only natural fiber materials, which will degrade over time, will be used as permanent measures, or if used temporarily, will be abandoned in place.	Construction	N1	N2	N2.5		105 Permit Condition 20 (Snyder, Northumberland, Boat Ramp) 105 Permit Condition 25 (Union County)						Covered under special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
	Streambank disturbance shall be kept to a minimum and stabilized as specified in the E&S Plan within 4 days of final earthmoving to prevent erosion and provide cover, shading, and food source for aquatic life.	Construction	N1	N2	N2.5		105 Permit Union Condition 21 - 105 Permit Snyder/Northumberland Condition 22 / Boat Ramp Condition 23						Commitment on sheet 12 of the E&S plans
The causeway and/or cofferdam must be constructed of rock, free of fines and silts, or other non-erodible material. Equipment fueling and storage of polluting substances such as petroleum products on the causeway should be limited to the greatest extent possible. Spills and/or leaks of any polluting substance on the causeway must be immediately contained, cleaned up, and reported to the Department at 570-327-3636.	Construction	N1				105 Permit Condition (Union #27, Northumberland # 24, Boat Launch #24)						Covered under special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"	
Since Wooded Run (CHN-41) and its tributary (CHN-42) are wild trout streams, no work shall be done in the stream channels between October 1 and December 31 without the prior written approval of the Pennsylvania Fish and Boat Commission.	Construction		N2			105 Permit Condition # 25 (Northumberland Co)						Reference special provisions "r030433 CONSTRUCTION RESTRICTIONS" and "CONSTRUCTION REQUIREMENTS FOR ENDANGERED SPECIES ACT COMPLIANCE"	
Viable three-foot long live stakes or containerized stakes in accordance with the approved planting plan shall be used along Wooded Run (CHN-41) and its relocated tributary (CHN-42). The stakes shall be cut from native species and spaced at most two feet apart starting at the water's edge and continuing uphill for at least two rows. Approximately 80% of the stake must be underground with two to five buds aboveground. Harvest straight live wood that is at least one year old and plant during the dormant season. Soak the stakes in water for a minimum of 24 hours prior to installation. Do not damage the stakes or split ends during installation, and tamp the soil around the stake so that it is secure. A pilot bar may be required to create a hole allowing stakes to be planted at the proper depth.	Construction		N2			105 Permit Condition # 26 (Northumberland Co)						Details shown on p 3 of Wooded Run Stream Relocation Plan	
Wooded Run Relocation shall be constructed in accordance with the Wooded Run Relocation Plan prepared by Skelly and Loy	Construction		N2			Wooded Run Relocation Plan and Special Provisions						Reference Special Provisions "Item 4808/9000-8000 through 8004 (Item numbers subject to change)	

CSVN NORTHERN SECTION CONSTRUCTION- MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				COMMITMENT ORIGIN	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken
	For all concrete work in the stream channel, allow concrete to harden enough to support foot traffic. Flush concrete with stream water and pump to an upland area to discharge in a manner that prevents erosion and re-entry of the water into the stream. Use a properly calibrated pH meter to monitor the discharge until the pH falls below 9.0 before allowing the stream to directly contact the new concrete.	Construction	N1	N2			105 Permit Condition # 22 (Boat Launch)						?
Floodplains	Mulch and reseed all roadway embankments	Construction	N1	N2	N2.5	N3		Pg. 45	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Covered as General note 13 on page 8 in the E&S plan
Geology and Soils	Address all identified solution features with approved engineering methods	Construction						Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Plan sheet of the E&S plans contains a detail of the treatment to roadside and and median swales and the encapsulation of the acid bearing rock in the widened embankment. Details and a special provision for sinkhole/void treatments are also included.
	In the event that a sinkhole develops during construction, the Contractor shall immediately divert water to by-pass the sinkhole.	Construction	N1	N2	N2.5	N3	NPDES Condition 2						covered as a note on sheet 31 of the construction plan as part of the sinkhole/void treatment
	The Contractor shall have all materials and equipment required to repair a sinkhole readily available as a precautionary measure for sinkhole development.	Construction	N1	N2	N2.5	N3	NPDES Condition 3						Covered under special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
	Basins excavated in Karst or Pyritic geology shall be excavated mechanically.	Construction		N2			NPDES Condition 4						Covered under special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
	All excavation in Pyritic geology must be done and monitored in accordance with the Pyritic Handling Plan. The only exception is for the river bridge pier foundations, of which any pyritic material will be disposed of at a landfill. All excavation for the piers in pyritic material will be performed in wet conditions.	Construction	N1	N2			NPDES Condition 5						Covered under special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
	A qualified professional shall be on-site during excavation of potentially pyritic materials, except for the river bridge contract of which all pyritic material from the pier foundations will be disposed of at a landfill.	Construction		N2			NPDES Condition 6						Covered under special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
	Contractor to adhere to all requirements of the PHMP from Station 1014+60 to Station 1074+50	Construction		N2			PHMP						Covered under special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
Public/Private Water Supplies	Perform detailed assessments of potentially affected individual domestic and public supply wells	Construction	N1	N2	N2.5			Pg. 43	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Reference special provision "031099 ITEM 9000-0121 - TESTING OF PRIVATE WATER SUPPLIES"
	Implement contingency plan to address citizen complaints regarding water supply degradation	Construction	N1	N2	N2.5			Pg. 43	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Reference special provision "031099 ITEM 9000-0121 - TESTING OF PRIVATE WATER SUPPLIES"
	Properly abandon wells within the take area	Construction	N1	N2	N2.5			Pg. 43	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Covered in section 202 in Pub 408
	Monitor and treat impacts to groundwater quality in the areas attributable to project construction	Construction	N1	N2	N2.5			Pg. 43	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			Reference special provision "031099 ITEM 9000-0121 - TESTING OF PRIVATE WATER SUPPLIES"
Waste Sites	If additional waste sites are encountered, a waste management plan will be developed	Construction	N1	N2	N2.5		FEIS/ROD						?
	Perform well and surface water monitoring as outlined in the PHMP	Construction		N2			PHMP						PHMP Approved by DEP and is a permit condition
	The contractor shall contact Skelly and Loy to provide oversight for the removal of historic fill at the Mulls Hollow Dump Area and dispose of excavated material at a PA DEP approved landfill facility.	Construction		N2									
Traffic and Transportation Network	Coordinate with school district transportation directors regarding construction activities along bus routes.	Construction		N2	N2.5	N3	FEIS/ROD	Pg. 46	Lewisburg Area and Milton Area School Districts	-----			Covered as a general note on page 1 of the traffic control plan. Also covered in special provision "a10560 ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REVIEW AND SIGN-OFF"
Scenic Rivers	Construction staging areas should be screened from the river by a vegetative buffer and set back as far as possible from the river's edge	Final Design/Construction	N1					Pg. 47	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			
	For causeway, contractor must adhere to requirements of DEP permit BDWW-GP-8 - Temporary Road Crossings	Construction	N1					Pg. 47	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			
	Notify river users of construction activity on the river, both upstream and downstream, by using appropriate signage	Construction	N1					Pg. 47	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			
	All debris entering the river should be removed, during both construction and cleanup	Construction	N1					Pg. 47	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			
Right-of-Way	Parcel 138, Steven W. and Jennifer M. Davis A home inspection and water test for quality and quantity are to be completed prior to construction or any blasting near the Davis property.	Construction											
	Parcel # 67 Claimant: Hummel Bros. Comment or Settlement Commitment: Claimant would like topsoil disturbed by construction, stockpiled, replaced and re-graded in their field following construction. Once construction is completed, the claimant would like to have as much of the paved temporary construction access, on their parcel, left in place, as possible.	Construction											
	Parcel # 411 Claimant David A. Streenstra & Donna L. Streenstra Comment or Settlement Commitment: In conjunction with the above highway project, the department is constructing a temporary construction access connecting S.R. 15 and Seven Kitchens Road. In the event of an emergency in which Reitz Avenue is impassable and the temporary construction access is not constructed, the claimant shall be able to use the existing road bed in order to park campers as they have prior to the project. In the event of an emergency in which Reitz Avenue is impassable and the temporary construction access is constructed, the claimant shall be able to use said access to evacuate campers. The claimant will be permitted to make only right turns onto S.R. 15 North. Once the temporary construction access is constructed, the claimant shall not use said access to park campers, but only for evacuation purposes.	Construction											
	Once construction is completed, the claimant would like to have as much of the paved temporary construction access, on their parcel, left in place, as possible.	Construction											
	Parcel # 385 Claimant Jerry L. Rhoads & Mardelle E. Rhoads Comment or Settlement Commitment: Contractor to install orange construction fencing dividing claimants residual and the areas aquired as TCE and Aerial Easement prior to construction.	Construction											
	Parcel 401, Lawrence J. and Christina M. Ross Complete a pre- and post-well inspection for water quality and quantity.	Construction											
	Parcel 401, Lawrence J. and Christina M. Ross Install a construction fence along the fill toe line on the northeast side of the proposed temporary roadway to protect their drainfield from damage.	Construction											
Miscellaneous	The permittee shall hold a pre-construction meeting that includes the Department, County Conservation Districts, and the Contractor prior to the commencement of earth disturbance.	Construction	N1	N2	N2.5	N3	NPDES Condition 1						Covered as general note 2 on sheet 8 of the E&S Plan
	No mow areas must be marked in the field to prevent future mowing and tree cutting.	Construction				N3	NPDES Condition 9						

CSVN NORTHERN SECTION POST CONSTRUCTION- MITIGATION COMMITMENT TRACKING SPREADSHEET 6/14/2016

RESOURCES	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				Commitment Origin	MITIGATION REPORT REFERENCE	Location	Quantity	Responsible Party	Date/Initials	Action Taken
Terrestrial Community and Wildlife Habitats	If noxious or invasive plant species become established in the right-of-way (post-construction), PENNDOT will attempt to control these until more beneficial species become established one growing season after construction .	Post-Construction	N1	N2	N2.5		FEIS/ROD	Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			
	Re-seed all exposed soil areas (including staging areas) with permanent cover as early as possible	Post-Construction	N1	N2	N2.5			Pg. 40	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			
	Following structure installation, restore all disturbed aquatic substrate and revegetate any disturbed riparian areas to pre-construction condition	Post-construction	N1	N2	N2.5			Pg. 42	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			
Public/Private Water Supplies	Provide continuation of water service to residents served by impacted water supplies (provide connections to public water systems, provide water treatment, re-drill existing wells to a greater depth, relocating a well, acquire the property)	Post-Construction	N1	N2	N2.5			Pg. 43	Union Twp, Point Twp, and W. Chillisquaque Twp.	-----			
Surface Water and Aquatic	The permittee shall maintain the structures herein authorized free of flood debris and silt deposits. When removal of silt and debris is necessary, it shall be accomplished in accordance with the Department's "Standards for Channel Cleaning at Bridges and Culverts," a copy of which is attached to the permit. Future bridge and culvert rehabilitation and maintenance work is subject to the following conditions: 1. No reduction of span, underclearance or waterway opening of the structure will occur. 2. No roadway grade will be altered, other than that required for normal resurfacing. 3. No substantial modification of the structure from its original specifications. 4. When work involves repairs to piers, footers or wingwalls, the construction area should be enclosed wherever possible within a cofferdam of sandbags or other non-polluting material. 5. The placement of riprap, where necessary, shall not constrict the normal channel width nor shall it interfere with any navigation on the stream or migration of fish.	Post-Construction	N1	N2			105 Permit Condition (Snyder #25, Union # 30, Northumberland # 33)						
MISC	Complete LOMR for the river bridge	Post-Construction	N1						Union Twp and Point Twp				

SOUTHERN SECTION 1 - DAM MITIGATION TRACKING SPREADSHEET 6/14/16

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				Commitment Origin	Final Design/Bid Package Prep			Construction			Post Construction				
			S1	S2	S3	S4		Responsible Party	Date/Initials	Action taken	Action Taken	Date/Initials	Action Taken	Action Taken	Date/Initials	Action Taken		
2.1 Social Considerations																		
2.1.1 Population and Housing	Provide relocation assistance for all displaced persons	Final Design	S1				FEIS/ROD	District 3-0		These mitigation commitments are being met through District 3-0 ROW /acquisition specialists led by Mr. Jeffrey Wenner.								
	Employ the provisions of Last Resort Housing as necessary	Final Design	S1					District 3-0										
	When feasible, complete the demolition of remaining structures between October 1 and March 31. If not possible, pre-demolition surveys to assess for bats may be required.	Final Design	S1				BA/BO	District 3-0										
	Provide fair market value compensation for partial property takes	Final Design	S1				FEIS/ROD	District 3-0										
2.1.2 Neighborhoods and Community Cohesion	Design and construct new access road for the northern section of the Colonial Woods neighborhood (Colonial Drive relocated)	Final Design	S1	S2			FEIS/ROD	GF		The access to Colonial Acres has been modified since the FEIS and this design has been incorporated into the DFV plans. Additional correspondence is required with the neighborhood. Modifications to this connection are being investigated during FD.								
	Design and construct the Courtland Avenue Extension to connect the Orchard Hills and Gunter neighborhoods, incorporating a sidewalk or wide road shoulders to accommodate pedestrians and/or bicyclists	Final Design				S4		GF		The Cortland Ave Extension has been incorporated into the DFV plans and includes provisions for pedestrians.								
	The Courtland Avenue Extension will be maintained by Shamokin Dam Borough	Post-Construction				S4		District 3-0										
2.1.3.1 Community Facilities and Services - Public Schools and Educational Facilities	Coordinate with School District transportation directors regarding construction activities that may impact daily school bus runs	Construction	S1	S2	S3	S4	FEIS/ROD	Contractor		The District and designer will provide direction to the Contractor in the construction restrictions.								
2.1.3.3. Community Facilities and Services - Public Parks and Recreational Facilities	Investigate options for additional access to Shamokin Dam Borough riverfront property located west of Tedd's Landing and east of the Veteran's Memorial Bridge	Final Design				S4	FEIS/ROD	GF		Design modifications for this intersection are being investigated by GF in FD.								
2.1.3.5 Community Facilities and Services - Pedestrian and Bicycle Facilities	Design and construct the Courtland Avenue Extension to connect the Orchard Hills and Gunter neighborhoods, incorporating a sidewalk or wide road shoulders to accommodate pedestrians and/or bicyclists	Final Design				S4	FEIS/ROD	STV/GF		The Cortland Ave Extension has been incorporated into the DFV plans and includes provisions for pedestrians.								
	Consider a pedestrian activated signal at Route 11/15 and Eighth Avenue to increase safety of pedestrian crossings	Final Design				S4		GF										
2.1.3.7 Community Facilities and Services - Emergency Response Service Providers	Develop a Maintenance and Protection of Traffic (MPT) Plan during Final Design to minimize the disruption of traffic during construction	Final Design	S1	S2		S4	FEIS/ROD	GF										
	Coordinate with emergency service providers and agencies in implementing MPT Plan	Construction					FEIS/ROD	GF/District 3-0		The District and designer will provide direction to the Contractor in the Construction Restrictions.								
2.2 Economic Issues																		
2.2.1 Economic Trends and Local Business Impact	Implement displacement relocation/compensation for commercial establishments located in areas requiring property acquisition	Final Design					FEIS/ROD	District 3-0		These mitigation commitments are being met through District 3-0 ROW /acquisition specialists led by Mr. Jeffrey Wenner.								
	Work with the business community, local municipalities, and local tourism agencies to develop appropriate off-site signage for the business district and individual businesses	Final Design						GF										
2.3 Noise	Perform additional noise impact, mitigation feasibility, and mitigation reasonableness analysis to determine specific noise mitigation measures, using PENNDOT's most recent noise policies	Final Design					FEIS/ROD	GF		A Final Design Noise Study will be completed as part of the FD process using updated traffic volumes for the design year.								
	Investigate the use of excess excavated material for construction of earthen berm noise barriers	Final Design						GF		Design changes between FEIS and Final Design may result in additional noise impacted areas. This will be determined by the noise study. If it appears noise mitigation is required, earthen berms will be investigated.								
	Limit construction activities to daylight hours to minimize construction noise impacts (if possible to maintain construction schedule)	Construction						GF/Contractor										
2.4 Air Quality	Obtain necessary permits from the PA DEP if any paving materials plant (or other air contamination source) will be constructed	Construction				S3	FEIS/ROD	Contractor										
	An Asbestos Containing Material (ACM) Survey will be completed. If present, asbestos will be removed, handled, and disposed of properly	Final Design	S1			S4		District 3-0		ACM Surveys are completed by qualified individuals within the District 3-0 prior to all building demolitions. If present, the contractor completing the demolition is required to remove, handle and dispose of the asbestos properly.								
	Employ typical air quality control measures. These include dust controls at the source (wet suppression) and during transport (covering of hauling trucks). No open burning of construction or demolition waste is permitted.	Construction	S1	S2	S3	S4		Contractor										
2.5 Agricultural Resources	Continue to investigate minimization measures to reduce impacts to agricultural land (minimize required right-of-way width, control runoff/erosion damages)	Final Design	S1				FEIS/ROD	GF		Median width was reduced from 90' to the minimum requirements to reduce the footprint of the highway and minimize ag impacts.								
	Evaluate replacement of disrupted water supplies necessary for continued agricultural operations	Final Design	S1					GF		To date, no water supplies for ag uses are known to be impacted.								
	Study replacement access to land-locked parcels. Implement if feasible and reasonable; if not, compensate the landowner or acquire the property as an uneconomic remnant	Final Design	S1					GF		DFV/Final Design outlines access to properties.								
	Prepare a Farmlands Assessment Report (FAR)	Final Design	S1					S&L		1st FAR was Feb 2005. After the App redesignation, a 2nd FAR was prepared for the southern portion of the project for the DAM alternative in March 2006								
	Obtain approval from the Agricultural Lands Condemnation Approval Board (ALCAB) prior to condemnation of productive agricultural land for highway purposes	Final Design	S1					S&L		1st ALCAB - 3/31/05 (Adjudication & Order 4/22/05) 2nd ALCAB hearing held 5/4/06 with Adjudication & Order 5/8/06								
2.6 Visual Quality	Colonial Acres viewshed (including Fisher Road): Consider using context-sensitive bridge design (color/texture/materials), landscaping fill slopes, and the use of vegetative screening. Consider planting clusters of trees to screen bridge piers	Final Design	S1				FEIS/ROD	GF										
	Monroe Manor - provide evergreen screening on the northeast side of the highway	Final Design	S1					GF										
	Gunter and Orchard Hills developments viewshed: Consider landscaping fill slopes and the use of vegetative screening wherever possible for the Courtland Avenue Extension	Final Design	S1			S4		GF										
2.7 Natural Resources																		
Advanced Compensation Natural Resource Mitigation Proposal	Attempt to provide a total ecosystem approach to natural resource mitigation by completing all compensatory mitigation activities at one location	Final Design						S&L	DONE	These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD								
	Maintain consistency with terrestrial mitigation policies of the FHWA and PENNDOT	Final Design						S&L		These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD								

SOUTHERN SECTION 1 - DAM MITIGATION TRACKING SPREADSHEET 6/14/16

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				Commitment Origin	Final Design/Bid Package Prep			Construction			Post Construction		
			S1	S2	S3	S4		Responsible Party	Date/Initials	Action taken	Action Taken	Date/Initials	Action Taken	Action Taken	Date/Initials	Action Taken
	Obtain potentially suitable mitigation areas primarily through amicable (voluntary) easement agreements or acquisition	Final Design					FEIS/ROD	S&L		These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD						
	Use a hierarchical approach to evaluate relevant mitigation opportunities within and adjacent to the project study area	Final Design						S&L		These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD						
	Create approximately 7 acres of wetlands	Final Design						S&L		These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD						
	Restore, enhance, or reconstruct approximately 1,000 to 4,000 linear feet of stream	Final Design						S&L		These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD						
	Provide approximately 55 acres of old field mitigation	Final Design						S&L		These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD						
	Provide approximately 150 acres of forestland mitigation	Final Design						S&L		These mitigation commitments have been met with the construction of the Center Site and Vargo Site mitigation areas. These mitigation areas fulfill the requirements stipulated in the FEIS/ROD (In partial fulfillment of the NEPA ROD, PennDOT constructed 82 acres of forested area at the Center Site in conjunction with the stream and wetland mitigation areas. It is anticipated that the balance of the terrestrial mitigation will be completed in conjunction with future bat mitigation resulting from the Endangered Species Act Section 7 consultation process.)						
	The permittee will utilize the Center Mitigation Site, located in Snyder County, for all stream mitigation requirements for Section 1 (southern section) and Section 2 (northern section) and wetland mitigation required for Section 1 (southern section).	Construction					404 Permit Condition 15	District								
PennDOT will utilize construction procedures that minimize the likely introduction of invasive species into the mitigation areas in accordance with FHWA guidance related to Executive Order #13112	Construction					404 Permit Condition 22	Contractor									
PennDOT will designate an independent environmental monitor that may include the District Environmental Manager, their staff, or qualified designee. The monitor will oversee the construction phases of the project to ensure that permit conditions are met. The role of the independent environmental monitor will include: (a) monitoring the construction to ensure that the work is in compliance with this permit, (b) informing PennDOT and this office of any problems that arise concerning construction in waters of the U.S., including jurisdictional wetlands, (c) recommending measures to bring the project into compliance, (d) identify ongoing unresolved compliance issues for reference to the USACE, (e) Notify the USACE State College Field Office of ongoing unresolved compliance issues within 48 hours.	Construction					404 Permit Condition 27	District			A special provision will be developed addressing the Environmental Monitor. It will be added to the PS&E package.						
Terrestrial Community and Wildlife Habitats	The permittee shall remove trees for this project that have a diameter equal to and greater than three (3) inches at breast height (DBH) between November 1 and March 31 of any given calendar year to prevent killing or injuring bats. Where possible, shagbark hickory trees, dead and dying trees, and large diameter trees (greater than 12 inches DBH) shall be retained to serve as roost trees for bats. A written waiver must be acquired from the Pennsylvania Game Commission prior to cutting trees between April 1 and October 31.	Construction						N1	BO Condition 1a	Contractor						
	To avoid killing or injuring northern long-eared bats that may be roosting in buildings or structures, all demolition activities shall occur between October 1 and March 31, unless a Service approved emergence survey is completed (e.g., See Appendix E of 2015 Range-wide Indiana Bat Summer Survey Guidelines, April 2015) that support the conclusion that either bats are absent trapping studies demonstrate an absence of northern long-eared bats.	Construction						N1	BO Condition 1.b.	Contractor						
	Implement all mitigation commitments for NLE Bats as presented in the Bat Conservation Plan	Final Design/Construction							BO Condition 2	Contractor						
	Pile driving activities shall only occur during daylight hours.	Construction							BO Condition 1.c	Contractor						
	No project-related or project-generated materials, waste, or fill will be deposited in areas that would result in additional forest clearing or sedimentation to any streams in the action area or areas providing habitat to northern long-eared bats.	Construction							BO Condition 1.d	Contractor						
	During the bidding process, prospective project contractors will be notified regarding the presence of endangered species in the project area and the special provisions necessary to protect them. The successful contractor(s) will be instructed on the importance of the natural resources in the project area and the need to ensure proper implementation of the tree-cutting restrictions, erosion and sedimentation controls, and spill avoidance/remediation practices.	Final Design							BO Condition 1.e	GF						
	The following conditions (language) will be included in all construction and demolition contracts awarded for project implementation: 1. Endangered species are present in the project area and there is a risk of take (Endangered Species Act section 9 violation) if the Terms and Conditions of the Service's biological opinion are not closely followed. 2. Any trees greater than or equal to 3 inches diameter at breast height (d.b.h.) will only be cut from October 1 and March 31. 3. Best Management Practices for erosion and sedimentation control will be in place before, during, and after any work is conducted. 4. The Service will be notified immediately of any failures of erosion and sedimentation control measures or spills of hazardous materials.	Final Design							BO Condition 1.i	GF						

SOUTHERN SECTION 1 - DAM MITIGATION TRACKING SPREADSHEET 6/14/16

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				Commitment Origin	Final Design/Bid Package Prep			Construction			Post Construction				
			S1	S2	S3	S4		Responsible Party	Date/Initials	Action taken	Action Taken	Date/Initials	Action Taken	Action Taken	Date/Initials	Action Taken		
	PennDOT, or their contractor, will develop a Pollution Prevention and Contingency Plan which details strict implementation of siltation and erosion measures, off-site storage of toxic materials, hazardous material handling and disposal (i.e. oils, fuels, lubricants, cement and concrete materials, asphalt materials, herbicides, pesticides, and the like), contingency plans for unintended catastrophic events, equipment refueling (i.e., 300 feet away from aquatic resources and not on causeways), and construction crew education.	Final Design/Construction					BO Condition 1.f	GF										
	PennDOT or their contractors will develop and implement a plan for treatment of the wastewater from the interior of the bridge pier cofferdams that contain "green concrete" materials, residue or low pH water. The plan will be provided to the Service for concurrence and comment.	Final Design/Construction					BO Condition 1.g	GF/ Contractor										
	PennDOT or their contractors will develop a dust control strategy, reviewable by the Service. The plan will detail how they intend to eliminate or ameliorate the effects of changes in air quality conditions during construction, and control dust.	Construction					BO Condition 1.h	GF / Contractor										
	3.b. FHWA and PennDOT shall develop and implement bat monitoring plan in the southern section of the project prior to the onset of tree removal to evaluate if the assumptions in the BA and BO regarding the population of northern long-eared bats in the southern section of the project. i. A study plan for the monitoring will be submitted to the Service for review and concurrence no longer than 12 months after the project has begun. ii. Results of the bat monitoring study of the Southern Section will be submitted to the Service prior to tree cutting activities for the construction of the Southern Section. If additional information found during the southern monitoring study represents new information not previously considered in this opinion, it will be necessary to reinitiate consultation with the Service to determine what measures are necessary to reduce or avoid potential take. iii. The final monitoring study will be completed no longer than 24 months after the entire project is completed.						BO Condition 3.b	S&L										
	Any dead northern long-eared bats found in the action area will be reported to the Department, the Environmental Monitor, and the U.S. Fish and Wildlife Service's (Service's) Pennsylvania Field Office (110 Radnor Road, Suite 101, State College, PA 16801; telephone 814 234 4090) and Region 5 Division of Law Enforcement (300 Westgate Center Drive, Hadley, MA 01035 9589; telephone 413 253 8343) within 48 hours of discovery. Notification must include the date, time, and location of the carcass, and any other pertinent information. Northern long-eared bats that are accidentally killed, or that are moribund, are to be preserved in a cold location until properly identified (date of collection, complete scientific and common name, latitude and longitude of collection site, description of collection site). Specimens will be transferred to the Service or a Service-approved facility.	Construction					BO Condition 4	District 3-0 / S&L/ Contractor										
	Consider minor alignment shifts to minimize terrestrial habitat impacts	Final Design						GF		ROW impact area has been minimized as much as possible in these areas.								
	Consider final design modifications to stormwater management facilities	Final Design						GF										
	Verify locally important wildlife habitats have been avoided or impacts minimized	Final Design						S&L										
	Design vegetative clear zones along the edge of roadway and add safety measures (such as deer crossing signs) to avoid motorist/animal collisions	Final Design						GF										
	Limit the use of concrete median barriers where safety is not adversely affected	Final Design						GF		Use of concrete median barrier and median guide rail limited where safety is not adversely affected								
	Prior to construction, survey Ash Basin No. 3 and the adjacent property (AG2-5) each spring for the presence of the Upland Sandpiper (state threatened species)	Final Design						S&L		Complete - The habitat originally identified for Sandpiper is no longer present due to natural succession. Survey of the Ash Pond 3 and AG2-5 was previously conducted on 6-16-03 and 7-8-06.								
	Prior to construction, survey the project area each spring for the presence of the Bald Eagle (federal threatened and state endangered species)	Final Design						S&L		This effort has been focused on the river crossing in north to date. Nest surveys are conducted annually.								
	Continue annual coordination to update threatened and endangered species information in the project area until the start of construction	Final Design						S&L		Effective July 2, 2012, PNDI receipts and clearance letters issued by the jurisdictional agencies will be valid for two years. Our current letters from the jurisdictional agencies are dated 2014 (PGC letter =7/7/14, PA DCNR letter=9/8/14, PFBC letter=11/24/14, USFWS letter=9/19/14), therefore we will be performing agency outreach again in 2016. Additionally, we received a Biological Opinion from the USFWS for the Indiana Bat and the NLE bat.								
	Ensure that clearing and disturbance remains within the right-of-way and within areas cleared by the contractor. Consider habitat features that should be avoided and mark areas to remain unaltered.	Construction						S&L/Contractor										
	Review all contractor proposed off-site areas required during construction	Construction						S&L		Prepare a special provision discussing required reporting for all waste and borrow sites requiring a NPDES permit.								
	Avoid the salvage of topsoil from areas containing invasive plant species	Construction						Contractor		In accordance with Publication 756 (11/13), before earth moving begins, the LOD will be inspected by the Environmental Monitor for major areas of invasive species. If discovered, the contractor should develop a containment and disposal plan, paid incidental of the earthwork. This will be covered in the Environmental Monitor special provision.								
	Re-seed all exposed soil areas (including staging areas) with permanent cover as early as possible	Post-Construction						Contractor		This should be included in a ECMTS review and sign off and also in the E&S plans.								

SOUTHERN SECTION 1 - DAM MITIGATION TRACKING SPREADSHEET 6/14/16

RESOURCE	MITIGATION AND/OR MINIMIZATION	PROJECT PHASE	CONSTRUCTION SECTION				Commitment Origin	Final Design/Bid Package Prep			Construction			Post Construction			
			S1	S2	S3	S4		Responsible Party	Date/Initials	Action taken	Action Taken	Date/Initials	Action Taken	Action Taken	Date/Initials	Action Taken	
related to Earthwork Balance	Continue coordination with local municipalities to identify other potential surplus waste disposal sites	Final Design					FEIS/ROD	GF									
	Include Special Provision to specs to assure contractor has qualified professionals to investigate proposed disposal areas	Final Design						GF									
	If excess material is to be disposed of outside the project corridor, contractor must obtain all necessary approvals, including environmental clearances	Construction						Contractor									
2.15 Miscellaneous	Requests for alignment modifications will be considered during Final Design	Final Design					FEIS/ROD	GF									
	Contact Mrs. Hoke at 11 Colonial Drive when any PennDOT activities related to the CSVT occur near the Colonial Acres Development. She has concerns for pesticide use, CO/PM/Diesel from construction, Toxic Spills, operational AQ implications) related to asthmatic family members living in the dwells	Final Design, Construction, Post-Construction								District to make all contacts with Mrs. Hoke.							
	PENNDOT will coordinate with the National Geodetic Survey (NGS) to identify locations of geodetic control monuments. PENNDOT will notify NGS 90 days prior to required relocation of any monuments.	Final Design						GF		Coordination with NGS has occurred. No monuments will be affected by the CSVT construction							