

Engineering • Inspection

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SUMMARY

Purpose of the Study

Within the Clarion, Crawford, Forest, Venango, and Warren Counties in Northwest PA, there are currently 338 permanent bridges over 20 feet long on locally owned roads. The costs of maintaining, rehabilitating, and replacing these structures can signify an important portion of the limited budget of counties and municipalities. The purpose of this study is to identify local bridges that are operationally redundant as potential candidates for closure and removal. This identification will assist counties and municipalities in making decisions on the repair or replacement of those identified bridges when prioritizing future projects.

Methodology of the Study

The analysis and identification of the potential bridge candidates for closure and removal was executed in accordance with the process and guidelines developed by the Pennsylvania Department of Transportation (PennDOT) and included in Appendix AD to PennDOT Publication 10X, Design Manual Part 1X, Appendices to Design Manuals 1, 1A, 1B, 1C, and SOL482-13-13. This PennDOT process includes 10 different steps that generally involve data collection, mapping, and data analysis. In addition to the PennDOT process guidelines, the feedback and recommendations made by the following individuals were considered for the bridge evaluation and identification: the Project Steering Committee members, PennDOT District 1-0 and 10-0 personnel, County Planning Commission representatives, and public in general.

Primary Source of Bridge Data

The primary source of bridge data used for the initial bridge screening in this study was the PennDOT Bridge Management System (BMS) database. This database was obtained through a shape file downloaded in September 2014 from the following website:

ftp://ftp.dot.state.pa.us/public/Bureaus/PlanningResearch/PlanningPartners/Statewide_Shape_Files

Bridges Identified as Potential Candidates for Closure and Removal

The study identified a total of 33 bridges as potential candidates for closure and removal for the five counties, based on the criteria for bridge operational redundancy. The number of bridges identified for each county is as follows: 11 for Clarion County, 12 for Crawford County, 5 for Venango County, and 5 for Warren County. No potential candidates were identified for Forest County.

Five bridges in the BMS database (2 in Clarion County, 2 in Crawford County, and 1 in Venango County) were identified as already closed and removed. A list of these bridges is presented in Table 4.

In addition to the 38 bridges mentioned above, 8 bridges (3 in Clarion County and 5 in Crawford County) were recommended by County Commissioners and PennDOT representatives as potential candidates for operational redundancy. Considering that these bridges do not entirely fulfill the criteria followed in this study as potential candidates for redundancy, they were excluded from the final list presented in Table 3. However, this exclusion does not indicate that

they should not be considered as operationally redundant at the time of a future evaluation. The list of these recommended bridges is presented in Table 5.

Mitigation Strategies

Mitigation strategies were developed to address the impacts related to the closure and removal of the bridges selected as operationally redundant. These strategies included the identification of detour routes capable of accommodating additional traffic, detour signing, and the development of turnaround solutions for the truncated portion of each roadway. Exhibit 5 presents the mitigation strategies developed for each bridge.

Public Meetings

Three public meetings were conducted in late January 2016 at three different locations, Meadville, Titusville, and Clarion. The objectives of these meetings were to present the results of the study to the public, and receive comments and concerns from the public. The information presented by Quality Engineering Solutions, Inc. (QES) at the public meetings included an overview of the study background and objectives, and a summary of the bridge screening process. Additionally, the final list of candidates for each county was presented along with several examples of the mitigation strategies developed for the final bridge candidates. The material provided to the attendees included the total list of final candidates and a public involvement survey.

Specific feedback was obtained for nine bridges from the three public meetings. Feedback addressed 4 bridges in Crawford County, 3 bridges in Venango County, and 2 bridges in Clarion County. The feedback obtained from the public was mainly related to increase in users travel time, number of users affected, access of emergency vehicles, and property values. The comments and concerns expressed by the public were considered in the selection of the final list of potential candidates for closure and removal, resulting in revisions to the final list.

Future Work

For a particular project, the information and results included in this study are intended as a resource for use in conjunction with a detailed analysis of the conditions at the time of further evaluation. Additional variables other than the ones included in PennDOT Publication 10X can be used for the determination of operational redundancy for a particular bridge. These additional variables might include bridge proximity and remaining bridge life.

REDUNDANT BRIDGE INVENTORY STUDY

Background and Purpose of the Study

Within the Northwest Rural Planning Organization (Northwest RPO), which encompasses the counties of Clarion, Crawford, Forest, Venango, and Warren, 338 permanent bridges over 20 feet long exist on locally owned roads. These structures are owned independently by counties, municipalities, cities, and railroad companies. The distribution of the ownership varies by county, as presented in Figure 1. As seen in this figure, the majority of bridges are owned by local municipalities and cities, and to a lesser extent by the counties. A few of these bridges (i.e., 1 in Clarion County and 1 in Crawford County) are owned by railroad companies.

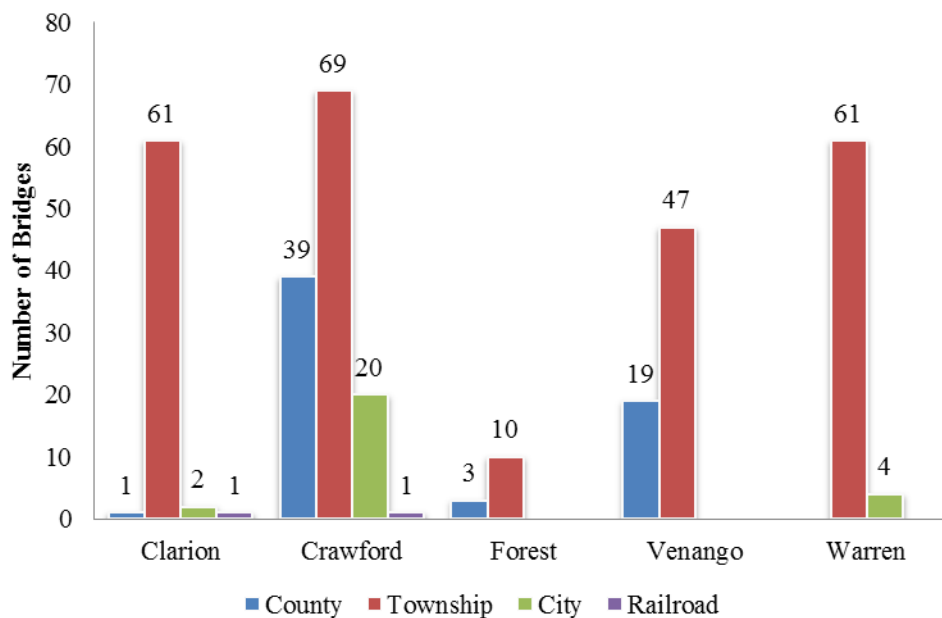


Figure 1. Distribution of Ownership of Local Bridges per County

According to the most updated report (June, 2014) from the Pennsylvania Department of Transportation (PennDOT), about 37% of these local structures are structurally deficient, approximately 41% are functionally obsolete, and about 28% are rated structurally deficient as well as functionally obsolete. Figure 2 presents the distribution of these categories for each of the five counties.

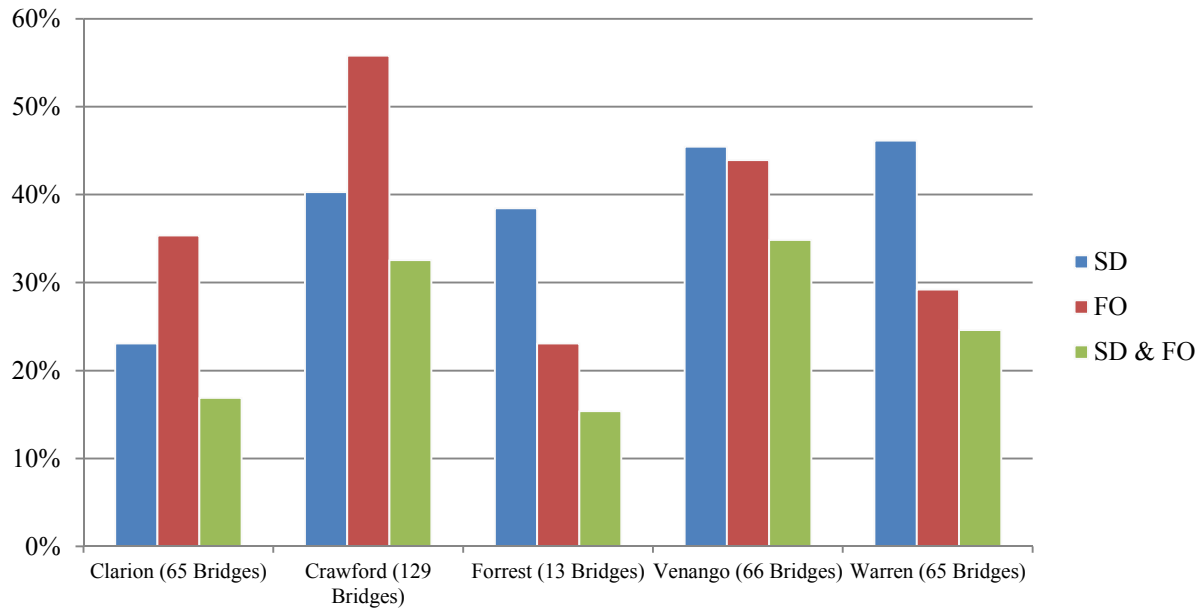


Figure 2. Structurally Deficient and Functionally Obsolete Bridges in the Five Counties

Whereas bridges rated structurally deficient or functionally obsolete are not inherently unsafe, the cost of maintaining, repairing, or replacing these types of structures can be a serious fiscal hardship for any county or municipality. The main purpose of this project is to identify the bridges over 20 feet long on the local route system that are operationally redundant and can be potential candidates for closure and removal. This identification will assist the counties and municipalities in making decisions on the repair or replacement of those identified bridges when prioritizing future projects. This effort is part of a long-term cost savings initiative by the Northwest Commission which entails optimization of the locally owned bridge inventory.

Project Scope and Methodology

The scope of this project was to identify potential candidates for closure and removal that are operationally redundant from among the 338 local bridges within the counties of Clarion, Crawford, Forest, Venango, and Warren. The study that was performed to accomplish this scope was executed in accordance with the guidelines developed by PennDOT and included in Appendix AD of Publication 10X Appendices to Design Manuals 1, 1A, 1B, and 1C, SOL482-13-13. The project was divided into four main tasks:

- Task 1 – Notification to Municipalities Involved
- Task 2 – Execution of the Study
- Task 3 – Final Report
- Task 4 – Informational Presentations at Public Meetings

A brief description of the activities performed for these tasks is as follows:

Task 1 involved sending a notification via email or U.S. mail to PennDOT Engineering Districts 1-0 and 10-0 and to all the municipalities where the bridges in this study are located. This

notification included the scope of the project, initial schedule, methodology, and contact information for QES and Northwest Commission key staff. A copy of one of the notifications sent can be seen in Appendix 1.

Task 2, which is the main focus of this report, was divided into seven subtasks:

- Subtask 2.1 Obtaining Bridge Data and Generating an Initial Bridge Map
- Subtask 2.2 Selection of the Study Area where the Identification Process will be Implemented
- Subtask 2.3 Develop Initial List of Operationally Redundant Bridges and Update the Initial Map
- Subtask 2.4 Collect Additional Data for Potential Redundant Bridges
- Subtask 2.5 Evaluate Collected Data to Create an Updated List of Bridges for Potential Closure and Removal
- Subtask 2.6 Perform Field View and Studies for the Pre-selected Bridges Meeting the Criteria
- Subtask 2.7 Develop Final List of Operationally Redundant Bridges and Develop Mitigation Strategies for Each

For the purpose of this report, the activities executed under Task 2 are grouped into two main sections, Bridge Screening Process and Development of Mitigation Strategies.

Task 3 specifically involved the execution of the final report.

Task 4 consisted of Informational Presentations at Public Meetings. Task 4 addresses three informational meetings to present the finding of this study to the public. A summary of these meetings is provided in a subsequent section (Public Informational Meetings) of this report.

Bridge Screening Process

The bridge screening process included all the activities under Subtask 2.1 through Subtask 2.7 except the development of mitigation strategies. In general, this process involved data collection, GIS mapping, data evaluation and analysis, and selection of potential candidate redundant bridges. A detailed description of the activities performed in this screening process follows.

Subtask 2.1 Obtaining Bridge Data and Generating an Initial Map (Steps 1 and 2 of the PennDOT Study Process) The emphasis of this subtask was to obtain basic geospatial data for the 338 bridges on the local route system included in this study, and generate a bridge map using ArcMap software. The shape files with the geospatial data were obtained from the PennDOT Bridge Management System (BMS) and the Pennsylvania Spatial Data Access (PASDA) website. The shape file of local bridges includes 177 specific attributes for each bridge. These attributes include information such as Bridge ID, Traffic, Detour Length, Year Built, Structurally Deficient Status, Functionally Obsolete Status, etc. A table with all the attributes for each bridge is presented in Appendix 2.

Additional data (e.g., local roads, rivers, creeks and streams, railroads, areas of proposed development, locations of emergency management services, important agriculture locations, and

school locations) was obtained from the PASDA website and County Planning Departments. These data were incorporated in the GIS map presented in Exhibit 1.

Subtask 2.2 Selection of Area where the Identification Process will be Implemented (Step 3 of PennDOT Study Process) This area was predetermined as the area within the five counties (i.e., Clarion, Crawford, Forest, Venango, and Warren).

Subtask 2.3 Develop Initial List of Operationally Redundant Bridges and Update Map (Steps 4 and 5 of PennDOT Study Process) In order to establish a clear selection process for the potential candidates for closure and removal, a decision chart was developed by QES. This chart was executed based on the following criteria established in the PennDOT study process (Appendix AD of Publication 10X, Appendices to Design Manuals 1, 1A, 1B, 1C, and SOL482-13-13):

- $AADT < 200$ and detour length < 5 miles
- $AADT \geq 200$ and < 500 and detour length < 2 miles
- Structure is Structurally Deficient (SD) or Functionally Obsolete (FO)
- Structure is already posted
- Length of dead end road (after closure) measured from both sides of the bridge
- EMS Network does not utilize this structure
- Programmed future maintenance:
 - Previously completed
 - Scheduled
 - Length of any associated construction (< 1 mile) and the right-of-way footprint

Note: Age of Structure (Year Built) was not included as criterion per recommendation of the project Steering Committee.

As seen in the decision chart presented in Exhibit 2, 16 different selection levels (i.e., 0, 1, 1A, 2, 2A, 3, 3A, 4, 4A, 5, 6, 7, 8, 9, 10, and 11) were created to assign a rank or priority order for each bridge depending on its potential to be a candidate for further analysis and to be eventually selected as a possible candidate for closure and removal. More, Level 0 (Top Level) includes the structures with the highest potential to be closed and removed. Level 11 (Lowest Level) includes the structures that do not fulfill any of the criteria to be considered as potential candidates for closure and removal. The intermediate levels decrease in order depending on the fulfillment of the criteria in the flow chart. Bridges falling in selection levels 0 to 4A were included in the initial list and considered candidates for further data collection and analysis.

Table 1 presents the bridges selected for the initial list. As seen in the table, the number of bridges selected by this initial screening for Clarion, Crawford, Venango, and Warren counties are 15, 14, 7, and 7, respectively. In the case of Forest County none of the bridges met the criteria to be included in the initial list of potential candidates.

Based on the selected potential candidates for closure and removal, the map generated in Subtask 2.1 was updated indicating the candidate structures for closure in red and structures for which closure is not feasible in green. The updated map is shown in Exhibit 3.

Table 1. Initial List of Operationally Redundant Bridges

County	Bridge Key	Location	Feature intersected	Facility
Clarion	11097	Ashland Township	Lit East Sandy Creek	T-398 Kline Road
	11157	Perry Township	Black Fox Run	T-300 Hillville Rd
	11173	Salem Township	Beaver Creek	T-345 Mehrten Rd
	43008	Monroe Township	Abandoned Rr	T-528 Rapp Road
	11102	Beaver Township	Canoe Creek	T-327 Shettler Rd
	11106	Beaver Township	Canoe Creek	T-385 Eagle Furnac
	11158	Perry Township	Trib To Allegheny River	T-647 Hagentown Rd
	11163	Redbank Township	Town Run	T-504 Windmill Rd
	11171	Richland Township	Turkey Run	Twp Rd 382
	11137	Limestone Township	Piney Creek	T-685 Limestone
	11149	Millcreek Township	Mill Creek	T-571 Millcreek Rd
	11153	Monroe Township	Piney Creek	T-528 Rapp Road
	11159	Porter Township	Fiddlers Run	T-462 Sled Road
	11166	Redbank Township	Pine Creek	Twp Rd 513
	11168	Redbank Township	Town Run	Twp Rd 840
Crawford	13393	Athens Township	Muddy Creek	T-776,Eddie Road
	13416	Conneaut Township	Linesville Creek	T-605, West Road
	13450	Oil Creek Township	Pine Creek	T-993,Messerall Rd
	13517	Woodcock Township	W..New York & Pa Rr.	T-653,Morris Road
	13530	Meadville Township	French Creek	Mead Avenue
	13545	City of Titusville	Church Run	Linden Place

County	Bridge Key	Location	Feature intersected	Facility
	13554	Saegertown	French Creek	T-962,Jordan Drive
	13390	Athens Township	Muddy Creek	T-743,Hamilton Rd.
	13499	Venango Township	Coulter Run	T-807,Kightlinger
	13513	Woodcock Township	Woodcock Creek	T-600,Craig Road
	13493	Troy Township	Sugar Creek	T-477,Jay Road
	13389	Athens Township	E.Br.Muddy Creek	T-709,Three Brg.Rd
	13408	Beaver Township	Stone Run	T-885,Jeruselum Rd
	13492	Troy Township	Sugar Creek E.Br.	T-477,Jay Road
Venango	33889	Jackson Township	Sugar Creek Br.	T-384,White Road
	33869	Clinton Township	Scrubgrass Ck. Br.	T-380,Phipps Road
	33896	Mineral Township	South Sandy Creek	T-300,Henderson St
	33919	Richland Township	Pine Run	T-377,Valley Churc
	45678	Allegheny Township	Tr.Pithole Ck.	T-632
	47236	Rockland Township	Trib To Allegheny	Dotter Road
	33923	Richland Township	Pine Run	T-590,Mcfeeters Rd
Warren	34228	Brokenstraw Township	Irvine Run	T-444,Irvine Run R
	34253	Freehold Township	Lt. Brokenstraw Ck.	T-561,North Road
	34272	Sheffield Township	Two Mile Run	T-540,Center St
	34286	Sugar Grove Township	Stillwater Creek	T-460,Stoddard Rd.
	34264	Pittsfield Township	Garland Run	T-378,Trailer Park
	34243	Eldred Township	Caldwell Creek	T-355,Chapel Hill
	41318	Spring Creek Township	Whitney Run	T-326,Jinks Road

Subtask 2.4 Collect Additional Data for Potential Redundant Bridges (Step 6 of PennDOT Study Process) The data collected in the previous subtasks was exported from ArcMap into an Excel spreadsheet. This spreadsheet was complemented with data from local planning partners and PennDOT. A brief description of the elements included in this data collection follows.

- Length of Dead End Streets – This length was measured along the proposed center line on both sides of the bridge.
- Subdivision and Land Development Ordinance Requirement – The maximum length of cul-de-sac allowed by the governing body was obtained from the county and municipality Subdivision and Land Development Ordinances (SALDO). This maximum length for Clarion County is 500 ft unless topography or other factors justify a greater distance. In the case of Crawford County there is no county-wide SALDO. For Venango County the maximum length allowed of cul-de-sac is 1,200 ft, and for Warren County this maximum length is 600 ft unless topography or other factors justify a greater distance. This information along with the requirements found for municipalities is presented in Exhibit 4.
- Residential Dwelling Units – The number of dwelling units on each side of the bridge that would be affected by bridge closure was determined from aerial maps. This data was confirmed during a subsequent field visit to the selected bridge candidates.
- Business Access Points – The number of driveways on each side of the bridge that connect the businesses and farms to the road was determined from aerial maps. This data was confirmed during a subsequent field visit to the selected bridge candidates.
- EMS Network Usage – Information regarding bridge usage by EMS vehicles was obtained from County EMS Managers. Clarion, Crawford, and Venango County Managers stated that all the local bridges are used by EMS vehicles. In the case of Warren County, several categories of usage (i.e., minor, moderate, major, extreme) were provided.
- School Bus Use – Bridge usage information by school buses was provided by school district personnel. It should be noted that this could change in the future.
- Historic Status – The historic status of the bridge was obtained from the PennDOT BMS database.
- Normal Travel Time and Detour Travel Time along designated detour route – Normal travel length and potential detour lengths were determined using aerial views and the GIS map. The Normal and Detour travel times were determined using this information.
- Percent Change in Travel Time – This variable was calculated using the following formula:

$$\left[\left(\frac{\text{Detour Time}}{\text{Normal Travel Time}} \right) - 1 \right] * 100\% \quad (1)$$

- Sidewalks – This information was determined from aerial maps and confirmed during a subsequent field visit to the selected bridge candidates.
- Railroad Presence – This information was collected using aerial views and the GIS map.
- Define Function of the Road – Based on the access points and traffic volume all the roads were categorized as Local.
- Flooding/Road Closure – This information was obtained from county emergency services.
- Scour Critical Bridge Indicator – This indicator was obtained from the PennDOT BMS database.
- Cost of Replacing Bridge – In the case of Venango County this information was provided by the Planning Director. For the rest of the counties this cost was calculated using the following formula included in the PennDOT guidelines:
 - Length*width (24ft minimum) = area
 - Area*price per square foot (\$650 per square foot, 2013 dollars)
- Cost Per Vehicle – This cost was calculated by dividing the cost of replacing the bridge by the most current ADT available.

Subtask 2.5 Evaluate Collected Data to Create an Updated List of Bridges for Potential Closure and Removal (Step 7 of PennDOT Study Process) The data collected in the previous subtask was evaluated following the guidelines in Step 7 of the PennDOT Study Process. Along with this evaluation, a revision of the initial list of Operationally Redundant Bridges developed in Subtask 2.3 and presented in Table 1 was executed. This revision was necessary due to updates to bridge attributes data provided by PennDOT Districts 1 and 10 and the counties. Table 2 presents a summary of the revisions made to the initial list.

Table 2. Summary of Revisions to Initial List of Candidates

County	Bridge Key	Location	Facility	Feature Intersected	Updated Information	Action
Clarion	11133	Limestone Township	T-444, Curl Rd	Piney Creek	Detour Length	Included as Candidate
	11153	Monroe Township	T-528, Rapp Rd	Piney Creek	Detour Length	Excluded as Candidate
Crawford	13415	Conneaut Township	T346, Russell Rd	Linesville Creek	Rehabilitation/ Replacement Plan	Included as Candidate
	13550	Conneautville	Center St	Conneaut Creek	Rehabilitation/ Replacement Plan	Included as Candidate
Venango	47236	Rockland Township	Dotter Rd	Trib To Allegheny	Rehabilitation/ Replacement Plan	Excluded as Candidate
	33914	Plum Township	T-627, Williams Rd	Sugar Creek Mid.Br.	Rehabilitation/ Replacement Plan	Included as Candidate

Warren	34228	Brokenstraw Township	T-444, Irvine Run Road	Irvine Run	Rehabilitation/ Replacement Plan	Excluded as Candidate
	34231	Columbus Township	T-350, Alderbottom	Tamarack Swamp Trib	Status (Closed)	Included as Candidate
	34232	Columbus Township	T-350, Alderbottom	Tamarack Swamp Trib	Status (Closed)	Included as Candidate
	34272	Village Of Sheffield	T-540, Center St	Two Mile Run	Recently Replaced	Excluded as Candidate

As seen in the table, Bridges 11133, 13415, 13550, 33914, 34231, and 34232 were included as potential candidates in the initial list. In contrast, Bridges 11153, 47236, 34228, and 34272 were removed from the initial list and not considered further as potential candidates for redundancy because, with the updated data, they did not fulfill the redundant criteria followed in the study.

A summary of the collected and evaluated data for each bridge is presented in Exhibit 4.

Subtask 2.6 Perform Field View and Studies for the Pre-selected Bridges Meeting the Criteria (Step 8 of PennDOT Study Process)

For the bridges selected in the previous subtask, field visits were completed in three different phases. The first phase from June 15 to June 17, 2015, the second phase from June 23 to June 25, 2015, and the final phase on October 8, 2015. The data collected during these field visits included the following:

- Traffic Counts – QES personnel completed manual 1-hour traffic counts at the selected bridges. This traffic data was converted to ADT using PennDOT Design Hour Factors (K-Factor) and Hourly Percentages (Tables 350 and 385 of PennDOT 2012 Pennsylvania Traffic Data Publication).
- Verification of Detour Route – The condition and accessibility of the proposed detour was verified. Additionally, the presence of Structurally Deficient and/or Functionally Obsolete bridges on the proposed detour was confirmed.
- Environmental Impact Footprint – The potential environmental impact due to bridge closure and removal and the implementation of mitigation strategies was evaluated.
- Right-of-Way Acquisition Footprint – The right-of-way acquisition footprint was evaluated for potential locations for the implementation of turnarounds and cul-de-sacs derived from the closure and removal of the selected structures.
- Utility Impacts – The existence of utility lines and the impact associated with the bridge removal was evaluated.
- Residential Impacts – The number of residential units possibly affected by the closure and removal of the selected structures was evaluated.
- Posted Status – The posted status of the structures with its corresponding weight limit was confirmed.

- Sidewalks – The existence of sidewalks on the bridges was verified.

The data collected for this subtask is presented in Exhibit 4.

Subtask 2.7 Develop Final List of Operationally Redundant Bridges and Develop Mitigation Strategies (Step 9 of PennDOT Study Process) Based on the field visits and the evaluation of the collected data, a final list of potential candidates for closure and removal was developed. For the development of this list, input from PennDOT was also considered, along with feedback from the county and municipality representatives, as well as the comments and inquiries from the citizens that submitted comments at or subsequent to the public informational meetings. A summary of these comments and inquiries from the public are presented in the Public Informational Meetings section below.

Table 3 shows the list of bridges that correspond to the final list of potential candidates for closure and removal. This list includes the corresponding county, location, municipality, owner, and principal remarks for each structure.

Table 3. Final List of Potential Candidates for Closure and Removal

County	Bridge Key	Location	Facility	Feature Intersected	Remarks
Clarion	11102	Beaver Township	T-327 Shettler Road	Canoe Creek	SD, FO, Posted, DL=1.15 mi, SB, Owner: Township
	11106	Beaver Township	T-385 Eagle Furnace	Canoe Creek	SD, FO, Closed, Owner: Township
	11133	Limestone Township	T-444 Curl Road	Piney Creek	FO, Posted, DL=2.5mi Owner: Township
	11137	Limestone Township	T-685 Cemetery Road	Piney Creek	FO, Posted, DA, DL=0.37mi, Owner: Township
	11158	Perry Township	T-647 Hagentown Road	Trib. To Allegheny River	SD, Posted, DL=0.44mi, SB, Owner: Township
	11159	Porter Township	T-462 Sled Road	Fiddlers Run	FO, Posted, DL=3.2mi, SB, Owner: Township
	11163	Redbank Township	T-504 Windmill Road	Town Run	SD, FO, Posted, DL=1.94mi, DRPC, SB, Owner: Township
	11166	Redbank Township	T-513 Dewey Road	Pine Creek	FO, Posted, DL=1.92mi, SB Owner: Township

County	Bridge Key	Location	Facility	Feature Intersected	Remarks
	11168	Redbank Township	T-840 Truittsburg Rd	Town Run	FO, Posted, DL=3mi, DRPC, SB, Owner: Township
	11171	Richland Township	T-382 Ritts Farm Rd	Turkey Run	SD, FO, Posted, DL=3.6mi, SB, Owner: Township
	11173	Salem Township	T-345 Mehrten Rd	Beaver Creek	SD, FO, Closed, Owner: Township
Crawford	13389	Athens Township	T-709, Three Bridge Rd	E.Br. Muddy Creek	FO, Posted, DL=4.52mi, SB, Owner: Township
	13390	Athens Township	T-743 Hamilton Rd	Muddy Creek	SD, FO, Closed, Owner: County
	13408	Beaver Township	T-885 Jerusalem Rd	Stone Run	FO, Posted, DL=1.72mi, FOBD, Owner: County
	13415	Conneaut Township	T-346 Russell Rd	Linesville Creek	SD, FO, Posted, DL=3mi, Owner: Township
	13416	Conneaut Township	T-605 West Rd	Linesville Creek	SD, FO, Closed and Partially Removed, Owner: Township
	13450	Oil Creek Township	T-993 Messerall Rd	Pine Creek	SD, FO, Closed and Partially Removed, Owner: County
	13492	Troy Township	T-477 Jay Rd	Sugar Creek E.Br.	FO, Posted, DL=4.51 mi, SB, Owner: Township
	13493	Troy Township	T-477 Jay Rd	Sugar Creek	FO, Posted, DL=1.66mi, SB, Owner: Township
	13499	Venango Township	T-807 Kightlinger	Coulter Run	SD, FO, Posted, DL=0.68mi, SB, Owner: Township
	13513	Woodcock Township	T-600 Craig Rd	Woodcock Creek	SD, FO, Posted, DA, DL=1.82mi, Owner: County
	13545	City Of Titusville	Linden Place	Church Run	SD, FO, Posted, DL=0.18mi, Owner: City
	13550	Conneautville	Center St	Conneaut Creek	SD, FO, Posted, DL=0.56mi, Owner: County

County	Bridge Key	Location	Facility	Feature Intersected	Remarks
	13554	Saegertown	T-962 Jordan Dr	French Creek	SD, FO, Posted, DL=1.21mi, Owner: County
Venango	33869	Clinton Township	T-380 Phipps Rd	Scrubgrass Ck. Br.	SD, FO, Posted, DL=3.17mi, Owner: Township
	33914	Plum Township	T-627 Williams Rd	Sugar Creek Mid.Br.	SD, FO, Posted, DL=2.8mi, Owner: Township
	33919	Richland Township	T-377 Valley Church Rd	Pine Run	SD, FO, Posted, DL=2.51mi, SB, Owner: Township
	33923	Richland Township	T-590 Whitling Rd	Pine Run	FO, Posted, DL=3.13mi, Owner: Township
	45678	Allegheny Township	T-632 Pleasant Valley Dr	Tr.Pithole Ck.	SD, FO, Posted, DL=1.85mi, Owner: Township
Warren	34231	Columbus Township	T-350 Alderbottom Rd	Tamarack Swamp Trib	SD, Closed, No Plans to Reopen it. Owner: Township
	34232	Columbus Township	T-350, Alderbottom Rd	Tamarack Swamp Trib	SD, Closed, No Plans to Reopen it. Owner: Township
	34243	Eldred Township	T-355, Chapel Hill Rd	Caldwell Creek	SD, FO, Posted, DL=2.0mi, Owner: Township
	34286	Sugar Grove Township	T-460 Stoddard Rd	Stillwater Creek	Box Culvert, SD, FO, Posted, DA, DL=3.2mi, Owner: Township
	41318	Spring Creek Township	T-326 Jinks Rd	Whitney Run	SD, FO, Posted, DL=3.77mi, Owner: Township

SD= Structurally Deficient

FO= Functionally Obsolete

DL= Detour Length

DA= Bridge located in Development Area

FOBD= Functionally Obsolete Bridge on Detour

DRPC= Portions of Detour Route in Poor Condition

SB= School Bus using the bridge

As seen in Table 3, there are 5 bridges currently closed. Of these 5 bridges, 2 have been partially removed, and the other 2 will not be considered for reopening in the future. In the case of the

bridges that are currently open, the common characteristics that lead to their selection as final candidates are as follows:

- ADT is less than 500
- Detour length is shorter than 5 miles
- Bridges are either Structurally Deficient or Functionally Obsolete
- Bridges are posted
- No future rehabilitation or replacement is planned

In addition to the 33 bridges identified as potential candidates and presented in Table 3, 5 bridges already closed and removed were found within the five counties. As presented in Table 4, 2 bridges were found in Clarion County, 2 bridges in Crawford County, and 1 bridge in Venango County. It is recommended to remove these structures from the PennDOT county and municipal inventories.

Table 4. List of Bridges already Closed and Removed

County	Bridge Key	Location	Facility	Feature Intersected	Remarks
Clarion	11157	Perry Township	T-300 Hillville Rd	Black Fox Run	Closed and Removed Owner: Township
	43008	Monroe Township	T-528 Rapp Rd	Abandoned Rr	Closed and Removed Owner: Railroad
Crawford	13393	Athens Township	T-776,Eddie Rd	Muddy Creek	Closed and Removed Owner: County
	13517	Woodcock Township	T-653,Morris Rd	W.New York & Pa Railroad	Closed and Removed Owner: Railroad
Venango	33889	Jackson Township	T-384,White Rd	Sugar Creek Br	Closed and Removed Owner: Township

Exhibit 4 presents a summary of the attributes for each bridge identified as a potential candidate for closure and removal including the bridges that were found already closed and removed.

Bridges Recommended as Potential Candidates by County Commissioners and/or PennDOT Representatives

Table 5 presents a list of bridges that were recommended by County Commissioners and PennDOT representatives for inclusion in the final list of bridges considered potential candidates for closure and removal. Although these bridges may exhibit characteristics of operational redundancy, they were not included in the final list of candidates presented in Table 3 since on the basis of the BMS data they do not completely fulfill the criteria followed in the study for the selection of candidates. For instance, Bridge 13546 on South Perry Street in Titusville,

Crawford County, is structurally deficient, functionally obsolete; it is currently posted, and has a relatively short detour (i.e., approximately 1 mile); however, its traffic volume (i.e., ADT=1,023 vehicles) is substantially higher than the threshold value established in the study guidelines (i.e., ADT < 500 vehicles).

Table 5. List of Bridges Recommended by County and/or PennDOT Representatives as Potential Candidates for Redundancy

County	Bridge Key	Location	Facility	Feature Intersected	Owner	Remarks
Clarion	11131	Licking Township	T-341 Myers Hollow	Cherry Run	Township	ADT (Year 2007) =50, DL=1.1mi, Posted
	11170	Richland Township	T-310 Metz Rd	Richey Run	Township	ADT (Year 2007) =50, DL=2.70mi, No Posted
	40564	Redbank Township	T-506 Wallwork Rd	Pine Creek	Township	ADT (Year 2007) =50, DL=1.0mi, No Posted
Crawford	13401	Beaver Township	T-867 Philadelphia	Middle Br. Conneaut	Township	ADT (Year 2012) =250, FO, DL=2mi, No Posted
	13428	East Med Township	T-517 Plank Rd	Little Sugar Creek	County	ADT (Year 2012) =250, SD, FO, DL=2.7mi, Posted
	13446	Oil Creek Township	T-926 Dotyville Rd	Pine Creek	County	ADT (Year 2011) =250,SD, FO, DL=3.0mi, Posted
	13456	Rockdale Township	T-840 Hogback W. Rd	Kelly Run	Township	ADT (Year 2012) = 50,SD, DL=1.0mi, No Posted
	13546	Titusville	South Perry St	Oil Creek	County	ADT (Year 2013) = 1,023, SD, FO, DL=1.0mi, Posted

ADT = Average Daily Traffic
SD= Structurally Deficient
FO= Functionally Obsolete
DL= Detour Length

The fact that these bridges were not included in the final list of candidates does not indicate that they shouldn't be considered operationally redundant for a future evaluation. Transient variables such as traffic volume or structural condition prevalent at that time should be reassessed. Additionally, variables not included in this study, such as bridge proximity or bridge remaining life, can also be considered for the redundancy analysis at the time of the evaluation of a specific bridge.

Mitigation Strategies

The final activity for Task 2 was to develop mitigation strategies for the potential impact of the closure and removal of the selected bridges. These selected bridges correspond to the bridges in the potential candidate list that are currently in service. The strategies considered include the identification of a traffic detour route, temporary detour signing, and recommendations for permanent turnarounds on closed roads.

Traffic Detour Routes Detour routes for bridges selected as potential candidates for closure and removal that are currently in service were identified. The selection of these detour routes considered factors such as shortest distance routes on public roads, the capability of the road to accommodate the additional traffic, the existence of structurally deficient bridges on the route, and the current condition of the roads. The lengths of the identified detours range from 0.18 mi to 4.5 miles. These detour routes can be implemented temporarily during bridge removal as well as permanently after the bridge has been removed. The detour routes identified for each bridge are presented in Exhibit 5.

Temporary Detour Signing The recommended signing to be implemented during the time of bridge removal should comply with the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition Figure 6H-20. This figure, presented in Appendix 3, includes all the signing required for a typical detour for a closed street.

Permanent Turnarounds In order to provide for vehicles turning around on closed roads, the implementation of permanent turnarounds at specific locations at the terminus of these roads was evaluated. The types and minimum dimensions for these turnarounds was based on the types of cul-de-sacs and dead-end streets included in Chapter 5 of the American Association of State Highway and Transportation Officials (AASHTO) 2011 Policy on Design of Highways and Streets (i.e., Green Book). Appendix 4 shows Figure 5-1 of this publication which provides nine different types of cul-de-sacs and dead-end streets with their corresponding minimum dimensions for four types of design vehicles (Passenger, Single Unit, WB-40, and WB-50). For this evaluation, the Single Unit Vehicle was used as the design vehicle and only three types of cul-de-sacs were considered (Figure 3):

- Circular all paved
- circular offset
- L-Type

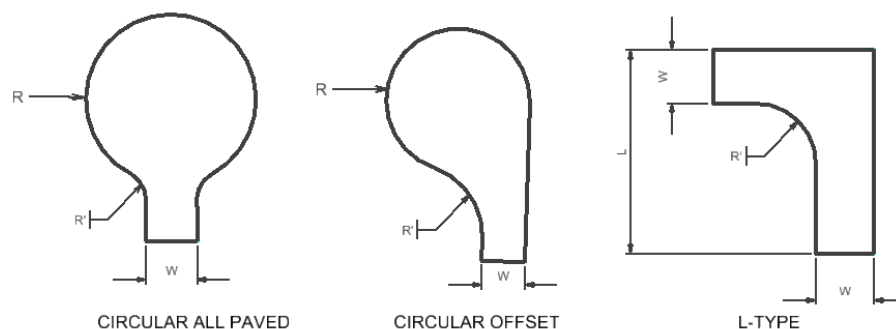


Figure 3. Cul-de-sacs Types Used

Of these three types of cul-de-sacs, the preferred option was the circular offset. This choice is mainly based on the need for additional right-of-way only from one side of the road. However, in some cases where space and/or topographic restrictions existed, the other two turnaround types were also utilized.

Exhibit 5 presents conceptual plans that include the type and location of the proposed cul-de-sacs for the bridges listed in Table 3 that are currently in service. As seen in Exhibit 5, the radius used for the circular cul-de-sacs was 30 feet. This radius permits a single unit truck to perform a turn with only one steering reversal. The L-type turnarounds have a total offset of 50 feet to also allow a single unit truck to perform a continuous turn.

The right-of-way for the turnarounds is assumed to extend 15 feet beyond the pavement edge. The approximate right-of-way acquisition footprint for each bridge is presented in Exhibit 4. This acquisition footprint which assumes an existing right-of-way of 33 feet was calculated as approximately 3,500 sq ft for the circular all paved cul-de-sac, 3,600 sq ft for the circular offset cul-de-sac, and 1,400 sq ft for the L-type turnaround.

In cases where the dead-end road is less than 300 feet in length, the recommendation is to close the road at the nearest intersection.

Public Informational Meetings

The final task of the study (Task 4) consisted of conducting public informational meetings to present the results of the study to local officials and the public in general. A press release was posted in five of the main newspapers in the area within the five counties. Additionally, the township managers for the municipalities where final candidates are located were invited via email and telephone. A copy of the press release and invitation to the townships can be seen in Appendix 5. In order to distribute the meetings geographically, three public meetings were held at the following locations, dates and times:

Table 6. Public Informational Meetings Information

Location	Date
Vernon Township Building 16678 McMath Ave Meadville, PA 16335	January 20, 2016 5:00 PM
Drake Well Museum 202 Museum Ln Titusville, PA 16354	January 21, 2016 5:00 PM
Main Street Center 516 Main Street Clarion, PA 16214	January 27, 2016 6:00 PM

The information presented by QES at the public meetings included an overview of the study background and objectives, and a summary of the bridge screening process. Additionally, the final list of candidates for each county was presented along with several examples of the mitigation strategies developed for the final bridge candidates. A copy of the slides used in the presentation can be seen in Appendix 6. The material provided to the attendees included the

total list of final candidates and a public involvement survey (see Appendix 7). The attendance of each meeting was recorded in a sign-in sheet (see Appendix 8).

Meadville Meeting January 20th, 2016

A total of 13 individuals attended this meeting. A summary of the comments and responses to the public involvement surveys received is as follows:

- **Bridge Key:** 13554
County: Crawford
Location: Saegertown
Facility: T-962 Jordan Drive
Feature Intersected: French Creek

There is a roundabout planned to be constructed at the beginning of 2016 by PennDOT at the east end of the bridge. The community has invested \$20,000 to light this bridge and the bridge has historical significance. Many vehicles can't make the turn from Route 19 onto the west end of Jordan Drive. When school lets out, the traffic volume is high and accidents can occur on Route 19. Two survey responses were received for this bridge. Note: This bridge was initially included in the final list of candidates, but it was removed after considering the comments and concerns expressed by the community, as summarized above.

- **Bridge Key:** 13389
County: Crawford
Location: Athens Township
Facility: T-709, Three Bridge Road
Feature Intersected: E.Br. Muddy Creek

Muddy Creek splits a property of 64 acres in half, this bridge is the only access from side to side of the property. During the summer the area is heavily used recreationally (fishing, swimming, fish commission annual stocking site, etc.). The detour route is long and the condition of its roads is poor. There are other questionable bridges on the detour route. One survey was received for this bridge.

Titusville Meeting January 21st, 2016

A total of seven individuals attended this meeting. A summary of the comments and responses to the public involvement surveys received is as follows:

- **Bridge Key:** 11171
County: Crawford
Location: Richland Township
Facility: T-382, Ritts Farm Road
Feature Intersected: Turkey Run

The bridge is used by school buses and the closure and removal of this bridge will affect many homes.

One survey was received for this bridge.

- **Bridge Key:** 33919
County: Venango
Location: Richland Township
Facility: T-377, Valley Church Road
Feature Intersected: Pine Run

This bridge is the main artery to the Northern part of the township. There are school students picked up along Valley Church Road. One survey was received for this bridge.

- **Bridge Key:** 33923
County: Venango
Location: Richland Township
Facility: T-590, Whitling Road
Feature Intersected: Pine Run

If this bridge is closed and for some reason Valley Church Road can't be used, the detour route would be too long. One survey was received for this bridge.

- **Bridge Key:** 33896
County: Venango
Location: Mineral Township
Facility: T-300, Henderson Street
Feature Intersected: South Sandy Creek

This bridge is used by a gas company, residents, and emergency vehicles. It would take a long time to reach these homes and the gas company in case of emergency. The closure would add considerable time to the emergency vehicles response. During winter months the bridge closure would trap people in if one of the adjacent hilly roads was slippery. As it is, the township uses this road to get to the other roads on this side of the township. One survey was received for this bridge. Note: This bridge was included in the preliminary final list of candidates but it was removed considering the comments and concerns expressed by the community summarized above.

- **Bridge Key:** 13546
County: Crawford
Location: Titusville
Facility: South Perry Street
Feature Intersected: Oil Creek

When this bridge was closed before, it caused a lot of extra traffic down Bloss Street through the neighborhood where children play. Also, when this bridge and Franklin Street Bridge were closed, it was difficult for all the traffic to get to the Brown Street Bridge. As long as the Franklin Street Bridge is open, the detour is not an issue. If for some reason, both the South Perry Street Bridge and the Franklin Street Bridge are closed, the traffic volume and the delay times are much higher. The recent traffic count does not consider trucks and school buses that

can't cross the bridge now. The Franklin Street Bridge is 76 years old and will need to be replaced in the future. If the South Perry Street Bridge is closed, all traffic will go to the Brown Street Bridge with a one lane street leading to it. Two surveys were received for this bridge. Note: This bridge was not included in the final list of potential candidates. However, it is in the list of bridges recommended for closure and removal by PennDOT representatives presented in Table 5.

Clarion Meeting January 27st, 2016

A total of 11 individuals attended this meeting. A summary of the comments and responses to the public involvement surveys received is as follows:

- | | |
|---|--|
| <ul style="list-style-type: none">• Bridge Key: 11133
County: Clarion
Location: Limestone Township
Facility: T-444 Curll Road
Feature Intersected: Piney Creek | <ul style="list-style-type: none">• Bridge Key: 11137
County: Clarion
Location: Limestone Township
Facility: T-685 Cemetery Road
Feature Intersected: Piney Creek |
|---|--|

If these two bridges are removed it will cause a major hardship for the township residents, emergency vehicles, and school buses. Township workers cross the two bridges almost every day. One survey was received for these two bridges.

Conclusions and Recommendations

- A total of 338 local bridges at least 20 ft long within Clarion, Crawford, Forest, Venango, and Warren counties were evaluated to identify potential candidates for closure and removal on the basis of operational redundancy. A detailed screening process was executed generally following the guidelines developed by PennDOT and included in Appendix AD of Publication, 10X Appendices to Design Manuals 1, 1A, 1B, 1C, and SOL482-13-13. After this screening, which included field data collection and feedback from PennDOT, county, and municipal representatives, and the public in general, a total of 33 potential candidates for closure and removal were identified within the five counties. Of these 33 bridges, 7 are already closed and the remaining 26 currently remain in service.
- The final number of bridges identified as potential candidates for closure and removal for each county is as follows: 10 in Clarion County, 13 in Crawford County, 5 in Venango County, and 5 in Warren County. No potential candidates were identified within Forest County.
- In addition to the 33 bridges identified as potential candidates, a total of 5 bridges (2 in Clarion County, 2 in Crawford County, and 1 in Venango County) were found already closed and removed. It is recommended that these bridges be removed from the BMS Local Bridges database.
- Considering the total number of local bridges per county, the approximate percentage of bridges identified as potential candidates for closure and removal for each county is as

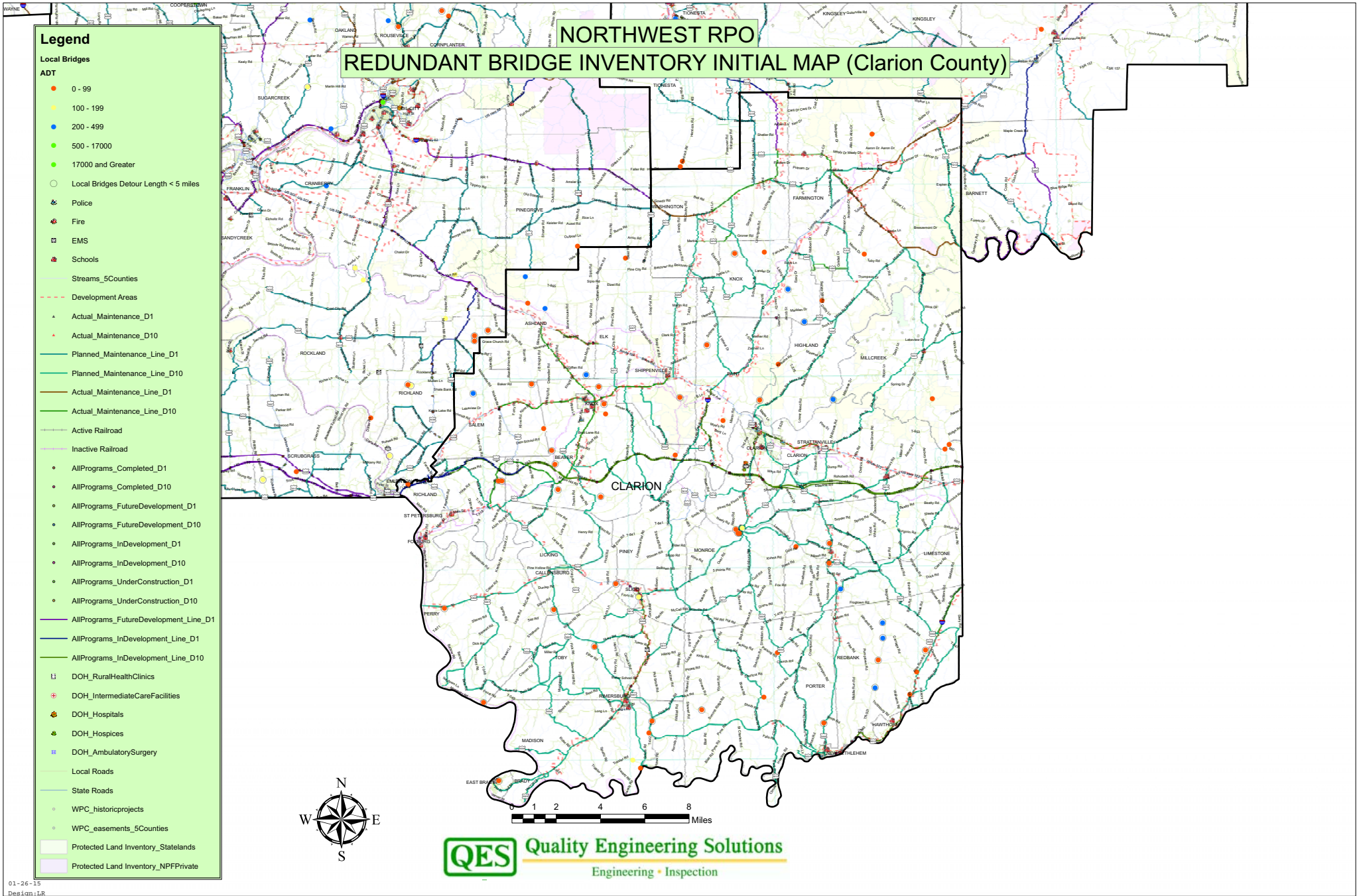
follows: Clarion County 17%, Crawford County 9%, Forest County 0%, Venango County 8%, and Warren County 8%. With the exception of Clarion County and Forest County, the results of this study are similar to the results obtained in a previous study conducted in Mercer County, where the percentage of identified candidates was approximately 8% of the total number of local bridges.

- An extensive amount of information was collected for each of the structures evaluated as potential candidates. This data includes elements such as traffic volume, residential impact, historic status, estimated replacement costs, percentage change in travel time, and length of dead-end street created. This information along with the results of this study will be useful to counties and municipalities in making decisions concerning the future rehabilitation or replacement of these structures.
- Mitigation strategies were developed for the bridges identified as potential candidates that are currently in service. These strategies included the identification of a traffic detour route, temporary detour signing, and recommendations for permanent turnarounds on closed roads.
- In addition to the 33 bridges identified as operationally redundant and the 5 bridges found already closed and removed, 8 bridges (i.e., 3 in Clarion County and 5 in Crawford County) were recommended for inclusion in the final list of potential candidates by County Commissioners and PennDOT representatives. These bridges exhibit some characteristics of operationally redundant structures, but they were not included in the final list of candidates because they did not completely fulfill the criteria followed in this study.
- Three public informational meetings were conducted to present the results of this study. The comments and concerns from the public were mainly related to increases in users travel time, number of users affected, access of emergency vehicles, and property values. These comments and concerns were taken into account for the selection of the final potential candidates for closure and removal.
- The list of potential candidates identified during this study does not constitute a final verdict about the removal, rehabilitation, or replacement of these bridges. Moreover, the information included in this report is intended as a resource for use in conjunction with a detailed evaluation of the conditions present at the time of a particular bridge project evaluation. Additional variables other than the ones included in PennDOT Publication 10X can be used for the determination of operational redundancy for a particular bridge. These additional variables might include proximity to other bridges and bridge remaining life.
- The guidelines included in Appendix AD of PennDOT Publication 10X, Appendices to Design Manuals 1, 1A, 1B, 1C, and SOL482-13-13 provide a detailed step-by-step bridge screening process for the selection of candidates for closure and removal. However, it was found that this process does not establish a clear relationship between each of the variables considered in the candidates' selection criteria, and also it does not establish a weight or importance level to each of the variables evaluated. In order to provide a solution for these issues, QES developed a decision chart that was used as a tool in this study. This tool, if considered appropriate, may aid the decision makers in their task.

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1. American Association of State Highway and Transportation Officials (AASHTO). *A Policy on Geometric Design of Highways and Streets*. Washington, D.C., 2004.
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3. Pennsylvania Department of Transportation. 2013. Multimodal Project Management System Interactive Query . [ONLINE] Available at: http://www.dot7.state.pa.us/MPMS_IQ/Mapping#. [Accessed Jan 2015].
4. Pennsylvania Department of Transportation. 2007. Bridge Management System. [ONLINE] Available at: <https://www.dot14.state.pa.us/BMS2Web/>. [Accessed Nov 2014].
5. Trans Associates Engineering Consultants, Inc. *Bridge Closure and Removal Study, Mercer County, Pennsylvania*. Mercer County Engineer's Office, Greenville, PA, January 2015.
6. PennDOT Bureau of Planning and Research Transportation Planning Division. *2013 Pennsylvania Traffic Data*. In cooperation with US DOT FHWA Pub 601 (9-14).

Exhibit 1 Initial Map



NORTHWEST RPO

REDUNDANT BRIDGE INVENTORY INITIAL MAP (Crawford County)

Legend

Local Bridges

ADT

- 0 - 99
- 100 - 199
- 200 - 499
- 500 - 17000
- 17000 and Greater

- Local Bridges Detour Length < 5 miles

- Police
- Fire
- EMS
- Schools

- Streams_5Counties

- Development Areas

- Actual_Maintenance_D1

- Actual_Maintenance_D10

- Planned_Maintenance_Line_D1

- Planned_Maintenance_Line_D10

- Actual_Maintenance_Line_D1

- Actual_Maintenance_Line_D10

- Active Railroad

- Inactive Railroad

- AllPrograms_Completed_D1

- AllPrograms_Completed_D10

- AllPrograms_FutureDevelopment_D1

- AllPrograms_FutureDevelopment_D10

- AllPrograms_InDevelopment_D1

- AllPrograms_InDevelopment_D10

- AllPrograms_UnderConstruction_D1

- AllPrograms_UnderConstruction_D10

- AllPrograms_FutureDevelopment_Line_D1

- AllPrograms_InDevelopment_Line_D1

- AllPrograms_InDevelopment_Line_D10

- DOH_RuralHealthClinics

- DOH_IntermediateCareFacilities

- DOH_Hospitals

- DOH_Hospices

- DOH_AmbulatorySurgery

- Local Roads

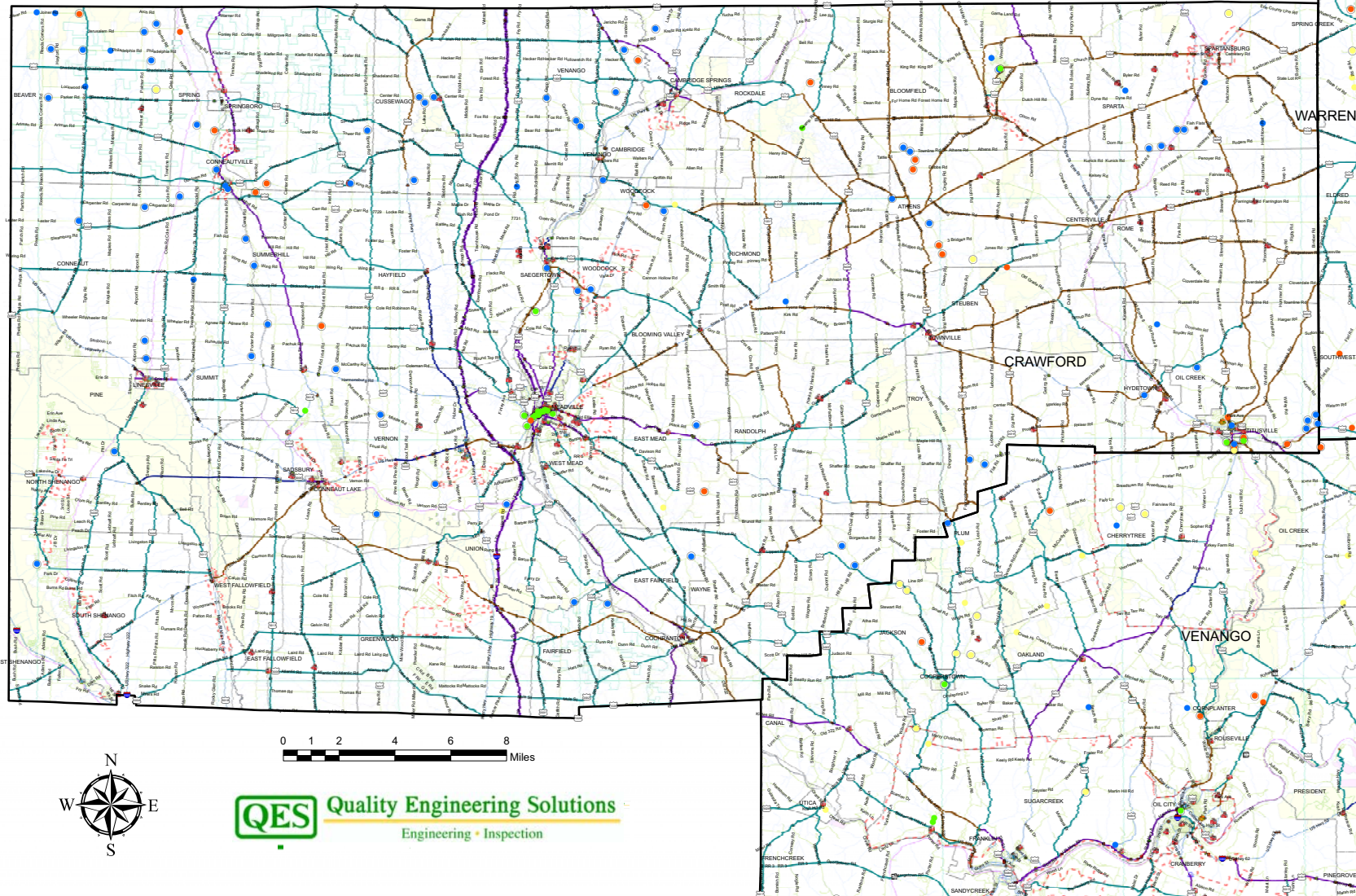
- State Roads

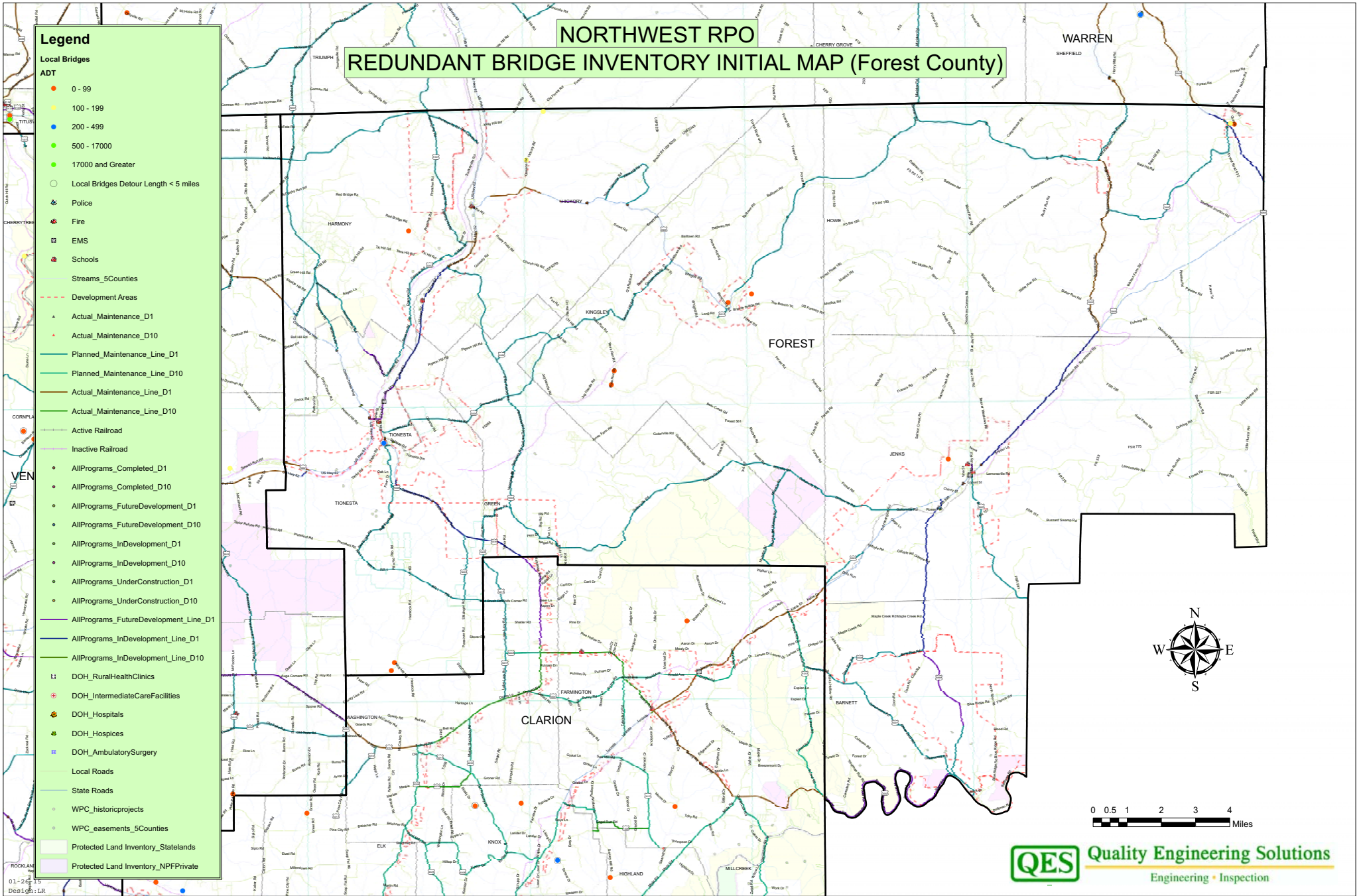
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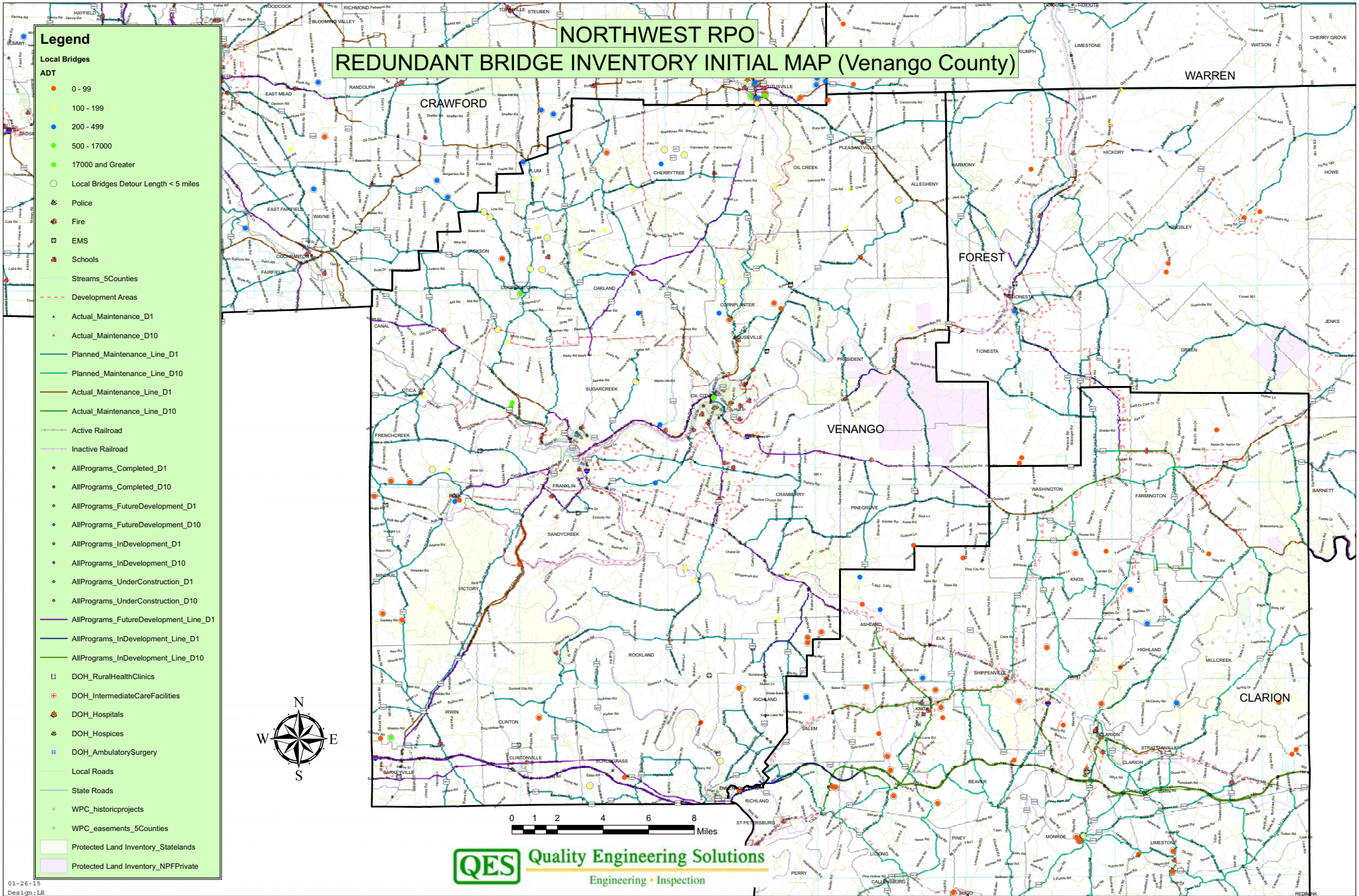
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- Protected Land Inventory_StateLands

- Protected Land Inventory_NPFPPrivate







NORTHWEST RPO

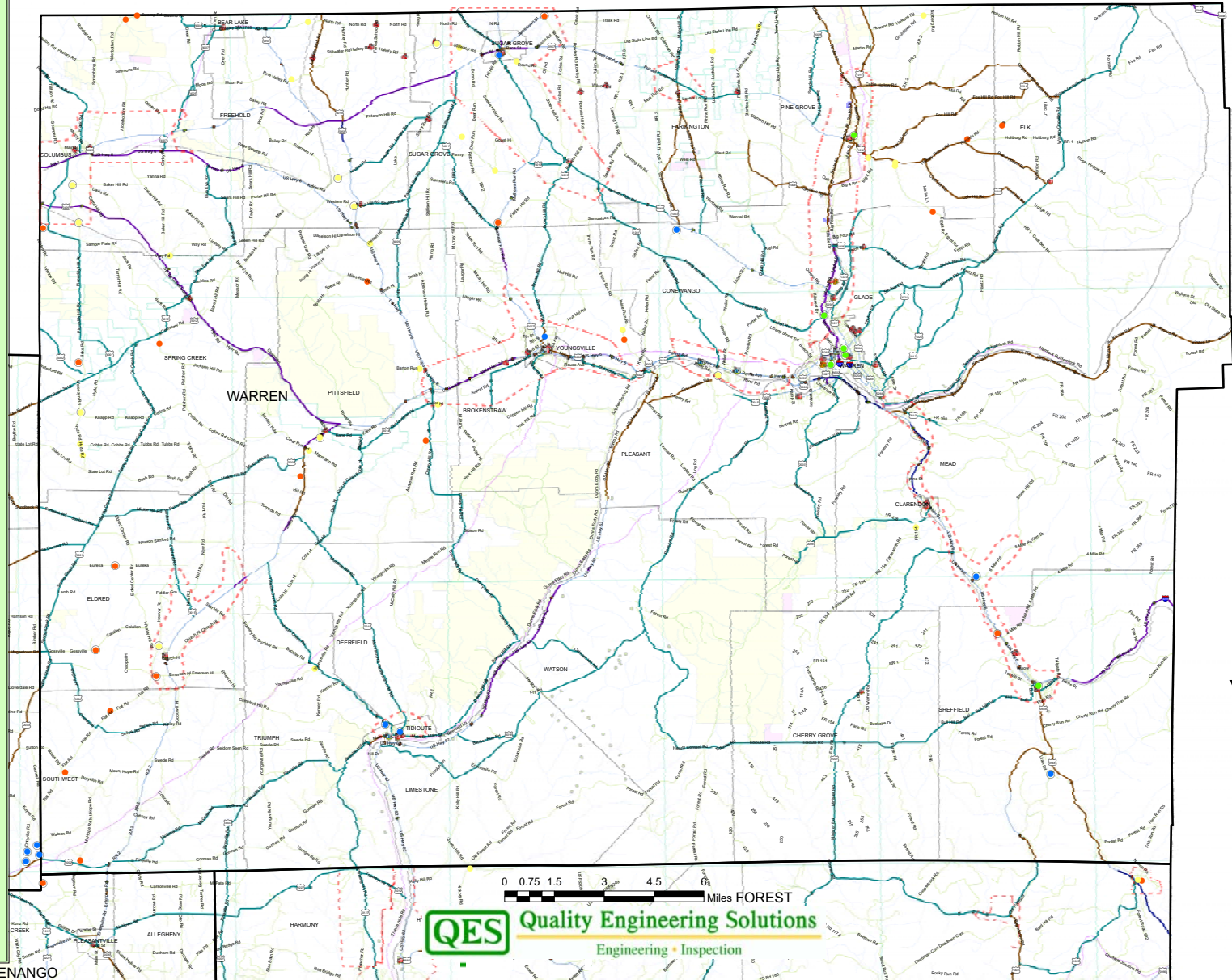
REDUNDANT BRIDGE INVENTORY INITIAL MAP (Warren County)

Legend

Local Bridges

ADT

- 0 - 99
- 100 - 199
- 200 - 499
- 500 - 17000
- 17000 and Greater
- Local Bridges Detour Length < 5 miles
- Police
- Fire
- EMS
- Schools
- Streams_5Counties
- Development Areas
- Actual_Maintenance_D1
- Actual_Maintenance_D10
- Planned_Maintenance_Line_D1
- Planned_Maintenance_Line_D10
- Actual_Maintenance_Line_D1
- Actual_Maintenance_Line_D10
- Active Railroad
- Inactive Railroad
- AllPrograms_Completed_D1
- AllPrograms_Completed_D10
- AllPrograms_FutureDevelopment_D1
- AllPrograms_FutureDevelopment_D10
- AllPrograms_InDevelopment_D1
- AllPrograms_InDevelopment_D10
- AllPrograms_UnderConstruction_D1
- AllPrograms_UnderConstruction_D10
- AllPrograms_FutureDevelopment_Line_D1
- AllPrograms_InDevelopment_Line_D1
- AllPrograms_InDevelopment_Line_D10
- DOH_RuralHealthClinics
- DOH_IntermediateCareFacilities
- DOH_Hospitals
- DOH_Hospices
- DOH_AmbulatorySurgery
- Local Roads
- State Roads
- WPC_historicprojects
- WPC_easements_5Counties
- Protected Land Inventory_StateLands
- Protected Land Inventory_NPPPrivate



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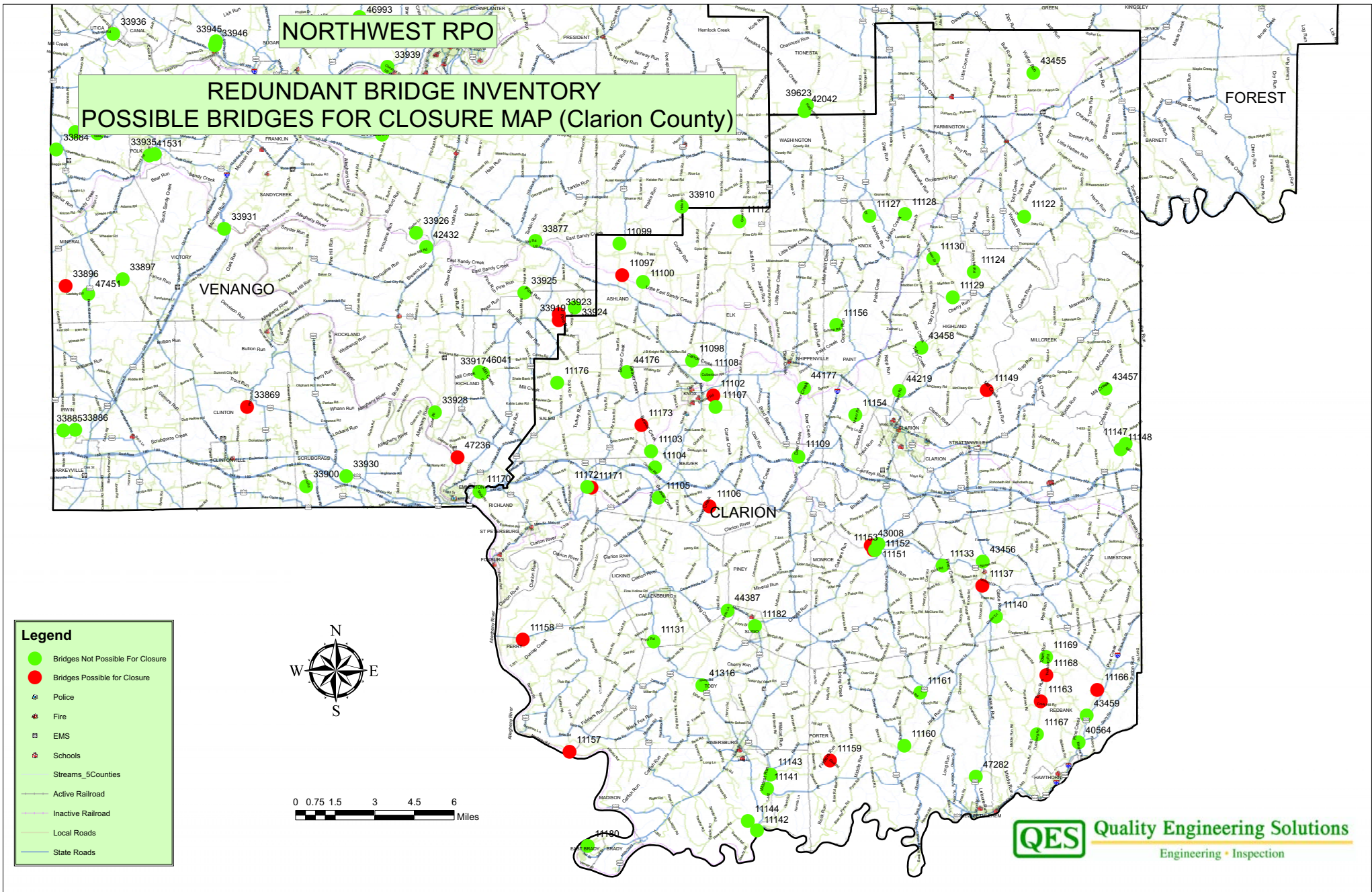
Exhibit 2 Selection Flow Chart

NW RPO BRIDGE INVENTORY PROJECT

INITIAL LIST OF BRIDGE CANDIDATES DECISION CHART



Exhibit 3 Map of Possible Bridges for Closure

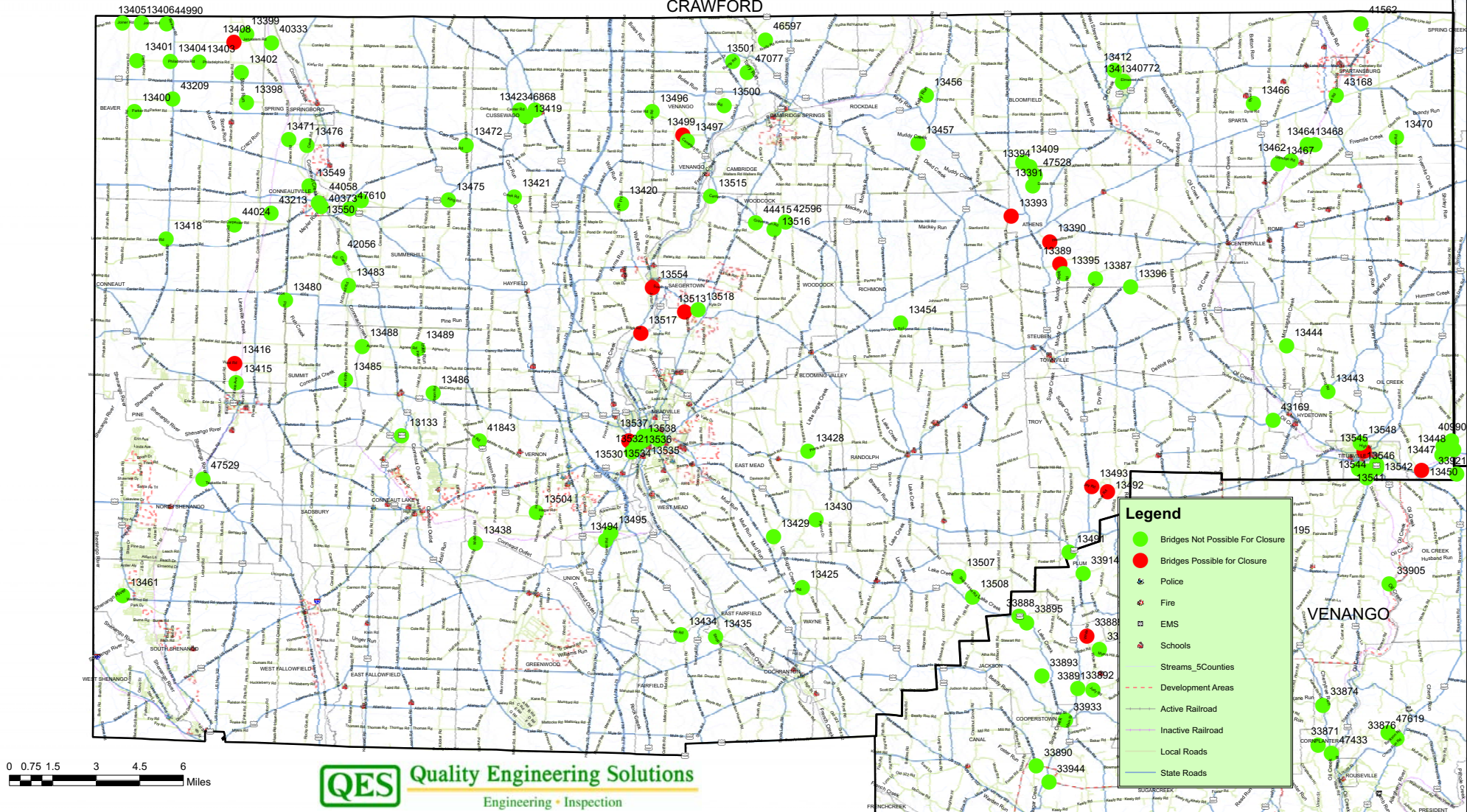


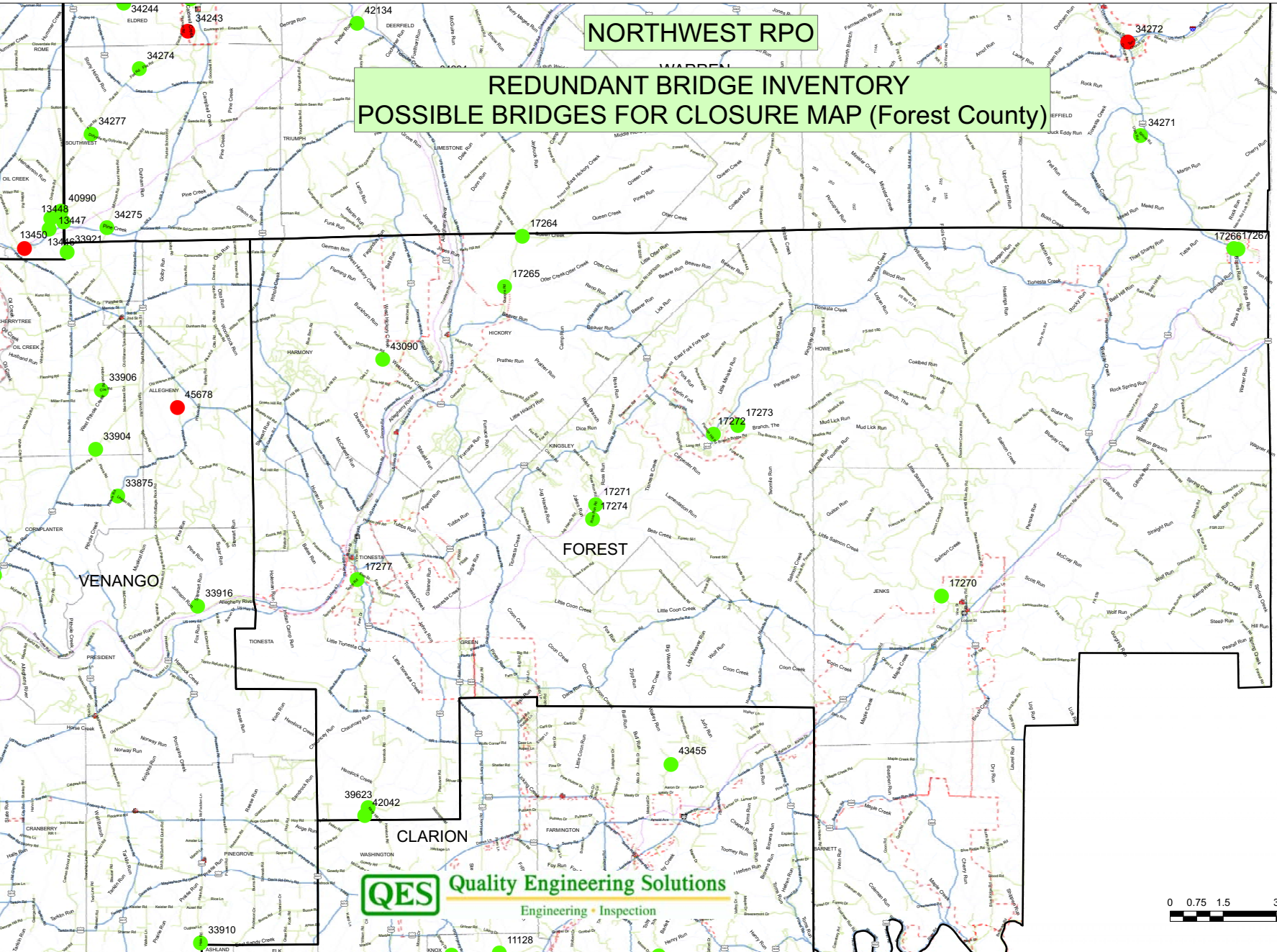
NORTHWEST RPO

REDUNDANT BRIDGE INVENTORY POSSIBLE BRIDGES FOR CLOSURE MAP (Crawford County)



CRAWFORD





NORTHWEST RPO

REDUNDANT BRIDGE INVENTORY
POSSIBLE BRIDGES FOR CLOSURE MAP (Forest County)

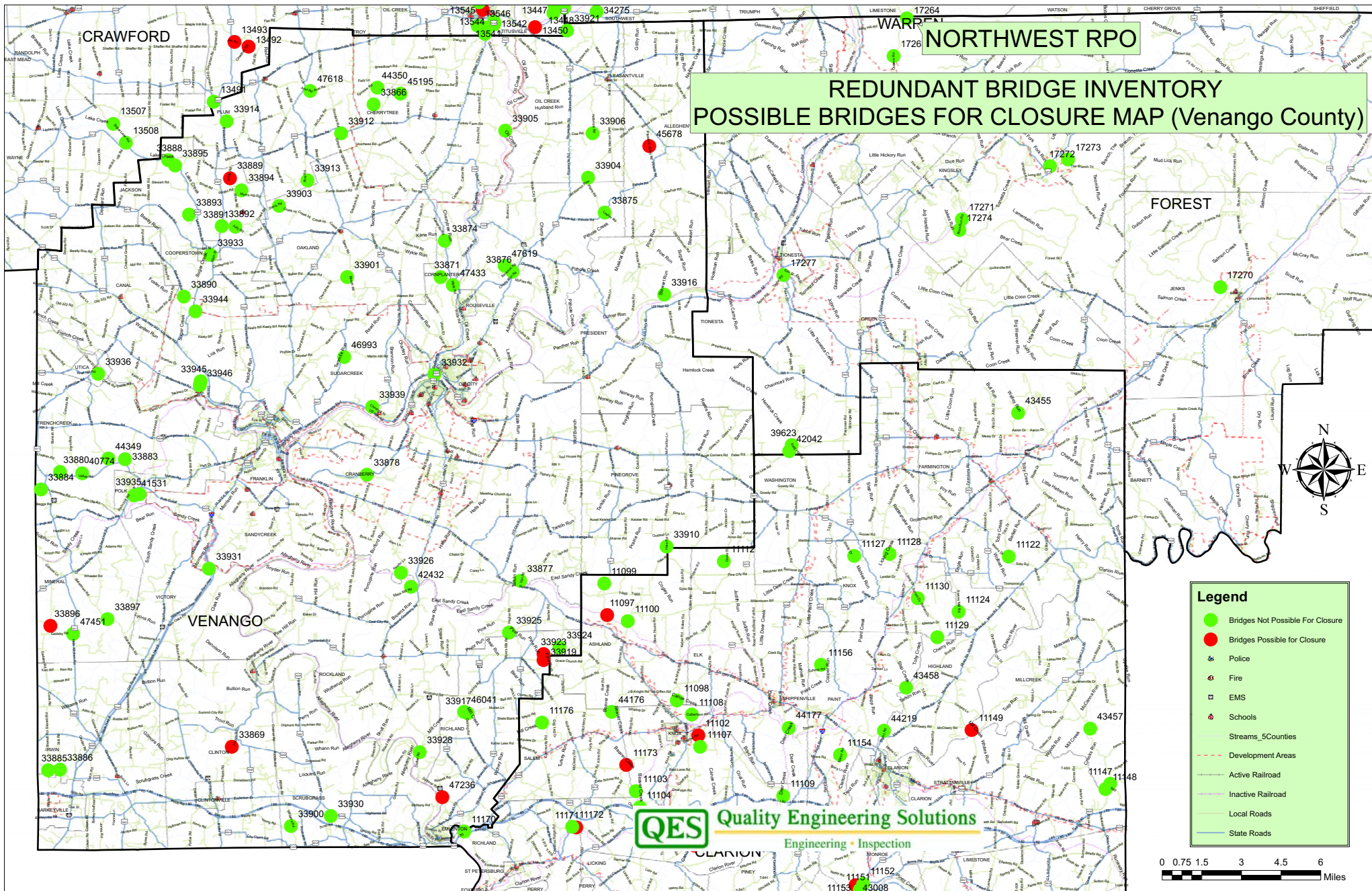


Legend

- Bridges Not Possible For Closure
- Bridges Possible for Closure
- 🚓 Police
- 🚒 Fire
- 🚑 EMS
- 🎓 Schools
- 🌊 Streams_5Counties
- Development Areas
- Active Railroad
- Inactive Railroad
- Local Roads
- State Roads



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REDUNDANT BRIDGE INVENTORY POSSIBLE BRIDGES FOR CLOSURE MAP (Warren County)

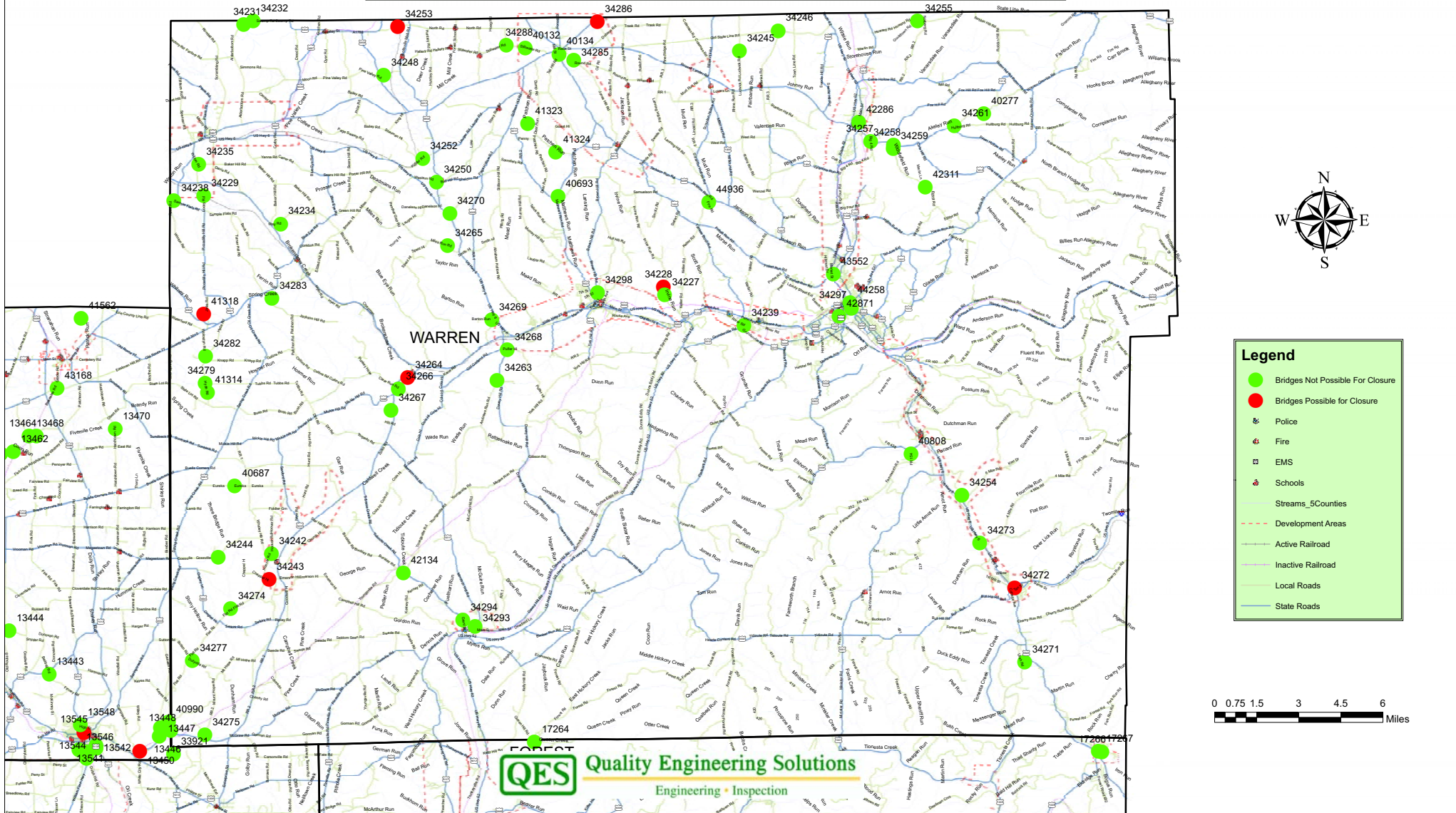


Exhibit 4 Summary of Final Candidates Attributes

Final Bridge Candidates Attributes

Clarion County Bridges Page 1 of 2

County	Bridge Key	Location	Facility	Feature Intersected	Length (ft)	Posted Status	SD	FO	ADT	ADT Year	ADT (Year 2015)	Detour Length (mi)	Dead End Length 1 Side (ft)	Dead End Length 2 Side (ft)	Bridge in the School Buses Routes	Maximum Length of Cul-de Sac by County Ordinance (ft)	Maximum Length of Cul-de Sac by Local Ordinance (ft)	Residential Dwelling Units North/West	Residential Dwelling Units South/East
Clarion	11102	BEAVER TOWNSHIP	T-327 SHETTLER RD	CANOE CREEK	28	4 Ton	Yes	Yes	50	2007	356	1.1	2351.85	37	Yes	500 ft unless topography or other factors justify greater distance	None	6	0
Clarion	11106	BEAVER TOWNSHIP	T-385 EAGLE FURNACE	CANOE CREEK	49	Closed	Yes	Yes	50	2007	N/A	6.3	N/A	N/A	N/A	500 ft unless topography or other factors justify greater distance	None	N/A	N/A
Clarion	11133	LIMESTONE TOWNSHIP	T-444 CURLL RD	PINEY CREEK	37	4 Ton	No	Yes	50	2007	15	2.5	4700	500	Unknown	500 ft unless topography or other factors justify greater distance	None	2	2
Clarion	11137	LIMESTONE TOWNSHIP	T-685 LIMESTONE	PINEY CREEK	48	3 Ton	No	Yes	50	2007	14	0.3	211.2	105.6	No	500 ft unless topography or other factors justify greater distance	None	1	2
Clarion	11157	PERRY TOWNSHIP	T-300 HILLVILLE RD	BLACK FOX RUN	31	Closed and Removed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	500 ft unless topography or other factors justify greater distance	None	N/A	N/A
Clarion	11158	PERRY TOWNSHIP	T-647 HAGENTOWN RD	TRIB TO ALLEGHENY RIVER	28	13 Ton	Yes	No	50	2007	31	0.44	180	2576	Yes	500 ft unless topography or other factors justify greater distance	None	0	18
Clarion	11159	PORTER TOWNSHIP	T-462 SLED ROAD	FIDDLERS RUN	22	29 Ton	No	Yes	50	2007	12	3.2	686.4	3009.6	Yes	500 ft unless topography or other factors justify greater distance	None	0	1
Clarion	11163	REDBANK TOWNSHIP	T-504 WINDMILL RD	TOWN RUN	26	10 Ton	Yes	Yes	50	2007	14	1.94	422.4	5121.6	Yes	500 ft unless topography or other factors justify greater distance	None	1	0
Clarion	11166	REDBANK TOWNSHIP	TWP RD 513	PINE CREEK	23	9 Ton	No	Yes	50	1993	13	1.92	200	527	Yes	500 ft unless topography or other factors justify greater distance	None	1	1
Clarion	11168	REDBANK TOWNSHIP	TWP RD 840	TOWN RUN	22	18 Ton	No	Yes	350	1993	14	3	528	5227.2	Yes	500 ft unless topography or other factors justify greater distance	None	0	6
Clarion	11171	RICHLAND TOWNSHIP	TWP RD 382	TURKEY RUN	23	10 Ton	Yes	Yes	50	1993	43	3.6	1372.8	1636.8	Yes	500 ft unless topography or other factors justify greater distance	None	5	8
Clarion	11173	SALEM TOWNSHIP	T-345 MEHRTEN RD	BEAVER CREEK	35	Closed	Yes	Yes	50	2007	N/A	7	N/A	N/A	N/A	500 ft unless topography or other factors justify greater distance	None	N/A	N/A
Clarion	43008	MONROE TOWNSHIP	T-528 RAPP ROAD	ABANDONED RR	82	Closed and Removed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	500 ft unless topography or other factors justify greater distance	None	N/A	N/A

Final Bridge Candidates Attributes

Clarion County Bridges Page 2 of 2

County	Bridge Key	Location	Facility	Feature Intersected	Farms North/West	Farms South/East	Business Acces Points	Bridge in Development Area	Historic Status	Lane Count of Bridge	Normal Travel Length (mi)	Detour Length (mi)	% Increase in Travel Time	SD Bridges on Detour	Sidewalks	Utilities	Railroad	Flooding/ Road Closure	Scour Critical Bridge Indicator	Cost of Bridge Replacement (\$)	Cost per Vehicle (\$)	Environmental Impacts to Natural Resources	R/W footprint for acquisition (SF)
Clarion	11102	BEAVER TOWNSHIP	T-327 SHETTLER RD	CANOE CREEK	1	0	0	No	Not Determined	1	0.85	1.08	27%	No	No	No	No	Yes	4	\$ 436,800	\$ 1,228	No	3600
Clarion	11106	BEAVER TOWNSHIP	T-385 EAGLE FURNACE	CANOE CREEK	N/A	N/A	N/A	No	Not Determined	1	N/A	N/A	N/A	No	N/A	No	No	No	N/A	\$ 764,400	\$ 15,288	No	N/A
Clarion	11133	LIMESTONE TOWNSHIP	T-444 CURLL RD	PINEY CREEK	2	0	1	No	Not Determined	1	1.34	2.47	84%	No	No	No	No	No	5	\$ 577,200	\$ 37,738	No	7200
Clarion	11137	LIMESTONE TOWNSHIP	T-685 LIMESTONE	PINEY CREEK	0	0	0	Yes	Not Eligible	1	0.07	0.29	283%	No	No	Yes	No	No	4	\$ 748,800	\$ 54,392	No	4900
Clarion	11157	PERRY TOWNSHIP	T-300 HILLVILLE RD	BLACK FOX RUN	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	N/A	N/A	N/A	N/A	N/A
Clarion	11158	PERRY TOWNSHIP	T-647 HAGENTOWN RD	TRIB TO ALLEGHENY RIVER	0	1	0	No	Not Determined	2	0.54	0.44	-19%	No	No	No	No	No	4	\$ 436,800	\$ 14,172	No	3600
Clarion	11159	PORTER TOWNSHIP	T-462 SLED ROAD	FIDDLERS RUN	0	0	0	No	Not Determined	1	0.72	3.23	314%	No	No	No	No	No	5	\$ 343,200	\$ 28,350	No	7000
Clarion	11163	REDBANK TOWNSHIP	T-504 WINDMILL RD	TOWN RUN	3	1	0	No	Not Determined	1	1.08	1.94	80%	No	No	No	No	No	4	\$ 405,600	\$ 28,800	No	3600
Clarion	11166	REDBANK TOWNSHIP	TWP RD 513	PINE CREEK	0	0	0	No	Not Determined	1	0.15	2.53	1269%	No	No	No	No	Yes	6	\$ 358,800	\$ 27,178	No	7100
Clarion	11168	REDBANK TOWNSHIP	TWP RD 840	TOWN RUN	1	2	1	No	Not Eligible	2	1.22	3.01	147%	No	No	No	No	Yes	6	\$ 343,200	\$ 24,247	No	7200
Clarion	11171	RICHLAND TOWNSHIP	TWP RD 382	TURKEY RUN	0	0	0	No	Not Determined	1	1.42	3.57	136%	No	No	Yes	No	No	7	\$ 358,800	\$ 8,362	No	7200
Clarion	11173	SALEM TOWNSHIP	T-345 MEHRTEN RD	BEAVER CREEK	N/A	N/A	N/A	No	Not Determined	1	N/A	N/A	N/A	No	N/A	No	No	No	N/A	\$ 546,000	\$ 10,920	No	N/A
Clarion	43008	MONROE TOWNSHIP	T-528 RAPP ROAD	ABANDONED RR	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	Yes	No	N/A	N/A	N/A	N/A	N/A

Final Bridge Candidates Attributes

Crawford County Bridges Page 1 of 2

County	Bridge Key	Location	Facility	Feature Intersected	Length (ft)	Posted Status	SD	FO	ADT	ADT Year	ADT (Year 2015)	Detour Length (mi)	Dead End Length 1 Side (ft)	Dead End Length 2 Side (ft)	Bridge in the School Buses Routes	Maximum Length of Cul-de Sac by County Ordinance (ft)	Maximum Length of Cul-de Sac by Local Ordinance (ft)	Residential Dwelling Units North/West	Residential Dwelling Units South/East
Crawford	13389	ATHENS TOWNSHIP	T-709,THREE BRG.RD	OVER E.BR.MUDDY CREEK	40	12 Ton Comb 19 Ton	No	Yes	50	2012	16	4.52	158.4	6547.2	Yes	No county-wide SALDO	None	0	5
Crawford	13390	ATHENS TOWNSHIP	T-743,HAMILTON RD.	OVER MUDDY CREEK	47	CLOSED	Yes	Yes	250	2012	N/A	2.14	369.6	5438.4	N/A	No county-wide SALDO	None	N/A	N/A
Crawford	13393	ATHENS TOWNSHIP	T-776,EDDIE ROAD	OVER MUDDY CREEK	65	CLOSED	Yes	Yes	250	2012	N/A	3	N/A	N/A	N/A	No county-wide SALDO	None	N/A	N/A
Crawford	13408	BEAVER TOWNSHIP	T-885,JERUSELAM RD	OVER STONE RUN	68	9 Ton	No	Yes	250	2012	47	1.72	580.8	2798.4	No	No county-wide SALDO	None	1	4
Crawford	13415	CONNEAUT TOWNSHIP	T-346,RUSSELL ROAD	OVER LINESVILLE CREEK	33	3 Ton	Yes	Yes	250	2012	88	3	1800	3450	Unknown	No county-wide SALDO	600	9	12
Crawford	13416	CONNEAUT TOWNSHIP	T-605, WEST ROAD	OVER LINESVILLE CREEK	30	CLOSED	Yes	Yes	250	2010	N/A	3.78	N/A	N/A	N/A	No county-wide SALDO	600	N/A	N/A
Crawford	13450	OIL CREEK TOWNSHIP	T-993,MESSERALL RD	OVER PINE CREEK	103	CLOSED	Yes	Yes	50	2010	N/A	2	N/A	N/A	N/A	No county-wide SALDO	600 ft. For lengths > 600 ft the min turnaround	N/A	N/A
Crawford	13492	TROY TOWNSHIP	T-477,JAY ROAD	OVER SUGAR CREEK E.BR.	24	8 Ton Comb 15 Ton	No	Yes	250	2012	14	4.52	264	3326.4	Yes	No county-wide SALDO	None	0	7
Crawford	13493	TROY TOWNSHIP	T-477,JAY ROAD	OVER SUGAR CREEK	24	32 Ton Comb 40 Ton	No	Yes	250	2012	103	1.66	63.36	739.2	Yes	No county-wide SALDO	None	0	5
Crawford	13499	VENANGO TOWNSHIP	T-807,KIGHTLINGER	OVER COULTER RUN	31	3 Ton	Yes	Yes	250	2012	14	0.68	1003.2	844.8	Yes	No county-wide SALDO	None	1	1
Crawford	13513	WOODCOCK TOWNSHIP	T-600,CRAIG ROAD	OVER WOODCOCK CREEK	80	4 Ton	Yes	Yes	250	2011	53	1.82	1003.2	1214.4	No	No county-wide SALDO	None	0	4
Crawford	13517	WOODCOCK TOWNSHIP	T-653,MORRIS ROAD	OVER W.NEW YORK & PA RR.	160	Closed and Removed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No county-wide SALDO	None	N/A	N/A
Crawford	13545	TITUSVILLE	LINDEN PLACE	OVER CHURCH RUN	21	11 Ton Comb 19 Ton	Yes	Yes	250	1991	12	0.18	105.6	52.8	Unknown	No county-wide SALDO	600	3	2
Crawford	13550	CONNEAUTVILLE BOROUGH	CENTER ST.	OVER CONNEAUT CREEK	79	6 Ton	Yes	Yes	250	2012	250	0.56	515.96	325	Unknown	No county-wide SALDO	None	8	9

Final Bridge Candidates Attributes

Crawford County Bridges Page 2 of 2

County	Bridge Key	Location	Facility	Feature Intersected	Farms North/West	Farms South/East	Bussiness Acces Points	Bridge in Development Area	Historic Status	Lane Count of Bridge	Normal Travel Length (mi)	Detour Length (mi)	% Increase in Travel Time	SD Bridges on Detour	Sidewalks	Utilities	Railroad	Flooding/ Road Closure	Scour Critical Bridge Indicator	Cost of Bridge Replacement (\$)	Cost per Vehicle (\$)	Environmental Impacts to Natural Resources	R/W footprint for acquisition (SF)
Crawford	13389	ATHENS TOWNSHIP	T-709,THREE BRG.RD	OVER E.BR.MUDDY CREEK	0	2	0	No	Not Eligible	1	1.29	4.51	212%	No	No	No	No	Yes	8	\$ 624,000	\$ 40,182	No	3500
Crawford	13390	ATHENS TOWNSHIP	T-743,HAMILTON RD.	OVER MUDDY CREEK	N/A	N/A	N/A	No	Not Eligible	1	N/A	N/A	N/A	No	N/A	No	No	No	N/A	\$ 733,200	\$ 2,933	No	N/A
Crawford	13393	ATHENS TOWNSHIP	T-776,EDDIE ROAD	OVER MUDDY CREEK	N/A	N/A	N/A	No	Not Determined	1	N/A	N/A	N/A	No	N/A	No	No	No	N/A	\$ 1,014,000	\$ 4,056	No	N/A
Crawford	13408	BEAVER TOWNSHIP	T-885,JERUSELAM RD	OVER STONE RUN	0	0	0	No	Not Determined	1	0.66	1.72	161%	No	No	No	No	No	4	\$ 1,060,800	\$ 22,784	No	7000
Crawford	13415	CONNEAUT TOWNSHIP	T-346,RUSSELL ROAD	OVER LINESVILLE CREEK	0	0	0	No	Not Eligible	1	1.06	2.98	163%	No	No	No	No	No	2	\$ 514,800	\$ 5,819	No	7200
Crawford	13416	CONNEAUT TOWNSHIP	T-605, WEST ROAD	OVER LINESVILLE CREEK	N/A	N/A	N/A	No	Not Eligible	1	N/A	N/A	N/A	No	N/A	No	No	No	N/A	\$ 468,000	\$ 1,872	No	N/A
Crawford	13450	OIL CREEK TOWNSHIP	T-993,MESSERALL RD	OVER PINE CREEK	N/A	N/A	N/A	No	Possibly Eligible	1	N/A	N/A	N/A	No	N/A	No	No	No	N/A	\$ 1,606,800	\$ 32,136	No	N/A
Crawford	13492	TROY TOWNSHIP	T-477,JAY ROAD	OVER SUGAR CREEK E.BR.	0	0	0	No	Not Eligible	2	0.68	4.51	563%	No	No	No	No	No	4	\$ 374,400	\$ 26,397	No	3600
Crawford	13493	TROY TOWNSHIP	T-477,JAY ROAD	OVER SUGAR CREEK	0	0	0	No	Not Eligible	2	0.67	1.66	140%	No	No	No	No	No	4	\$ 374,400	\$ 3,652	No	7200
Crawford	13499	VENANGO TOWNSHIP	T-807,KIGHTLINGER	OVER COULTER RUN	0	0	0	No	Not Eligible	1	0.36	0.67	86%	No	No	No	No	No	2	\$ 483,600	\$ 34,343	No	7000
Crawford	13513	WOODCOCK TOWNSHIP	T-600,CRAIG ROAD	OVER WOODCOCK CREEK	0	0	1	Yes	Not Determined	1	0.43	1.83	293%	No	No	No	No	No	4	\$ 1,248,000	\$ 23,432	No	3600
Crawford	13517	WOODCOCK TOWNSHIP	T-653,MORRIS ROAD	OVER W.NEW YORK & PA RR.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	Yes	No	N/A	N/A	N/A	N/A	N/A
Crawford	13545	TITUSVILLE	LINDEN PLACE	OVER CHURCH RUN	0	0	0	No	Not Determined	1	0.09	0.18	100%	No	No	Yes	No	No	5	\$ 327,600	\$ 26,870	No	5000
Crawford	13550	CONNEAUTVILLE BOROUGH	CENTER ST.	OVER CONNEAUT CREEK	0	0	1	No	Not Determined	1	0.17	0.56	229%	No	No	No	No	No	4	\$ 1,232,400	\$ 4,930	No	7200

Final Bridge Candidates Attributes

Venango County Bridges Page 1 of 2

County	Bridge Key	Location	Facility	Feature Intersected	Length (ft)	Posted Status	SD	FO	ADT	ADT Year	ADT (Year 2015)	Detour Length (mi)	Dead End Length 1 Side (ft)	Dead End Length 2 Side (ft)	Bridge in the School Buses Routes	Maximum Length of Cul-de Sac by County Ordinance (ft)	Maximum Length of Cul-de Sac by Local Ordinance (ft)	Residential Dwelling Units North/West	Residential Dwelling Units South/East
Venango	33869	CLINTON TOWNSHIP	T-380,PHIPPS ROAD	OVER SCRUBGRASS CK. BR.	70	12 Ton Comb 21 Ton	Yes	Yes	50	2012	11	3.17	3062.4	7708.8	No	1200 ft	None	1	9
Venango	33889	JACKSON TOWNSHIP	T-384,WHITE ROAD	OVER SUGAR CREEK BR.	28	Closed and Removed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1200 ft	None	N/A	N/A
Venango	33914	PLUM TOWNSHIP	T-627,WILLIAMS RD	OVER SUGAR CREEK MID.BR.	75	10 Ton	Yes	Yes	100	2012	15	2.8	898	3310	Unknown	1200 ft	None	0	4
Venango	33919	RICHLAND TOWNSHIP	T-377,VALLEY CHURC	OVER PINE RUN	24	29 Ton Comb 40 Ton	Yes	Yes	50	2012	28	2.51	211.2	4118.4	Yes	1200 ft	None	11	0
Venango	33923	RICHLAND TOWNSHIP	T-590,MCFEETERS RD	OVER PINE RUN	23	10 Ton Comb 18 Ton	No	Yes	50	2012	12	3.13	715	2500	No	1200 ft	None	8	0
Venango	45678	ALLEGHENY TOWNSHIP	T-632	TR.PITHOLE CK.	21	4 Ton	Yes	Yes	100	2012	14	1.85	981	6199	No	1200 ft	None	9	0

Final Bridge Candidates Attributes

Venango County Bridges Page 2 of 2

County	Bridge Key	Location	Facility	Feature Intersected	Farms North/West	Farms South/East	Business Acces Points	Bridge in Development Area	Historic Status	Lane Count of Bridge	Normal Travel Length (mi)	Detour Length (mi)	% Increase in Travel Time	SD Bridges on Detour	Sidewalks	Utilities	Railroad	Flooding/ Road Closure	Scour Critical Bridge Indicator	Cost of Bridge Replacement (\$)	Cost per Vehicle (\$)	Environmental Impacts to Natural Resources	R/W footprint for acquisition (SF)
Venango	33869	CLINTON TOWNSHIP	T-380,PHIPPS ROAD	OVER SCRUBGRASS CK. BR.	0	0	1	No	Not Determined	1	2.05	3.18	47%	No	No	Yes	No	No	5	\$ 1,029,000	\$ 96,671	No	7000
Venango	33889	JACKSON TOWNSHIP	T-384,WHITE ROAD	OVER SUGAR CREEK BR.	N/A	N/A	N/A	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	N/A	N/A	N/A	N/A	N/A
Venango	33914	PLUM TOWNSHIP	T-627,WILLIAMS RD	OVER SUGAR CREEK MID.BR.	0	5	0	No	Not Determined	1	0.82	2.74	211%	No	No	Yes	No	No	3	\$ 1,102,500	\$ 73,845	No	7200
Venango	33919	RICHLAND TOWNSHIP	T-377,VALLEY CHURC	OVER PINE RUN	1	0	1	No	Not Determined	1	1.04	2.51	127%	No	No	No	No	No	5	\$ 352,800	\$ 12,437	No	3600
Venango	33923	RICHLAND TOWNSHIP	T-590,MCFEETERS RD	OVER PINE RUN	0	0	0	No	Not Eligible	2	1.3	3.13	141%	No	No	No	No	No	5	\$ 358,800	\$ 29,387	No	7200
Venango	45678	ALLEGHENY TOWNSHIP	T-632	TR.PITHOLE CK.	0	1	1	No	Not Determined	1	1.36	1.85	32%	No	No	Yes	No	No	4	\$ 308,700	\$ 22,424	No	7200

Final Bridge Candidates Attributes

Warren County Bridges Page 1 of 2

County	Bridge Key	Location	Facility	Feature Intersected	Farms North/West	Farms South/East	Business Acces Points	Bridge in Development Area	Historic Status	Lane Count of Bridge	Normal Travel Length (mi)	Detour Length (mi)	% Increase in Travel Time	SD Bridges on Detour	Sidewalks	Utilities	Railroad	Flooding/ Road Closure	Scour Critical Bridge Indicator	Cost of Bridge Replacement (\$)	Cost per Vehicle (\$)	Environmental Impacts to Natural Resources	R/W footprint for acquisition (SF)
Warren	34231	COLUMBUS TOWNSHIP	T-350,ALDERBOTTOM	OVER TAMARACK SWAMP TRIB	N/A	N/A	N/A	No	Not Determined	1	N/A	N/A	N/A	No	N/A	No	No	No	N/A	\$ 312,000	\$ 6,240	No	N/A
Warren	34232	COLUMBUS TOWNSHIP	T-350,ALDERBOTTOM	OVER TAMARACK SWAMP TRIB	N/A	N/A	N/A	No	Not Determined	1	N/A	N/A	N/A	No	N/A	No	No	No	N/A	\$ 327,600	\$ 6,552	No	N/A
Warren	34243	ELDRED TOWNSHIP	T-355,CHAPEL HILL	OVER CALDWELL CREEK	0	1	0	Yes	Not Determined	1	0.51	2.02	266%	No	No	No	No	No	4	\$ 670,800	\$ 61,168	No	7200
Warren	34286	SUGAR GROVE TOWNSHIP	T-590,STODDARD RD.	OVER STILLWATER CREEK	2	4	1	Yes	Not Eligible	2	0.66	3.2	327%	No	No	Yes	No	Yes	8	\$ 390,000	\$ 26,346	No	7200
Warren	41318	SPRING CREEK TOWNSHIP	T-326,JINKS ROAD	OVER WHITNEY RUN	0	0	1	No	Not Determined	1	1.02	2.27	123%	No	No	No	No	No	3	\$ 390,000	\$ 4,033	No	3600

Final Bridge Candidates Attributes

Warren County Bridges Page 2 of 2

County	Bridge Key	Location	Facility	Feature Intersected	Length (ft)	Posted Status	SD	FO	ADT	ADT Year	ADT (Year 2015)	Detour Length (mi)	Dead End Length 1 Side (ft)	Dead End Length 2 Side (ft)	Bridge in the School Buses Routes	Maximum Length of Cul-de Sac by County Ordinance (ft)	Maximum Length of Cul-de Sac by Local Ordinance (ft)	Residential Dwelling Units North/West	Residential Dwelling Units South/East
Warren	34231	COLUMBUS TOWNSHIP	T-350,ALDERBOTTOM	OVER TAMARACK SWAMP TRIB	20	CLOSED	Yes	No	50	1995	N/A	5.5	N/A	N/A	N/A	600 ft unless topography or other factors justify greater distance	None	N/A	N/A
Warren	34232	COLUMBUS TOWNSHIP	T-350,ALDERBOTTOM	OVER TAMARACK SWAMP TRIB	21	CLOSED	Yes	No	50	1995	N/A	5.5	N/A	N/A	N/A	600 ft unless topography or other factors justify greater distance	None	N/A	N/A
Warren	34243	ELDRED TOWNSHIP	T-355,CHAPEL HILL	OVER CALDWELL CREEK	43	12 Ton	Yes	Yes	75	2005	11	2.01	631	2071	No	600 ft unless topography or other factors justify greater distance	None	2	0
Warren	34286	SUGAR GROVE TOWNSHIP	T-590,STODDARD RD.	OVER STILLWATER CREEK	25	15 Ton	Yes	Yes	65	2005	15	3.2	528	2798.4	No	600 ft unless topography or other factors justify greater distance	None	0	1
Warren	41318	SPRING CREEK TOWNSHIP	T-326,JINKS ROAD	OVER WHITNEY RUN	25	19 Ton	Yes	Yes	75	2005	97	2.27	92	5240	No	600 ft unless topography or other factors justify greater distance	None	7	0

Exhibit 5 Mitigation Strategies Plans

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Clarion County Bridges

Bridge Key	Location	Facility	Feature Intersected	Detour Exhibit No.	Turnaround Exhibit No.
11102	BEAVER TOWNSHIP	T-327 SHETTLER RD	CANOE CREEK	5A1	5A2
11133	LIMESTONE TOWNSHIP	T-444 CURLL ROAD	PINEY CREEK	5B1	5B2
11137	LIMESTONE TOWNSHIP	T-685 CEMETERY ROAD	PINEY CREEK	5C1	5C2
11158	PERRY TOWNSHIP	T-647 HAGENTOWN RD	TRIB TO ALLEGHENY RIVER	5D1	5D2
11159	PORTER TOWNSHIP	T-462 SLED ROAD	FIDDLERS RUN	5E1	5E2
11163	REDBANK TOWNHSIP	T-504 WINDMILL ROAD	TOWN RUN	5F1	5F2
11166	REDBANK TOWNHSIP	T-513 DEWEY ROAD	PINE CREEK	5G1	5G2
11168	REDBANK TOWNHSIP	T-840 TRUITTSBURG ROAD	TOWN RUN	5H1	5H2
11171	RICHLAND TOWNHSIP	T-382 RITTS FARM ROAD	TURKEY RUN	5I1	5I2

Crawford County Bridges

Bridge Key	Location	Facility	Feature Intersected	Detour Exhibit No.	Turnaround Exhibit No.
13389	ATHENS TOWNSHIP	T-709 THREE BRG.RD	E.BR.MUDDY CREEK	5J1	5J2
13408	BEAVER TOWNSHIP	T-885 JERUSELAM RD	STONE RUN	5K1	5K2
13415	CONNEAUT TOWNSHIP	T-346,RUSSELL ROAD	LINESVILLE CREEK	5L1	5L2
13492	TROY TOWNSHIP	T-477 JAY ROAD	SUGAR CREEK E.BR.	5M1	5M2
13493	TROY TOWNSHIP	T-477 JAY ROAD	SUGAR CREEK	5N1	5N2
13499	VENANGO TOWNSHIP	T-807 KIGHTLINGER	COULTER RUN	5O1	5O2
13513	SAEGERTOWN	T-600 CRAIG ROAD	WOODCOCK CREEK	5P1	5P2
13545	CITY OF TITUSVILLE	LINDEN PLACE	CHURCH RUN	5Q1	5Q2
13550	CONNEAUTVILLE	CENTER STREET	CONNEAUT CREEK	5R1	5R2

Venango County Bridges

Bridge Key	Location	Facility	Feature Intersected	Detour Exhibit No.	Turnaround Exhibit No.
33869	CLINTON TOWNSHIP	T-380 PHIPPS ROAD	SCRUBGRASS CK. BR.	5S1	5S2
33914	PLUM TOWNSHIP	T-627 WILLIAMS ROAD	SUGAR CREEK MID.BR.	5T1	5T2
33919	RICHLAND TOWNSHIP	T-377 VALLEY CHURCH ROAD	PINE RUN	5U1	5U2
33923	RICHLAND TOWNSHIP	T-590 WHITLING ROAD	PINE RUN	5V1	5V2
45678	ALLEGHENY TOWNSHIP	T-632 PLEASANT VALLEY DR	TR.PITHOLE CK.	5W1	5W2

Warren County Bridges

Bridge Key	Location	Facility	Feature Intersected	Detour Exhibit No.	Turnaround Exhibit No.
34243	ELDRED TOWNSHIP	T-355 CHAPEL HILL ROAD	CALDWELL CREEK	5X1	5X2
34286	SUGAR GROVE TOWNSHIP	T-590 STODDARD ROAD	STILLWATER CREEK	5Y1	5Y2
41318	SPRING CREEK TOWNSHIP	T-326 JINKS ROAD	WHITNEY RUN	5Z1	5Z2



REDUNDANT BRIDGE INVENTORY
Clarion, Crawford, Forrest, Venango, and
Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.
405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

PROPOSED DETOUR

BRIDGE BRKEY: 11102

COUNTY: CLARION

SHETTLER RD OVER CANOE CREEK

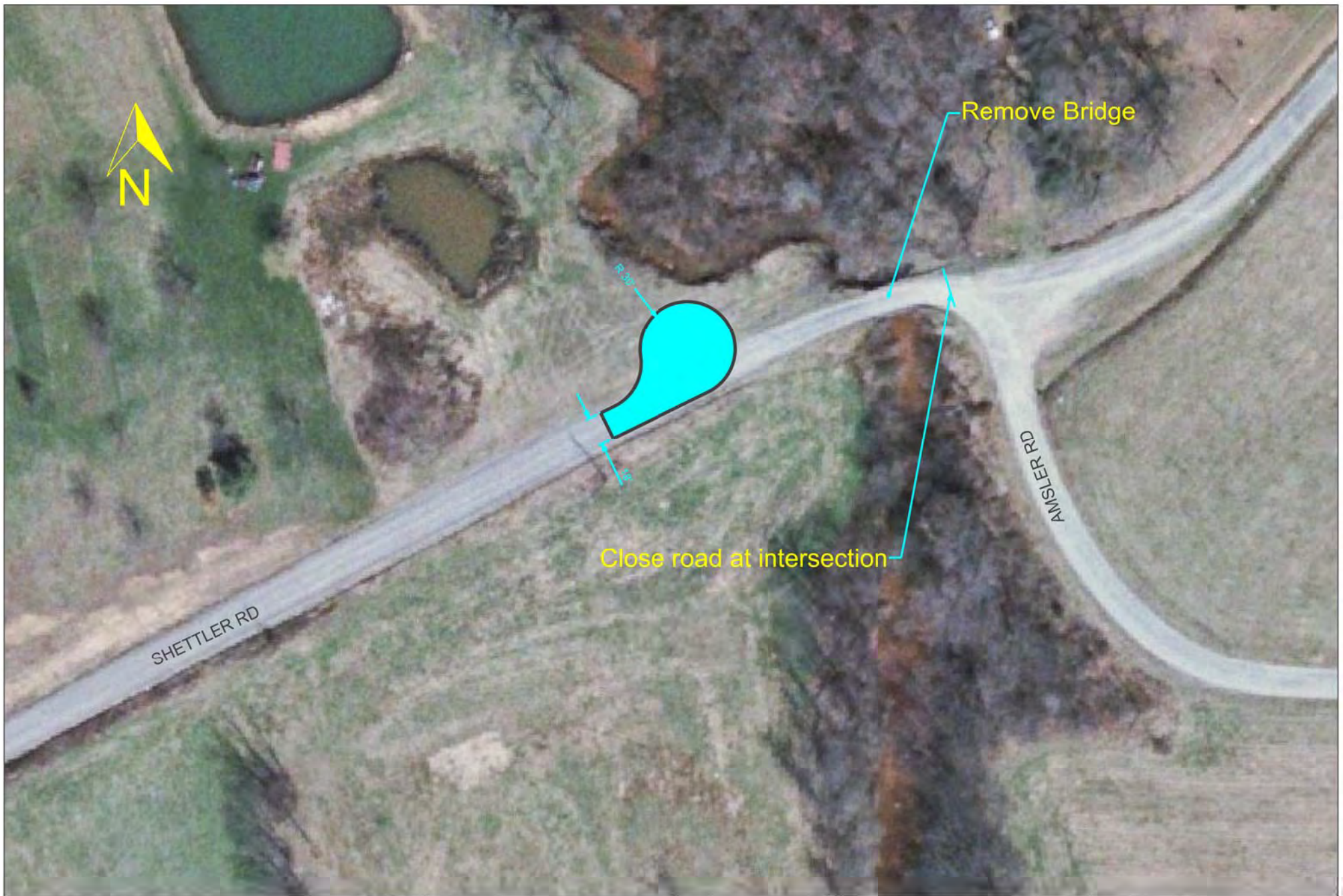
BEAVER TOWNSHIP

EXHIBIT **5A1**

PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

POTENTIAL MITIGATION STRATEGY

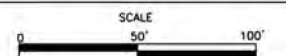
BRIDGE BRKEY: 11102

COUNTY: CLARION

SHETTLER RD OVER CANOE CREEK

BEAVER TOWNSHIP

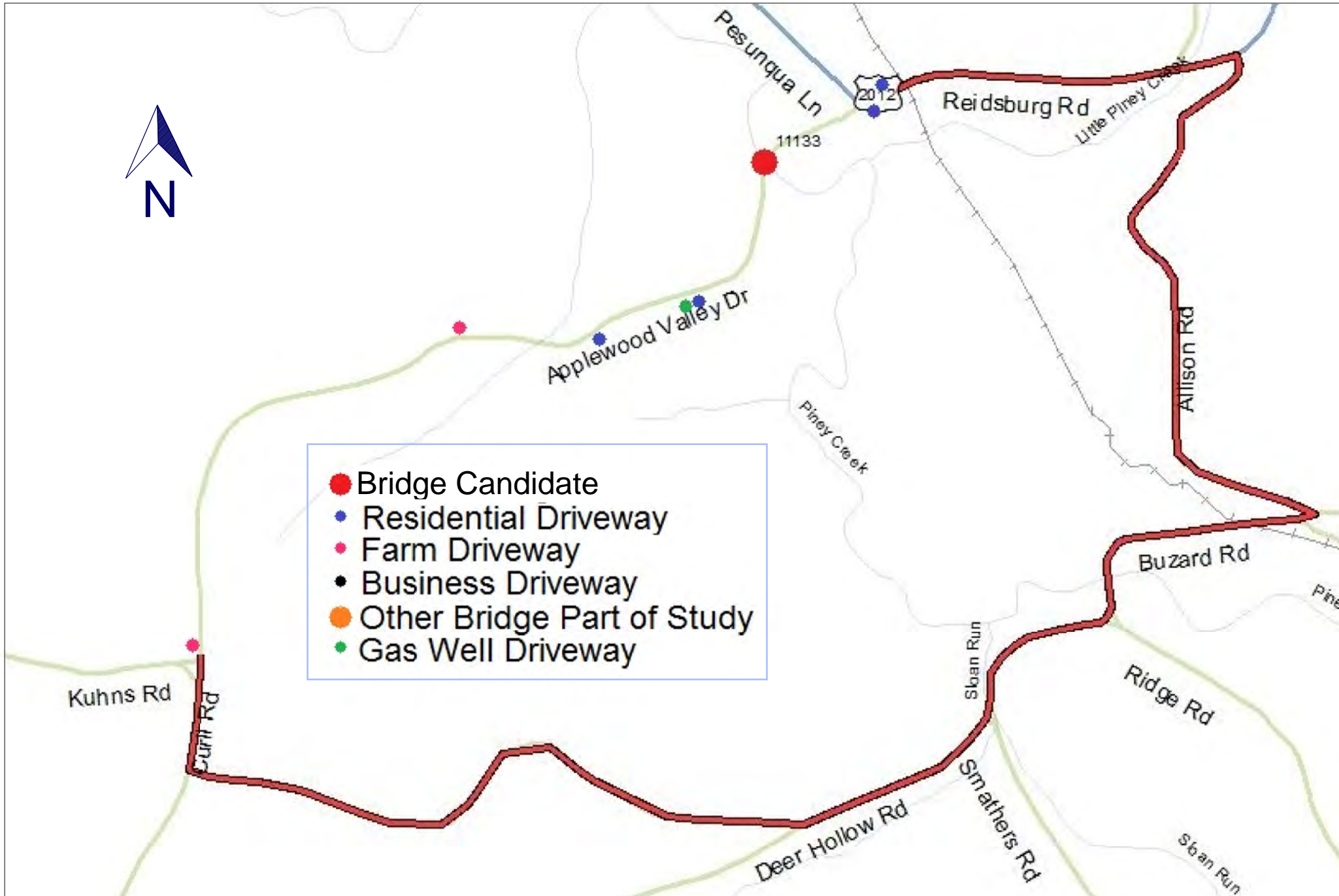
EXHIBIT **5A2**



PROJECT: **E14-1902**

DRW : LR

REV: DM



- Bridge Candidate
- Residential Driveway
- Farm Driveway
- Business Driveway
- Other Bridge Part of Study
- Gas Well Driveway

REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and
Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

PROPOSED DETOUR

BRIDGE BRKEY: 11133

COUNTY: CLARION

CURLL RD OVER PINEY CREEK

LIMESTONE TOWNSHIP

EXHIBIT

5B1

PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

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POTENTIAL MITIGATION STRATEGY

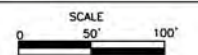
BRIDGE BRKEY: 11133

COUNTY: CLARION

CURLL RD OVER PINEY CREEK

LIMESTONE TOWNSHIP

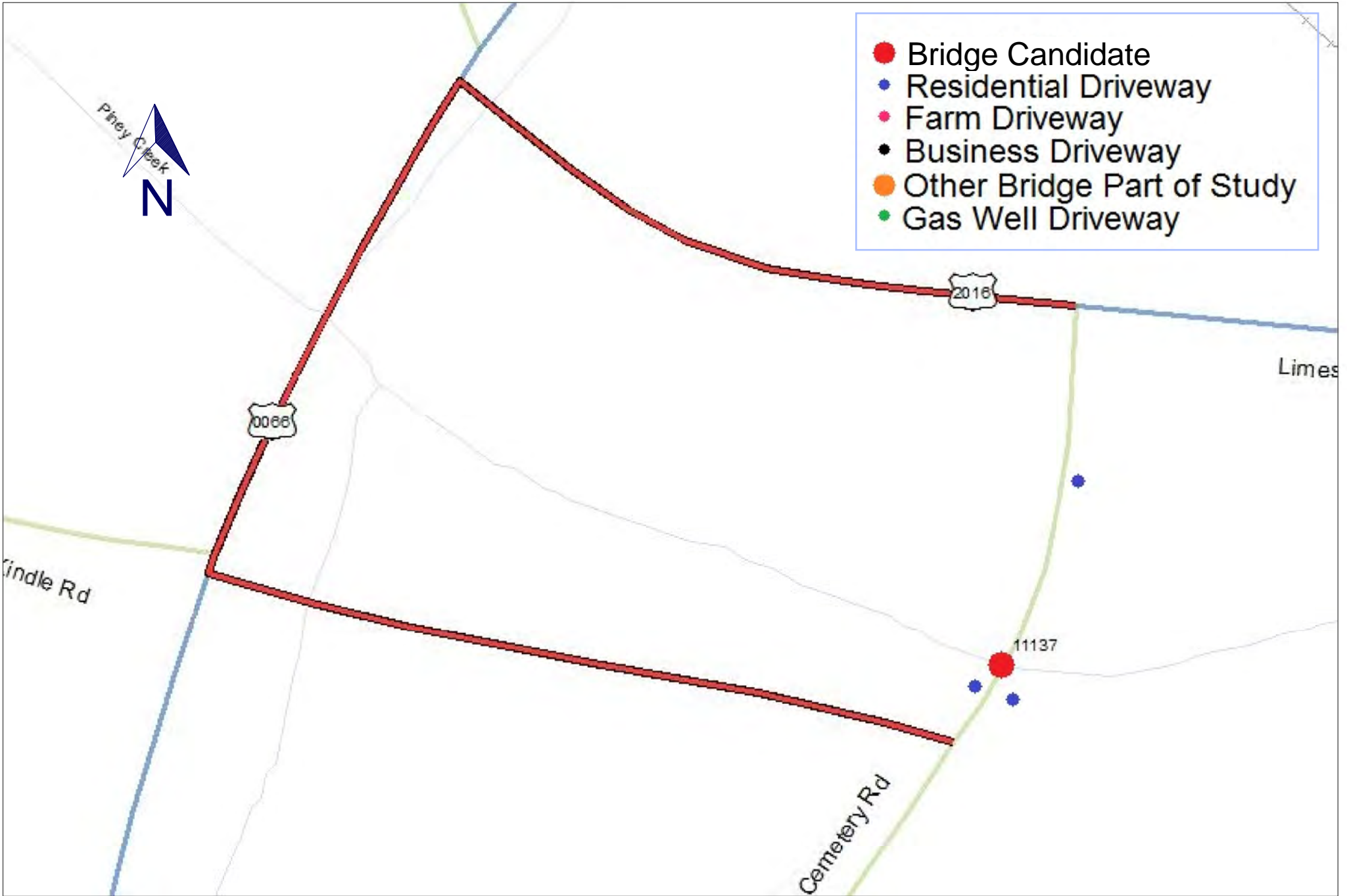
EXHIBIT **5B2**



PROJECT: E14-1902

DRW : LR

REV: DM



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PROPOSED DETOUR

BRIDGE BRKEY: 11137

COUNTY: CLARION

CEMETERY RD OVER PINEY CREEK

LIMESTONE TOWNSHIP

EXHIBIT **5C1**

PROJECT: **E14-1902**

DRW : LR

REV: DM



Project:

REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and
Warren Counties

Northwest Commission



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POTENTIAL MITIGATION STRATEGY

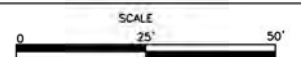
BRIDGE BRKEY: 11137

COUNTY: CLARION

CEMETERY RD OVER PINEY CREEK

LIMESTONE TOWNSHIP

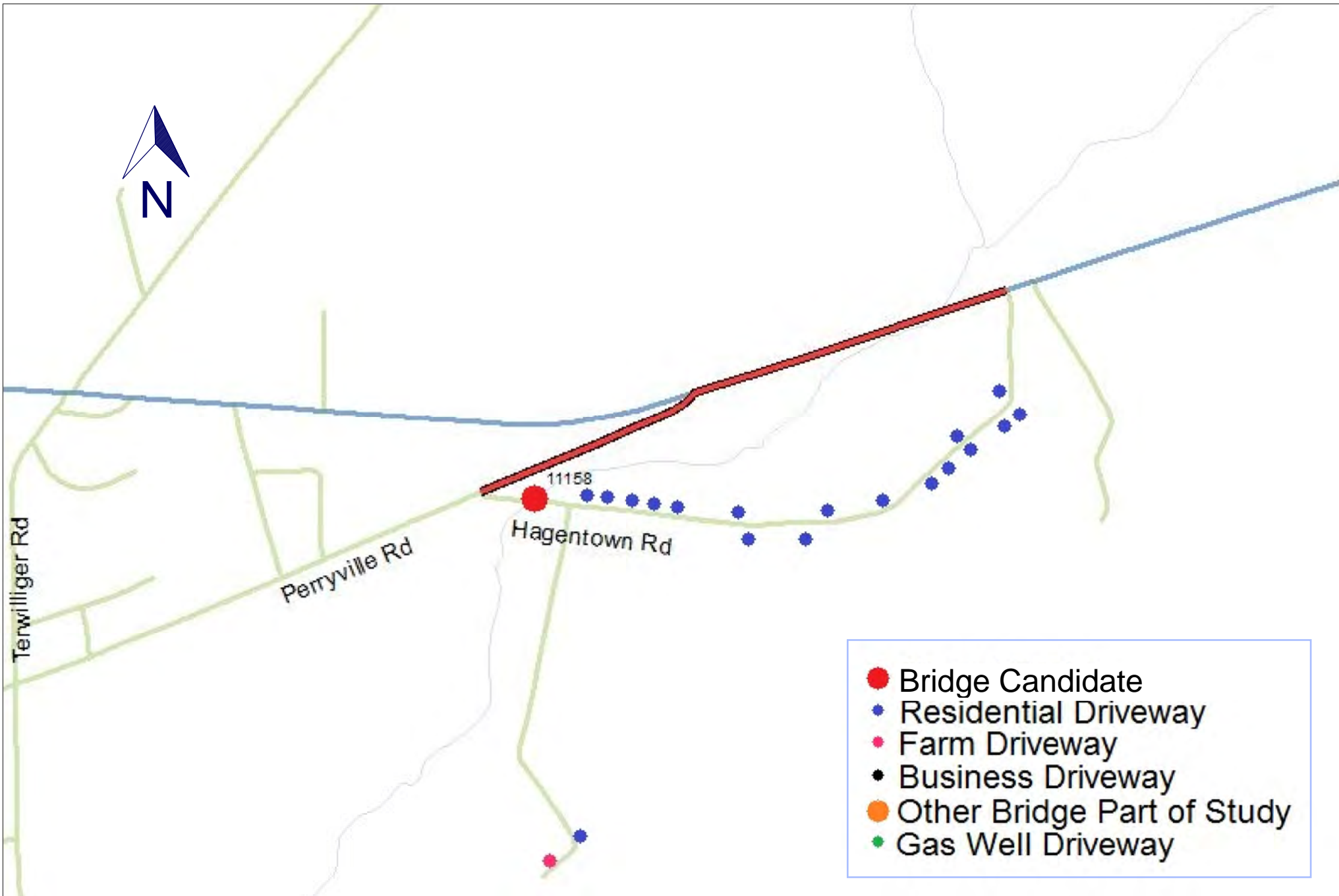
EXHIBIT **5C2**



PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and
Warren Counties

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PROPOSED DETOUR

BRIDGE BRKEY: 11158

COUNTY: CLARION

HAGENTOWN RD OVER TRIB TO ALLEGHENY RIVER

PERRY TOWNSHIP

EXHIBIT

5D1

PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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POTENTIAL MITIGATION STRATEGY

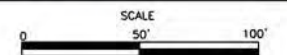
BRIDGE BRKEY: 11158

COUNTY: CLARION

HAGENTOWN RD OVER TRIB TO ALLEGHENY RIVER

PERRY TOWNSHIP

EXHIBIT **5D2**



PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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PROPOSED DETOUR

BRIDGE BRKEY: 11159

COUNTY: CLARION

SLED RD OVER FIDDLERS RUN

PORTER TOWNSHIP

EXHIBIT

5E1

PROJECT: E14-1902

DRW : LR

REV: DM



Project:

REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and
Warren Counties

Northwest Commission



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POTENTIAL MITIGATION STRATEGY

BRIDGE BRKEY: 11159

COUNTY: **CLARION**

SLED RD OVER FIDDLERS RUN

PORTER TOWNSHIP

EXHIBIT

5E2

SCALE

0 25' 50'

PROJECT: **E14-1902**

DRW : LR

REV: DM



Project:

REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and
Warren Counties

Northwest Commission



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POTENTIAL MITIGATION STRATEGY

BRIDGE BRKEY: 11163

COUNTY: CLARION

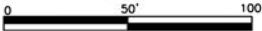
WINDMILL RD OVER TOWN RUN

REDBANK TOWNSHIP

EXHIBIT

5F2

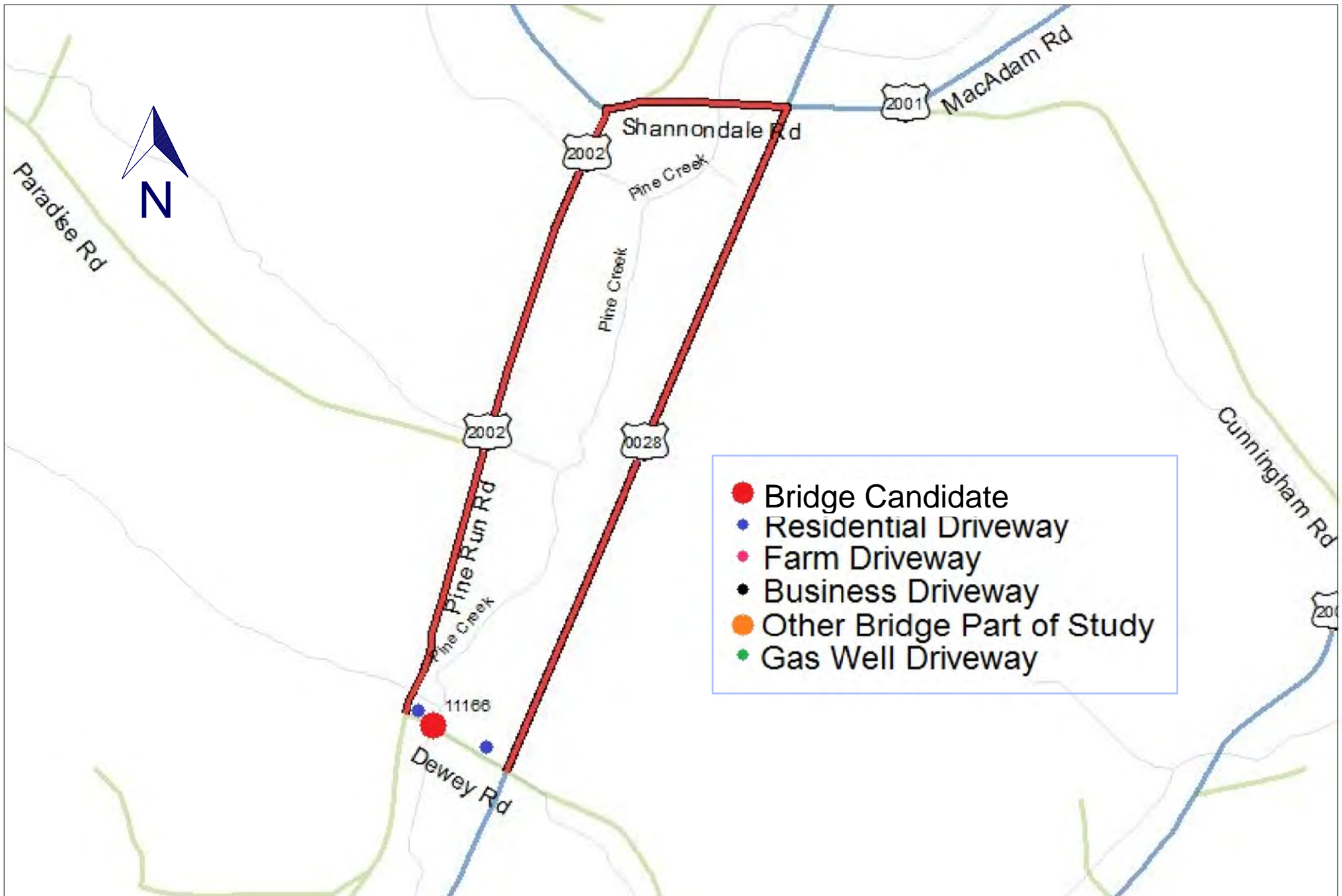
SCALE



PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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PROPOSED DETOUR

BRIDGE BRKEY: 11166

COUNTY: CLARION

DEWEY RD OVER PINE CREEK

REDBANK TOWNSHIP

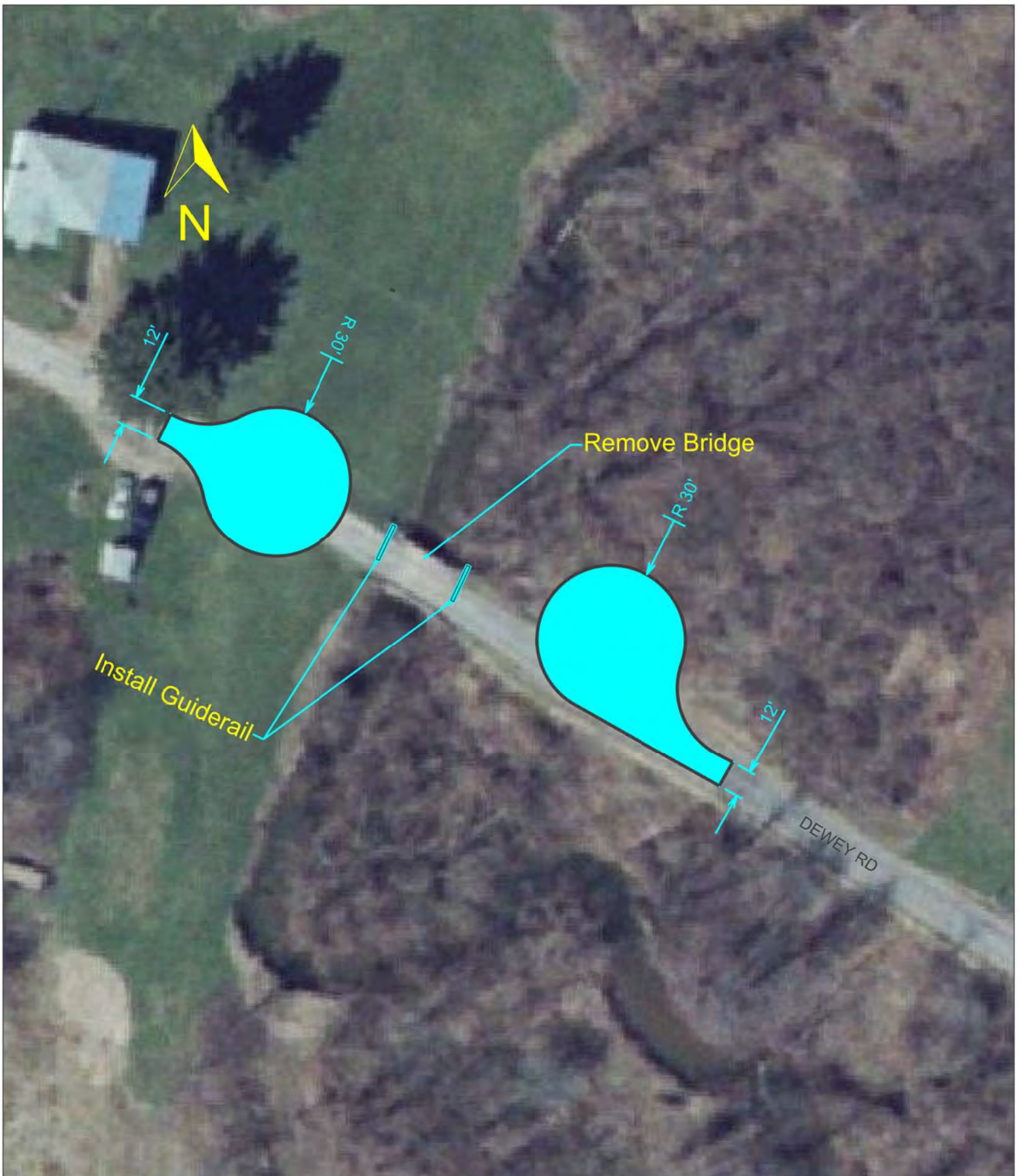
EXHIBIT


5G1

PROJECT: E14-1902

DRW : LR

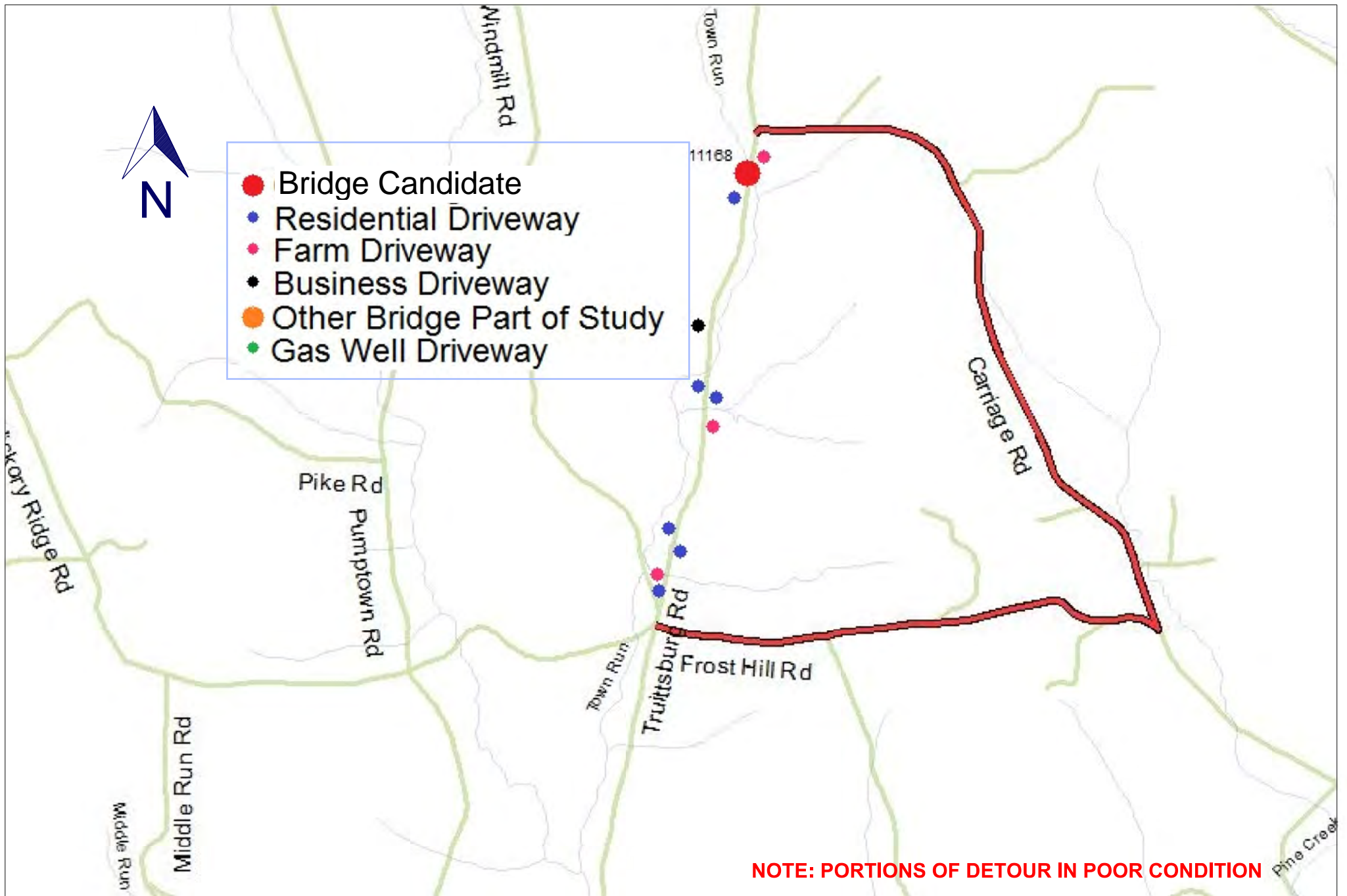
REV: DM



<div>Project:</div> <div>REDUNDANT BRIDGE INVENTORY</div> <div>Clarion, Crawford, Forrest, Venango, and Warren Counties</div> <div>Northwest Commission</div>	<div></div> <div>QUALITY ENGINEERING SOLUTIONS INC.</div> <div>405 Water Street, Conneaut Lake, PA 16316</div> <div>Phone: (814)382-0373 www.qespavements.com</div>	POTENTIAL MITIGATION STRATEGY		EXHIBIT 5G2	
		BRIDGE BRKEY: 11166		<div>SCALE</div> <div><div>025'50'</div></div>	
		COUNTY: CLARION			
		DEWEY RD OVER PINE CREEK		PROJECT: E14-1902	
		REDBANK TOWNSHIP		DRW : LR	REV: DM



- Bridge Candidate
- Residential Driveway
- Farm Driveway
- Business Driveway
- Other Bridge Part of Study
- Gas Well Driveway



NOTE: PORTIONS OF DETOUR IN POOR CONDITION

REDUNDANT BRIDGE INVENTORY
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Warren Counties

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PROPOSED DETOUR	EXHIBIT 5H1	
BRIDGE BRKEY: 11168		
COUNTY: CLARION		
TRUITTSBURG RD OVER TOWN RUN	PROJECT: E14-1902	
REDBANK TOWNSHIP	DRW : LR	REV: DM



Project:
REDUNDANT BRIDGE INVENTORY
 Clarion, Crawford, Forrest, Venango, and
 Warren Counties
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POTENTIAL MITIGATION STRATEGY

BRIDGE BRKEY: 11168

COUNTY: **CLARION**

TRUITTSBURG RD OVER TOWN RUN

REDBANK TOWNSHIP

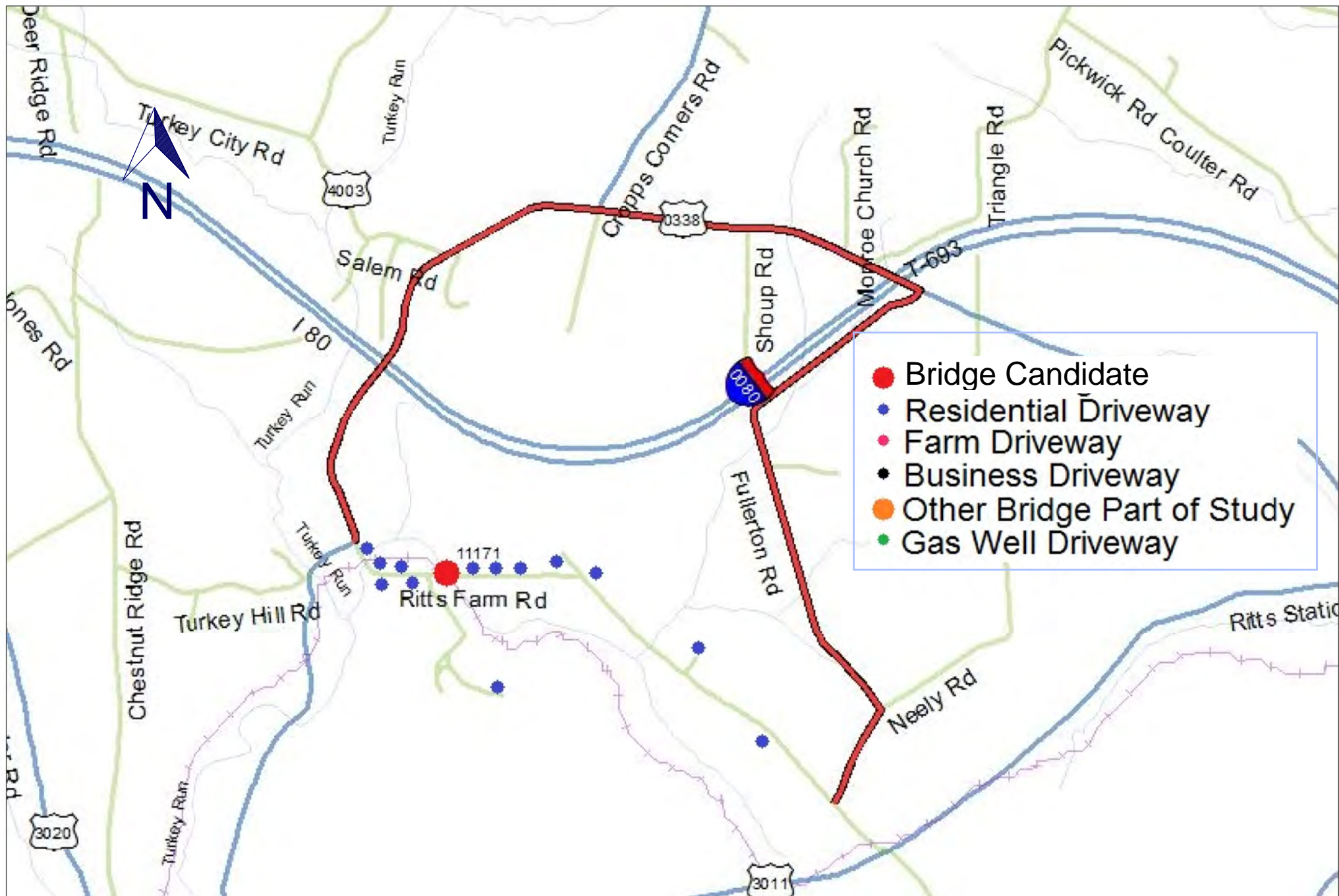
EXHIBIT **5H2**



PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

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PROPOSED DETOUR

BRIDGE BRKEY: 11171

COUNTY: CLARION

RITTS FARM RD OVER TURKEY RUN

RICHLAND TOWNSHIP

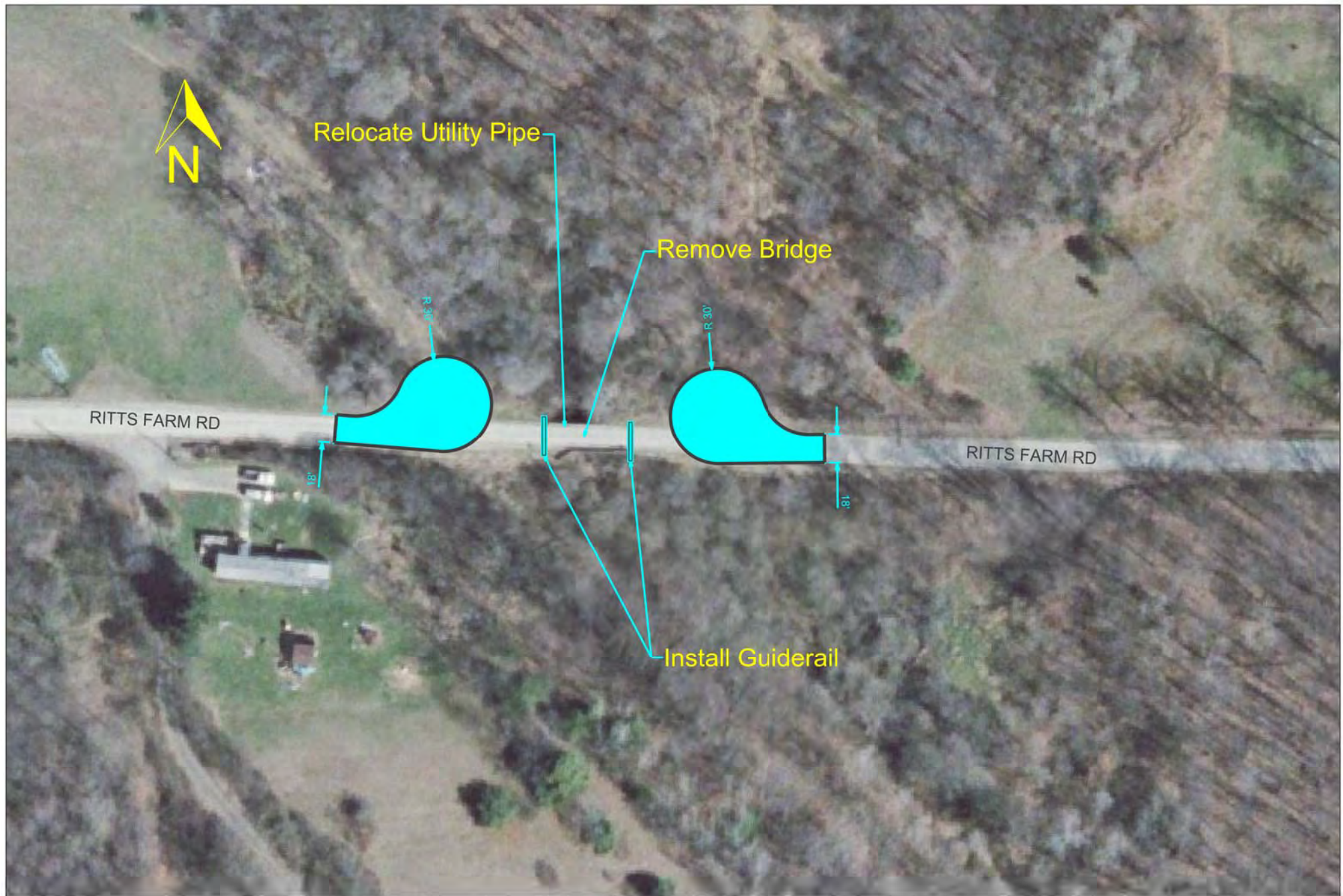
EXHIBIT

511

PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

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POTENTIAL MITIGATION STRATEGY

BRIDGE BRKEY: 11171

COUNTY: CLARION

RITTS FARM RD OVER TURKEY RUN

RICHLAND TOWNSHIP

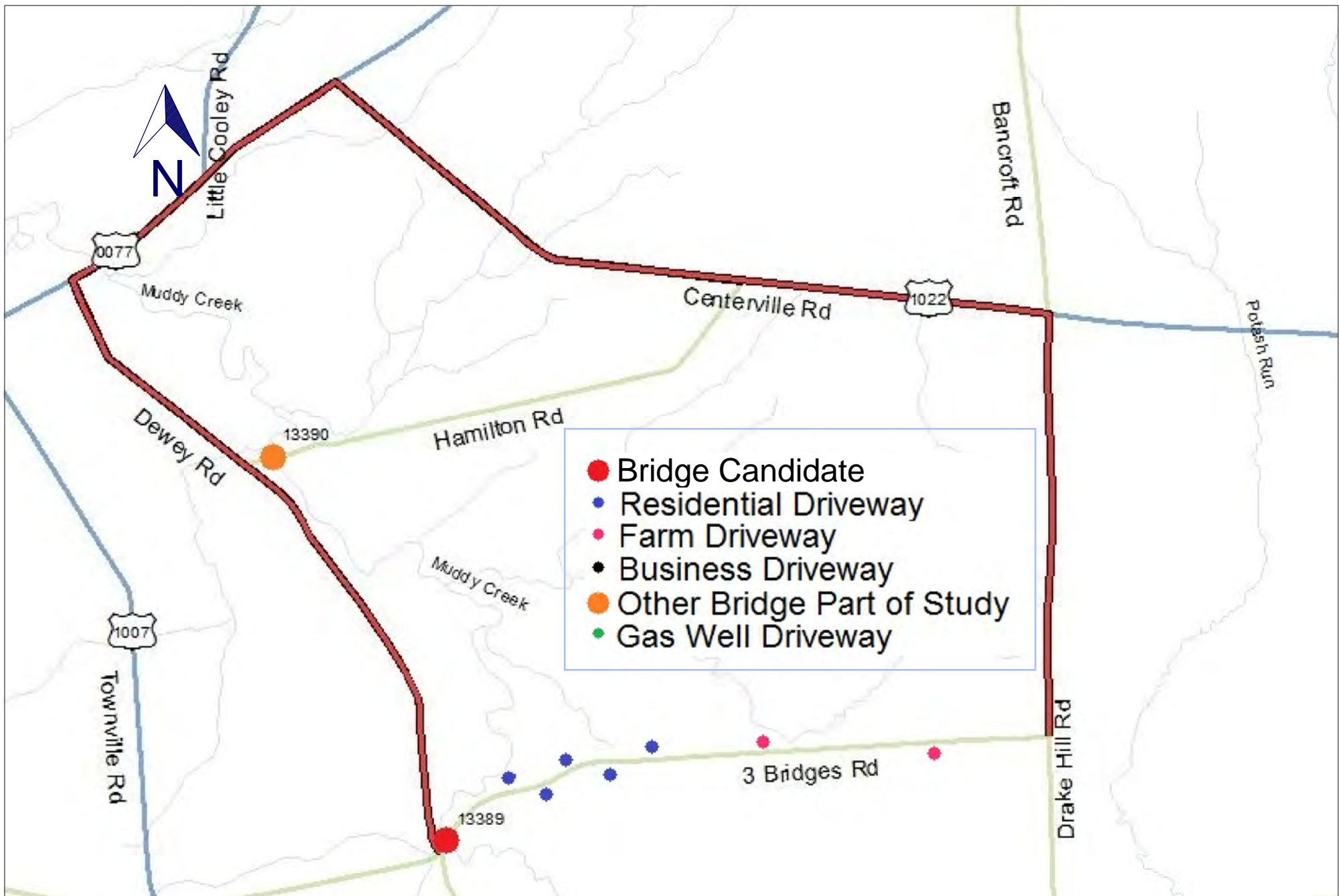
EXHIBIT **512**



PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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PROPOSED DETOUR

BRIDGE BRKEY: 13389

COUNTY: CRAWFORD

3 BRIDG RD OVER E. BR. MUDDY CREEK

ATHENS TOWNSHIP

EXHIBIT

5J1

PROJECT: E14-1902

DRW : LR

REV: DM



Project:
REDUNDANT BRIDGE INVENTORY
 Clarion, Crawford, Forrest, Venango, and
 Warren Counties
 Northwest Commission



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POTENTIAL MITIGATION STRATEGIES

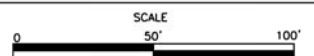
BRIDGE BRKEY: 13389

COUNTY: **CRAWFORD**

3 BRIDG RD OVER E. BR. MUDDY CREEK

ATHENS TOWNSHIP

EXHIBIT **5J2**



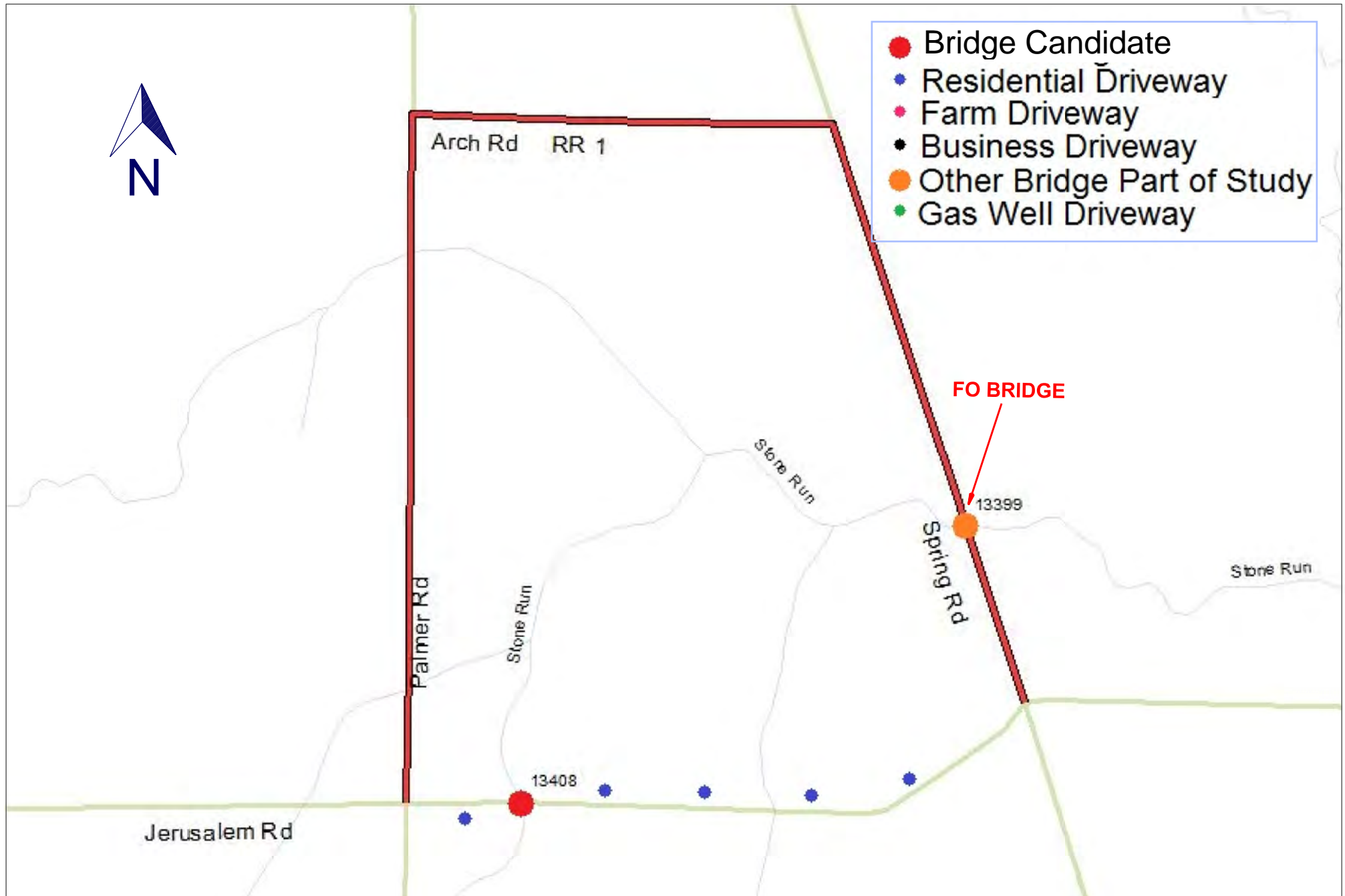
PROJECT: **E14-1902**

DRW : LR

REV: DM



- Bridge Candidate
- Residential Driveway
- Farm Driveway
- Business Driveway
- Other Bridge Part of Study
- Gas Well Driveway



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and
Warren Counties

Northwest Commission



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PROPOSED DETOUR

BRIDGE BRKEY: 13408

COUNTY: CRAWFORD

JERUSALEM RD OVER STONE RD

BEAVER TOWNSHIP

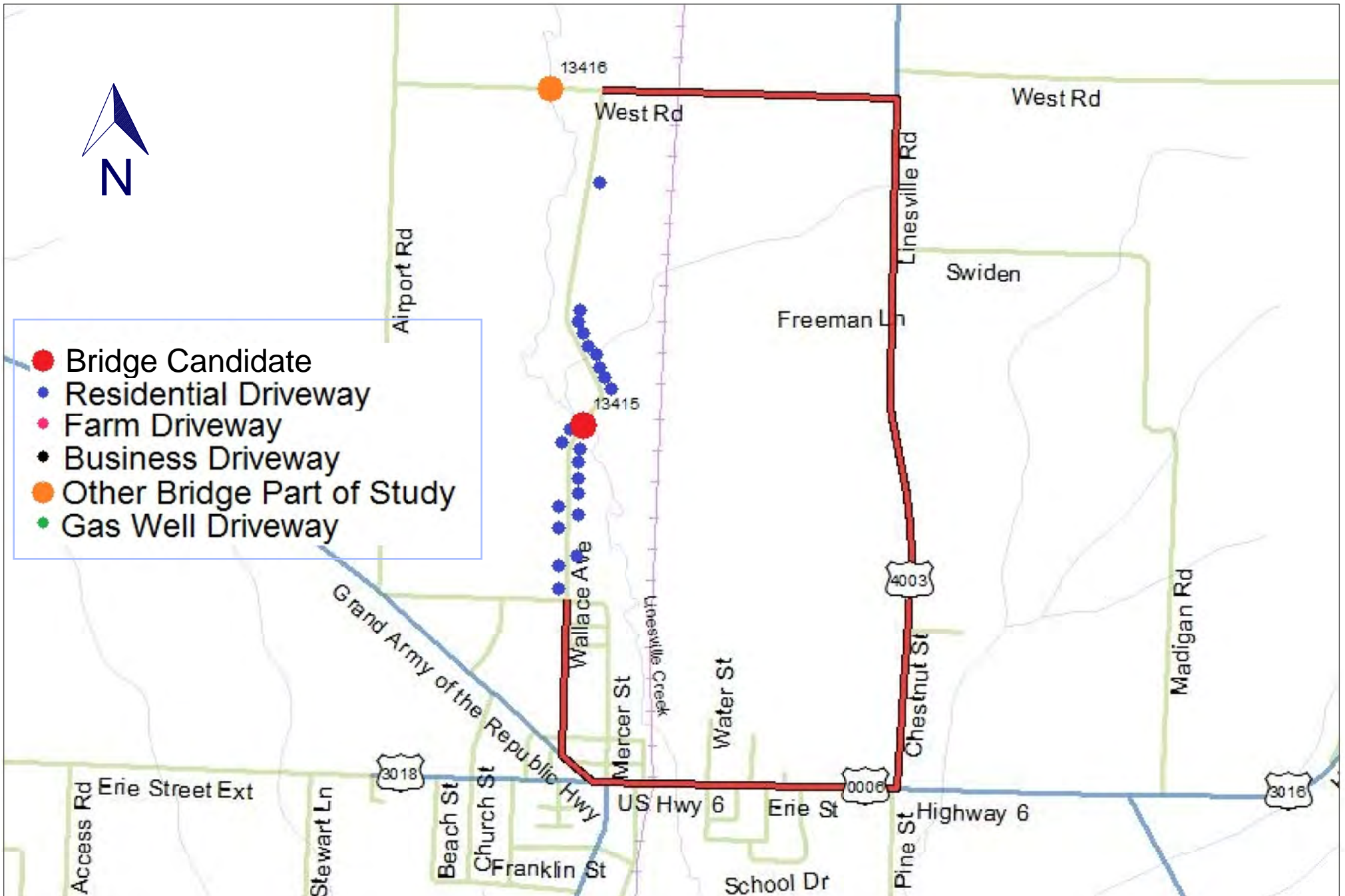
EXHIBIT

5K1

PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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PROPOSED DETOUR

BRIDGE BRKEY: 13415

COUNTY: CRAWFORD

WALLACE AVE OVER LINESVILLE CREEK

CONNEAUT TOWNSHIP

EXHIBIT


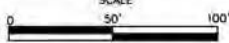
5L1

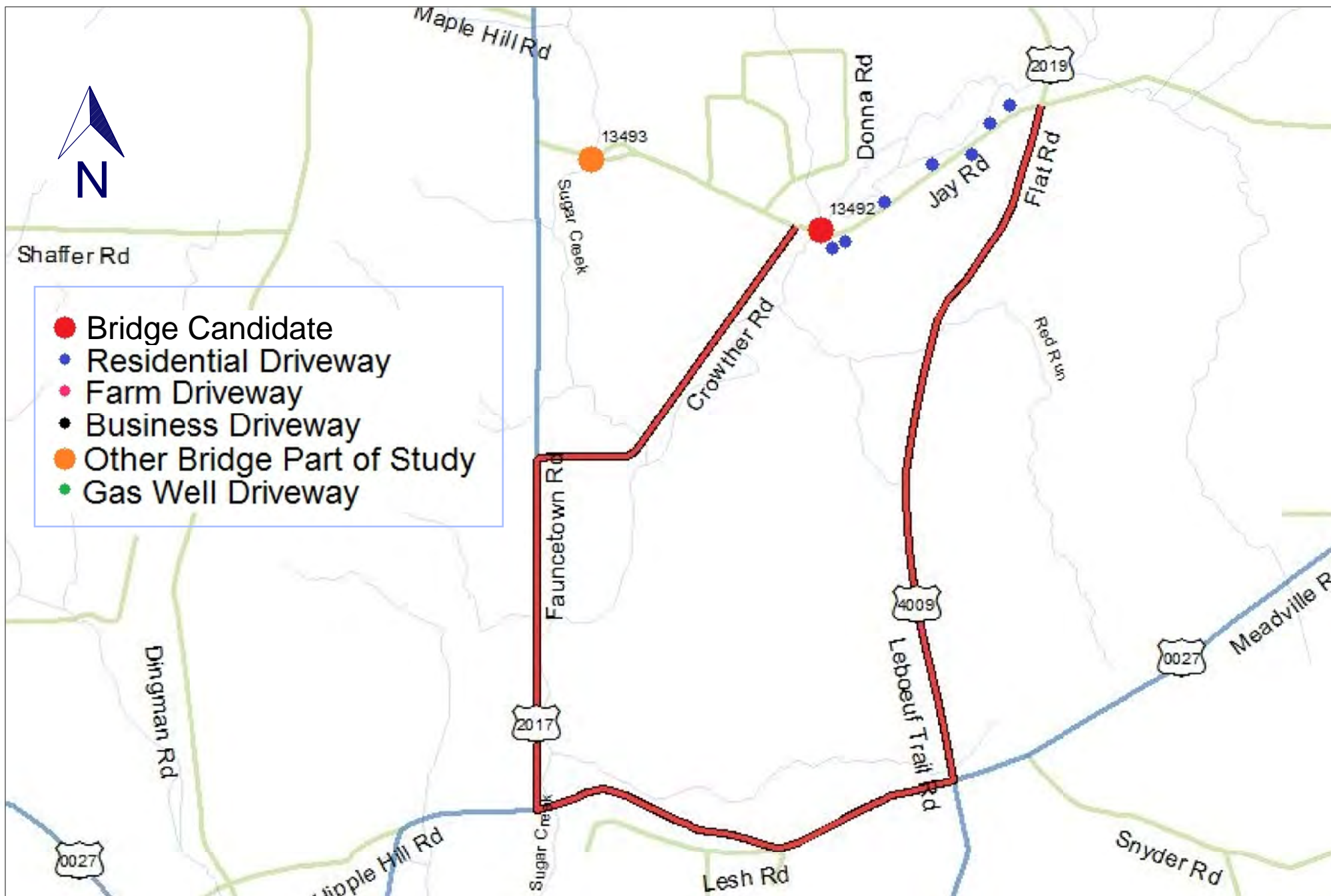
PROJECT: E14-1902

DRW : LR

REV: DM



<div>Project:</div> <div>REDUNDANT BRIDGE INVENTORY</div> <div>Clarion, Crawford, Forrest, Venango, and Warren Counties</div> <div>Northwest Commission</div>	<div></div> <div>QUALITY ENGINEERING SOLUTIONS INC.</div> <div>405 Water Street, Conneaut Lake, PA 16316</div> <div>Phone: (814)382-0373 www.qespavements.com</div>	POTENTIAL MITIGATION STRATEGY		EXHIBIT 5L2	
		BRIDGE BRKEY: 13415		<div>SCALE</div> <div></div>	
		COUNTY: CRAWFORD			
		WALLACE AVE OVER LINESVILLE CREEK		PROJECT: E14-1902	
		CONNEAUT TOWNSHIP		DRW : LR	REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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PROPOSED DETOUR

BRIDGE BRKEY: 13492

COUNTY: CRAWFORD

JAY RD OVER SUGAR CREEK E.BR.

TROY TOWNSHIP

EXHIBIT

5M1

PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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POTENTIAL MITIGATION STRATEGY

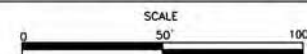
BRIDGE BRKEY: 13492

COUNTY: CRAWFORD

JAY RD OVER SUGAR CREEK E.BR.

TROY TOWNSHIP

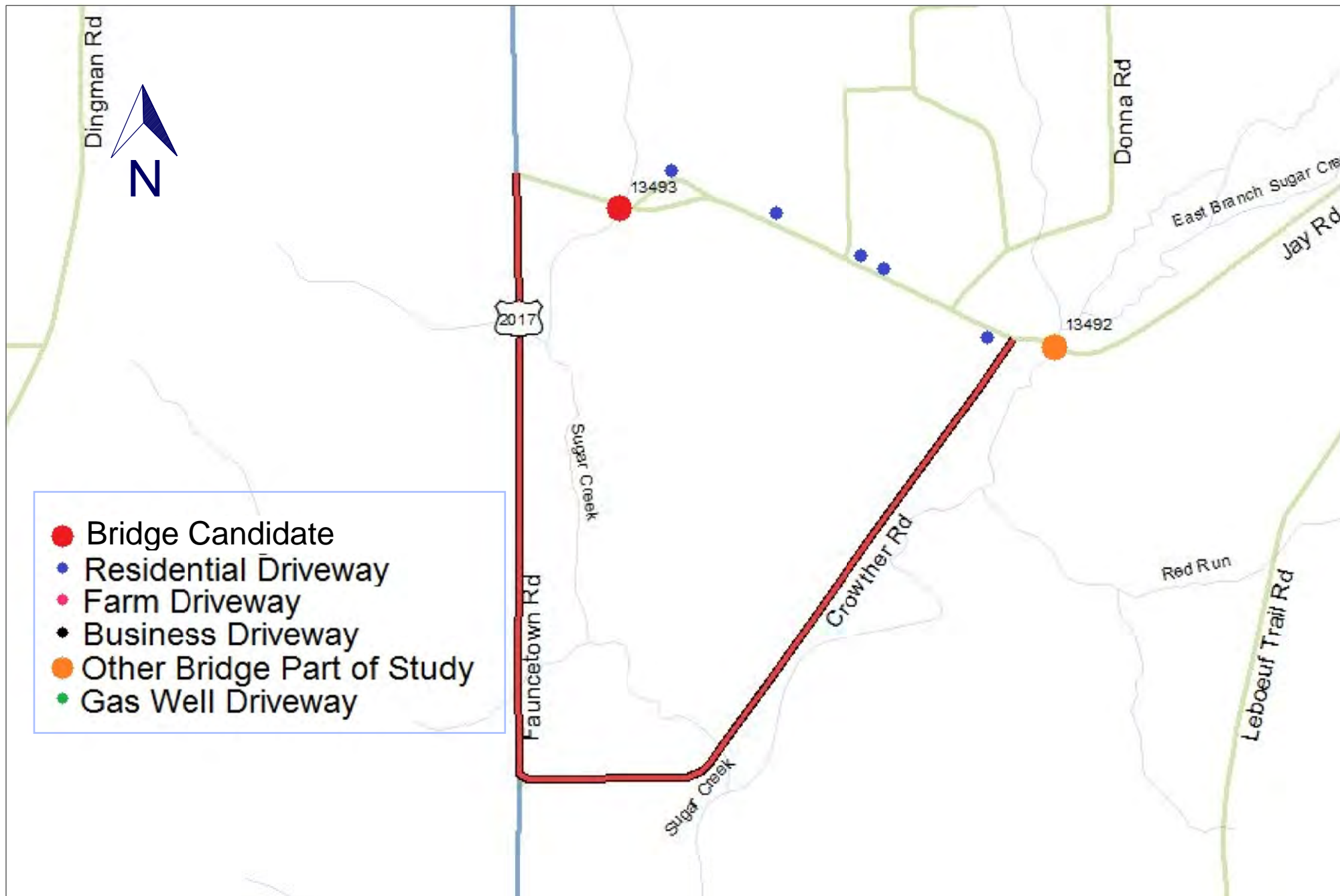
EXHIBIT **5M2**



PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

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PROPOSED DETOUR

BRIDGE BRKEY: 13493

COUNTY: CRAWFORD

JAY RD OVER SUGAR CREEK

TROY TOWNSHIP

EXHIBIT

5N1

PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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POTENTIAL MITIGATION STRATEGY

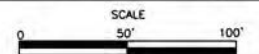
BRIDGE BRKEY: 13493

COUNTY: CRAWFORD

JAY RD OVER SUGAR CREEK

TROY TOWNSHIP

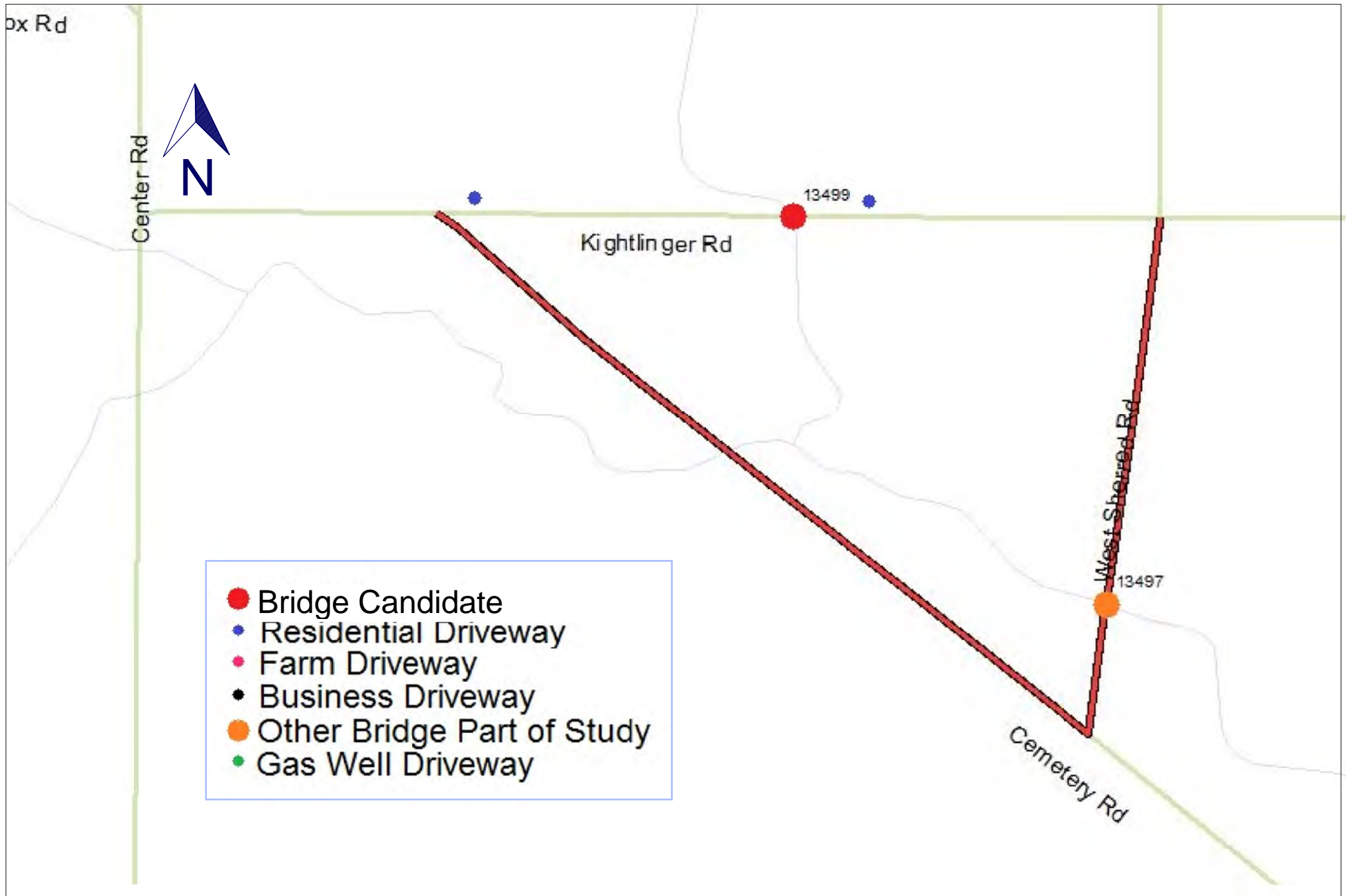
EXHIBIT **5N2**



PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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PROPOSED DETOUR

BRIDGE BRKEY: 13499

COUNTY: CRAWFORD

KIGHTLINDER RD OVER COULTER RUN

VENANGO TOWNSHIP

EXHIBIT

501

PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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POTENTIAL MITIGATION STRATEGY

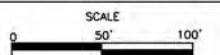
BRIDGE BRKEY: 13499

COUNTY: **CRAWFORD**

KIGHTLINDER RD OVER COULTER RUN

BEAVER TOWNSHIP

EXHIBIT **502**



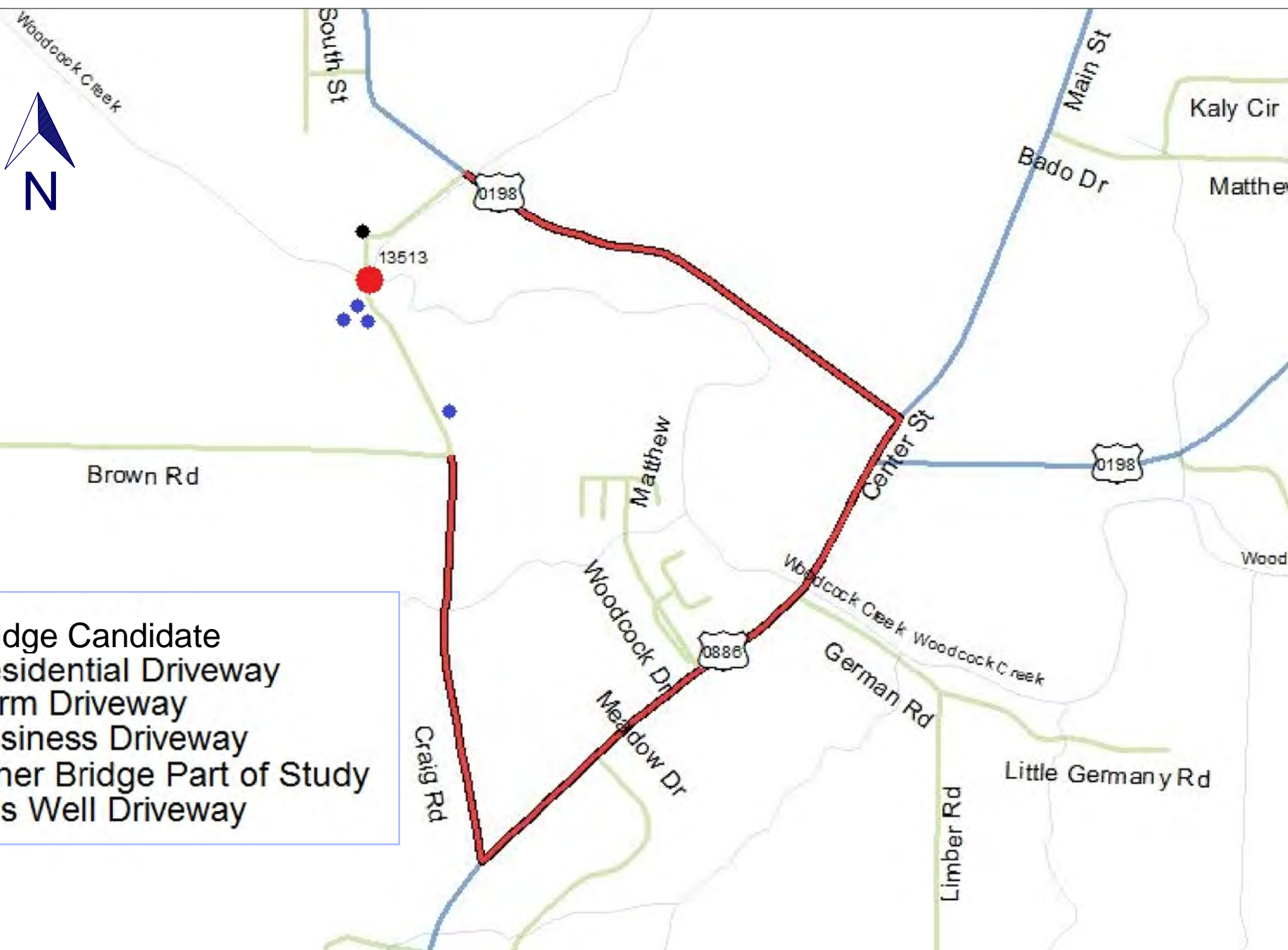
PROJECT: **E14-1902**

DRW : LR

REV: DM



- Bridge Candidate
- Residential Driveway
- Farm Driveway
- Business Driveway
- Other Bridge Part of Study
- Gas Well Driveway



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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PROPOSED DETOUR

BRIDGE BRKEY: 13513

COUNTY: **CRAWFORD**

CRAIG RD OVER COOKWOOD CREEK

OUTSIDE SAEGERTOWN

EXHIBIT

5P1

PROJECT: **E14-1902**

DRW : LR

REV: DM



Project:

REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

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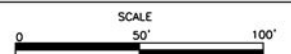
BRIDGE BRKEY: 13513

COUNTY: **CRAWFORD**

CRAIG RD OVER COOKWOOD CREEK

OUTSIDE SAEGERTOWN

EXHIBIT **5P2**



PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

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PROPOSED DETOUR

BRIDGE BRKEY: 13545

COUNTY: CRAWFORD

LINDEN ST OVER CHURCH RUN

CITY OF TITUSVILLE

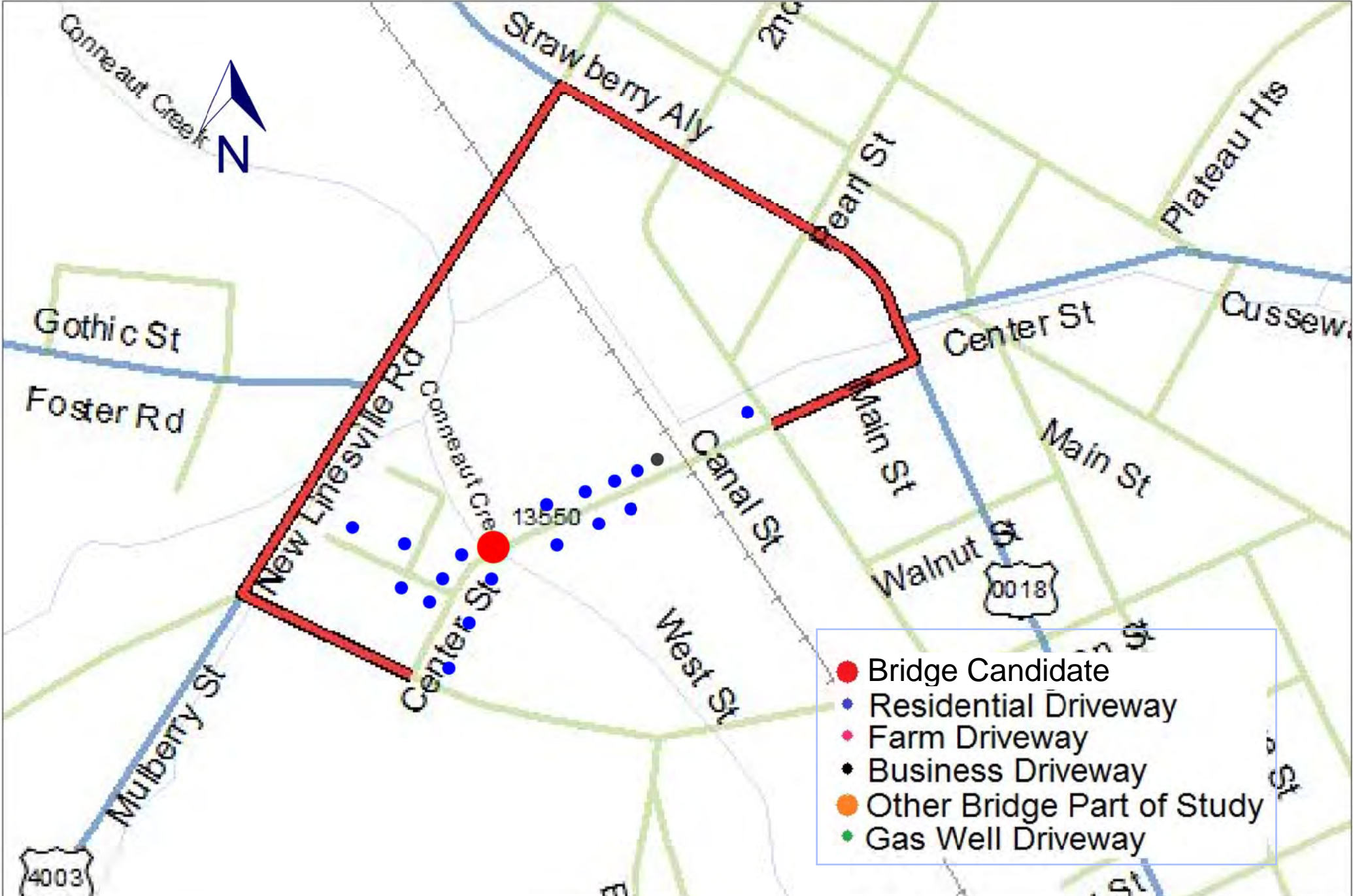
EXHIBIT

5Q1

PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

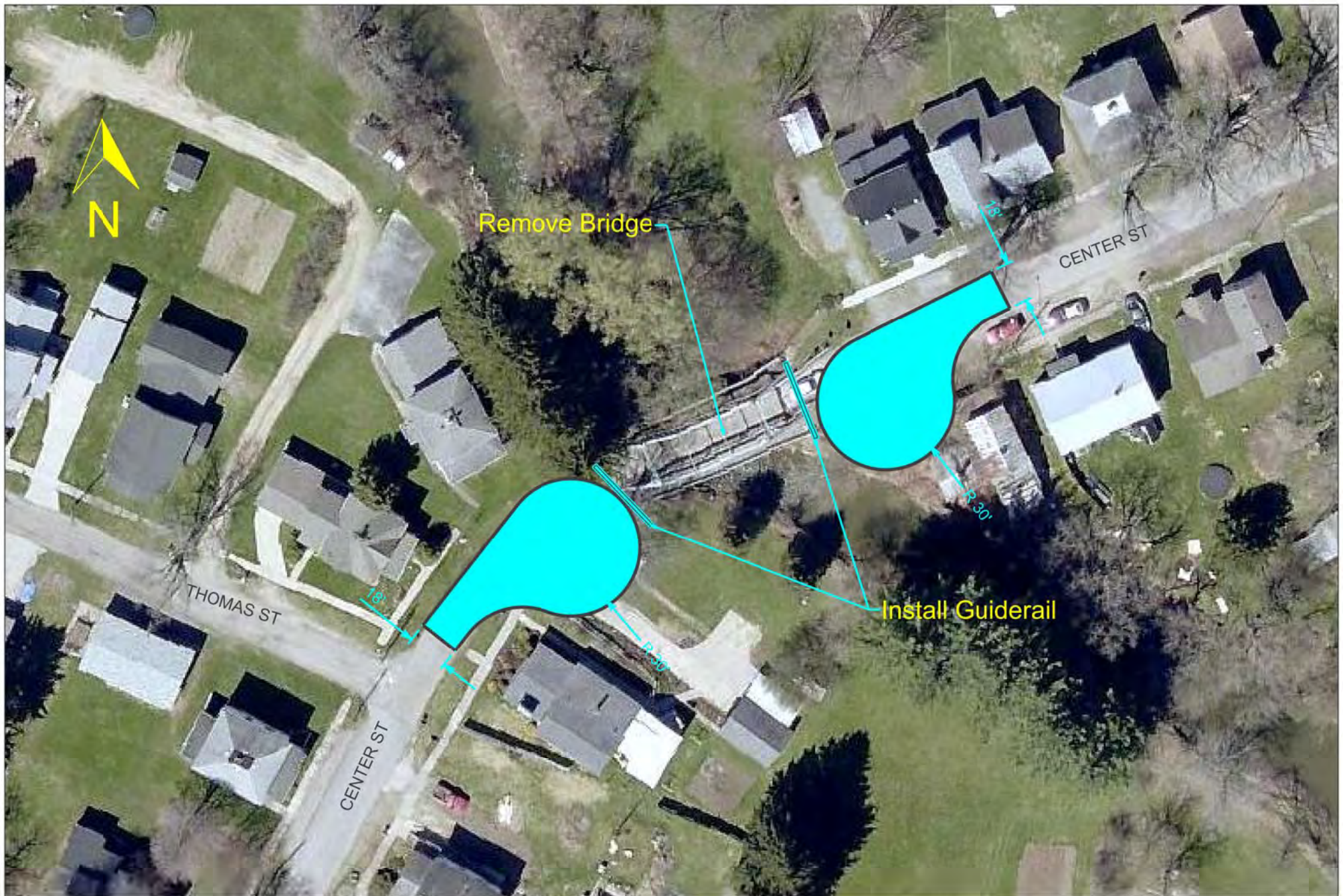
Northwest Commission



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PROPOSED DETOUR	EXHIBIT 5R1	
BRIDGE BRKEY: 13550		
COUNTY: CRAWFORD		
CENTER ST OVER CONNEAUT CREEK	PROJECT: E14-1902	
CONNEAUTVILLE	DRW : LR	REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



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POTENTIAL MITIGATION STRATEGY

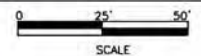
BRIDGE BRKEY: 13550

COUNTY: CRAWFORD

CENTER ST OVER CONNEAUT CREEK

CONNEAUTVILLE

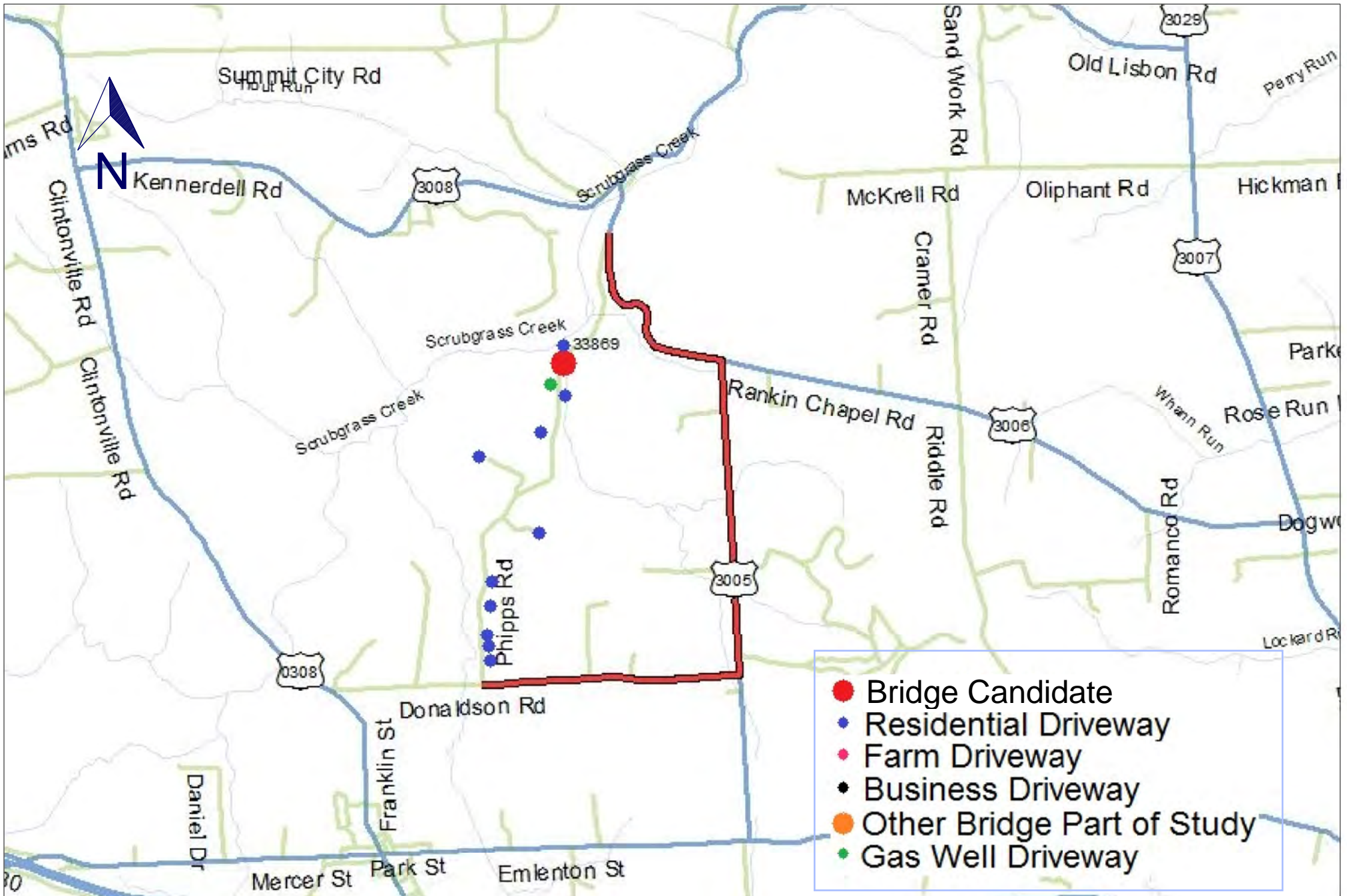
EXHIBIT **5R2**



PROJECT: **E14-1902**

DRW : LR

REV: DM



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PROPOSED DETOUR

BRIDGE BRKEY: 33869

COUNTY: VENANGO

PHIPPS RD OVER SCRUBGRASS CREEK BR.

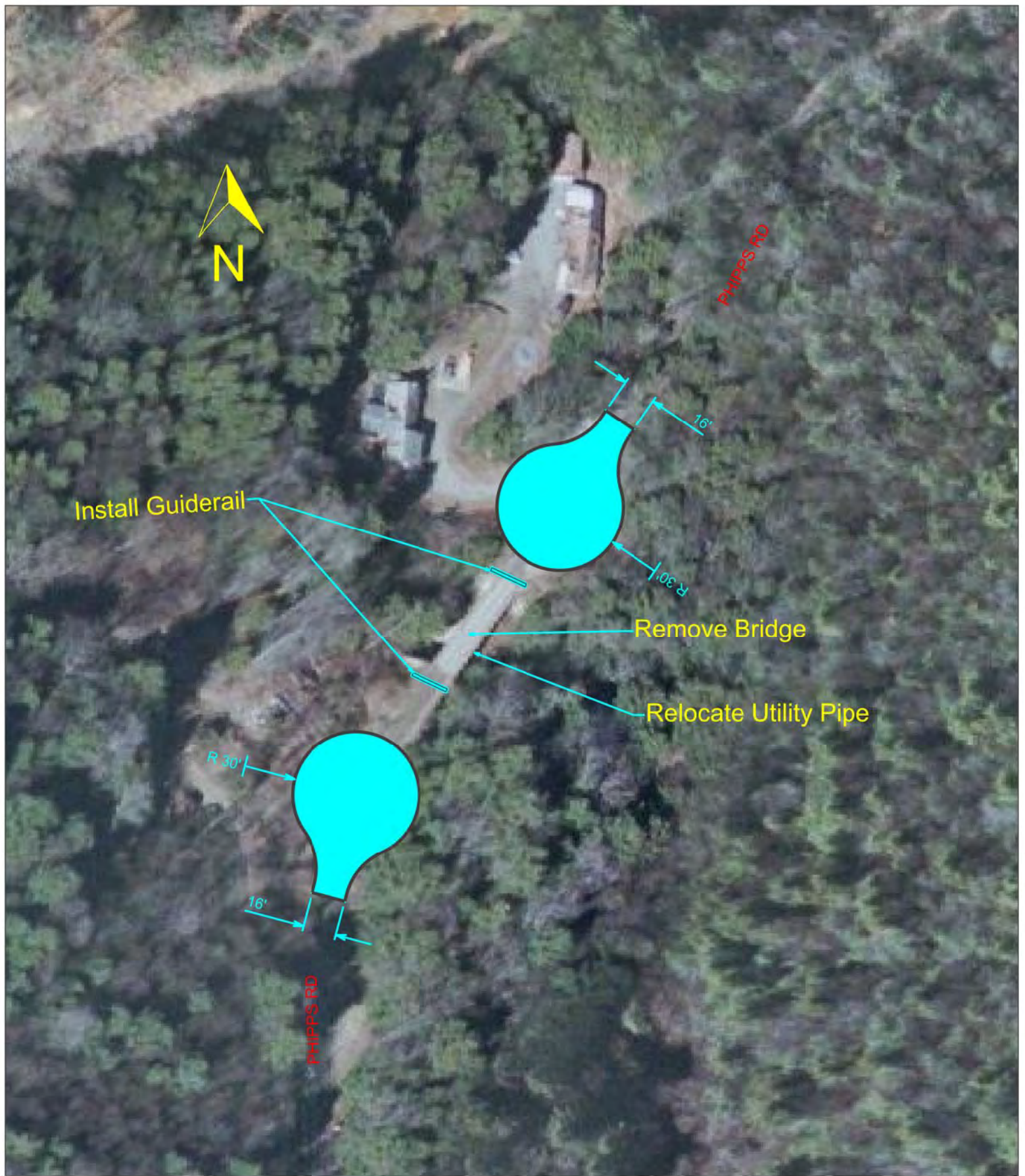
CLINTON TOWNSHIP


EXHIBIT **5S1**

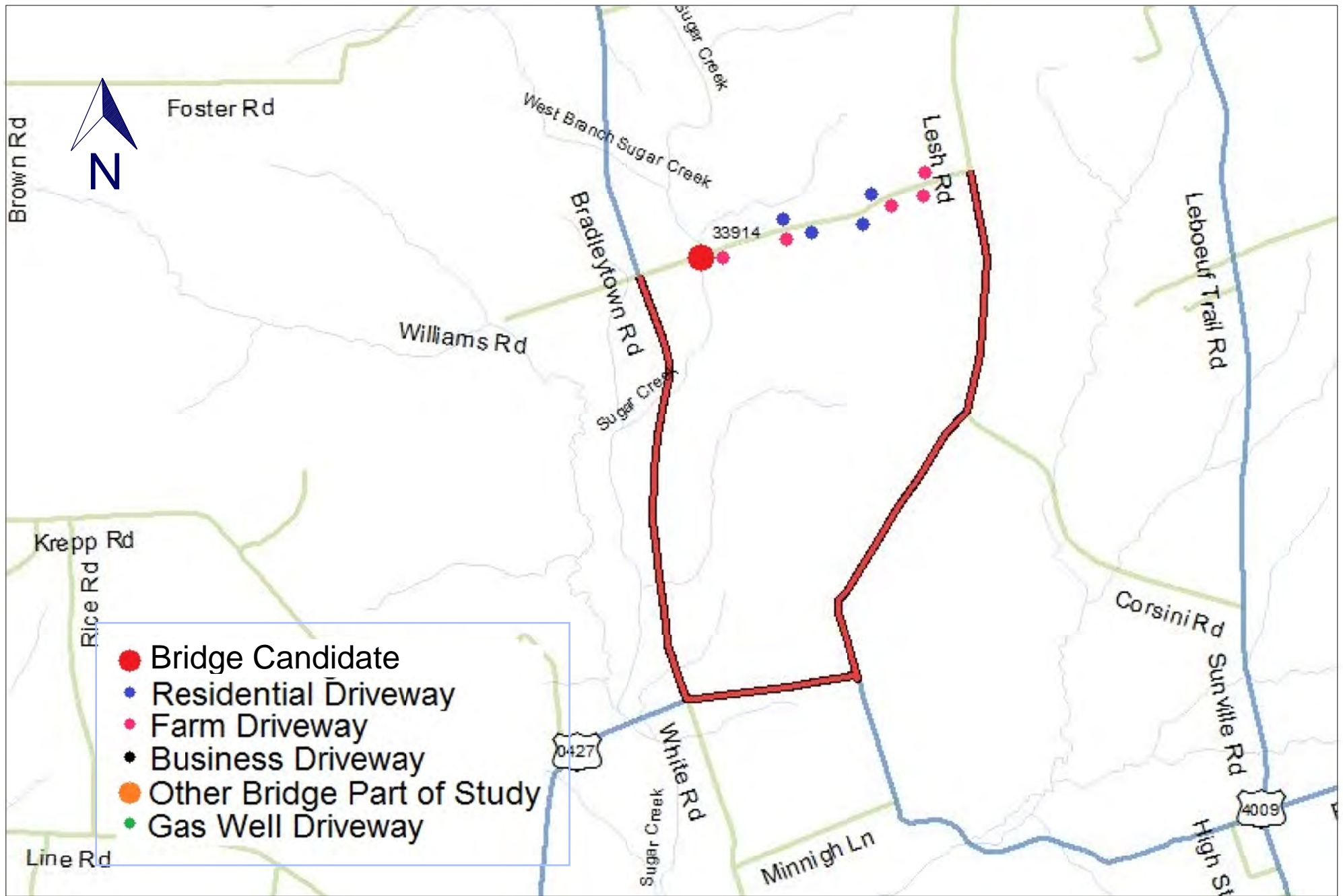
PROJECT: **E14-1902**

DRW : LR

REV: DM



<div>Project:</div> <div>REDUNDANT BRIDGE INVENTORY</div> <div>Clarion, Crawford, Forrest, Venango, and Warren Counties</div> <div>Northwest Commission</div>	<div></div> <div>QUALITY ENGINEERING SOLUTIONS INC.</div> <div>405 Water Street, Conneaut Lake, PA 16316</div> <div>Phone: (814)382-0373 www.qespavements.com</div>	POTENTIAL MITIGATION STRATEGY		EXHIBIT 5S2	
		BRIDGE BRKEY: 33869		<div>SCALE</div> <div><div>025'50'</div></div>	
		COUNTY: VENANGO			
		PHIPPS RD OVER SCRUBGRASS CREEK BR.		PROJECT: E14-1902	
		CLINTON TOWNSHIP		DRW : LR	REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

PROPOSED DETOUR

BRIDGE BRKEY: 33914

COUNTY: VENANGO

WILLIAMS RD OVER SUGAR CREEK MID BR. E

PLUM TOWNSHIP

EXHIBIT **5T1**

PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

POTENTIAL MITIGATION STRATEGY

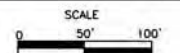
BRIDGE BRKEY: 33914

COUNTY: VENANGO

WILLIAMS RD OVER SUGAR CREEK MID BR. E

PLUM TOWNSHIP

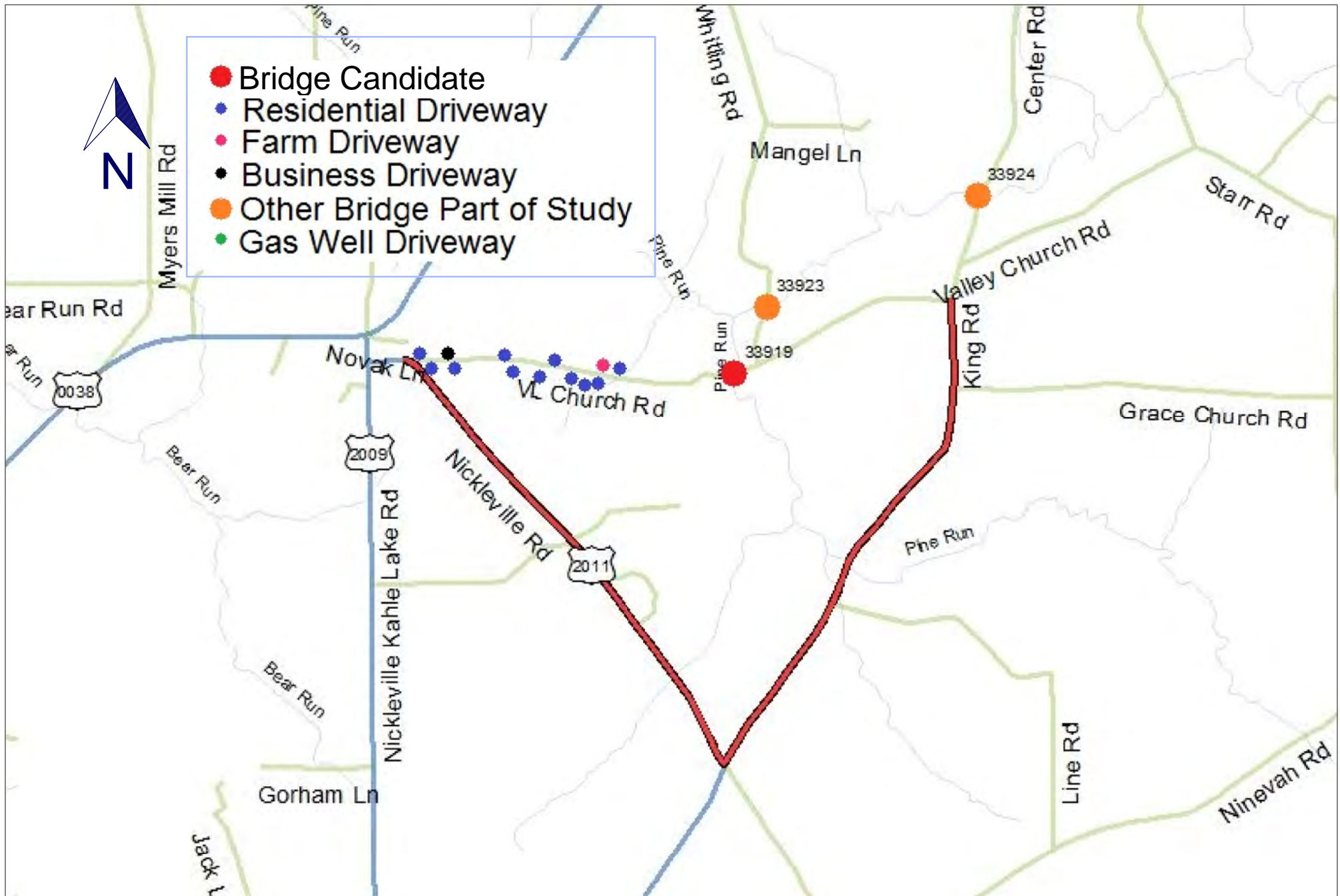
EXHIBIT **5T2**



PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

PROPOSED DETOUR

BRIDGE BRKEY: 33919

COUNTY: VENANGO

VALLEY CHURCH RD OVER PINE RUN

RICHLAND TOWNSHIP

EXHIBIT

5U1

PROJECT: E14-1902

DRW : LR

REV: DM



Project:
REDUNDANT BRIDGE INVENTORY
 Clarion, Crawford, Forrest, Venango, and
 Warren Counties
 Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.
 405 Water Street, Conneaut Lake, PA 16316
 Phone: (814)382-0373 www.qespavements.com

POTENTIAL MITIGATION STRATEGY	
BRIDGE BRKEY: 33919	
COUNTY: VENANGO	
VALLEY CHURCH RD OVER PINE RUN	
RICHLAND TOWNSHIP	

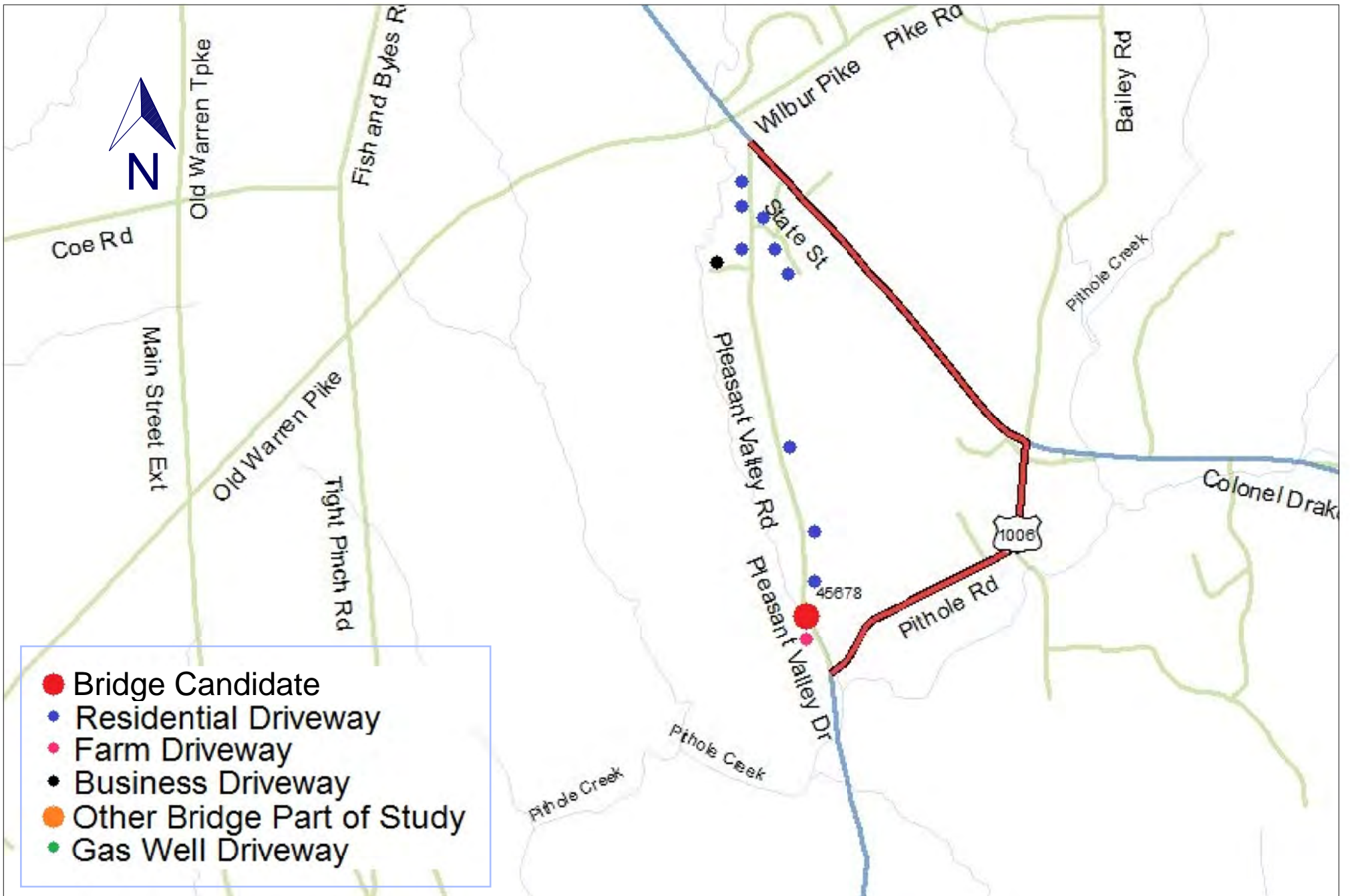
EXHIBIT 5U2	
SCALE 0 50' 100'	
PROJECT: E14-1902	
DRW : LR	REV: DM



<div>REDUNDANT BRIDGE INVENTORY</div> <div>Clarion, Crawford, Forrest, Venango, and Warren Counties</div> <div>Northwest Commission</div>	<div></div> <div>QUALITY ENGINEERING SOLUTIONS INC.</div> <div>405 Water Street, Conneaut Lake, PA 16316</div> <div>Phone: (814)382-0373 www.qespavements.com</div>	PROPOSED DETOUR		EXHIBIT 5V1	
		BRIDGE BRKEY: 33923			
		COUNTY: VENANGO			
		WHITLING RD OVER PINE RUN		PROJECT: E14-1902	
		RICHLAND TOWNSHIP		DRW : LR	REV: DM



<div>Project:</div> <div>REDUNDANT BRIDGE INVENTORY</div> <div>Clarion, Crawford, Forrest, Venango, and Warren Counties</div> <div>Northwest Commission</div>	<div></div> <div>QUALITY ENGINEERING SOLUTIONS INC.</div> <div>405 Water Street, Conneaut Lake, PA 16316</div> <div>Phone: (814)382-0373 www.qespavements.com</div>	POTENTIAL MITIGATION STRATEGY		EXHIBIT 5V2	
		BRIDGE BRKEY: 33923		<div>SCALE</div> <div><div>050'100'</div></div>	
		COUNTY: VENANGO			
		WHITLING RD OVER PINE RUN		PROJECT: E14-1902	
		RICHLAND TOWNSHIP		DRW : LR	REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

PROPOSED DETOUR

BRIDGE BRKEY: 45678

COUNTY: VENANGO

PLEASANT VALLEY DR OVER PITHOLE CK.

ALLEGHENY TOWNSHIP

EXHIBIT **5W1**

PROJECT: E14-1902

DRW : LR

REV: DM



Project:

REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and
Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
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POTENTIAL MITIGATION STRATEGY

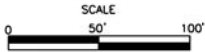
BRIDGE BRKEY: 45678

COUNTY: **VENANGO**

PLEASANT VALLEY DR OVER PITHOLE CK.

ALLEGHENY TOWNSHIP

EXHIBIT **5W2**



PROJECT: **E14-1902**

DRW : LR

REV: DM



- Bridge Candidate
- Residential Driveway
- Farm Driveway
- Business Driveway
- Other Bridge Part of Study
- Gas Well Driveway



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and
Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

PROPOSED DETOUR

BRIDGE BRKEY: 34243

COUNTY: WARREN

CHAPPEL HILL RD OVER CALDWELL CREEK

ELDRED TOWNSHIP

EXHIBIT **5X1**

PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.
 405 Water Street, Conneaut Lake, PA 16316
 Phone: (814)382-0373 www.qespavements.com

POTENTIAL MITIGATION STRATEGY

BRIDGE BRKEY: 34243

COUNTY: WARREN

CHAPPEL HILL RD OVER CALDWELL CREEK

ELDRED TOWNSHIP

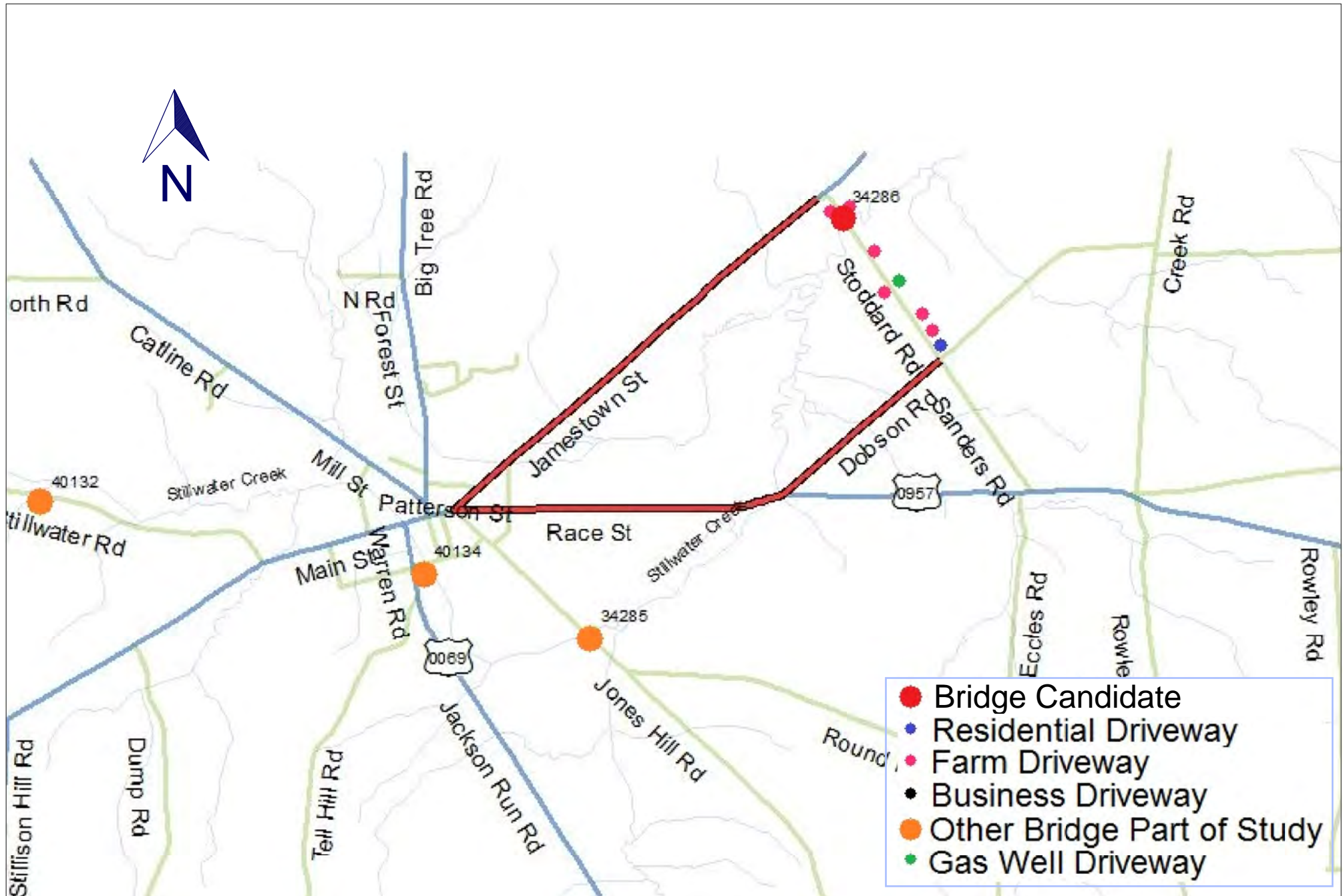
EXHIBIT **5X2**



PROJECT: E14-1902

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

PROPOSED DETOUR

BRIDGE BRKEY: 34286

COUNTY: WARREN

JINKS RD OVER WHITNEY RD

SPRING CREEK TOWNSHIP

EXHIBIT

5Y1

PROJECT: E14-1902

DRW : LR

REV: DM



STODDARD RD

Remove Box Culvert



Project:

REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and
Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

POTENTIAL MITIGATION STRATEGY

BRIDGE BRKEY: 34286

COUNTY: WARREN

STODDARD RD OVER STILLWATER CREEK

SUGAR GROVE TOWNSHIP

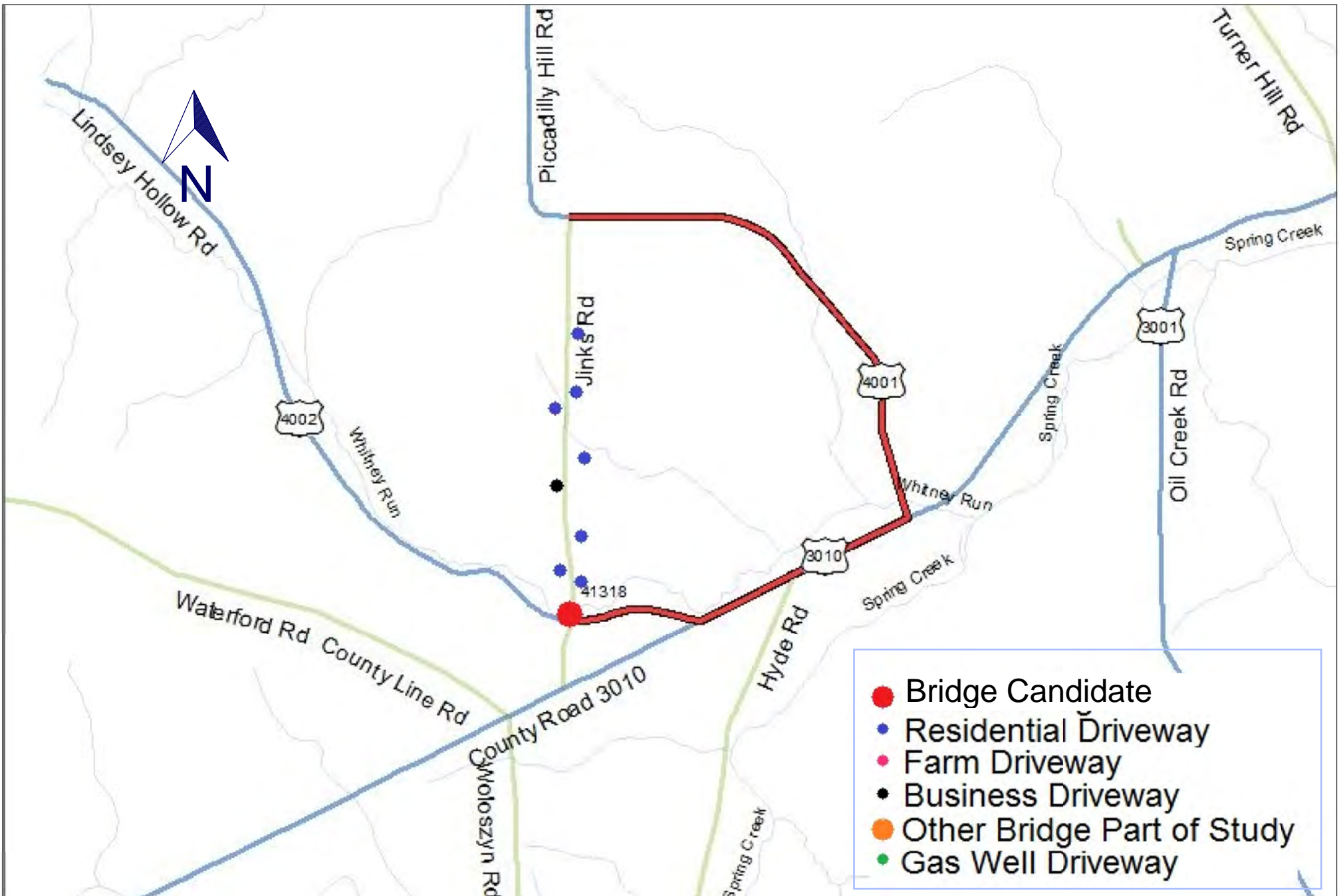
EXHIBIT **5Y2**



PROJECT: **E14-1902**

DRW : LR

REV: DM



REDUNDANT BRIDGE INVENTORY

Clarion, Crawford, Forrest, Venango, and Warren Counties

Northwest Commission



QUALITY ENGINEERING SOLUTIONS INC.

405 Water Street, Conneaut Lake, PA 16316
Phone: (814)382-0373 www.qespavements.com

PROPOSED DETOUR

BRIDGE BRKEY: 41318

COUNTY: WARREN

LINDEN ST OVER CHURCH RUN

CITY OF TITUSVILLE

EXHIBIT **521**

PROJECT: E14-1902

DRW : LR

REV: DM



<div>Project:</div> <div>REDUNDANT BRIDGE INVENTORY</div> <div>Clarion, Crawford, Forrest, Venango, and Warren Counties</div> <div>Northwest Commission</div>	<div><div>QES</div></div> <div>QUALITY ENGINEERING SOLUTIONS INC.</div> <div>405 Water Street, Conneaut Lake, PA 16316</div> <div>Phone: (814)382-0373 www.qespavements.com</div>	POTENTIAL MITIGATION STRATEGY	EXHIBIT 522	
		BRIDGE BRKEY: 41318	<div>SCALE</div> <div>025'50'</div>	
		COUNTY: WARREN		
		JINKS RD OVER WHITNEY RD	PROJECT: E14-1902	
		SPRING CREEK TOWNSHIP	DRW : LR	REV: DM

Appendix 1 Notification sent to Municipalities



Quality Engineering Solutions

Engineering • Inspection

September 23, 2014
QES File #E14-1902

To Whom It May Concern:

**Re: Northwest Rural Planning Organization
County & Municipal Redundant Bridge Inventory**

Dear Sir/Madam:

Quality Engineering Solutions, Inc. (QES) has been awarded a project administered by the Northwest Pennsylvania Regional Planning and Development Commission (Northwest Commission), to develop a county and municipal bridge inventory within the counties of Clarion, Crawford, Forest, Venango, and Warren. This inventory will identify bridges over 20 ft. in length on the local route system which have reasonable alternative routes, and that are candidates for closure and removal. The information collected in this study will be made available to the counties and municipalities to assist them in making decisions on the repair or replacement of those identified bridges when prioritizing future projects.

The primary source of data that will be used in the execution of this study is the PennDOT Bridge Management System database. However, it is expected that assistance from county or local personnel will be needed in cases where specific data needs to be collected or validated. In these cases, QES will be contacting the county or local offices involved to coordinate the data collection/validation process.

The duration of this project is one year with scheduled completion by the end of September 2015. In addition to a final report that will be provided to each municipality with identified bridge candidates, informational presentations will be facilitated at public meetings in counties identified as having operationally redundant bridges.

Any questions or concerns related to this project can be addressed to:

Luis Ramirez
QES Project Manager
Email: lramirez@gespavements.com
Phone: (814) 382-0373

Sue Smith
Regional Planning Manager
Northwest Commission
Email: sues@northwestpa.org
Phone: (814) 677-4800 x131

Thank you in advance for your collaboration to this project.

Sincerely,

Luis Ramirez, M.Sc.
Project Manager

LR/rkp

Appendix 2 List of Total Local Bridges

Complete List of Local Bridges

Clarion County Bridges Page 1 of 4

COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Clarion	11097	TWP #221 - KLINE	T-398 KLINE ROAD	LIT EAST SANDY CREEK	11097	7201	398	221	41.2994	-79.5853	10	Township	1,930	0
Clarion	11098	NORTH OF KNOX	TWP RD 863	LITTLE CANOE CREEK	11098	7201	863	3479	41.2523	-79.535	10	Township	1,942	0
Clarion	11099	TWP #43+20 - COFFMAN	T-865 CAMP COFFMAN	EAST SANDY CREEK	11099	7201	865	4320	41.3167	-79.5872	10	Township	1,961	0
Clarion	11100	TWP #284+65 - KOSSUTH	T-865 CAMP COFFMAN	LITTLE EAST SANDY CREEK	11100	7201	865	8465	41.2958	-79.5703	10	Township	1,961	0
Clarion	11102	TWP #12 - SHETTLER	T-327 SHETTLER RD	CANOE CREEK	11102	7202	327	12	41.2331	-79.5197	10	Township	1,909	1,965
Clarion	11103	TWP #16 - JEFFERSON	T-391 JEFFERSON RD	BEAVER CREEK	11103	7202	391	16	41.2028	-79.5653	10	Township	1,960	0
Clarion	11104	TWP #17 - COULTER	T-383 COULTER RD	BEAVER CREEK	11104	7202	383	17	41.1939	-79.5625	10	Township	1,960	0
Clarion	11105	TWP #18 - BURNT MILLS	T-403 BURNT MILLS	BEAVER CREEK	11105	7202	403	18	41.1772	-79.56	10	Township	1,970	0
Clarion	11106	TWP #19 - EAGLE FURNACE	T-385 EAGLE FURNAC	CANOE CREEK	11106	7202	385	19	41.1725	-79.5231	10	Township	1,960	0
Clarion	11107	E OF T396 & T400	TWP RD 400	CANOE CR	11107	7202	400	217	41.2267	-79.5183	10	Township	1,930	0
Clarion	11108	TWP #218 - CULBERTSON	T-407 CULBERTSON	CANOE CREEK	11108	7202	407	218	41.2444	-79.5242	10	Township	1,997	0
Clarion	11109	TWP #23 - BEAVER FURNACE	T-411 BEAVER FURNA	DEER CREEK	11109	7202	411	23	41.1994	-79.4583	10	Township	1,910	0
Clarion	11112	3 MI.W.OF MARBLE	TWP RD 408	E.SANDY CREEK	11112	7205	408	210	41.3283	-79.5	10	Township	1,912	0
Clarion	11122	TWP #215 - MOORE	T-619 MOORE DRIVE	TOBY CREEK	11122	7206	619	215	41.3297	-79.2928	10	Township	1,975	0
Clarion	11124	TWP #3 - SARVEY MILL	T-562 SARVEY MILL	TOBY CREEK	11124	7207	562	3	41.2997	-79.3297	10	Township	1,996	0
Clarion	11127	TWP #219 - SHADY	T-589 SHADY DRIVE	MAHLES RUN	11127	7208	589	219	41.3308	-79.4053	10	Township	1,984	0
Clarion	11128	TWP #6 - LICKING	T-600 LICKING DR	LICKING CREEK	11128	7208	600	6	41.3317	-79.3794	10	Township	1,950	0
Clarion	11129	TWP #81+81 - WHITE OAK	T-852 WHITE OAK DR	TOBY CREEK	11129	7208	852	8181	41.2858	-79.3453	10	Township	1,941	0
Clarion	11130	TWP #183+12 - SUNSET	T-850 SUNSET DRIVE	STEP CREEK	11130	7208	850	8312	41.3072	-79.3592	10	Township	1,950	0
Clarion	11131	TWP #40 - MYERS HOLLOW	T-341 MYERS HOLLOW	CHERRY RUN	11131	7209	341	40	41.0986	-79.5644	10	Township	1,950	1,982
Clarion	11133	TWP #26 - CURLL	T-444 CURLL RD	PINEY CREEK	11133	7210	444	26	41.1389	-79.3544	10	Township	1,940	0
Clarion	11137	TWP #30 - LIMESTONE	T-685 LIMESTONE	PINEY CREEK	11137	7210	685	30	41.1275	-79.3258	10	Township	1,910	0
Clarion	11140	TWP #437+81 - FROGTOWN	T-840 FROGTOWN RD	GLADE RUN	11140	7210	840	3781	41.1106	-79.3161	10	Township	1,954	0
Clarion	11141	TWP #34 - SOLIDA	T-442 SOLIDA RD	WILDCAT RUN	11141	7211	442	34	41.0175	-79.4831	10	Township	1,977	0
Clarion	11142	VILLAGE OF LAWSONHAM	TWP RD 460	TRIB.OF RED BANK CREEK	11142	7211	460	208	40.9945	-79.4905	10	Township	1,935	0
Clarion	11143	TWP #33 - WILDCAT SCHOOL	T-689 WILDCAT SCHL	WILDCAT RUN	11143	7211	689	33	41.0253	-79.4803	10	Township	1,963	0
Clarion	11144	TWP #2050 - TRAISTER	T-880 TRAISTER RD	TURKEY RUN	11144	7211	880	2050	40.9997	-79.4972	10	Township	1,934	0
Clarion	11147	TWP #43 - WINCKLICK	T-564 LT MILLCR RD	LITTLE MILL CREEK	11147	7212	564	43	41.2044	-79.2208	10	Township	1,960	0
Clarion	11148	TWP #42 - ASBURY	T-562 OLD STATE RD	LITTLE MILL CREEK	11148	7212	566	42	41.2014	-79.2244	10	Township	1,955	0
Clarion	11149	TWP#571-01 - MILLCREEK	T-571 MILLCREEK RD	MILL CREEK	11149	7212	571	1	41.2347	-79.3211	10	County	1,959	0
Clarion	11151	TWP #24 - REIDSBURG 2	T-523 TIMBER BRIDG	REIDS RUN	11151	7213	526	24	41.1478	-79.4033	10	Township	1,991	0
Clarion	11152	TWP #51 - REIDSBURG 1	T-526 OLD TOWN RD	PINEY CREEK	11152	7213	526	51	41.1511	-79.4008	10	Township	1,991	0

Complete List of Local Bridges

Clarion County Bridges Page 2 of 4

COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUFFRATE	ADT	DETOUR LENGTH (miles)
Clarion	11097	TWP #221 - KLINE	T-398 KLINE ROAD	LIT EAST SANDY CREEK	20	334	1	Steel, I beams	OPEN	SD	FO	24.3	50	5
Clarion	11098	NORTH OF KNOX	TWP RD 863	LITTLE CANOE CREEK	22	605	1	Concrete(in place), Slab (solid)	OPEN			74.2	270	2
Clarion	11099	TWP #43+20 - COFFMAN	T-865 CAMP COFFMAN	EAST SANDY CREEK	58	2047	1	P/S, Box beam - adj	OPEN			99.8	200	23
Clarion	11100	TWP #284+65 - KOSSUTH	T-865 CAMP COFFMAN	LITTLE EAST SANDY CREEK	26	983	1	Concrete(in place), T-beams	OPEN			86.9	200	4
Clarion	11102	TWP #12 - SHETTLER	T-327 SHETTLER RD	CANOE CREEK	28	448	1	Steel, I beams	POSTED	SD		32.6	356	1.5
Clarion	11103	TWP #16 - JEFFERSON	T-391 JEFFERSON RD	BEAVER CREEK	45	648	1	Steel, I beams	POSTED			54.1	50	3
Clarion	11104	TWP #17 - COULTER	T-383 COULTER RD	BEAVER CREEK	47	658	1	Steel, I beams	POSTED			28	50	3
Clarion	11105	TWP #18 - BURNT MILLS	T-403 BURNT MILLS	BEAVER CREEK	51	689	1	Steel, I beams	POSTED			33.3	50	1.4
Clarion	11106	TWP #19 - EAGLE FURNACE	T-385 EAGLE FURNAC	CANOE CREEK	49	828	1	Steel, I beams	POSTED	SD	FO	29.6	50	5.5
Clarion	11107	E OF T396 & T400	TWP RD 400	CANOE CR	22	275	1	Steel, I beams	POSTED		FO	46.9	50	10
Clarion	11108	TWP #218 - CULBERTSON	T-407 CULBERTSON	CANOE CREEK	26	637	1	Concrete(precast), Box culvert	OPEN			97	50	4
Clarion	11109	TWP #23 - BEAVER FURNACE	T-411 BEAVER FURNA	DEER CREEK	70	1218	1	Concrete(in place), Arch deck - closed	OPEN			75	50	8
Clarion	11112	3 MI.W.OF MARBLE	TWP RD 408	E.SANDY CREEK	26	382	1	Concrete(in place), Arch deck - closed	OPEN		FO	61.9	40	15
Clarion	11122	TWP #215 - MOORE	T-619 MOORE DRIVE	TOBY CREEK	30	534	1	Steel, I beams	POSTED	SD	FO	33.4	50	6
Clarion	11124	TWP #3 - SARVEY MILL	T-562 SARVEY MILL	TOBY CREEK	41	1160	1	P/S, Box beam - adj	OPEN			96	50	10
Clarion	11127	TWP #219 - SHADY	T-589 SHADY DRIVE	MAHLES RUN	24	583	2	Concrete(in place), Box culvert	OPEN			98	50	0
Clarion	11128	TWP #6 - LICKING	T-600 LICKING DR	LICKING CREEK	29	418	1	Steel, I beams	POSTED	SD		27.4	50	4.1
Clarion	11129	TWP #81+81 - WHITE OAK	T-852 WHITE OAK DR	TOBY CREEK	48	1176	1	Steel, I beams	POSTED			55.6	320	4.7
Clarion	11130	TWP #183+12 - SUNSET	T-850 SUNSET DRIVE	STEP CREEK	24	607	1	Steel, I beams	OPEN			70.9	320	3
Clarion	11131	TWP #40 - MYERS HOLLOW	T-341 MYERS HOLLOW	CHERRY RUN	50	855	1	Steel, I beams	POSTED			57.3	50	1.1
Clarion	11133	TWP #26 - CURLL	T-444 CURLL RD	PINEY CREEK	37	518	1	Steel, Other	POSTED		FO	28.8	15	2.5
Clarion	11137	TWP #30 - LIMESTONE	T-685 LIMESTONE	PINEY CREEK	48	566	1	Steel, I beams	POSTED		FO	19.9	14	1
Clarion	11140	TWP #437+81 - FROGTOWN	T-840 FROGTOWN RD	GLADE RUN	23	626	1	P/S, Box beam - adj	OPEN			84	250	1
Clarion	11141	TWP #34 - SOLIDA	T-442 SOLIDA RD	WILDCAT RUN	29	435	2	Timber, Solid timber beams	POSTED	SD	FO	20.9	50	6
Clarion	11142	VILLAGE OF LAWSONHAM	TWP RD 460	TRIB.OF RED BANK CREEK	23	338	1	Steel, I beams	POSTED		FO	29.1	10	99
Clarion	11143	TWP #33 - WILDCAT SCHOOL	T-689 WILDCAT SCHL	WILDCAT RUN	38	695	1	Concr. encased steel, I beams	OPEN	SD		63.3	50	1
Clarion	11144	TWP #2050 - TRAISTER	T-880 TRAISTER RD	TURKEY RUN	22	574	1	Concrete(in place), T-beams	OPEN			91.2	170	5
Clarion	11147	TWP #43 - WINCKLICK	T-564 LT MILLCR RD	LITTLE MILL CREEK	32	528	1	Concr. encased steel, I beams	POSTED			54.1	50	5.2
Clarion	11148	TWP #42 - ASBURY	T-562 OLD STATE RD	LITTLE MILL CREEK	25	338	1	Timber, Solid timber beams	POSTED		FO	37.5	50	5.2
Clarion	11149	TWP#571-01 - MILLCREEK	T-571 MILLCREEK RD	MILL CREEK	72	1440	1	Steel, I beams	POSTED		FO	42.2	200	0
Clarion	11151	TWP #24 - REIDSBURG 2	T-523 TIMBER BRIDG	REIDS RUN	44	1056	1	Timber, Solid timber beams	POSTED			61.3	50	1
Clarion	11152	TWP #51 - REIDSBURG 1	T-526 OLD TOWN RD	PINEY CREEK	52	1482	1	P/S, Box beam - adj	OPEN			96.2	150	1

Complete List of Local Bridges

Clarion County Bridges Page 3 of 4

COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Clarion	11153	TWP #25 - REIDSBURG 3	T-528 RAPP ROAD	PINEY CREEK	11153	7213	528	25	41.1478	-79.4044	10	Township	1,960	0
Clarion	11154	1 MI.W.OF CLARION	TWP RD 421	BR.OF CLARION RIVER	11154	7214	421	204	41.2217	-79.4167	10	Township	1,984	0
Clarion	11156	TWP #206 - BANNER	T-582 BANNER RD	LITTLE PAINT CREEK	11156	7214	582	206	41.2711	-79.43	10	Township	1,998	0
Clarion	11157	TWP #201 - BLACK FOX	T-300 HILLVILLE RD	BLACK FOX RUN	11157	7215	300	201	41.0383	-79.6258	10	Township	1,950	0
Clarion	11158	TWP #200 - HAGENTOWN	T-647 HAGENTOWN RD	TRIB TO ALLEGHENY RIVER	11158	7215	647	200	41.1	-79.6592	10	Township	1,920	1,988
Clarion	11159	TWP #36 - SLED	T-462 SLED ROAD	FIDDLERS RUN	11159	7217	462	36	41.0325	-79.4372	10	Township	1,960	0
Clarion	11160	TWP #37 - HUBER	T-472 HUBER RD	LEATHERWOOD CREEK	11160	7217	472	37	41.0403	-79.3833	10	Township	1,950	0
Clarion	11161	TWP #38 - PACKING	T-493 PACKING RD	LEATHERWOOD CREEK	11161	7217	493	38	41.0692	-79.3714	10	Township	1,970	0
Clarion	11163	TWP #49 - WINDMILL	T-504 WINDMILL RD	TOWN RUN	11163	7218	504	49	41.0639	-79.2842	10	Township	1,940	0
Clarion	11166	.2 MI.W.OF RT 28	TWP RD 513	PINE CREEK	11166	7218	513	207	41.07	-79.2433	10	Township	1,940	0
Clarion	11167	TWP #1840 - TOWN RUN	T-921 TOWN RUN RD	TOWN RUN	11167	7218	921	1840	41.0458	-79.2872	10	Township	1,937	1,974
Clarion	11168	S.INT.OF T-840 & T-510	TWP RD 840	TOWN RUN	11168	7218	840	4158	41.0783	-79.28	10	Township	1,941	0
Clarion	11169	N OF NEW BETHLEHEM	TWP RD 840	TOWN RUN	11169	7218	840	7784	41.0883	-79.28	10	Township	1,941	0
Clarion	11170	TWP #214 - METZ	T-310 METZ RD	RICHEY RUN	11170	7219	310	214	41.1814	-79.69	10	Township	1,910	0
Clarion	11171	E.OF JCT.RT.338 & T382	TWP RD 382	TURKEY RUN	11171	7219	382	212	41.183	-79.6087	10	Township	1,890	0
Clarion	11172	N.OF JCT.RT.338 & T 382	TWP RD 382	TRIB.TO TURKEY RUN	11172	7219	382	213	41.1833	-79.6117	10	Township	1,890	0
Clarion	11173	TWP #15 - MEHRTEN	T-345 MEHRTEN RD	BEAVER CREEK	11173	7220	345	15	41.2172	-79.5722	10	Township	1,950	0
Clarion	11176	TWP #6591 - KAHLE	T-910 COMMUNITY	MILL CREEK	11176	7220	910	6591	41.2406	-79.6331	10	Township	1,993	0
Clarion	11180	TWP #31 - EAST BRADY	SECOND STREET	BRADY ST&TRIB ALLEGHENY	11180	7403	150	31	40.9869	-79.6131	10	City	1,989	0
Clarion	11182	TWP #203 - SLIGO	MADISON STREET	LITTLE LICKING CREEK	11182	7411	100	203	41.1067	-79.4908	10	City	1,930	0
Clarion	40564	TWP #46 - WALLWORK	T-506 WALLWORK RD	PINE CREEK	40564	7218	508	46	41.0411	-79.2572	10	Township	1,997	0
Clarion	41316	TWP #220 - CHERRY RUN	T-374 SUMMERVILLE	CHERRY RUN	41316	7221	374	220	41.0744	-79.5294	10	Township	2,001	0
Clarion	43008	RAPP ROAD	T-528 RAPP ROAD	ABANDONED RR	43008	7213	528	99	41.1503	-79.4064	10	Railroad	1,910	0
Clarion	43455	CO #216 - WALLEY RUN	T-620 WALLEY RUN	WALLEY RUN	43455	7206	620	216	41.4083	-79.285	10	Township	2,004	0
Clarion	43456	TWP#27 - MCGREGOR	T-447 MCGREGOR RD	LITTLE PINEY CREEK	43456	7210	447	27	41.1408	-79.3253	10	Township	2,004	0
Clarion	43457	TWP #44 - PENDLETON	T-562 OLD STATE RD	MILL CREEK	43457	7212	562	44	41.2347	-79.235	10	Township	2,004	0
Clarion	43458	CO #2 - KINBAHE	T-577 KINBAHE RD	TOBY CREEK	43458	7207	577	2	41.2581	-79.3683	10	Township	2,004	0
Clarion	43459	TWP #47 - CARRIAGE	T-510 CARRIAGE RD	PINE CREEK	43459	7218	510	47	41.0558	-79.2511	10	Township	2,003	0
Clarion	44176	TWP #211 - BITTERSWEET	T-336 BITTERSWEET	BEAVER CREEK	44176	7220	336	211	41.2464	-79.5825	10	Township	2,007	0
Clarion	44177	TWP #9 - BRYNERS MILL 1	T-424 BRYNERS MILL	DEER CREEK	44177	7205	424	9	41.2369	-79.4539	10	Township	2,007	0
Clarion	44219	TWP #1 - BIGLEY	T-576 BIGLEY RD	TOBY CREEK	44219	7207	576	1	41.2347	-79.3847	10	Township	2,007	0
Clarion	44387	TWP #39 - MORRIS	T-374 MORRIS ROAD	LICKING CREEK	44387	7209	374	39	41.1153	-79.5106	10	Township	2,008	0
Clarion	47282	90 FT EAST OF SR 66 INT	T-750 LEISURE ROAD	LEISURE RUN	47282	7217	750	50	41.0231	-79.3318	10	Township	2,012	0

Complete List of Local Bridges

Clarion County Bridges Page 4 of 4

COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUFFRATE	ADT	DETOUR LENGTH (miles)
Clarion	11153	TWP #25 - REIDSBURG 3	T-528 RAPP ROAD	PINEY CREEK	66	799	1	Steel, I beams	POSTED		FO	62.1	50	4
Clarion	11154	1 MI.W.OF CLARION	TWP RD 421	BR.OF CLARION RIVER	22	493	1	Steel, I beams	OPEN			93	50	5
Clarion	11156	TWP #206 - BANNER	T-582 BANNER RD	LITTLE PAINT CREEK	43	1398	1	P/S, Box beam - adj	OPEN			98	50	0
Clarion	11157	TWP #201 - BLACK FOX	T-300 HILLVILLE RD	BLACK FOX RUN	31	508	1	Steel, I beams	CLOSED	SD	FO	24.5	50	1
Clarion	11158	TWP #200 - HAGENTOWN	T-647 HAGENTOWN RD	TRIB TO ALLEGHENY RIVER	28	532	1	Steel, I beams	POSTED	SD		54.8	31	0.5
Clarion	11159	TWP #36 - SLED	T-462 SLED ROAD	FIDDLERS RUN	22	398	1	Concr. encased steel, I beams	POSTED		FO	73.4	12	3.2
Clarion	11160	TWP #37 - HUBER	T-472 HUBER RD	LEATHERWOOD CREEK	42	756	1	Steel, I beams	POSTED		FO	55.2	50	5
Clarion	11161	TWP #38 - PACKING	T-493 PACKING RD	LEATHERWOOD CREEK	26	395	1	Steel, I beams	POSTED			69.7	50	5
Clarion	11163	TWP #49 - WINDMILL	T-504 WINDMILL RD	TOWN RUN	26	515	1	Concr. encased steel, I beams	POSTED	SD	FO	55.5	14	2
Clarion	11166	.2 MI.W.OF RT 28	TWP RD 513	PINE CREEK	23	361	1	Timber, Solid timber beams	POSTED		FO	44.2	13	3
Clarion	11167	TWP #1840 - TOWN RUN	T-921 TOWN RUN RD	TOWN RUN	33	653	1	Steel, I beams	OPEN	SD	FO	47.9	350	3.3
Clarion	11168	S.INT.OF T-840 & T-510	TWP RD 840	TOWN RUN	22	605	1	Concrete(in place), Slab (solid)	POSTED		FO	60	14	1
Clarion	11169	N OF NEW BETHLEHEM	TWP RD 840	TOWN RUN	21	580	1	Concrete(in place), Slab (solid)	OPEN			75	350	1
Clarion	11170	TWP #214 - METZ	T-310 METZ RD	RICHEY RUN	40	700	1	Masonry, Arch deck - closed	OPEN			80.5	50	2.7
Clarion	11171	E.OF JCT.RT.338 & T382	TWP RD 382	TURKEY RUN	23	370	1	Steel, I beams	POSTED	SD	FO	24.5	43	0
Clarion	11172	N.OF JCT.RT.338 &T 382	TWP RD 382	TRIB.TO TURKEY RUN	21	357	1	Steel, I beams	OPEN	SD	FO	53.5	50	0
Clarion	11173	TWP #15 - MEHRTEN	T-345 MEHRTEN RD	BEAVER CREEK	35	546	1	Steel, I beams	CLOSED	SD	FO	19.6	50	7
Clarion	11176	TWP #6591 - KAHLE	T-910 COMMUNITY	MILL CREEK	23	743	1	P/S, Slab (solid)	OPEN			100	250	2
Clarion	11180	TWP #31 - EAST BRADY	SECOND STREET	BRADY ST&TRIB ALLEGHENY	210	6741	3	P/S, Box beam - (spread)	OPEN			100	50	1
Clarion	11182	TWP #203 - SLIGO	MADISON STREET	LITTLE LICKING CREEK	28	742	1	Steel, I beams	POSTED			55.4	100	3
Clarion	40564	TWP #46 - WALLWORK	T-506 WALLWORK RD	PINE CREEK	64	979	1	Steel, I beams	OPEN			66.6	50	1
Clarion	41316	TWP #220 - CHERRY RUN	T-374 SUMMERVILLE	CHERRY RUN	36	1026	1	P/S, Box beam - adj	OPEN			100	50	3
Clarion	43008	RAPP ROAD	T-528 RAPP ROAD	ABANDONED RR	82	1394	3	Timber, Solid timber beams	CLOSED	SD	FO	24.1	50	4
Clarion	43455	CO #216 - WALLEY RUN	T-620 WALLEY RUN	WALLEY RUN	22	552	1	Concrete(in place), Box culvert	OPEN			97.7	50	5
Clarion	43456	TWP#27 - MCGREGOR	T-447 MCGREGOR RD	LITTLE PINEY CREEK	36	1030	1	Steel, I beams	OPEN			100	50	3
Clarion	43457	TWP #44 - PENDLETON	T-562 OLD STATE RD	MILL CREEK	86	2468	1	P/S, Box beam - (spread)	OPEN			99.9	50	15
Clarion	43458	CO #2 - KINBAHE	T-577 KINBAHE RD	TOBY CREEK	55	1799	1	Steel, I beams	OPEN			95	50	10
Clarion	43459	TWP #47 - CARRIAGE	T-510 CARRIAGE RD	PINE CREEK	45	1382	1	Steel, I beams	OPEN			94	50	6
Clarion	44176	TWP #211 - BITTERSWEET	T-336 BITTERSWEET	BEAVER CREEK	26	624	1	Concrete(precast), Box culvert	OPEN			100	50	0
Clarion	44177	TWP #9 - BRYNERS MILL 1	T-424 BRYNERS MILL	DEER CREEK	82	2337	1	P/S, Box beam - (spread)	OPEN			95	50	0
Clarion	44219	TWP #1 - BIGLEY	T-576 BIGLEY RD	TOBY CREEK	102	3305	1	P/S, I beams	OPEN			100	50	0
Clarion	44387	TWP #39 - MORRIS	T-374 MORRIS ROAD	LICKING CREEK	72	2174	1	Steel, I beams	OPEN			100	50	0
Clarion	47282	90 FT EAST OF SR 66 INT	T-750 LEISURE ROAD	LEISURE RUN	25	600	1	Concrete(precast), Box culvert	OPEN			100	50	0

Complete List of Local Bridges

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Crawford	13133	SUMMIT TOWNSHIP	SR 618	OVER INLET RUN TRIB	13133	7226	0	4005	41.6402	-80.3144	1	Township	1,927	2,008
Crawford	13387	3.3 MI. NW. TOWNVILLE	T-301,DRAKE HILL	OVER E.BR.MUDDY CREEK	13387	7201	300	4003	41.7183	-79.8518	1	Township	1,957	0
Crawford	13389	1.4 MI. SE. L.COOLEY	T-709,THREE BRG.RD	OVER E.BR.MUDDY CREEK	13389	7201	709	4004	41.7258	-79.8755	1	Township	1,960	1,991
Crawford	13390	.5 MI SE SR0077ATHENS TWP	T-743,HAMILTON RD.	OVER MUDDY CREEK	13390	7201	743	3001	41.7371	-79.8821	1	County	1,920	1,997
Crawford	13391	1.6 MI. N. LITTLE COOLEY	T-765,DOBBS ROAD	OVER FEDERAL RUN	13391	7201	765	4001	41.765	-79.8933	1	Township	1,983	0
Crawford	13393	.5 M.NW SR0077 ATHENS TWP	T-776,EDDIE ROAD	OVER MUDDY CREEK	13393	7201	776	3002	41.75	-79.9078	1	County	1,895	1,996
Crawford	13394	ATHENS & BLOOMFIELD TWPS.	T-789,ATHENS ROAD	OVER FEDERAL RUN	13394	7201	789	8001	41.7745	-79.8953	1	Township	1,920	2,004
Crawford	13395	1.7 MI. SE.LITTLE COOLEY	T-794,DEWEY ROAD	OVER E.BR.MUDDY CREEK	13395	7201	794	4006	41.7211	-79.8731	1	Township	1,960	1,998
Crawford	13396	2 MI. NW. TYRONVILLE	T-828,OLD GRADE RD	OVER E.BR.MUDDY CREEK	13396	7201	828	4007	41.7143	-79.8283	1	Township	1,960	0
Crawford	13398	BEAVER TOWNSHIP	T-300,PALMER ROAD	OVER STONE RUN	13398	7202	300	4011	41.8067	-80.4183	1	Township	1,965	0
Crawford	13399	1.1 MLE.ST GAME LAND 101	T-368,SPRING ROAD	OVER STONE RUN	13399	7202	368	4007	41.8407	-80.4183	1	Township	1,940	1,988
Crawford	13400	0.9 MI. W. BEAVER CENTER	T-835,PARKER ROAD	OVER CONNEAUT CREEK	13400	7202	835	4001	41.8022	-80.493	1	Township	1,975	2,003
Crawford	13401	3 MI. N.W. BEAVER CENTER	T-867,PHILADELPHIA	OVER MIDDLE BR.CONNEAUT	13401	7202	867	4002	41.8276	-80.4915	1	Township	1,920	1,988
Crawford	13402	BEAVER TOWNSHIP	T-867,PHILADELPHIA	OVER STONE RUN	13402	7202	867	4008	41.8217	-80.4217	1	Township	1,991	0
Crawford	13403	BEAVER TOWNSHIP	T-867,PHILADELPHIA	OVER MUD RUN	13403	7202	867	4009	41.8267	-80.45	1	Township	1,965	0
Crawford	13404	BEAVER TOWNSHIP	T-867,PHILADELPHIA	OVER CONNEAUT CREEK E.BR	13404	7202	867	4010	41.8271	-80.4693	1	Township	1,986	0
Crawford	13405	4.7 MI. N.W. BEAVER CNTR.	T-883,JOINER ROAD	OVER CONNEAUT CREEK W.BR	13405	7202	883	4003	41.8463	-80.5014	1	Township	1,935	0
Crawford	13406	4 MI. N.W. BEAVER CENTER	T-883,JOINER ROAD	OVER CONNEAUT CK.MID.BR.	13406	7202	883	4004	41.8461	-80.4886	1	Township	1,983	0
Crawford	13408	3.2 MI.NE. BEAVER CENTER	T-885,JERUSELAM RD	OVER STONE RUN	13408	7202	885	3003	41.8367	-80.4267	1	County	1,884	1,988
Crawford	13409	4 MI.SW.LAKE CANADOHTA	T-791,MICKEL HOLW.	OVER FEDERAL RUN	13409	7203	791	4002	41.7767	-79.9	1	Township	1,983	0
Crawford	13412	LAKE CANADOHTA	ISLAND AVENUE	OVER WEST SHREVE RUN	13412	7203	8817	4004	41.8227	-79.8386	1	Township	1,964	2,001
Crawford	13413	BLOOMFIELD TOWNSHIP	SR 7203,MAPLE DR	OVER EAST SHREVE RUN	13413	7203	8819	4003	41.8167	-79.8333	1	Township	1,964	0
Crawford	13415	CONNEAUT TOWNSHIP	T-346,RUSSELL ROAD	OVER LINESVILLE CREEK	13415	7205	346	4004	41.6668	-80.4247	1	Township	1,911	0
Crawford	13416	.7 MI.W.SR-4003 ON T-605	T-605, WEST ROAD	OVER LINESVILLE CREEK	13416	7205	605	4001	41.6764	-80.4257	1	Township	1,934	1,991
Crawford	13418	STEAMBURG,CONNEAUT TWP.	T-721,LESTER ROAD	OVER PADEN CREEK	13418	7205	721	3005	41.7383	-80.4717	1	County	1,940	1,988
Crawford	13419	1 MI.N.POTTERS CORS.T-496	T-496,LAKE ROAD	OVER CUSSEWAGO CREEK	13419	7206	496	4002	41.8	-80.2317	1	Township	1,984	0
Crawford	13420	1 MLS.SR 1002 ON FRY RD.	T-540,FRY ROAD	OVER WOLF RUN	13420	7206	540	4001	41.7564	-80.1679	1	Township	1,920	0
Crawford	13421	0.25 MLE.TR-98,CUSSEWAGO	T-751,CREEK ROAD	OVER CUSSEWAGO CREEK	13421	7206	751	3008	41.7599	-80.2393	1	County	1,910	1,993
Crawford	13423	2.5 MI.NW MOSIERTOWN	T-841,CENTER ROAD	OVER CUSSEWAGO CREEK	13423	7206	841	4003	41.8031	-80.2255	1	Township	1,925	1,999
Crawford	13425	1.75 MI.N.OF COCHRANTON	T-399 (GRIFFEN RD)	OVER LT.SUGAR CREEK	13425	7207	399	3010	41.5646	-80.0475	1	County	1,910	1,969
Crawford	13428	2 MLE.SR-2009 ON T-517	T-517,PLANK ROAD	OVER LITTLE SUGAR CREEK	13428	7209	517	3011	41.6326	-80.0437	1	County	1,905	2,012
Crawford	13429	2.7 MI. SW. FRENCHTOWN	T-642,SMITH ROAD	OVER LITTLE SUGAR BRANCH	13429	7209	642	4002	41.59	-80.0667	1	Township	1,955	0
Crawford	13430	1.2 MI. SW. FRENCHTOWN	T-670,HINKSON ROAD	OVER LITTLE SUGAR BRANCH	13430	7209	670	4003	41.5983	-80.0383	1	Township	1,900	2,001
Crawford	13434	.6 MI.N.OF SR-0285	T-574,MARSH ROAD	OVER CONNEAUT OUTLET	13434	7210	574	3013	41.5409	-80.1283	1	County	1,890	1,996
Crawford	13435	.7 MI.NW. SR 0285	T-620,WIGHTMAN RD.	OVER CONNEAUT OUTLET	13435	7210	620	3014	41.5399	-80.1053	1	County	1,897	1,994
Crawford	13438	2.7 MI. SE. CONNEAUT LK.	T-387,BROWN HILL	OVER CONNEAUT OUTLET CK.	13438	7211	387	8001	41.5867	-80.265	1	Township	1,988	0
Crawford	13443	1.25 MI. E. OF HYDETOWN	T-599,FINNEY ROAD	OVER THOMPSON CREEK	13443	7214	599	3019	41.6617	-79.6971	1	County	1,930	2,002
Crawford	13444	2.0 MI.N.OF HYDETOWN	T-639,BOG HOLLOW	OVER MCLAUGHLIN CREEK	13444	7214	639	4002	41.6844	-79.7245	1	Township	1,947	0
Crawford	13446	1.4 MI E OF TITUSVILLE	T-926,DOTYVILLE RD	OVER PINE CREEK	13446	7214	926	3021	41.6296	-79.6215	1	County	1,900	1,993
Crawford	13447	2.8 MI. E. OF TITUSVILLE	T-926,DOTYVILLE RD	OVER HENDERSON RUN	13447	7214	926	4004	41.6339	-79.6206	1	Township	1,945	0
Crawford	13448	2 MLE.TITUSVILLE ON T928	T-928,DUNCAN ROAD	OVER PINE CREEK	13448	7214	928	3022	41.6323	-79.6136	1	County	1,910	1,983
Crawford	13450	IMI EAST OF TITUSVILLE	T-993,MESSERALL RD	OVER PINE CREEK	13450	7214	993	3020	41.6217	-79.635	1	County	1,875	1,960
Crawford	13454	4.5 MI. N. GUYS MILLS	T-724,CASTLE ROAD	OVER WOODCOCK CREEK	13454	7217	724	4001	41.6967	-79.9817	1	Township	1,930	2,002

Complete List of Local Bridges

Crawford County Bridges Page 2 of 6

COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUPFRATE	ADT	DETOUR LENGTH (miles)
Crawford	13133	SUMMIT TOWNSHIP	SR 618	OVER INLET RUN TRIB	87	3080	1	P/S, Box beam - (spread)	OPEN			96.1	2300	11
Crawford	13387	3.3 MI. NW. TOWNVILLE	T-301,DRAKE HILL	OVER E.BR.MUDDY CREEK	37	1010	1	P/S, Box beam - adj	OPEN	SD		67.9	100	4
Crawford	13389	1.4 MI. SE. L.COOLEY	T-709,THREE BRG.RD	OVER E.BR.MUDDY CREEK	40	724	1	Steel, I beams	POSTED		FO	44	50	4
Crawford	13390	.5 MI SE SR0077ATHENS TWP	T-743,HAMILTON RD.	OVER MUDDY CREEK	47	691	1	Steel, Truss - thru	CLOSED	SD	FO	20.5	250	2
Crawford	13391	1.6 MI. N. LITTLE COOLEY	T-765,DOBBS ROAD	OVER FEDERAL RUN	39	644	1	Steel, I beams	POSTED			81.7	50	3
Crawford	13393	.5 M.NW SR0077 ATHENS TWP	T-776,EDDIE ROAD	OVER MUDDY CREEK	65	923	1	Steel, Truss - thru	CLOSED	SD	FO	14.6	250	3
Crawford	13394	ATHENS & BLOOMFIELD TWPS.	T-789,ATHENS ROAD	OVER FEDERAL RUN	28	591	1	Steel, I beams	POSTED		FO	62	250	4
Crawford	13395	1.7 MI. SE.LITTLE COOLEY	T-794,DEWEY ROAD	OVER E.BR.MUDDY CREEK	30	510	1	Steel, I beams	OPEN	SD	FO	61.5	50	4
Crawford	13396	2 MI. NW. TYRONVILLE	T-828,OLD GRADE RD	OVER E.BR.MUDDY CREEK	27	383	1	Steel, I beams	POSTED	SD		49.1	50	6
Crawford	13398	BEAVER TOWNSHIP	T-300,PALMER ROAD	OVER STONE RUN	27	956	1	Concrete(in place), Slab (solid)	OPEN	SD		72	100	2
Crawford	13399	1.1 MLE.ST GAME LAND 101	T-368,SPRING ROAD	OVER STONE RUN	30	597	1	Steel, I beams	OPEN		FO	68.9	250	2
Crawford	13400	0.9 MI. W. BEAVER CENTER	T-835,PARKER ROAD	OVER CONNEAUT CREEK	26	624	1	Steel, I beams	POSTED	SD		61.1	250	4
Crawford	13401	3 MI. N.W. BEAVER CENTER	T-867,PHILADELPHIA	OVER MIDDLE BR.CONNEAUT	28	510	1	Steel, I beams	OPEN		FO	66.9	250	2
Crawford	13402	BEAVER TOWNSHIP	T-867,PHILADELPHIA	OVER STONE RUN	35	669	1	Steel, I beams	OPEN		FO	78.9	250	3
Crawford	13403	BEAVER TOWNSHIP	T-867,PHILADELPHIA	OVER MUD RUN	22	396	1	Steel, I beams	POSTED		FO	74	250	5
Crawford	13404	BEAVER TOWNSHIP	T-867,PHILADELPHIA	OVER CONNEAUT CREEK E.BR	31	592	1	Steel, I beams	OPEN	SD	FO	51.9	250	3
Crawford	13405	4.7 MI. N.W. BEAVER CNTR.	T-883,JOINER ROAD	OVER CONNEAUT CREEK W.BR	45	936	1	Steel, I beams	POSTED	SD	FO	16.6	250	6
Crawford	13406	4 MI. N.W. BEAVER CENTER	T-883,JOINER ROAD	OVER CONNEAUT CK.MID.BR.	37	699	1	Steel, I beams	OPEN		FO	75.8	250	6
Crawford	13408	3.2 MI.NE. BEAVER CENTER	T-885,JERUSELAM RD	OVER STONE RUN	68	1054	1	Steel, Truss - thru	POSTED		FO	39.4	47	2
Crawford	13409	.7 MI.SW.LAKE CANADOHTA	T-791,MICKEL HOLW.	OVER FEDERAL RUN	20	340	2	Steel, Pipe culvert	OPEN			99.9	250	3
Crawford	13412	LAKE CANADOHTA	ISLAND AVENUE	OVER WEST SHREVE RUN	31	499	1	Steel, I beams	POSTED	SD	FO	46.1	250	99
Crawford	13413	BLOOMFIELD TOWNSHIP	SR 7203,MAPLE DR	OVER EAST SHREVE RUN	22	354	1	Steel, I beams	OPEN		FO	76	250	1
Crawford	13415	CONNEAUT TOWNSHIP	T-346,RUSSELL ROAD	OVER LINESVILLE CREEK	33	525	1	Concr. encased steel, I beams	POSTED	SD	FO	20.8	88	3
Crawford	13416	.7 MI.W.SR-4003 ON T-605	T-605, WEST ROAD	OVER LINESVILLE CREEK	30	486	1	Steel, I beams	CLOSED	SD	FO	19	250	3
Crawford	13418	STEAMBURG,CONNEAUT TWP.	T-721,LESTER ROAD	OVER PADEN CREEK	52	832	1	Steel, I beams	OPEN			73.1	250	4
Crawford	13419	1 MI.N.POTTERS CORS.T-496	T-496,LAKE ROAD	OVER CUSSEWAGO CREEK	30	669	1	Steel, I beams	POSTED			28.3	250	4
Crawford	13420	1 MLS.SR 1002 ON FRY RD.	T-540,FRY ROAD	OVER WOLF RUN	26	517	1	Concr. encased steel, I beams	POSTED	SD	FO	35.5	250	6
Crawford	13421	0.25 MLE.TR-98,CUSSEWAGO	T-751,CREEK ROAD	OVER CUSSEWAGO CREEK	72	1152	1	Steel, Truss - thru	POSTED	SD	FO	24.8	250	4
Crawford	13423	2.5 MI.NW MOSIERTOWN	T-841,CENTER ROAD	OVER CUSSEWAGO CREEK	24	468	1	Steel, I beams	POSTED		FO	48.6	250	4
Crawford	13425	1.75 MI.N.OF COCHRANTON	T-399 (GRIFFEN RD)	OVER LT.SUGAR CREEK	46	828	1	Steel, I beams	POSTED		FO	48.6	250	4
Crawford	13428	2 MLE.SR-2009 ON T-517	T-517,PLANK ROAD	OVER LITTLE SUGAR CREEK	45	626	1	Steel, Other	POSTED	SD	FO	30.8	250	4
Crawford	13429	2.7 MI. SW. FRENCHTOWN	T-642,SMITH ROAD	OVER LITTLE SUGAR BRANCH	31	716	1	Concrete(in place), Slab (solid)	OPEN			80.2	150	6
Crawford	13430	1.2 MI. SW. FRENCHTOWN	T-670,HINKSON ROAD	OVER LITTLE SUGAR BRANCH	25	575	2	Steel, I beams	OPEN	SD		70	50	4
Crawford	13434	.6 MI.N.OF SR-0285	T-574,MARSH ROAD	OVER CONNEAUT OUTLET	74	1036	1	Steel, Truss - thru	POSTED	SD	FO	22.2	250	4
Crawford	13435	.7 MI.NW. SR 0285	T-620,WIGHTMAN RD.	OVER CONNEAUT OUTLET	80	1120	1	Steel, Truss - thru	POSTED	SD	FO	13.8	250	4
Crawford	13438	2.5 MI. SE. CONNEAUT LK.	T-387,BROWN HILL	OVER CONNEAUT OUTLET CK.	23	276	3	Steel, Pipe culvert	OPEN			99.9	250	4
Crawford	13443	1.25 MI. E. OF HYDETOWN	T-599,FINNEY ROAD	OVER THOMPSON CREEK	42	634	1	Steel, I beams	POSTED	SD	FO	38.6	250	4
Crawford	13444	2.0 MI.N.OF HYDETOWN	T-639,BOG HOLLOW	OVER MCCLAUGHLIN CREEK	34	673	1	Concr. encased steel, I beams	OPEN	SD	FO	48.7	250	6
Crawford	13446	1.4 MI E OF TITUSVILLE	T-926,DOTYVILLE RD	OVER PINE CREEK	84	1176	1	Steel, Truss - thru	POSTED	SD	FO	27.8	250	3
Crawford	13447	2.8 MI. E. OF TITUSVILLE	T-926,DOTYVILLE RD	OVER HENDERSON RUN	25	505	1	Concr. encased steel, I beams	OPEN		FO	64.9	250	2
Crawford	13448	2 MLE.TITUSVILLE ON T928	T-928,DUNCAN ROAD	OVER PINE CREEK	52	1248	1	Timber, Glue-lam timber	POSTED			77.4	250	3
Crawford	13450	IMI EAST OF TITUSVILLE	T-993,MESSERALL RD	OVER PINE CREEK	103	1627	1	Alum, Iron, Truss - thru	CLOSED	SD	FO	19.9	50	2
Crawford	13454	4.5 MI. N. GUYS MILLS	T-724,CASTLE ROAD	OVER WOODCOCK CREEK	41	652	1	Steel, I beams	OPEN		FO	73.7	250	99

Complete List of Local Bridges

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Crawford	13456	5 MILE.CAMBRIDGE SPRINGS	T-840,HOGBACK W.RD	OVER KELLY RUN	13456	7218	840	4000	41.8104	-79.9643	1	Township	1,976	0
Crawford	13457	5MILE.S.E. CAMBRIDGE SP.	T-878,SWAMP ROAD	OVER MUDDY CREEK	13457	7218	878	4002	41.7866	-79.9699	1	Township	1,980	0
Crawford	13461	SOUTH SHENANGO TOWNSHIP	T-401,HURLBERT RD.	OVER PYMATUNING TRIB.	13461	7221	401	4001	41.5601	-80.4997	1	Township	1,978	0
Crawford	13462	GLYNDEN,SPARTA TOWNSHIP	T-793,GLYNDEN ROAD	OVER OIL CREEK EAST BR.	13462	7222	793	3026	41.7768	-79.7209	1	County	1,896	1,985
Crawford	13464	3 MI. S.W. SPARTANSBURG	T-795 FISH FLATS R	OVER OIL CREEK EAST BR.	13464	7222	795	4005	41.785	-79.705	1	Township	1,950	1,997
Crawford	13466	0.8 MI. N. BRITTON RUN	T-878,BRITTON R.RD	OVER BRITTON RUN	13466	7222	878	4001	41.8056	-79.7458	1	Township	1,965	2,007
Crawford	13467	3 MI. NE. CENTERVILLE	T-880 (FIRTH ROAD)	OVER BRITTON RUN	13467	7222	880	4006	41.7756	-79.7296	1	Township	1,920	1,991
Crawford	13468	3 MI SW SPARTANSBURG	T-896 SPORTSMAN RD	OVER EAST BR. OIL CREEK	13468	7222	896	3028	41.785	-79.71	1	County	1,901	1,994
Crawford	13470	3 MI. S.E. SPARTANSBURG	T-922 HATCHTOWN RD	OVER FIVE MILE CREEK	13470	7222	922	4003	41.7883	-79.6505	1	Township	1,950	1,984
Crawford	13471	SPRING TOWNSHIP	T-366,GREEN ROAD	OVER CRAZY RUN	13471	7223	366	4003	41.7883	-80.39	1	Township	1,960	1,987
Crawford	13472	ON EAST SPRING RD.,T-466	T-466,E.SPRING RD.	OVER CARR RUN	13472	7223	466	4002	41.7857	-80.2716	1	Township	1,940	0
Crawford	13475	SPRING TOWNSHIP,RUNDELL	T-749, KING ROAD	OVER CARR RUN TRIB.	13475	7223	749	4001	41.7583	-80.2833	1	Township	1,910	1,995
Crawford	13476	0.6 MI.W.SR-18,SPRING TWP	T-803,TOWER ROAD	OVER CONNEAUT CREEK	13476	7223	803	3030	41.7855	-80.3778	1	County	2,008	0
Crawford	13480	SUMMERHILL TOWNSHIP	T-360,TOWNLINE RD.	OVER FISH CREEK	13480	7225	360	4003	41.7079	-80.3919	1	Township	1,990	0
Crawford	13483	WING ROAD,T-689	T-689,WING ROAD	OVER CONNEAUT CREEK	13483	7225	689	4001	41.7154	-80.35	1	Township	1,933	1,965
Crawford	13485	SUMMIT TOWNSHIP,PORTER RD	T-402,PORTER ROAD	OVER CONNEAUT CREEK	13485	7226	402	4003	41.6683	-80.3517	1	Township	1,995	0
Crawford	13486	SUMMIT TOWNSHIP	T-452,GIBSON ROAD	OVER PINE RUN	13486	7226	452	4001	41.6617	-80.2933	1	Township	1,995	0
Crawford	13488	SUMMIT TOWNSHIP	T-609,AGNEW ROAD	OVER CONNEAUT CREEK	13488	7226	609	4002	41.685	-80.3406	1	Township	1,920	0
Crawford	13489	SUMMIT TOWNSHIP	T-609,AGNEW ROAD	INLET RUN	13489	4014	30	0	41.684	-80.3034	1	Township	1,992	0
Crawford	13491	2.5 MLS.OF FAUNCETOWN	T-425,DEETER H.RD.	OVER LT.SUGAR CREEK	13491	7227	425	4003	41.5817	-79.87	1	Township	1,950	2,009
Crawford	13492	6 MLS.OF TOWNVILLE	T-477,JAY ROAD	OVER SUGAR CREEK E.BR.	13492	7227	477	4001	41.6119	-79.8443	1	Township	1,935	2,001
Crawford	13493	6 MLS.TOWNVILLE	T-477,JAY ROAD	OVER SUGAR CREEK	13493	7227	477	4002	41.6145	-79.8547	1	Township	1,950	0
Crawford	13494	3 MI.SOUTH MEADVILLE	T-413, HAMILL ROAD	OVER NORFOLK SOUTH R.R.	13494	7228	413	8001	41.5883	-80.1783	1	Township	1,925	1,988
Crawford	13495	2 MI. S. MEADVILLE	T-704,KENNEDY HILL	OVER UNNAMED RUN	13495	7228	704	4002	41.5917	-80.175	1	Township	1,969	0
Crawford	13496	.5 MLS.SR.1006 ON T-568	T-568,CAPP ROAD	OVER COULTER RUN	13496	7229	568	4005	41.8024	-80.1473	1	Township	1,905	1,986
Crawford	13497	.8 MI.NW.SR.1019 ON T-616	T-616,SHERRED ROAD	OVER COULTER RUN	13497	7229	616	4003	41.7879	-80.1239	1	Township	1,930	2,002
Crawford	13499	1.5 MI. NW VENANGO	T-807,KIGHTLINGER	OVER COULTER RUN	13499	7229	807	4004	41.7906	-80.1269	1	Township	1,930	0
Crawford	13500	.5 MI S SR 1006	T-847 (TOBIN ROAD)	OVER BOLE'S RUN	13500	7229	847	3036	41.8056	-80.0993	1	County	1,972	0
Crawford	13501	4 MI. N. VENANGO	T-873,RACOP ROAD	OVER TORRY RUN	13501	7229	873	4002	41.8275	-80.0935	1	Township	1,915	1,990
Crawford	13504	1 MLS.SR-0006 ON T-488	T-488,HOLLIS ROAD	OVER WATSON RUN	13504	7230	488	3037	41.6022	-80.2245	1	County	1,960	0
Crawford	13507	NORTH END OF SUGAR LAKE	T-421,SUGAR LK.RD.	OVER SUGAR LAKE TRIB.	13507	7231	421	4002	41.57	-79.9433	1	Township	1,920	1,993
Crawford	13508	.25 MILE.SUGAR LAKE-T768	T-768,SUGAR LK.RD.	OVER LAKE CREEK	13508	7231	768	3040	41.5596	-79.9342	1	County	1,976	0
Crawford	13513	JUST SOUTH OF SAEGERTOWN	T-600,CRAIG ROAD	OVER WOODCOCK CREEK	13513	7235	600	3041	41.7024	-80.1258	1	County	1,896	1,994
Crawford	13515	1.3 MI.NW.SR 0086	T-602,BOCKMAN H.RD	OVER GRAVEL RUN	13515	7235	602	3042	41.76	-80.1083	1	County	1,996	0
Crawford	13516	.2 MLS.SR 1002 ON T-650	T-650,HUSON RD.	OVER GRAVEL RUN	13516	7235	650	3043	41.7436	-80.066	1	County	1,935	2,009
Crawford	13517	1.7 MI.SW SAGERTOWN	T-653,MORRIS ROAD	OVER W.NEW YORK & PA RR.	13517	7235	653	4001	41.6917	-80.155	1	Railroad	1,935	0
Crawford	13518	GERMAN ROAD,T-657	T-657,GERMAN ROAD	OVER WOODCOCK CREEK TR.	13518	7235	657	4002	41.7033	-80.1167	1	Township	1,989	0
Crawford	13521	CENTER STREET,MEADVILLE	WEST CENTER STREET	OVER MILL RUN	13521	7301	8805	4008	41.6395	-80.1518	1	City	1,906	1,979
Crawford	13522	CHERRY STREET, MEADVILLE	CHERRY STREET	OVER MILL RUN	13522	7301	8806	4009	41.64	-80.1533	1	City	1,906	1,974
Crawford	13523	CLINTON COURT, MEADVILLE	CLINTON COURT	OVER MILL RUN	13523	7301	8807	4012	41.6383	-80.1533	1	City	1,902	0
Crawford	13524	CHESTNUT STREET,MEADVILLE	CHESTNUT STREET	OVER MILL RUN	13524	7301	8808	4011	41.6383	-80.1533	1	City	1,906	1,973
Crawford	13525	GARDEN STREET,MEADVILLE	GARDEN STREET	OVER MILL RUN	13525	7301	8811	4005	41.6405	-80.1483	1	City	1,913	1,994
Crawford	13526	GROVE STREET,MEADVILLE	GROVE STREET	OVER MILL RUN	13526	7301	8812	4001	41.6385	-80.1431	1	City	1,912	0

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUPFRATE	ADT	DETOUR LENGTH (miles)
Crawford	13456	5 MILE.CAMBRIDGE SPRINGS	T-840,HOGBACK W.RD	OVER KELLY RUN	37	688	1	Steel, I beams	OPEN	SD		82	50	1
Crawford	13457	5MILE.S.E. CAMBRIDGE SP.	T-878,SWAMP ROAD	OVER MUDDY CREEK	86	1574	1	Steel, I beams	OPEN	SD	FO	63.2	500	8
Crawford	13461	SOUTH SHENANGO TOWNSHIP	T-401,HURLBERT RD.	OVER PYMATUNING TRIB.	48	1200	1	P/S, Box beam - adj	OPEN			67.3	250	3
Crawford	13462	GLYNDEN,SPARTA TOWNSHIP	T-793,GLYNDEN ROAD	OVER OIL CREEK EAST BR.	75	1208	1	P/S, Box beam - adj	OPEN		FO	68.8	250	4
Crawford	13464	3 MI. S.W. SPARTANSBURG	T-795 FISH FLATS R	OVER OIL CREEK EAST BR.	106	2830	2	Steel, Girder riv/deck	POSTED	SD		43.8	250	4
Crawford	13466	0.8 MI. N. BRITTON RUN	T-878,BRITTON R.RD	OVER BRITTON RUN	38	863	1	Steel, I beams	OPEN			85.4	250	6
Crawford	13467	3 MI. NE. CENTERVILLE	T-880 (FIRTH ROAD)	OVER BRITTON RUN	37	574	1	Steel, I beams	POSTED	SD	FO	22.3	250	3
Crawford	13468	3 MI SW SPARTANSBURG	T-896 SPORTSMAN RD	OVER EAST BR. OIL CREEK	85	1182	1	Steel, Truss - thru	POSTED	SD	FO	15.9	250	4
Crawford	13470	3 MI. S.E. SPARTANSBURG	T-922 HATCHTOWN RD	OVER FIVE MILE CREEK	28	594	1	Steel, I beams	POSTED	SD	FO	16.6	250	6
Crawford	13471	SPRING TOWNSHIP	T-366,GREEN ROAD	OVER CRAZY RUN	22	574	1	Concr. encased steel, I beams	OPEN			91.9	250	3
Crawford	13472	ON EAST SPRING RD.,T-466	T-466,E.SPRING RD.	OVER CARR RUN	36	580	1	Concr. encased steel, I beams	POSTED	SD	FO	17.4	250	4
Crawford	13475	SPRING TOWNSHIP,RUNDELL	T-749,KING ROAD	OVER CARR RUN TRIB.	40	760	1	Steel, I beams	POSTED	SD	FO	25.1	250	3
Crawford	13476	0.6 MI.W.SR-18,SPRING TWP	T-803,TOWER ROAD	OVER CONNEAUT CREEK	88	2112	1	P/S, Box beam - (spread)	OPEN			100	50	3
Crawford	13480	SUMMERHILL TOWNSHIP	T-360,TOWNLINE RD.	OVER FISH CREEK	24	612	1	Concrete(precast), Rigid frame	POSTED		FO	53.6	250	6
Crawford	13483	WING ROAD,T-689	T-689,WING ROAD	OVER CONNEAUT CREEK	53	848	1	Steel, Truss - thru	POSTED	SD	FO	33.7	250	4
Crawford	13485	SUMMIT TOWNSHIP,PORTER RD	T-402,PORTER ROAD	OVER CONNEAUT CREEK	28	666	1	Concrete(precast), Arch culvert	OPEN			74.2	250	3
Crawford	13486	SUMMIT TOWNSHIP	T-452,GIBSON ROAD	OVER PINE RUN	24	578	1	Concrete(precast), Arch culvert	OPEN			87	250	2
Crawford	13488	SUMMIT TOWNSHIP	T-609,AGNEW ROAD	OVER CONNEAUT CREEK	34	615	1	Steel, I beams	OPEN		FO	65.7	250	2
Crawford	13489	SUMMIT TOWNSHIP	T-609,AGNEW ROAD	INLET RUN	28	902	2	Concrete(in place), Box culvert	OPEN			99	78	4
Crawford	13491	2.5 MLS.OF FAUNCETOWN	T-425,DEETER H.RD.	OVER L.T.SUGAR CREEK	25	400	1	Steel, I beams	OPEN	SD	FO	59.5	250	1
Crawford	13492	6 MLS.OF TOWNVILLE	T-477,JAY ROAD	OVER SUGAR CREEK E.BR.	24	463	1	Steel, I beams	POSTED		FO	62.7	14	2
Crawford	13493	6 MLS.TOWNVILLE	T-477,JAY ROAD	OVER SUGAR CREEK	24	461	1	Steel, I beams	POSTED		FO	65.7	250	1
Crawford	13494	3 MI.SOUTH MEADVILLE	T-413, HAMILL ROAD	OVER NORFOLK SOUTH R.R.	75	1410	3	Steel, Girder riv/thru	POSTED		FO	45.1	100	99
Crawford	13495	2 MI. S. MEADVILLE	T-704,KENNEDY HILL	OVER UNNAMED RUN	42	1491	1	P/S, Box beam - (spread)	OPEN			89.4	280	2
Crawford	13496	.5 MLS.SR.1006 ON T-568	T-568,CAPP ROAD	OVER COULTER RUN	26	489	1	Steel, I beams	POSTED		FO	59.4	250	3
Crawford	13497	.8 MI.NW.SR.1019 ON T-616	T-616,SHERRED ROAD	OVER COULTER RUN	27	451	1	Steel, I beams	OPEN			75.7	250	1
Crawford	13499	1.5 MI. NW VENANGO	T-807,KIGHTLINGER	OVER COULTER RUN	31	502	1	Concr. encased steel, I beams	POSTED	SD	FO	18.6	14	1
Crawford	13500	.5 MI S SR 1006	T-847 (TOBIN ROAD)	OVER BOLE'S RUN	51	1734	1	P/S, Box beam - adj	POSTED	SD	FO	40.8	250	3
Crawford	13501	4 MI. N. VENANGO	T-873,RACOP ROAD	OVER TORRY RUN	22	396	1	Concr. encased steel, I beams	OPEN			73.9	250	3
Crawford	13504	1 MLS.SR-0006 ON T-488	T-488,HOLLIS ROAD	OVER WATSON RUN	62	1531	1	Steel, I beams	POSTED	SD		44.5	400	3
Crawford	13507	NORTH END OF SUGAR LAKE	T-421,SUGAR LK.RD.	OVER SUGAR LAKE TRIB.	25	580	1	Steel, I beams	POSTED	SD		45.8	250	3
Crawford	13508	.25 MILE.SUGAR LAKE-T768	T-768,SUGAR LK.RD.	OVER LAKE CREEK	78	2051	3	Timber, Solid timber beams	POSTED			84.4	250	4
Crawford	13513	JUST SOUTH OF SAEGERTOWN	T-600,CRAIG ROAD	OVER WOODCOCK CREEK	80	1264	1	Steel, Truss - thru	POSTED	SD	FO	22.3	53	2
Crawford	13515	1.3 MI.NW.SR 0086	T-602,BOCKMAN H.RD	OVER GRAVEL RUN	61	1970	1	P/S, Box beam - adj	OPEN			99.9	250	4
Crawford	13516	.2 MLS.SR 1002 ON T-650	T-650,HUSON RD.	OVER GRAVEL RUN	42	756	1	Steel, I beams	OPEN		FO	81.4	250	3
Crawford	13517	1.7 MLSW SAGERTOWN	T-653,MORRIS ROAD	OVER W.NEW YORK & PA RR.	160	4144	3	Steel, Truss - thru	CLOSED	SD	FO	19.6	500	2
Crawford	13518	GERMAN ROAD,T-657	T-657,GERMAN ROAD	OVER WOODCOCK CREEK TR.	26	658	1	Timber, Glue-lam timber	OPEN			85.9	250	3
Crawford	13521	CENTER STREET,MEADVILLE	WEST CENTER STREET	OVER MILL RUN	25	1000	1	Concrete(in place), Slab (solid)	OPEN			82.9	1500	1
Crawford	13522	CHERRY STREET, MEADVILLE	CHERRY STREET	OVER MILL RUN	30	600	1	Concrete(in place), Slab (solid)	OPEN		FO	84.6	1500	1
Crawford	13523	CLINTON COURT, MEADVILLE	CLINTON COURT	OVER MILL RUN	24	468	1	Concr. encased steel, I beams	POSTED	SD	FO	28.8	1500	1
Crawford	13524	CHESTNUT STREET,MEADVILLE	CHESTNUT STREET	OVER MILL RUN	23	1150	1	Concrete(in place), Slab (solid)	POSTED			90.6	2500	1
Crawford	13525	GARDEN STREET,MEADVILLE	GARDEN STREET	OVER MILL RUN	26	1040	1	Concrete(in place), Slab (solid)	OPEN	SD	FO	22.9	1500	1
Crawford	13526	GROVE STREET,MEADVILLE	GROVE STREET	OVER MILL RUN	137	6891	1	Concrete(in place), Arch deck - closed	OPEN	SD	FO	45.8	1000	1

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Crawford	13528	LIBERTY ST,MEADVILLE	LIBERTY STREET	OVER MILL RUN	13528	7301	8815	4004	41.6403	-80.1468	1	City	1,910	1,993
Crawford	13529	N.MAIN ST.,MEADVILLE	N.MAIN & W.STEERS	OVER MILL RUN	13529	7301	8818	4106	41.64	-80.15	1	City	1,916	2,011
Crawford	13530	MEAD AVENUE,MEADVILLE	MEAD AVENUE	OVER FRENCH CREEK	13530	7301	8820	3000	41.6379	-80.1629	1	County	1,871	1,912
Crawford	13531	ARCH ST., MEADVILLE CITY	ARCH STREET	OVER MILL RUN	13531	7301	8820	4020	41.6367	-80.1567	1	City	1,970	0
Crawford	13532	MERCER STREET,MEADVILLE	MERCER STREET	OVER FRENCH CREEK	13532	7301	8821	3016	41.6324	-80.1609	1	County	1,936	1,984
Crawford	13534	MARKET STREET, MEADVILLE	MARKET STREET	OVER MILL RUN	13534	7301	8823	4013	41.6383	-80.1533	1	City	1,910	1,987
Crawford	13535	MULBERRY ST.,MEADVILLE	MULBERRY STREET	OVER MILL RUN	13535	7301	8824	4014	41.6383	-80.1533	1	City	1,970	0
Crawford	13536	POPLAR STREET, MEADVILLE	POPLAR STREET	OVER MILL RUN	13536	7301	8826	4019	41.635	-80.1583	1	City	1,910	0
Crawford	13537	WALNUT/N.COTTAGE MEADVIL	WALNUT & COTTAGE	OVER MILL RUN	13537	7301	8829	4107	41.64	-80.15	1	City	1,916	1,976
Crawford	13538	WATER STREET,MEADVILLE	WATER STREET	OVER MILL RUN	13538	7301	8830	4015	41.6376	-80.1554	1	City	1,906	1,985
Crawford	13539	CITY OF TITUSVILLE	BARBER STREET	OVER HAMMOND RUN	13539	7302	8801	4005	41.62	-79.6717	1	City	1,965	1,988
Crawford	13540	CITY OF TITUSVILLE	BREED STREET	OVER TROUT RUN	13540	7302	8802	4007	41.6217	-79.6717	1	City	1,920	0
Crawford	13541	TITUSVILLE, BROWN STREET	BROWN STREET	OVER CHURCH RUN	13541	7302	8803	4002	41.625	-79.665	1	City	1,995	0
Crawford	13542	BROWN STREET,TITUSVILLE	BROWN STREET	OVER OIL CREEK	13542	7302	8804	3034	41.6233	-79.665	1	County	1,991	0
Crawford	13544	DUTCH HILL RD.,TITUSVILLE	DUTCH HILL R.T-576	OVER HAMMOND RUN	13544	7302	8810	4006	41.6183	-79.6717	1	City	1,992	0
Crawford	13545	CITY OF TITUSVILLE	LINDEN PLACE	OVER CHURCH RUN	13545	7302	8816	4003	41.6317	-79.6733	1	City	1,910	0
Crawford	13546	SOUTH PERRY ST,TITUSVILLE	SOUTH PERRY STREET	OVER OIL CREEK	13546	7302	8825	3035	41.6228	-79.6769	1	County	1,900	1,994
Crawford	13548	CITY OF TITUSVILLE	W.MT.VERNON STREET	OVER CHURCH RUN	13548	7302	8831	4004	41.6357	-79.6758	1	City	1,910	0
Crawford	13549	CONNEAUTVILLE BOROUGH	T-384,DEPOT ROAD	OVER CONNEAUT CREEK	13549	7406	384	3029	41.7652	-80.3763	1	County	1,889	1,994
Crawford	13550	CONNEAUTVILLE-CENTER ST.	CENTER STREET	OVER CONNEAUT CREEK	13550	7406	8809	3006	41.7567	-80.37	1	County	1,896	1,973
Crawford	13554	JUST OUTSIDE SAEGERTOWN	T-962,JORDAN DRIVE	OVER FRENCH CREEK	13554	7409	962	3025	41.7143	-80.1473	1	County	1,900	1,990
Crawford	40333	3.5MILES NW. SPRINGBORO	T-885,JERUSALEM RD	OVER CONNEAUT CREEK	40333	7223	885	3031	41.8367	-80.4017	1	County	1,998	0
Crawford	40373	JEFFERSON ST.,CONNTVLL.	JEFFERSON STREET	OVER CONNEAUT CREEK	40373	7406	8814	3007	41.755	-80.3683	1	County	1,998	0
Crawford	40772	LAKE CANADOHTA	T-990,LAKEVIEW DR.	OVER EAST SHREVE RUN	40772	7203	990	4005	41.8172	-79.8324	1	Township	1,999	0
Crawford	40990	500 FT W. WARREN CTY LINE	T-928,DUNCAN ROAD	OVER CALDWELL CREEK	40990	7214	928	3023	41.6367	-79.615	1	County	2,000	0
Crawford	41562	2.1 MI. N.E. SPARTANSBURG	T-924,WELSH HILL	OVER PATRICK RUN	41562	7222	924	4007	41.8454	-79.6737	1	Township	2,002	0
Crawford	41843	.1 MI.W.OF SR-4007	T-487, MIDDLE ROAD	OVER WATSON RUN	41843	7230	487	4003	41.6379	-80.2624	1	Township	2,002	0
Crawford	42056	2 MLS.CONNEAUTVILLE	T-693,FISH ROAD	OVER CONNEAUT CREEK	42056	7225	693	3033	41.7292	-80.3559	1	County	2,003	0
Crawford	42596	1.83 MI.SE.WOODCOCK BORO	T-658, LEIMBACH RD	GRAVEL RUN	42596	7235	658	3044	41.7472	-80.0583	1	County	2,004	0
Crawford	43168	0.7 MI.SW.SPARTANSBURG	T-869, BLAKESLEE R	OVER EAST BR.OIL CK.	43168	7222	869	3027	41.8095	-79.6905	1	County	2,005	0
Crawford	43169	HYDETOWN BORO	T-870,PATTERSON RD	OVER OIL CREEK TRIB	43169	7407	870	4003	41.6474	-79.7337	1	Township	2,005	0
Crawford	43209	0.1 MI. NORTH OF SR 4010	NELSON DRIVEWAY	E.BR. CONNEAUT CREEK	43209	7202	9999	4012	41.8083	-80.4675	1	Township	1,935	2,006
Crawford	43213	0.1 MLS.SOUTH OF SR 198	T-348,COLE ROAD	TRIB.CONNEAUT CREEK	43213	7202	348	4013	41.7514	-80.4017	1	Township	2,000	0
Crawford	44024	CONNEAUT	WHEELER ROAD	LINESVILLE CREEK	44024	7205	609	4002	41.7456	-80.426	1	Township	2,006	0
Crawford	44058	1.4 MI E.CONNEAUTVILLE	BLUE FALLS ROAD	TR.CONNEAUT CK.	44058	7223	747	4003	41.758	-80.3414	1	Township	1,996	0
Crawford	44415	.1 MLS.SR 1002 ON T-735	T-735 AMY ROAD	GRAVEL RUN	44415	7235	735	3045	41.7467	-80.0783	1	County	2,006	0
Crawford	44990	3 MI NORTH BEAVER CENTER	T-883, JOINER ROAD	E.BR.CONNEAUT CK.	44990	7202	883	4005	41.8458	-80.4717	1	Township	2,008	0
Crawford	46597	2.5 mi N Cambridge Spring	T-899, Kreitz Road	Little Conneauttee Creek	46597	7204	899	3004	41.8383	-80.0717	1	County	2,011	0
Crawford	46868	2.5 mile S Crossingville	T-841, Center Road	over Cussewago Creek	46868	7206	841	3009	41.8031	-80.2358	1	County	2,011	0
Crawford	47077	1.5 MI. NW OF CAMBRIDGE S	T-634 DRAKES MILLS	TORRY RUN	47077	7229	634	4001	41.8222	-80.0839	1	Township	2,011	0
Crawford	47528	2 MI N LITTLE COOLEY	T-765, DOBBS ROAD	FEDERAL RUN	47528	7201	765	4002	41.77	-79.8917	1	Township	2,011	0
Crawford	47529	NORTH SHENANGO TWP	T-479 FRIES ROAD	BENNETT RUN	47529	7213	479	4001	41.6186	-80.4464	1	Township	2,011	0
Crawford	47610	0.5 MI W OF CONNEAUTVILLE	T-406,SMITH ROAD	TRIB TO CONNEAUT CK	47610	7225	406	3032	41.7536	-80.3492	1	County	2,012	0

Complete List of Local Bridges

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUPFRATE	ADT	DETOUR LENGTH (miles)
Crawford	13528	LIBERTY ST,MEADVILLE	LIBERTY STREET	OVER MILL RUN	26	1295	1	P/S, Slab (solid)	OPEN	SD	FO	31.5	2500	1
Crawford	13529	N.MAIN ST.,MEADVILLE	N.MAIN & W.STEERS	OVER MILL RUN	25	3325	1	P/S, Box beam - adj	OPEN			97.8	2500	1
Crawford	13530	MEAD AVENUE,MEADVILLE	MEAD AVENUE	OVER FRENCH CREEK	264	5280	2	Alum, Iron, Truss - thru	CLOSED	SD	FO	0	5000	2
Crawford	13531	ARCH ST., MEADVILLE CITY	ARCH STREET	OVER MILL RUN	21	1707	1	Concrete(in place), Box culvert	OPEN			99.7	4280	1
Crawford	13532	MERCER STREET,MEADVILLE	MERCER STREET	OVER FRENCH CREEK	221	6962	1	Steel, Truss - thru	OPEN		FO	61.9	9000	1
Crawford	13534	MARKET STREET, MEADVILLE	MARKET STREET	OVER MILL RUN	25	993	1	P/S, Slab (solid)	OPEN			97.8	2500	1
Crawford	13535	MULBERRY ST.,MEADVILLE	MULBERRY STREET	OVER MILL RUN	26	525	1	P/S, Slab (solid)	OPEN		FO	61.9	1500	1
Crawford	13536	POPLAR STREET, MEADVILLE	POPLAR STREET	OVER MILL RUN	25	1233	1	Concr. encased steel, I beams	TEMP	SD		36.6	50	99
Crawford	13537	WALNUT/N.COTTAGE MEADVIL	WALNUT & COTTAGE	OVER MILL RUN	28	1008	1	Steel, I beams	POSTED	SD	FO	34.3	1500	1
Crawford	13538	WATER STREET,MEADVILLE	WATER STREET	OVER MILL RUN	24	1500	1	P/S, Slab (solid)	OPEN			66.7	3500	1
Crawford	13539	CITY OF TITUSVILLE	BARBER STREET	OVER HAMMOND RUN	20	644	1	Concrete(in place), Slab (solid)	OPEN		FO	93	50	2
Crawford	13540	CITY OF TITUSVILLE	BREED STREET	OVER TROUT RUN	22	814	1	Steel, I beams	U/CON	SD	FO	24.2	200	2
Crawford	13541	TITUSVILLE, BROWN STREET	BROWN STREET	OVER CHURCH RUN	20	700	1	Concrete(in place), Box culvert	OPEN			95	50	1
Crawford	13542	BROWN STREET,TITUSVILLE	BROWN STREET	OVER OIL CREEK	181	6625	2	P/S, Box beam - adj	OPEN			98	500	1
Crawford	13544	DUTCH HILL RD.,TITUSVILLE	DUTCH HILL R.T-576	OVER HAMMOND RUN	26	816	1	Timber, Stressed timber	OPEN			100	150	2
Crawford	13545	CITY OF TITUSVILLE	LINDEN PLACE	OVER CHURCH RUN	21	286	1	Steel, I beams	POSTED	SD	FO	19.4	12	2
Crawford	13546	SOUTH PERRY ST,TITUSVILLE	SOUTH PERRY STREET	OVER OIL CREEK	130	2405	1	Steel, Truss - thru	POSTED	SD	FO	15.7	1023	1
Crawford	13548	CITY OF TITUSVILLE	W.MT.VERNON STREET	OVER CHURCH RUN	23	552	1	Steel, I beams	POSTED	SD	FO	25	50	99
Crawford	13549	CONNEAUTVILLE BOROUGH	T-384,DEPOT ROAD	OVER CONNEAUT CREEK	78	1248	1	Steel, Truss - thru	POSTED		FO	49.8	250	3
Crawford	13550	CONNEAUTVILLE-CENTER ST.	CENTER STREET	OVER CONNEAUT CREEK	79	1256	1	Steel, Truss - thru	POSTED	SD	FO	14.4	250	1
Crawford	13554	JUST OUTSIDE SAEGERTOWN	T-962,JORDAN DRIVE	OVER FRENCH CREEK	206	3296	1	Steel, Truss - thru	POSTED	SD	FO	20.9	145	1
Crawford	40333	3.5MILES NW, SPRINGBORO	T-885,JERUSALEM RD	OVER CONNEAUT CREEK	78	2207	1	P/S, Box beam - adj	OPEN			100	50	6
Crawford	40373	JEFFERSON ST.,CONNTVILE.	JEFFERSON STREET	OVER CONNEAUT CREEK	65	2106	1	P/S, Box beam - adj	OPEN			89	318	1
Crawford	40772	LAKE CANADOHTA	T-990,LAKEVIEW DR.	OVER EAST SHREVE RUN	30	900	1	Concrete(precast), Arch culvert	OPEN			85.3	500	4
Crawford	40990	500 FT W. WARREN CTY LINE	T-928,DUNCAN ROAD	OVER CALDWELL CREEK	70	2261	1	P/S, Box beam - adj	OPEN			99.9	250	3
Crawford	41562	2.1 MI. N.E. SPARTANSBURG	T-924,WELSH HILL	OVER PATRICK RUN	20	522	1	Concrete(precast), Arch culvert	OPEN			99	100	2
Crawford	41843	.1 MI.W.OF SR-4007	T-487, MIDDLE ROAD	OVER WATSON RUN	37	1047	1	P/S, Box beam - adj	OPEN			92.4	400	2
Crawford	42056	2 MLS.CONNEAUTVILLE	T-693,FISH ROAD	OVER CONNEAUT CREEK	68	1686	1	P/S, Box beam - adj	OPEN			87.9	250	4
Crawford	42596	1.83 MI.SE.WOODCOCK BORO	T-658, LEIMBACH RD	GRAVEL RUN	24	523	1	Concrete(precast), Arch culvert	OPEN			97.9	100	7
Crawford	43168	0.7 MI.SW.SPARTANSBURG	T-869, BLAKESLEE R	OVER EAST BR.OIL CK.	50	1440	1	P/S, Box beam - (spread)	OPEN			97.9	250	5
Crawford	43169	HYDETOWN BORO	T-870,PATTERSON RD	OVER OIL CREEK TRIB	24	607	1	Concrete(precast), Arch culvert	OPEN		FO	83.2	250	4
Crawford	43209	0.1 MI. NORTH OF SR 4010	NELSON DRIVEWAY	E.BR. CONNEAUT CREEK	25	313	1	Steel, I beams	POSTED	SD	FO	4	250	3.8
Crawford	43213	0.1 MI.SOUTH OF SR 198	T-348,COLE ROAD	TRIB.CONNEAUT CREEK	29	577	1	Steel, I beams	OPEN		FO	80	250	0
Crawford	44024	CONNEAUT	WHEELER ROAD	LINESVILLE CREEK	32	890	1	Concrete(precast), Arch culvert	OPEN			93.9	250	0
Crawford	44058	1.4 MI E.CONNEAUTVILLE	BLUE FALLS ROAD	TR.CONNEAUT CK.	20	436	1	Concrete(precast), Rigid frame	OPEN		FO	75.5	50	0
Crawford	44415	.1 MLS.SR 1002 ON T-735	T-735 AMY ROAD	GRAVEL RUN	49	1176	1	P/S, Box beam - (spread)	OPEN			99	50	0
Crawford	44990	3 MI NORTH BEAVER CENTER	T-883, JOINER ROAD	E.BR.CONNEAUT CK.	50	665	1	Steel, I beams	OPEN			88.5	50	0
Crawford	46597	2.5 mi N Cambridge Spring	T-899, Kreitz Road	Little Conneauttee Creek	108	2743	1	P/S, Box beam - (spread)	OPEN			87.9	250	0
Crawford	46868	2.5 mile S Crossingville	T-841, Center Road	over Cussewago Creek	64	1242	1	P/S, Box beam - (spread)	OPEN		FO	88.5	250	0
Crawford	47077	1.5 MI. NW OF CAMBRIDGE S	T-634 DRAKES MILLS	TORRY RUN	22	583	1	Concrete(precast), Box culvert	OPEN			-1	50	0
Crawford	47528	2 MI N LITTLE COOLEY	T-765, DOBBS ROAD	FEDERAL RUN	22	242	1	Alum, Iron, Pipe culvert	OPEN			98	50	0
Crawford	47529	NORTH SHENANGO TWP	T-479 FRIES ROAD	BENNETT RUN	52	1529	3	P/S, Box beam - (spread)	POSTED			83.9	250	0
Crawford	47610	0.5 MI W OF CONNEAUTVILLE	T-406,SMITH ROAD	TRIB TO CONNEAUT CK	86	2184	1	P/S, Box beam - (spread)	OPEN			99	50	0

Complete List of Local Bridges

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Forest	17264	HICKORY TOWNSHIP	T-328,QUEEN BR	OVER EAST HICKORY CREEK	17264	7204	328	4001	41.6249	-79.3633	1	Township	1,933	0
Forest	17265	HICKORY TOWNSHIP	T-328,OTTER BR	OVER EAST HICKORY CREEK	17265	7204	328	4002	41.6044	-79.3732	1	Township	1,910	1,986
Forest	17266	HOWE TOWNSHIP	T-372	OVER S.BR. TIONESTA CR.	17266	7205	372	4001	41.6163	-78.9727	1	Township	1,992	0
Forest	17267	HOWE TOWNSHIP	T-372	OVER TIONESTA CREEK BR.	17267	7205	372	4002	41.6167	-78.975	1	Township	1,991	0
Forest	17270	JENKS TOWNSHIP	T-356	OVER SALMON CREEK	17270	7206	356	4001	41.4758	-79.1367	1	Township	1,920	1,984
Forest	17271	KINGSLEY TOWNSHIP	T-338	OVER ROSS RUN	17271	7207	338	4002	41.5147	-79.3246	1	Township	1,910	1,995
Forest	17272	AT TOWN OF KELLETTVILLE	T-345	OVER TIONESTA CREEK	17272	7207	345	3002	41.5433	-79.26	1	County	1,995	0
Forest	17273	KINGSLEY TOWNSHIP	T-345	OVER THE BRANCH	17273	7207	345	4001	41.5467	-79.2467	1	Township	1,993	0
Forest	17274	KINGSLEY TOWNSHIP	T-396	OVER ROSS RUN	17274	7207	396	4003	41.5089	-79.3264	1	Township	1,910	1,995
Forest	17277	TIONESTA BOROUGH	OLD ELM STREET	OVER TIONESTA CREEK	17277	7401	8802	3001	41.485	-79.455	1	County	1,919	0
Forest	39623	TIONESTA TOWNSHIP	T-316	OVER HEMLOCK CREEK BR.	39623	7208	316	4001	41.3917	-79.45	1	Township	1,996	0
Forest	42042	TIONESTA TOWNSHIP	T-316,COUNTY LINE	OVER MCCAULEY RUN	42042	7208	316	4002	41.3883	-79.4519	1	County	2,003	0
Forest	43090	HARMONY TOWNSHIP	T-353 MCATHUR R.RD	OVER WEST HICKORY CREEK	43090	7203	353	4001	41.575	-79.44	1	Township	2,005	0

Complete List of Local Bridges

Forest County Bridges Page 2 of 2

COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUFFRATE	ADT	DETOUR LENGTH (miles)
Forest	17264	HICKORY TOWNSHIP	T-328,QUEEN BR	OVER EAST HICKORY CREEK	64	768	3	Concrete(in place), Slab (solid)	POSTED	SD	FO	20.2	100	8
Forest	17265	HICKORY TOWNSHIP	T-328,OTTER BR	OVER EAST HICKORY CREEK	60	840	1	Steel, I beams	OPEN	SD		49.9	100	10
Forest	17266	HOWE TOWNSHIP	T-372	OVER S.BR. TIONESTA CR.	36	731	1	Timber, Stressed timber	OPEN			78.5	25	99
Forest	17267	HOWE TOWNSHIP	T-372	OVER TIONESTA CREEK BR.	42	1189	1	P/S, Box beam - adj	OPEN	SD	FO	47.8	100	99
Forest	17270	JENKS TOWNSHIP	T-356	OVER SALMON CREEK	31	493	1	Steel, I beams	OPEN			74.4	55	11
Forest	17271	KINGSLEY TOWNSHIP	T-338	OVER ROSS RUN	24	444	1	Steel, I beams	OPEN	SD		61.3	50	7
Forest	17272	AT TOWN OF KELLETTVILLE	T-345	OVER TIONESTA CREEK	269	7936	2	Steel, I-welded beams	OPEN			98.8	50	35
Forest	17273	KINGSLEY TOWNSHIP	T-345	OVER THE BRANCH	42	1189	1	P/S, Box beam - adj	OPEN			89.8	75	35
Forest	17274	KINGSLEY TOWNSHIP	T-396	OVER ROSS RUN	23	449	1	Steel, I beams	OPEN	SD		66	50	8
Forest	17277	TIONESTA BOROUGH	OLD ELM STREET	OVER TIONESTA CREEK	291	5587	3	Concrete(in place), Arch deck - closed	OPEN		FO	64.9	275	2
Forest	39623	TIONESTA TOWNSHIP	T-316	OVER HEMLOCK CREEK BR.	28	560	1	Steel, Pipe culvert	OPEN			89	40	6
Forest	42042	TIONESTA TOWNSHIP	T-316,COUNTY LINE	OVER MCCAULEY RUN	28	725	1	Concrete(precast), Box culvert	OPEN			99	50	6
Forest	43090	HARMONY TOWNSHIP	T-353 MCATHUR R.RD	OVER WEST HICKORY CREEK	84	2100	1	P/S, Box beam - (spread)	OPEN			94.9	60	12

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Venango	33866	CHERRY TREE TOWNSHIP	T-508,STONE SPRNG.	OVER PRATHER CREEK	33866	7203	508	4002	41.58	-79.7533	1	Township	1,993	0
Venango	33869	CLINTON TOWNSHIP	T-380,PHIPPS ROAD	OVER SCRUBGRASS CK. BR.	33869	7204	380	4001	41.2283	-79.8584	1	Township	1,900	0
Venango	33871	CORNPLANTER TOWNSHIP	T-553,RYND HILL RD	OVER WYKLE RUN	33871	7205	553	4010	41.485	-79.705	1	Township	1,992	0
Venango	33874	CORNPLANTER TOWNSHIP	T-587,HARPER ROAD	OVER CHERRYTREE RUN	33874	7205	587	4001	41.5049	-79.7018	1	Township	1,900	1,985
Venango	33875	CORNPLANTER TOWNSHIP	T-614,LESHER ROAD	OVER PITHOLE CREEK	33875	7205	614	4003	41.52	-79.585	1	Township	1,897	1,996
Venango	33876	CORNPLANTER TOWNSHIP	T-674	OVER CHERRY RUN	33876	7205	674	4007	41.4878	-79.6525	1	Township	1,915	0
Venango	33877	CRANBERRY TOWNSHIP	T-391,VAN ROAD	OVER TARKLIN CREEK	33877	7206	391	4010	41.3183	-79.6483	1	Township	1,992	0
Venango	33878	CRANBERRY TOWNSHIP	T-484,AIRES HILL R	OVER LOWER TWO MILE RUN	33878	7206	484	4008	41.3772	-79.7595	1	Township	1,908	1,998
Venango	33880	FRENCH CREEK TOWNSHIP	T-439 DEAN ROAD	OVER LITTLE SANDY CREEK	33880	7207	439	4003	41.3792	-79.9828	1	Township	1,895	1,975
Venango	33883	FRENCH CREEK TOWNSHIP	T-346,RAINBOW ROAD	OVER LITTLE SANDY CREEK	33883	7207	346	4001	41.3859	-79.9354	1	Township	1,915	1,982
Venango	33884	FRENCHCREEK & MINERAL TWP	T-425,GREENLEE RD	OVER LITTLE SANDY TRIB.	33884	7207	425	8004	41.3696	-79.9967	1	Township	1,950	0
Venango	33885	IRWIN TOWNSHIP	T-300,OLD BEECH RD	OVER WOLF CREEK E. BR.	33885	7208	300	4004	41.2156	-79.9919	1	Township	1,925	0
Venango	33886	IRWIN TOWNSHIP	T-323,GILMORE ROAD	OVER WOLF CREEK E. BR.	33886	7208	323	4002	41.2158	-79.9832	1	Township	1,970	0
Venango	33888	JACKSON TOWNSHIP	T-364,E.WAYNE ROAD	OVER LAKE CREEK	33888	7209	364	4002	41.5499	-79.9034	1	Township	1,900	2,009
Venango	33889	JACKSON TOWNSHIP	T-384,WHITE ROAD	OVER SUGAR CREEK BR.	33889	7209	384	4003	41.54	-79.8583	1	Township	1,940	0
Venango	33890	JACKSON TOWNSHIP	T-557,INDEPENDENT	OVER BEATTY RUN	33890	7209	557	8004	41.4751	-79.8922	1	Township	1,960	2,011
Venango	33891	JACKSON TOWNSHIP	T-593, BOALS BR.	OVER E. BR.OF SUGARCREEK	33891	7209	593	3025	41.5131	-79.8544	1	County	1,950	0
Venango	33892	JACKSON TOWNSHIP	T-595,MCINTOSH BRI	OVER SUGAR CREEK MID.BR.	33892	7209	595	3021	41.5138	-79.8645	1	County	1,982	0
Venango	33893	JACKSON TOWNSHIP	SMALLS ROAD	OVER LAKE CREEK	33893	7209	605	4001	41.52	-79.8883	1	Township	1,930	1,989
Venango	33894	JACKSON TOWNSHIP	T-607,WRIGHT ROAD	OVER SUGAR CREEK MID.BR.	33894	7209	607	3022	41.5333	-79.85	1	County	1,993	0
Venango	33895	JACKSON TOWNSHIP	T-611,GLEASON BR.	OVER LAKE CREEK	33895	7209	611	3020	41.5467	-79.8983	1	County	1,993	0
Venango	33896	MINERAL TOWNSHIP	T-300,HENDERSON ST	OVER SOUTH SANDY CREEK	33896	7210	300	4001	41.2948	-79.99	1	Township	1,930	0
Venango	33897	MINERAL TOWNSHIP	T-330,SLATERTOWN R	OVER SOUTH SANDY CREEK	33897	7210	330	3055	41.2984	-79.9484	1	County	1,978	0
Venango	33900	SCRUBGRASS TOWNSHIP	T-400,WILLIAMS RD.	OVER SCRUBGRASS CK.TRIB.	33900	7219	400	3046	41.1847	-79.8157	1	County	1,959	0
Venango	33901	OAKLAND TOWNSHIP	T-450	OVER TWO MILE RUN TRIB.	33901	7211	450	4001	41.4855	-79.7732	1	Township	1,936	0
Venango	33903	OAKLAND TOWNSHIP	T-597,REYNOLDS BRG	OVER SUGAR CREEK	33903	7211	597	3027	41.5247	-79.8226	1	County	1,905	1,986
Venango	33904	OIL CREEK TOWNSHIP	T-604,WARREN PIKE	OVER PITHOLE CREEK	33904	7212	604	4011	41.5391	-79.5969	1	Township	1,965	0
Venango	33905	OIL CREEK TOWNSHIP	T-635,MILLER FARM	OVER OIL CREEK	33905	7212	635	3034	41.5653	-79.6572	1	County	1,888	0
Venango	33906	OIL CREEK TOWNSHIP	T-639,COE ROAD	OVER WEST PITHOLE CREEK	33906	7212	639	4002	41.5634	-79.5935	1	Township	1,938	0
Venango	33910	PINE GROVE TOWNSHIP	HALE ROAD	OVER EAST SANDY CREEK	33910	7213	628	4001	41.3367	-79.5417	1	Township	1,905	1,994
Venango	33912	PLUM TOWNSHIP	T-476,GIFFORD ROAD	OVER PRATHER CREEK	33912	7214	476	4007	41.5643	-79.7771	1	Township	1,935	2,001
Venango	33913	PLUM TOWNSHIP	T-595,PUMP STA.RD.	OVER LITTLE SUGAR CREEK	33913	7214	595	3028	41.5383	-79.8017	1	County	1,992	0
Venango	33914	PLUM TOWNSHIP	T-627,WILLIAMS RD	OVER SUGAR CREEK MID.BR.	33914	7214	627	4005	41.5712	-79.8606	1	Township	1,880	0

Complete List of Local Bridges

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUFFRATE	ADT	DETOUR LENGTH (miles)
Venango	33866	CHERRY TREE TOWNSHIP	T-508,STONE SPRNG.	OVER PRATHER CREEK	36	1026	1	P/S, Box beam - adj	OPEN			96.2	200	5
Venango	33869	CLINTON TOWNSHIP	T-380,PHIPPS ROAD	OVER SCRUBGRASS CK. BR.	70	1127	2	Concr. encased steel, I beams	POSTED	SD	FO	20.8	11	3
Venango	33871	CORNPLANTER TOWNSHIP	T-553,RYND HILL RD	OVER WYKLE RUN	22	711	1	Concrete(precast), Box culvert	OPEN			97.9	250	6
Venango	33874	CORNPLANTER TOWNSHIP	T-587,HARPER ROAD	OVER CHERRYTREE RUN	38	524	1	Steel, Truss - thru	POSTED	SD	FO	19.5	100	4
Venango	33875	CORNPLANTER TOWNSHIP	T-614,LESHER ROAD	OVER PITHOLE CREEK	72	828	1	Steel, I beams	POSTED		FO	51.4	50	99
Venango	33876	CORNPLANTER TOWNSHIP	T-674	OVER CHERRY RUN	27	378	1	Steel, I beams	POSTED	SD	FO	22.2	25	99
Venango	33877	CRANBERRY TOWNSHIP	T-391,VAN ROAD	OVER TARKLIN CREEK	26	572	1	Steel, I beams	OPEN	SD	FO	51.9	100	8
Venango	33878	CRANBERRY TOWNSHIP	T-484,AIRES HILL R	OVER LOWER TWO MILE RUN	35	893	1	Steel, I beams	OPEN	SD		78.1	250	5
Venango	33880	FRENCH CREEK TOWNSHIP	T-439 DEAN ROAD	OVER LITTLE SANDY CREEK	56	784	1	Steel, Truss - thru	POSTED	SD	FO	24.7	50	2
Venango	33883	FRENCH CREEK TOWNSHIP	T-346,RAINBOW ROAD	OVER LITTLE SANDY CREEK	50	700	1	Steel, Girder riv/thru	CLOSED	SD	FO	24.7	100	5
Venango	33884	FRENCHCREEK & MINERAL TWP	T-425,GREENLEE RD	OVER LITTLE SANDY TRIB.	22	343	1	Steel, I beams	CLOSED	SD		32	50	4
Venango	33885	IRWIN TOWNSHIP	T-300,OLD BEECH RD	OVER WOLF CREEK E. BR.	35	567	1	Concr. encased steel, I beams	OPEN	SD		44.5	50	99
Venango	33886	IRWIN TOWNSHIP	T-323,GILMORE ROAD	OVER WOLF CREEK E. BR.	21	525	1	Steel, I beams	OPEN			71.4	500	2
Venango	33888	JACKSON TOWNSHIP	T-364,E.WAYNE ROAD	OVER LAKE CREEK	50	1000	1	Steel, I beams	OPEN			39.4	100	4
Venango	33889	JACKSON TOWNSHIP	T-384,WHITE ROAD	OVER SUGAR CREEK BR.	28	448	1	Steel, I beams	CLOSED	SD	FO	22.5	100	5
Venango	33890	JACKSON TOWNSHIP	T-557,INDEPENDENT	OVER BEATTY RUN	22	440	1	Steel, I beams	OPEN			69	120	2
Venango	33891	JACKSON TOWNSHIP	T-593, BOALS BR.	OVER E. BR.OF SUGARCREEK	76	1756	1	Steel, I beams	POSTED			71.7	100	2
Venango	33892	JACKSON TOWNSHIP	T-595,MCINTOSH BRI	OVER SUGAR CREEK MID.BR.	107	2654	1	P/S, Box beam - adj	OPEN			72.7	150	4
Venango	33893	JACKSON TOWNSHIP	SMALLS ROAD	OVER LAKE CREEK	58	818	1	Steel, I beams	OPEN			78.7	50	4
Venango	33894	JACKSON TOWNSHIP	T-607,WRIGHT ROAD	OVER SUGAR CREEK MID.BR.	68	1931	1	P/S, Box beam - adj	OPEN	SD	FO	53.9	100	4
Venango	33895	JACKSON TOWNSHIP	T-611,GLEASON BR.	OVER LAKE CREEK	65	1840	1	P/S, Box beam - adj	OPEN	SD	FO	56	100	3
Venango	33896	MINERAL TOWNSHIP	T-300,HENDERSON ST	OVER SOUTH SANDY CREEK	32	704	1	Steel, I beams	POSTED	SD	FO	48.8	32	2
Venango	33897	MINERAL TOWNSHIP	T-330,SLATERTOWN R	OVER SOUTH SANDY CREEK	45	950	1	Steel, I beams	OPEN			80.9	100	10
Venango	33900	SCRUBGRASS TOWNSHIP	T-400,WILLIAMS RD.	OVER SCRUBGRASS CK.TRIB.	45	1085	1	Steel, I beams	POSTED			87.5	100	2
Venango	33901	OAKLAND TOWNSHIP	T-450	OVER TWO MILE RUN TRIB.	28	596	1	Steel, I beams	POSTED	SD	FO	19.1	200	5
Venango	33903	OAKLAND TOWNSHIP	T-597,REYNOLDS BRG	OVER SUGAR CREEK	81	1790	1	Steel, I beams	OPEN			94	100	6
Venango	33904	OIL CREEK TOWNSHIP	T-604,WARREN PIKE	OVER PITHOLE CREEK	48	1157	1	P/S, Box beam - adj	OPEN	SD		36.7	130	7
Venango	33905	OIL CREEK TOWNSHIP	T-635,MILLER FARM	OVER OIL CREEK	154	2495	1	Alum, Iron, Truss - thru	POSTED			45	100	14
Venango	33906	OIL CREEK TOWNSHIP	T-639,COE ROAD	OVER WEST PITHOLE CREEK	28	437	1	Steel, I beams	OPEN	SD		61.4	100	5
Venango	33910	PINE GROVE TOWNSHIP	HALE ROAD	OVER EAST SANDY CREEK	61	836	1	Steel, Truss - thru	POSTED	SD	FO	20.3	50	14
Venango	33912	PLUM TOWNSHIP	T-476,GIFFORD ROAD	OVER PRATHER CREEK	44	612	2	Steel, I beams	OPEN	SD	FO	49.9	100	5
Venango	33913	PLUM TOWNSHIP	T-595,PUMP STA.RD.	OVER LITTLE SUGAR CREEK	66	1881	1	P/S, Box beam - adj	OPEN			99	100	5
Venango	33914	PLUM TOWNSHIP	T-627,WILLIAMS RD	OVER SUGAR CREEK MID.BR.	75	1350	1	Steel, Girder weld/thru	POSTED	SD	FO	28.9	15	5

Complete List of Local Bridges

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Venango	33916	PRESIDENT TOWNSHIP	T-537	OVER STEWARTS RUN	33916	7215	537	4001	41.4746	-79.542	1	Township	1,920	2,004
Venango	33917	RICHLAND TOWNSHIP	T-357,PORTERFIELD	OVER MILL CREEK	33917	7216	357	4002	41.2459	-79.6871	1	Township	1,901	0
Venango	33919	RICHLAND TOWNSHIP	T-377,VALLEY CHURC	OVER PINE RUN	33919	7216	377	4005	41.275	-79.6317	1	Township	1,901	0
Venango	33921	RICHLAND TOWNSHIP	T-381,STARR ROAD	OVER PINE RUN	33921	7216	381	4006	41.62	-79.6117	1	Township	1,990	0
Venango	33923	RICHLAND TOWNSHIP	T-590,MCFEETERS RD	OVER PINE RUN	33923	7216	590	4008	41.2783	-79.6317	1	Township	1,991	0
Venango	33924	RICHLAND TOWNSHIP	T-592,CENTER ROAD	OVER PINE RUN	33924	7216	592	4009	41.2817	-79.62	1	Township	1,990	0
Venango	33925	ROCKLAND TOWNSHIP	T-381,MYERS MILLS	OVER PINE RUN	33925	7217	381	3040	41.29	-79.6567	1	County	1,990	0
Venango	33926	ROCKLAND TOWNSHIP	T-512,SLAB FURNACE	OVER EAST SANDY CREEK	33926	7217	512	3036	41.3233	-79.735	1	County	1,992	0
Venango	33928	ROCKLAND TOWNSHIP	T-522,DOTTER ROAD	OVER MILL CREEK	33928	7217	522	3041	41.2248	-79.722	1	County	1,900	0
Venango	33930	SCRUBGRASS TOWNSHIP	T-462,SMITH ROAD	OVER LT.SCRUBGTASS CK. B	33930	7219	462	3044	41.19	-79.7867	1	County	1,900	1,989
Venango	33931	1 MI. E. OF OLD RT. 8	T-370,FISHERMANS	OVER VICTORY RUN	33931	7220	370	1500	41.3258	-79.8746	1	Township	1,907	1,991
Venango	33932	STATE STREET,OIL CITY	STATE STREET	ALLEG.R.,WNY&PA.PARK LT	33932	7302	8803	3001	41.4317	-79.71	1	County	1,990	0
Venango	33933	COOPERSTOWN BOROUGH	T-372,WOLLEN MILLS	OVER LAKE CREEK	33933	7402	372	3017	41.4978	-79.8727	1	County	1,889	0
Venango	33935	POLK BOROUGH	MC CLELLAND AVENUE	OVER LITTLE SANDY CREEK	33935	7405	8802	4001	41.3668	-79.9249	1	Township	1,960	0
Venango	33936	UTICA BOROUGH	T-356,GRANT STREET	OVER MILL CREEK	33936	7407	356	4001	41.4328	-79.9549	1	Township	1,900	1,993
Venango	33939	SUGAR CREEK BOROUGH	T-460,SHAFFER R.RD	OVER BRANNOM RUN	33939	7409	460	4006	41.4143	-79.7553	1	Township	2,003	0
Venango	33944	SUGAR CREEK BOROUGH	T-551,SLEEPY HLL.W.	OVER SUGAR CREEK BR.	33944	7409	551	4004	41.467	-79.8838	1	Township	1,945	0
Venango	33945	SUGAR CREEK BOROUGH	T-685,SUGAR CK.DR.	OVER SUGAR CREEK	33945	7409	685	3012	41.4286	-79.8801	1	County	1,980	0
Venango	33946	SUGAR CREEK BOROUGH	T-685,SUGAR CK.DR.	OVER SUGARCREEK TRIB.	33946	7409	685	4003	41.4263	-79.8809	1	Township	1,924	0
Venango	40774	FRENCH CREEK TOWNSHIP	T-318,NOGEL ROAD	OVER LITTLE SANDY CREEK	40774	7207	318	3057	41.3783	-79.9667	1	County	1,999	0
Venango	41531	POLK BOROUGH	CHURCH STREET	OVER LITTLE SANDY CREEK	41531	7405	8801	4000	41.366	-79.9288	1	Township	2,000	0
Venango	42432	ROCKLAND TOWNSHIP	T-512,SLAB FURNACE	OVER ALLEG.VALLEY TRAIL	42432	7217	512	58	41.3153	-79.7278	1	County	1,996	0
Venango	44349	FRENCH CREEK TOWNSHIP	T-334,WIPPER WILL	OVER LITTLE SANDY CK	44349	7207	334	4002	41.3865	-79.9476	1	Township	2,007	0
Venango	44350	CHERRYTREE TOWNSHIP	T-649,FAIRVIEW RD	BR. PRATHER CK	44350	7203	649	4001	41.5892	-79.7505	1	Township	2,007	0
Venango	45195	CHERRYTREE TWP	T-520, BARKER RD	PRATHER CREEK	45195	7203	520	4003	41.5858	-79.7336	1	Township	2,008	0
Venango	45678	ALLEGHENY TWP	T-632	TR.PITHOLE CK.	45678	7201	632	4001	41.5561	-79.5522	1	Township	1,933	0
Venango	46041	8.2 mi. North of Emlenton	Geiring Road	Mill Run	46041	7216	552	4007	41.2467	-79.6897	1	Township	2,010	0
Venango	46993	3.5 miles northof SR 8	Martin Hill Run	Over Two Mile Run	46993	7409	529	4002	41.4416	-79.7755	1	Township	2,011	0
Venango	47236	ROCKLAND TWP	DOTTER ROAD	TRIB TO ALLEGHENY	47236	7217	522	1510	41.2	-79.7058	1	County	1,959	0
Venango	47433	CORNPLANTER TWP	WAITZ ROAD	CHERRYTREE RUN	47433	7205	564	4009	41.4808	-79.6961	1	Township	2,012	0
Venango	47451	MINERAL TOWNSHIP	GADSBY ROAD	S. SANDY CREEK	47451	7210	383	4002	41.2903	-79.9736	1	Township	2,012	0
Venango	47618	1.4 M S OF SR 428 & 27	ACEL ROAD	PRATHER RUN	47618	7214	647	4006	41.5875	-79.7994	1	Township	2,012	0
Venango	47619	1.8 M NE OF ROUSEVILLE	T-569	CHERRY RUN	47619	7205	569	4002	41.4911	-79.6583	1	Township	2,011	0

Complete List of Local Bridges

Venango County Bridges Page 4 of 4

COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUFFRATE	ADT	DETOUR LENGTH (miles)
Venango	33916	PRESIDENT TOWNSHIP	T-537	OVER STEWARTS RUN	26	377	1	Steel, I beams	OPEN			71.9	100	12
Venango	33917	RICHLAND TOWNSHIP	T-357,PORTERFIELD	OVER MILL CREEK	29	490	1	Masonry, Arch deck - closed	OPEN	SD	FO	51.3	100	4
Venango	33919	RICHLAND TOWNSHIP	T-377,VALLEY CHURC	OVER PINE RUN	24	415	1	Concr. encased steel, I beams	POSTED	SD	FO	39.6	18	3
Venango	33921	RICHLAND TOWNSHIP	T-381,STARR ROAD	OVER PINE RUN	22	436	1	Steel, I beams	POSTED			74.5	50	2
Venango	33923	RICHLAND TOWNSHIP	T-590,MCFEETERS RD	OVER PINE RUN	23	460	1	Steel, I beams	POSTED		FO	48.4	12	3
Venango	33924	RICHLAND TOWNSHIP	T-592,CENTER ROAD	OVER PINE RUN	22	436	1	Steel, I beams	POSTED			78.1	50	2
Venango	33925	ROCKLAND TOWNSHIP	T-381,MYERS MILLS	OVER PINE RUN	48	936	1	Steel, I beams	OPEN		FO	94.5	100	5
Venango	33926	ROCKLAND TOWNSHIP	T-512,SLAB FURNACE	OVER EAST SANDY CREEK	96	2736	1	P/S, Box beam - adj	OPEN			96.9	100	11
Venango	33928	ROCKLAND TOWNSHIP	T-522,DOTTER ROAD	OVER MILL CREEK	62	998	1	Steel, Truss - thru	POSTED	SD	FO	29.1	75	8
Venango	33930	SCRUBGRASS TOWNSHIP	T-462,SMITH ROAD	OVER LT.SCRUBGTASS CK. B	46	750	1	Steel, I beams	POSTED			65.9	25	99
Venango	33931	1 MI. E. OF OLD RT. 8	T-370,FISHERMANS	OVER VICTORY RUN	85	1301	2	Steel, I-riveted beams	OPEN	SD	FO	38	50	8
Venango	33932	STATE STREET,OIL CITY	T-372,WOLLEN MILLS	ALLEG.R.,WNY&PA,PARK LT	1,014.00	57494	5	Steel, I-welded beams	OPEN		FO	63.9	17000	2
Venango	33933	COOPERSTOWN BOROUGH	T-372,WOLLEN MILLS	OVER LAKE CREEK	73	1168	1	Steel, Truss - thru	POSTED	SD	FO	26.6	550	4
Venango	33935	POLK BOROUGH	MC CLELLAND AVENUE	OVER LITTLE SANDY CREEK	74	1776	1	Steel, I beams	POSTED	SD		66.3	50	99
Venango	33936	UTICA BOROUGH	T-356,GRANT STREET	OVER MILL CREEK	62	930	1	Steel, I beams	OPEN		FO	77.9	100	10
Venango	33939	SUGAR CREEK BOROUGH	T-460,SHAFFER R.RD	OVER BRANNOM RUN	23	674	1	Steel, I beams	OPEN		FO	89.6	300	8
Venango	33944	SUGAR CREEK BOROUGH	T-551,SLEEPY HLL.W.	OVER SUGAR CREEK BR.	25	395	1	Steel, I beams	OPEN	SD	FO	56.3	120	5
Venango	33945	SUGAR CREEK BOROUGH	T-685,SUGAR CK.DR.	OVER SUGAR CREEK	160	4528	2	P/S, Box beam - adj	OPEN			82.8	500	9
Venango	33946	SUGAR CREEK BOROUGH	T-685,SUGAR CK.DR.	OVER SUGARCREEK TRIB.	28	728	1	Concrete(in place), T-beams	OPEN	SD		54.6	500	5
Venango	40774	FRENCH CREEK TOWNSHIP	T-318,NOGEL ROAD	OVER LITTLE SANDY CREEK	48	1358	1	P/S, Box beam - adj	OPEN	SD	FO	54	50	3
Venango	41531	POLK BOROUGH	CHURCH STREET	OVER LITTLE SANDY CREEK	90	2925	1	P/S, Box beam - adj	OPEN			85.5	250	99
Venango	42432	ROCKLAND TOWNSHIP	T-512,SLAB FURNACE	OVER ALLEG.VALLEY TRAIL	123	3149	1	Steel, I-welded beams	OPEN			97.9	100	11
Venango	44349	FRENCH CREEK TOWNSHIP	T-334,WIPPER WILL	OVER LITTLE SANDY CK	52	1529	1	P/S, Box beam - adj	OPEN			98	100	0
Venango	44350	CHERRYTREE TOWNSHIP	T-649,FAIRVIEW RD	BR. PRATHER CK	39	1018	1	Steel, I beams	OPEN			87.7	120	0
Venango	45195	CHERRYTREE TWP	T-520, BARKER RD	PRATHER CREEK	39	991	1	Steel, I beams	OPEN			83.9	120	0
Venango	45678	ALLEGHENY TWP	T-632	TR.PITHOLE CK.	21	443	1	Steel, I beams	POSTED	SD	FO	37.9	14	0
Venango	46041	8.2 mi. North of Emlenton	Geiring Road	Mill Run	45	1233	1	P/S, Box beam - (spread)	OPEN			100	50	0
Venango	46993	3.5 miles northof SR 8	Martin Hill Run	Over Two Mile Run	64	1600	1	P/S, Box beam - (spread)	OPEN			98.9	100	0
Venango	47236	ROCKLAND TWP	DOTTER ROAD	TRIB TO ALLEGHENY	27	432	1	Steel, I beams	POSTED	SD	FO	25.5	100	0
Venango	47433	CORNPLANTER TWP	WAITZ ROAD	CHERRYTREE RUN	71	1370	1	P/S, Box beam - (spread)	OPEN			-1	0	0
Venango	47451	MINERAL TOWNSHIP	GADSBY ROAD	S. SANDY CREEK	42	773	1	P/S, Box beam - (spread)	OPEN			100	50	0
Venango	47618	1.4 M S OF SR 428 & 27	ACEL ROAD	PRATHER RUN	25	526	1	Steel, I beams	OPEN			-1	0	0
Venango	47619	1.8 M NE OF ROUSEVILLE	T-569	CHERRY RUN	53	1028	3	P/S, Box beam - adj	OPEN			-1	0	0

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Warren	34227	BROKENSTRAW TOWNSHIP	T-444,IRVINE RUN R	OVER IRVINE RUN	34227	7201	444	4001	41.8551	-79.2704	1	Township	1,970	1,999
Warren	34228	BROKENSTRAW TOWNSHIP	T-444,IRVINE RUN R	OVER IRVINE RUN	34228	7201	444	4002	41.8592	-79.2712	1	Township	1,965	0
Warren	34229	COLUMBUS TOWNSHIP	T-340,LOCEY ROAD	OVER HARE CREEK	34229	7203	340	4001	41.9083	-79.5883	1	Township	1,997	0
Warren	34231	COLUMBUS TOWNSHIP	T-350,ALDERBOTTOM	OVER TAMARACK SWAMP TRIB	34231	7203	350	4006	41.9967	-79.56	1	Township	1,940	0
Warren	34232	COLUMBUS TOWNSHIP	T-350,ALDERBOTTOM	OVER TAMARACK SWAMP TRIB	34232	7203	350	4008	41.9983	-79.5533	1	Township	1,940	0
Warren	34234	COLUMBUS TOWNSHIP	T-515,WAY ROAD	OVER DAMON RUN	34234	7203	515	4002	41.8936	-79.5352	1	Township	1,940	2,010
Warren	34235	COLUMBUS TOWNSHIP	T-521,BAKER HILL R	OVER BROKENSTRAW CREEK	34235	7203	521	4000	41.9247	-79.5917	1	Township	1,992	0
Warren	34238	COLUMBUS TOWNSHIP	T-639,STEWART ROAD	OVER WINTON RUN	34238	7203	639	4011	41.906	-79.6091	1	Township	1,953	0
Warren	34239	CONEWANGO TOWNSHIP	T-451,RIVER ROAD	OVER MORSE RUN	34239	7204	451	4002	41.8391	-79.2158	1	Township	1,970	0
Warren	34242	ELDRED TOWNSHIP	T-316,WHALEY HILL	OVER CALDWELL CREEK	34242	7207	316	4002	41.7233	-79.5433	1	Township	1,940	2,009
Warren	34243	ELDRED TOWNSHIP	T-355,CHAPEL HILL	OVER CALDWELL CREEK	34243	7207	355	4001	41.71	-79.545	1	Township	1,910	1,998
Warren	34244	ELDRED TOWNSHIP	T-355,GOSSVILLE RD	OVER CALDWELL CREEK W.BR	34244	7207	355	4004	41.7217	-79.58	1	Township	1,995	0
Warren	34245	FARMINGTON TOWNSHIP	T-508,LUDWICK RD.	OVER Kiantone Creek	34245	7209	508	4002	41.9807	-79.2169	1	Township	1,940	1,982
Warren	34246	FARMINGTON TOWNSHIP	T-589,OLD ST.LINE	OVER Kiantone Creek	34246	7209	589	4003	41.991	-79.1899	1	Township	1,979	0
Warren	34248	FREEHOLD TOWNSHIP	T-539,VALASTIAK RD	OVER LT.BROKENSTRAW CK.	34248	7210	539	4002	41.97	-79.4633	1	Township	1,993	0
Warren	34250	FREEHOLD TOWNSHIP	T-547,WESTERN ROAD	OVER LT. BROKENSTRAW CK.	34250	7210	547	4005	41.9146	-79.4273	1	Township	1,990	0
Warren	34252	FREEHOLD TOWNSHIP	T-551,KIDDER ROAD	OVER LT.BROKENSTRAW CK.	34252	7210	551	4004	41.9267	-79.4367	1	Township	1,986	0
Warren	34253	FREEHOLD TOWNSHIP	T-561,NORTH ROAD	OVER LT. BROKENSTRAW CK.	34253	7210	561	4001	41.995	-79.4533	1	Township	1,920	0
Warren	34254	MEAD TOWNSHIP	T-389,SCHOOL ST.	OVER SIX MILE RUN	34254	7214	389	4001	41.75	-79.0667	1	Township	1,971	1,999
Warren	34255	PINE GROVE TOWNSHIP	T-300,GOULD TOWN RD	OVER STOREHOUSE RUN	34255	7215	300	4007	41.995	-79.0933	1	Township	1,989	0
Warren	34257	PINE GROVE TOWNSHIP	T-562,BIG FOUR RD.	OVER ACKLEY RUN	34257	7215	562	4004	41.9333	-79.1267	1	Township	1,990	0
Warren	34258	PINE GROVE TOWNSHIP	T-568,EGYPT HOLLOW	OVER ACKLEY RUN	34258	7215	568	4001	41.9311	-79.111	1	Township	1,970	0
Warren	34259	PINE GROVE TOWNSHIP	T-568,EGYPT HOLLOW	OVER WIDDELFIELD RUN	34259	7215	568	4002	41.9295	-79.1112	1	Township	1,955	0
Warren	34261	PINE GROVE TOWNSHIP	T-621,REYNOLDS RD	OVER REYNOLD RUN	34261	7215	621	4003	41.9409	-79.0687	1	Township	1,960	1,999
Warren	34263	PITTSFIELD TOWNSHIP	T-374,ANDREWS RUN	OVER ANDREWS RUN	34263	7216	374	4005	41.8117	-79.3867	1	Township	1,950	0
Warren	34264	PITTSFIELD TOWNSHIP	T-378,TRAILER PARK	OVER GARLAND RUN	34264	7216	378	4009	41.8136	-79.4484	1	Township	1,986	0
Warren	34265	PITTSFIELD TOWNSHIP	T-388,MILES RUN RD	OVER MILES RUN	34265	7216	388	4002	41.8817	-79.42	1	Township	1,950	1,960
Warren	34266	PITTSFIELD TOWNSHIP	T-395,MARSHEANN HL	OVER GARLAND RUN	34266	7216	395	4008	41.8079	-79.4548	1	Township	1,940	0
Warren	34267	PITTSFIELD TOWNSHIP	T-397	OVER GARLAND RUN	34267	7216	397	4006	41.7967	-79.46	1	Township	1,950	0
Warren	34268	PITTSFIELD TOWNSHIP	T-435,PULFER HILL	OVER ANDREWS RUN	34268	7216	435	4004	41.8278	-79.3794	1	Township	1,963	2,011
Warren	34269	PITTSFIELD TOWNSHIP	T-441,BARTON ROAD	OVER LT.BROKENSTRAW CK.	34269	7216	441	4003	41.8433	-79.39	1	Township	1,981	0
Warren	34270	PITTSFIELD TOWNSHIP	T-463,NELSON HILL	OVER LT BROKENSTRAW CK.	34270	7216	463	4007	41.8983	-79.4183	1	Township	1,920	0

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUFFRATE	ADT	DETOUR LENGTH (miles)
Warren	34227	BROKENSTRAW TOWNSHIP	T-444,IRVINE RUN R	OVER IRVINE RUN	24	456	1	Steel, I beams	OPEN	SD	FO	66.9	75	10
Warren	34228	BROKENSTRAW TOWNSHIP	T-444,IRVINE RUN R	OVER IRVINE RUN	30	546	1	Concrete(in place), Slab (solid)	CLOSED	SD	FO	27.8	100	14
Warren	34229	COLUMBUS TOWNSHIP	T-340,LOCEY ROAD	OVER HARE CREEK	41	1685	2	Concrete(in place), Box culvert	OPEN			85.5	125	3
Warren	34231	COLUMBUS TOWNSHIP	T-350,ALDERBOTTOM	OVER TAMARACK SWAMP TRIB	20	282	1	Steel, I beams	POSTED	SD		26.3	50	8
Warren	34232	COLUMBUS TOWNSHIP	T-350,ALDERBOTTOM	OVER TAMARACK SWAMP TRIB	21	309	1	Steel, I beams	POSTED	SD		35.9	50	8
Warren	34234	COLUMBUS TOWNSHIP	T-515,WAY ROAD	OVER DAMON RUN	60	768	1	Steel, I beams	TEMP	SD	FO	32.9	100	6
Warren	34235	COLUMBUS TOWNSHIP	T-521,BAKER HILL R	OVER BROKENSTRAW CREEK	100	2580	1	P/S, Box beam - adj	OPEN			48.7	100	4
Warren	34238	COLUMBUS TOWNSHIP	T-639,STEWART ROAD	OVER WINTON RUN	29	435	1	Steel, Arch culvert	POSTED	SD	FO	40.9	75	4
Warren	34239	CONEWANGO TOWNSHIP	T-451,RIVER ROAD	OVER MORSE RUN	34	850	1	Steel, I beams	POSTED	SD	FO	37.9	100	2
Warren	34242	ELDRED TOWNSHIP	T-316,WHALEY HILL	OVER CALDWELL CREEK	35	490	1	Steel, I beams	OPEN			82	100	2
Warren	34243	ELDRED TOWNSHIP	T-355,CHAPEL HILL	OVER CALDWELL CREEK	43	628	3	Steel, I beams	POSTED	SD		33.2	11	3
Warren	34244	ELDRED TOWNSHIP	T-355,GOSSVILLE RD	OVER CALDWELL CREEK W.BR	29	580	3	Steel, Pipe culvert	OPEN	SD		73	75	3
Warren	34245	FARMINGTON TOWNSHIP	T-508,LUDWICK RD.	OVER Kiantone Creek	27	432	1	Steel, I beams	POSTED	SD		47.8	100	5
Warren	34246	FARMINGTON TOWNSHIP	T-589,OLD ST.LINE	OVER Kiantone Creek	48	1056	1	Steel, I beams	OPEN	SD		66.9	100	6
Warren	34248	FREEHOLD TOWNSHIP	T-539,VALASTIAK RD	OVER LT.BROKENSTRAW CK.	67	1628	1	P/S, Box beam - adj	OPEN			74.7	150	5
Warren	34250	FREEHOLD TOWNSHIP	T-547,WESTERN ROAD	OVER LT. BROKENSTRAW CK.	65	1677	1	P/S, Box beam - adj	OPEN			42.9	150	3
Warren	34252	FREEHOLD TOWNSHIP	T-551,KIDDER ROAD	OVER LT.BROKENSTRAW CK.	91	1656	1	Steel, I beams	OPEN	SD	FO	64.3	150	4
Warren	34253	FREEHOLD TOWNSHIP	T-561,NORTH ROAD	OVER LT. BROKENSTRAW CK.	48	672	1	Steel, Truss - thru	CLOSED	SD	FO	22.5	100	6
Warren	34254	MEAD TOWNSHIP	T-389,SCHOOL ST.	OVER SIX MILE RUN	43	787	1	Steel, I beams	OPEN		FO	65	300	1
Warren	34255	PINE GROVE TOWNSHIP	T-300,GOULDTOWN RD	OVER STOREHOUSE RUN	26	741	1	P/S, Box beam - adj	OPEN			81.2	140	5
Warren	34257	PINE GROVE TOWNSHIP	T-562,BIG FOUR RD.	OVER ACKLEY RUN	50	1415	1	P/S, Box beam - adj	OPEN			97.9	100	8
Warren	34258	PINE GROVE TOWNSHIP	T-568,EGYPT HOLLOW	OVER ACKLEY RUN	45	981	1	Steel, I beams	POSTED	SD	FO	33.7	100	9
Warren	34259	PINE GROVE TOWNSHIP	T-568,EGYPT HOLLOW	OVER WIDDELFIELD RUN	24	533	2	Steel, I beams	POSTED	SD	FO	38.8	100	9
Warren	34261	PINE GROVE TOWNSHIP	T-621,REYNOLDS RD	OVER REYNOLD RUN	31	623	1	Steel, I beams	OPEN	SD		69.9	65	8
Warren	34263	PITTSFIELD TOWNSHIP	T-374,ANDREWS RUN	OVER ANDREWS RUN	34	612	1	Concr. encased steel, I beams	OPEN			72	75	99
Warren	34264	PITTSFIELD TOWNSHIP	T-378,TRAILER PARK	OVER GARLAND RUN	37	666	1	Steel, I beams	POSTED	SD	FO	61.7	150	1
Warren	34265	PITTSFIELD TOWNSHIP	T-388,MILES RUN RD	OVER MILES RUN	43	980	1	Steel, I beams	POSTED	SD		42.1	85	6
Warren	34266	PITTSFIELD TOWNSHIP	T-395,MARSHEANN HL	OVER GARLAND RUN	41	738	1	Concr. encased steel, I beams	OPEN	SD		60.3	100	6
Warren	34267	PITTSFIELD TOWNSHIP	T-397	OVER GARLAND RUN	31	496	1	Steel, I beams	POSTED	SD		45.3	20	99
Warren	34268	PITTSFIELD TOWNSHIP	T-435,PULFER HILL	OVER ANDREWS RUN	32	509	1	Steel, I beams	OPEN			72	100	99
Warren	34269	PITTSFIELD TOWNSHIP	T-441,BARTON ROAD	OVER LT.BROKENSTRAW CK.	91	2157	1	Steel, I beams	OPEN	SD		54	150	99
Warren	34270	PITTSFIELD TOWNSHIP	T-463,NELSON HILL	OVER LT BROKENSTRAW CK.	71	1136	1	Steel, I beams	OPEN			68.7	100	6

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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	STATE ROUTE NUMBER	SEGMENT NUMBER	SEG_NO	OFFSET	DEC_LAT	DEC_LONG	DISTRICT	OWNER	YEARBUILT	YEARRECON
Warren	34271	SHEFFIELD TOWNSHIP	T-526,HENERY MILL	OVER S.BR.TIONESTA CREEK	34271	7218	526	4001	41.6633	-79.025	1	Township	1,974	0
Warren	34272	IN VILLAGE OF SHEFFIELD	T-540,CENTER ST	OVER TWO MILE RUN	34272	7218	532	4002	41.7018	-79.0313	1	Township	1,948	1,992
Warren	34273	SHEFFIELD TOWNSHIP	T-546	OVER FOUR MILE RUN	34273	7218	546	4003	41.725	-79.0548	1	Township	1,970	2,008
Warren	34274	SOUTHWEST TOWNSHIP	T-304,FLAT ROAD	OVER W.BR.OF CALDWELL	34274	7219	304	4001	41.695	-79.5717	1	Township	2,010	0
Warren	34275	SOUTHWEST TOWNSHIP	T-306,MOUNT HOPE R	OVER PINE CREEK	34275	7219	306	4003	41.63	-79.59	1	Township	1,907	1,999
Warren	34277	SOUTHWEST TOWNSHIP	T-311,SUTTON ROAD	OVER CALDWELL CREEK	34277	7219	311	4002	41.6683	-79.5983	1	Township	2,010	0
Warren	34279	SPRING CREEK TOWNSHIP	T-322,HYDE ROAD	OVER SPRING CREEK	34279	7220	322	4003	41.8117	-79.5883	1	Township	1,996	0
Warren	34282	SPRING CREEK TOWNSHIP	T-425,KNAPP ROAD	OVER SPRING CREEK	34282	7220	425	4002	41.8255	-79.5878	1	Township	2,012	1,993
Warren	34283	SPRING CREEK TOWNSHIP	T-429,JACKSON HILL	OVER SPRING CREEK	34283	7220	429	4001	41.855	-79.5417	1	Township	1,910	2,004
Warren	34285	SUGAR GROVE TOWNSHIP	T-458,JONES HILL R	OVER STILLWATER CREEK	34285	7221	458	4003	41.977	-79.3315	1	Township	1,963	0
Warren	34286	SUGAR GROVE TOWNSHIP	T-460,STODDARD RD.	OVER STILLWATER CREEK	34286	7221	460	4007	41.9967	-79.315	1	Township	1,992	0
Warren	34288	SUGAR GROVE TOWNSHIP	T-539	OVER STILLWATER CK. TR.	34288	7221	539	4008	41.9849	-79.3782	1	Township	1,989	0
Warren	34293	FIRST ST. TIDIOUTE BORO.	FIRST STREET	OVER MC GUIRE RUN	34293	7404	8802	4001	41.685	-79.4033	1	Township	1,950	2,005
Warren	34294	GRANT ST. TIDIOUTE BORO.	GRANT STREET	OVER TIDIOUTE CREEK	34294	7404	8803	4002	41.6883	-79.4117	1	Township	1,940	1,992
Warren	34297	CITY OF WARREN	3RD AVENUE	CONEWANGO CREEK	34297	7405	8806	4001	41.8473	-79.1415	1	City	1,983	0
Warren	34298	YOUNGSVILLE BOROUGH	MILL STREET	OVER INDIAN CAMP RUN	34298	7406	8801	4001	41.8567	-79.3167	1	City	1,993	0
Warren	40132	SUGAR GROVE TOWNSHIP	T-539,STILLWATER R	OVER STILLWATER CREEK	40132	7221	539	4001	41.9833	-79.365	1	Township	1,997	0
Warren	40134	SUGARGROVE BOROUGH	SCHOOL STREET	OVER STILLWATER CREEK	40134	7403	8804	4001	41.98	-79.3417	1	Township	1,997	0
Warren	40277	ELK TOWNSHIP	T-621,REYNOLDS RD.	OVER REYNOLDS RUN	40277	7208	621	4001	41.9467	-79.0483	1	Township	1,990	0
Warren	40687	ELDRED TOWNSHIP	T-377,EUREKA ROAD	OVER CALDWELL CREEK W.BR	40687	7207	377	4005	41.7583	-79.5683	1	Township	1,997	0
Warren	40693	SUGAR GROVE TOWNSHIP	T-569,FIDDLER HILL	OVER MATTHEWS RUN	40693	7221	569	4006	41.9067	-79.3433	1	Township	1,998	0
Warren	40808	MEAD TOWNSHIP	T-444,FARNSWORTH R	OVER TIONESTA CK. W. BR.	40808	7214	444	4002	41.7717	-79.1014	1	Township	1,975	0
Warren	41314	SPRING CREEK TOWNSHIP	T-322,HYDE ROAD	OVER SPRING CREEK E.BR.	41314	7220	322	4004	41.8067	-79.5867	1	Township	2,001	0
Warren	41318	SPRING CREEK TOWNSHIP	T-326,JINKS ROAD	OVER WHITNEY RUN	41318	7220	326	4006	41.8472	-79.5889	1	Township	1,926	0
Warren	41323	SUGAR GROVE TOWNSHIP	T-452,DEER RUN RD	OVER PATCHEN RUN	41323	7221	452	4004	41.9444	-79.3639	1	Township	2,000	0
Warren	41324	SUGAR GROVE TOWNSHIP	T-579,PATCHEN ROAD	OVER PATCHEN RUN	41324	7221	579	4005	41.9294	-79.3447	1	Township	2,000	0
Warren	42134	TRIUMPH TOWNSHIP	T-362,YUNGSVILLE RD	OVER TIDIOUTE CREEK	42134	7222	362	4001	41.7128	-79.4525	1	Township	1,925	0
Warren	42286	PINE GROVE TOWNSHIP	LR 61081,JAMESTOWN	OVER JOHNNY RUN	42286	7215	8807	4005	41.9431	-79.1348	1	Township	2,002	0
Warren	42311	2.0MI.FROM S.R.1012	T-570/EGYPT HOL.RD	WIDDLEFIELD RUN	42311	7211	570	4001	41.9092	-79.0894	1	Township	1,958	0
Warren	42871	CITY OF WARREN	SR 3005 HICKORY ST	ALLEGHENY RIVER	42871	7405	8806	4003	41.8433	-79.15	1	City	2,005	0
Warren	43552	CONEWANGO TOWNSHIP	T-634,S.STATE ST.	OVER JACKSON RUN	43552	7204	634	4003	41.8649	-79.1536	1	Township	2,006	0
Warren	44258	CITY OF WARREN	5TH AVENUE	CONEWANGO CREEK	44258	7405	8801	4002	41.8502	-79.1424	1	City	2,006	0
Warren	44936	0.2 MI SOUTH OF SR69	T-465 CREMERY RD.	JACKSON RUN	44936	7204	465	4001	41.9028	-79.2392	1	Township	2,008	0

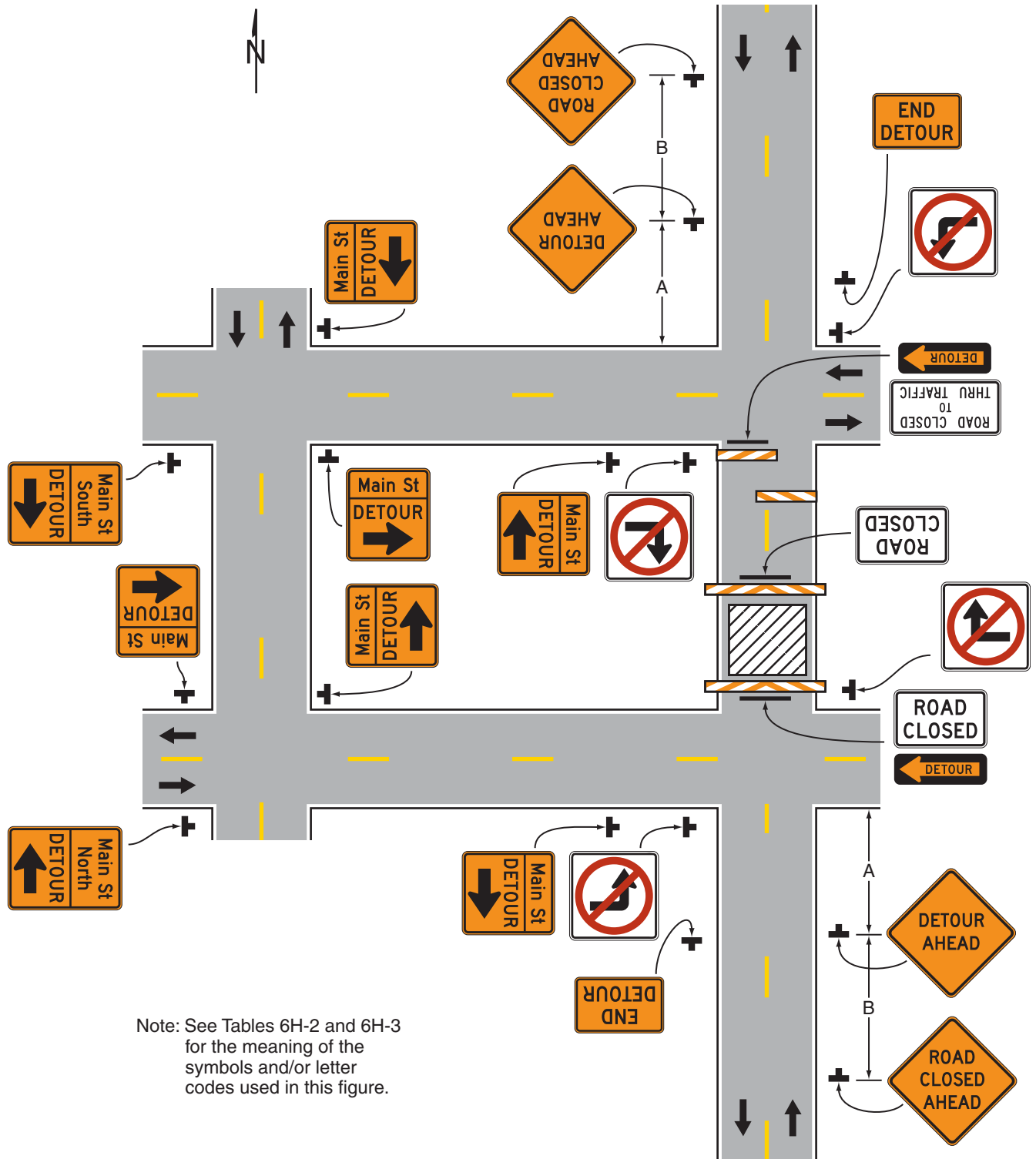
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COUNTY	BRKEY	LOCATION	FACILITY	FEATURE INTERSECTED	LENGTH (ft)	DECKAREA (SF)	# OF SPANS	TYPE	POST STATUS	SD	FO	SUFFRATE	ADT	DETOUR LENGTH (miles)
Warren	34271	SHEFFIELD TOWNSHIP	T-526,HENERY MILL	OVER S.BR.TIONESTA CREEK	78	2067	3	Timber, Solid timber beams	POSTED	SD	FO	39.5	300	1
Warren	34272	IN VILLAGE OF SHEFFIELD	T-540,CENTER ST	OVER TWO MILE RUN	56	1355	1	Steel, Girder riv/thru	CLOSED	SD	FO	17.5	750	1
Warren	34273	SHEFFIELD TOWNSHIP	T-546	OVER FOUR MILE RUN	51	719	1	Steel, I beams	POSTED			56.9	50	1
Warren	34274	SOUTHWEST TOWNSHIP	T-304,FLAT ROAD	OVER W.BR.OF CALDWELL	69	1277	1	P/S, Box beam - (spread)	OPEN			88.7	40	7
Warren	34275	SOUTHWEST TOWNSHIP	T-306,MOUNT HOPE R	OVER PINE CREEK	53	949	1	Steel, I beams	OPEN	SD		59.6	50	5
Warren	34277	SOUTHWEST TOWNSHIP	T-311,SUTTON ROAD	OVER CALDWELL CREEK	79	1975	1	P/S, Box beam - (spread)	OPEN			99	50	9
Warren	34279	SPRING CREEK TOWNSHIP	T-322,HYDE ROAD	OVER SPRING CREEK	61	1098	1	Steel, I beams	OPEN			71.4	100	6
Warren	34282	SPRING CREEK TOWNSHIP	T-425,KNAPP ROAD	OVER SPRING CREEK	74	1628	1	P/S, Box beam - (spread)	POSTED			52.4	125	2
Warren	34283	SPRING CREEK TOWNSHIP	T-429,JACKSON HILL	OVER SPRING CREEK	50	705	1	Steel, I beams	OPEN			75.5	50	6
Warren	34285	SUGAR GROVE TOWNSHIP	T-458,JONES HILL R	OVER STILLWATER CREEK	28	560	1	Concr. encased steel, I beams	POSTED	SD	FO	38.8	150	8
Warren	34286	SUGAR GROVE TOWNSHIP	T-460,STODDARD RD.	OVER STILLWATER CREEK	25	500	3	Steel, Pipe culvert	POSTED	SD	FO	45.1	15	4
Warren	34288	SUGAR GROVE TOWNSHIP	T-539	OVER STILLWATER CK. TR.	21	510	1	Steel, I beams	POSTED			79.9	100	3
Warren	34293	FIRST ST. TIDIOUTE BORO.	FIRST STREET	OVER MC GUIRE RUN	24	504	1	Concrete(in place), Slab (solid)	OPEN		FO	65.1	450	1
Warren	34294	GRANT ST. TIDIOUTE BORO.	GRANT STREET	OVER TIDIOUTE CREEK	37	599	1	Steel, I beams	OPEN		FO	73.3	250	2
Warren	34297	CITY OF WARREN	3RD AVENUE	CONEWANGO CREEK	425	17170	5	P/S, Box beam - adj	OPEN			82.6	4000	2
Warren	34298	YOUNGSVILLE BOROUGH	MILL STREET	OVER INDIAN CAMP RUN	24	960	1	Concrete(precast), Box culvert	OPEN			98.9	350	5
Warren	40132	SUGAR GROVE TOWNSHIP	T-539,STILLWATER R	OVER STILLWATER CREEK	37	1055	1	P/S, Box beam - adj	OPEN			100	100	5
Warren	40134	SUGARGROVE BOROUGH	SCHOOL STREET	OVER STILLWATER CREEK	51	1443	1	P/S, Box beam - adj	OPEN			75.7	400	1
Warren	40277	ELK TOWNSHIP	T-621,REYNOLDS RD.	OVER REYNOLDS RUN	36	720	1	Timber, Solid timber beams	POSTED	SD	FO	36.9	65	6
Warren	40687	ELDRED TOWNSHIP	T-377,EUREKA ROAD	OVER CALDWELL CREEK W.BR	29	551	3	Steel, Pipe culvert	OPEN	SD		73	70	3
Warren	40693	SUGAR GROVE TOWNSHIP	T-569,FIDDLER HILL	OVER MATTHEWS RUN	22	440	2	Steel, Pipe culvert	OPEN			89	80	3
Warren	40808	MEAD TOWNSHIP	T-444,FARNSWORTH R	OVER TIONESTA CK. W. BR.	89	2163	2	P/S, Box beam - adj	OPEN			86.9	100	15
Warren	41314	SPRING CREEK TOWNSHIP	T-322,HYDE ROAD	OVER SPRING CREEK E.BR.	36	396	3	Steel, Pipe culvert	OPEN			100	100	5
Warren	41318	SPRING CREEK TOWNSHIP	T-326,JINKS ROAD	OVER WHITNEY RUN	25	363	1	Steel, I beams	POSTED	SD		40.2	97	2
Warren	41323	SUGAR GROVE TOWNSHIP	T-452,DEER RUN RD	OVER PATCHEN RUN	24	576	3	Steel, Pipe culvert	OPEN			100	100	5
Warren	41324	SUGAR GROVE TOWNSHIP	T-579,PATCHEN ROAD	OVER PATCHEN RUN	35	700	3	Steel, Pipe culvert	OPEN			100	100	5
Warren	42134	TRIUMPH TOWNSHIP	T-362,YUNGSVLLE RD	OVER TIDIOUTE CREEK	32	592	1	Concrete(in place), T-beams	POSTED	SD	FO	58.3	100	6
Warren	42286	PINE GROVE TOWNSHIP	LR 61081,JAMESTOWN	OVER JOHNNY RUN	25	888	1	Concrete(precast), Box culvert	OPEN			98.8	700	4
Warren	42311	2.0MI.FROM S.R.1012	T-570,EGYPT HOL.RD	WIDDLEFIELD RUN	25	400	1	Steel, Arch culvert	OPEN			99	50	11
Warren	42871	CITY OF WARREN	SR 3005 HICKORY ST	ALLEGHENY RIVER	516	32405	4	P/S, Box beam - adj	OPEN			88.4	1455	3
Warren	43552	CONEWANGO TOWNSHIP	T-634,S.STATE ST.	OVER JACKSON RUN	54	1706	1	P/S, Box beam - (spread)	OPEN			98.9	500	2
Warren	44258	CITY OF WARREN	5TH AVENUE	CONEWANGO CREEK	356	13350	3	P/S, Box beam - adj	OPEN			92.3	2000	0
Warren	44936	0.2 MI SOUTH OF SR69	T-465 CREMERY RD.	JACKSON RUN	74	2176	1	P/S, Box beam - (spread)	OPEN			98.9	200	0

Appendix 3 Figure 6H-20 MUCTD Detour for a Closed Street

Figure 6H-20. Detour for a Closed Street (TA-20)



Typical Application 20

Appendix 4 Figure 5 AASHTO Green Book Turnaround Types

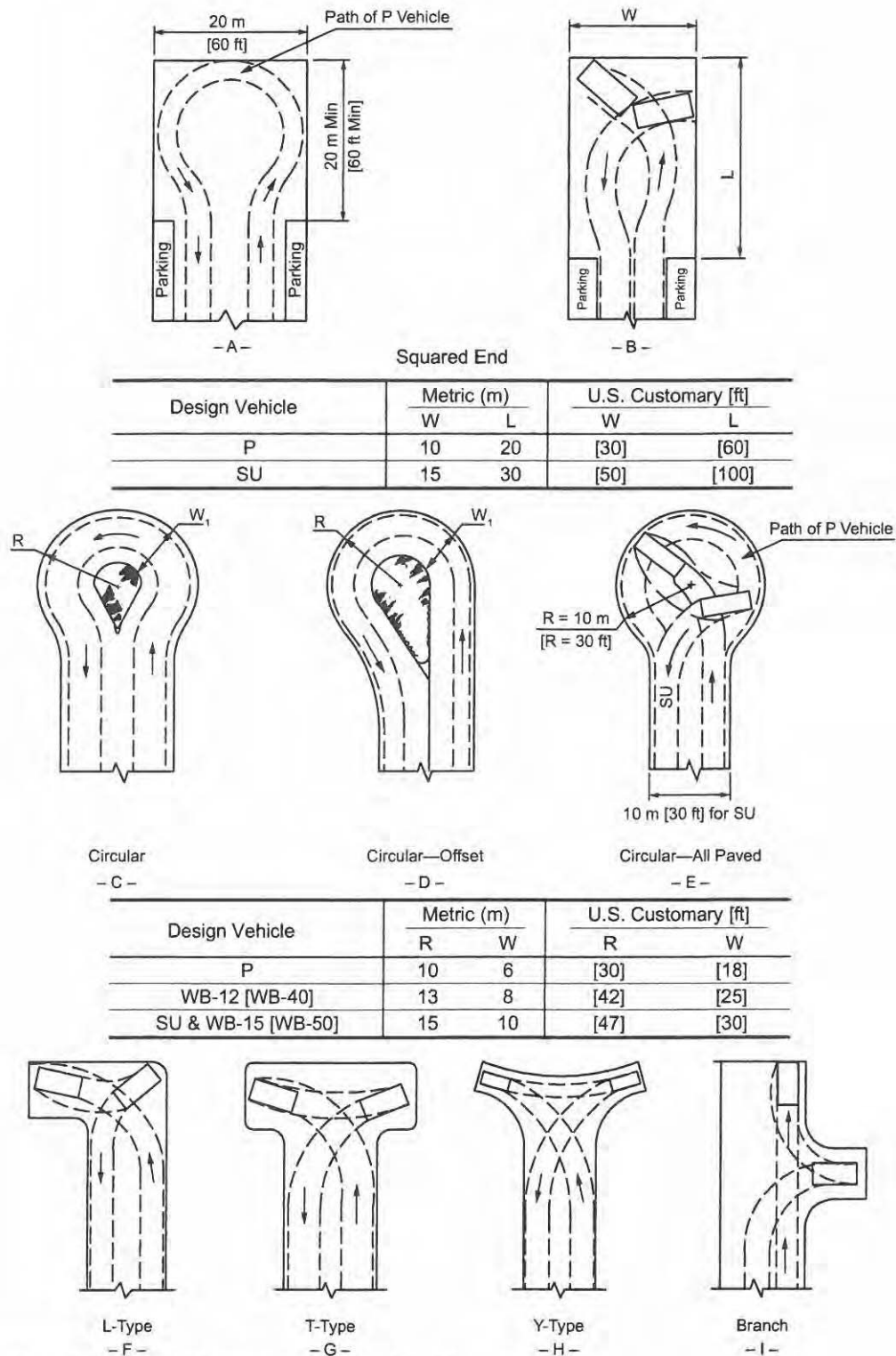


Figure 5-1. Types of Cul-de-Sacs and Dead-End Streets

Appendix 5 Public Informational Meetings-Press Release

January 05, 2016

FOR IMMEDIATE RELEASE

NORTHWEST RURAL PLANNING ORGANIZATION COUNTY AND MUNICIPAL REDUNDANT BRIDGE INVENTORY

(Meadville, PA) Quality Engineering Solutions, Inc. completed a bridge inventory study for structures on the local route system within Clarion, Crawford, Forest, Venango, and Warren counties. The objective of this study was to identify bridges as potential candidates for closure and removal. These bridges were evaluated in terms of traffic, detour length, structural and functional condition, among other factors, to determine if they can be considered as potential candidates. The study identified a total of 35 bridges as potential candidates for closure and removal for the five counties. The number of bridges identified for each county is as follows: 10 for Clarion County, 14 for Crawford County, 6 for Venango County, and 5 for Warren County.

The information collected in this study will assist the counties and municipalities in making decisions on the repair or replacement of those identified bridges when prioritizing future projects.

The list of identified potential candidates resulting from this study does not constitute a final verdict about the removal, rehabilitation, or replacement of these identified bridges or any of the local bridges within the five counties included in the study.

As part of the scope of this project administered by the Northwest Pennsylvania Regional Planning and Development Commission, three regional public meetings will be held to present the results of this study. These meetings will be held at the following locations and dates:

Location	Date
Vernon Township Building 16678 McMath Ave Meadville, PA 16335	January 20, 2016 5:00 PM
Drake Well Museum 202 Museum Ln Titusville, PA 16354	January 21, 2016 5:00 PM
Main Street Center 516 Main Street Clarion, PA 16214	January 27, 2016 6:00 PM

Any questions or concerns can be addressed to:

Luis Ramirez

QES Project Manager

Email: lr Ramirez@gespavements.com

Phone: (814) 382-0373

Sue Smith

Regional Planning Manager

Northwest Commission

Email: sues@northwestpa.org

Phone: (814) 677-4800 x131

Appendix 6 Public Informational Meetings-Presentation Slides



Northwest RPO County & Municipal Redundant Bridge Inventory

PUBLIC MEETING INFORMATIONAL PRESENTATION

Meadville, PA

01/20/16



OUTLINE

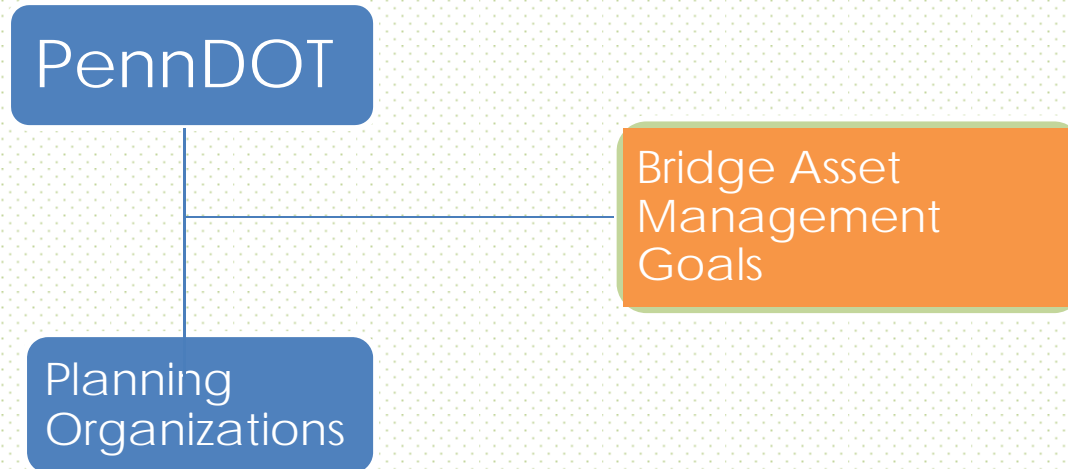
- Introduction and Project Objectives
- Terminology
- Bridge Screening Process
- Results
- Mitigation Strategies
- Comments and Questions



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INTRODUCTION AND STUDY PURPOSE



County	# of Local Bridges
Clarion	65
Crawford	129
Forest	13
Venango	66
Warren	65
Total	338

The purpose of this study is to **identify local bridges** that are **operationally redundant** as **potential candidates** for closure and removal. This identification will assist counties and municipalities in making decisions on the repair or replacement of those identified bridges when prioritizing future projects.

TERMINOLOGY

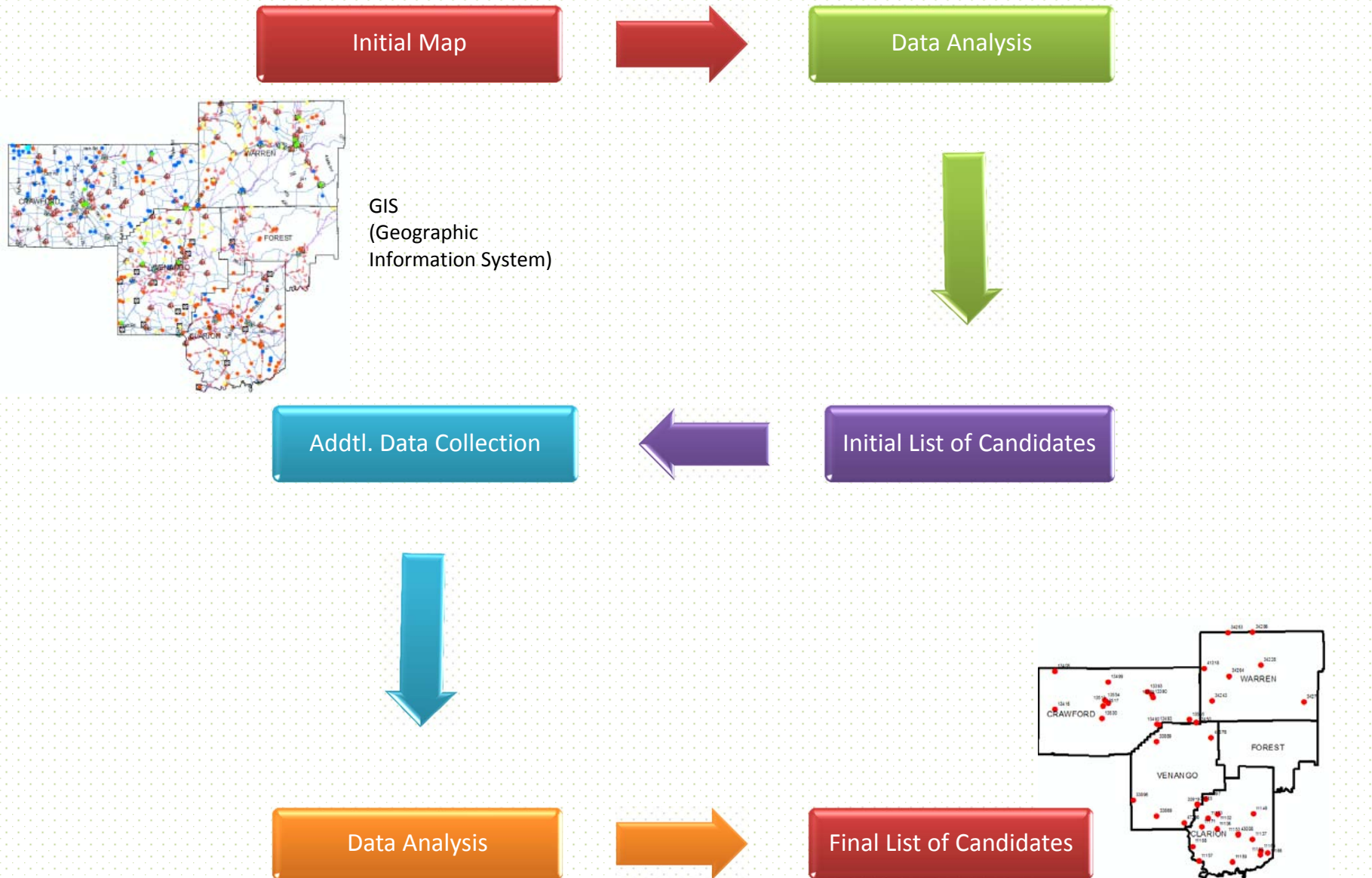
Structurally Deficient (SD) Bridge: There are elements of the bridge that need to be monitored and/or repaired. It does not imply that the bridge is likely to collapse or that it is unsafe. It means the bridge must be monitored, inspected, and maintained.



Functionally Obsolete (FO) Bridge: Bridges that don't have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand.



Bridge Screening Process



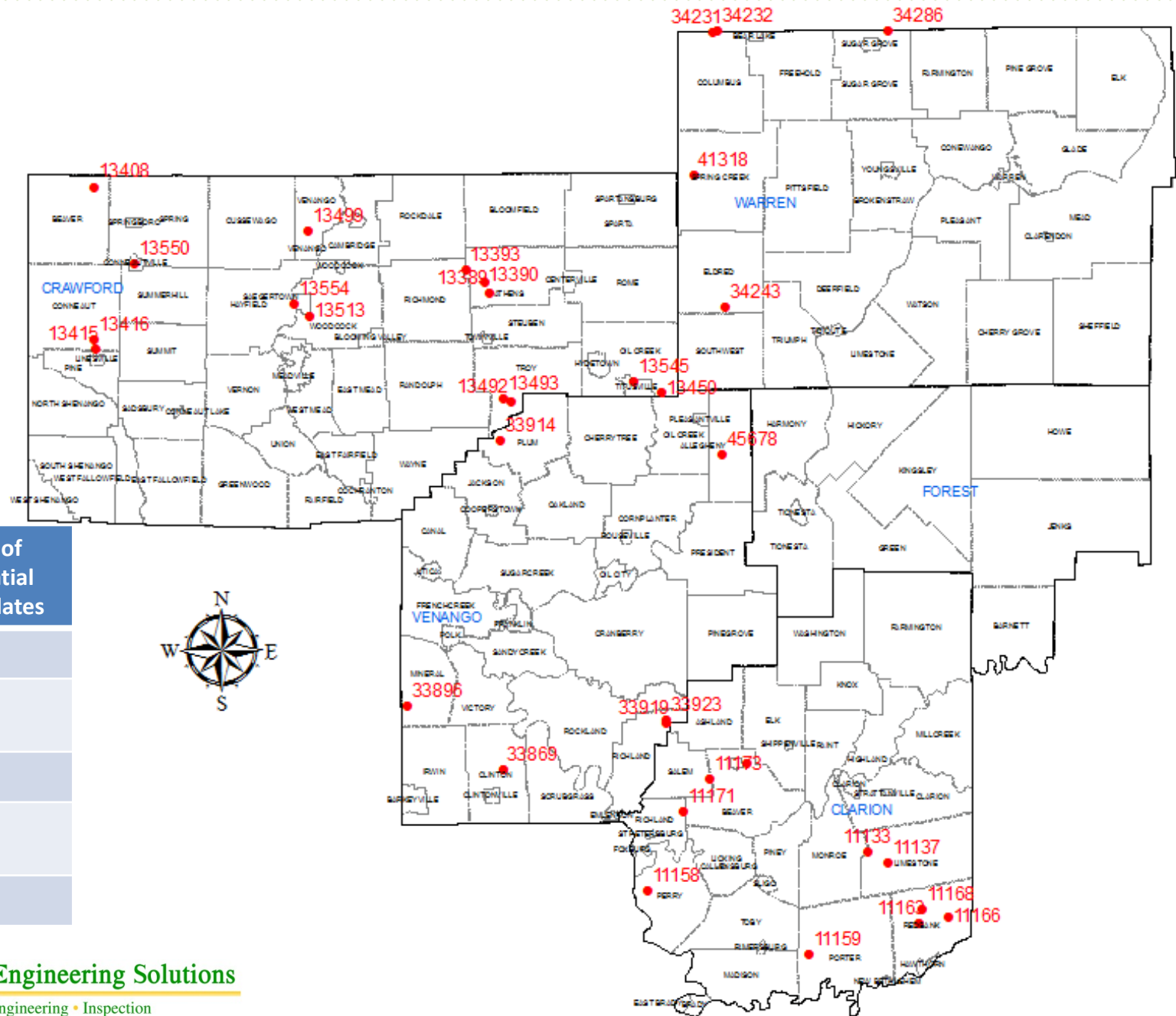
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Final Candidates Selection Criteria



Results (Final List of Potential Candidates)



County	No. of Potential Candidates
Clarion	10
Crawford	14
Forest	0
Venango	6
Warren	5



Results (Final List of Potential Candidates)

County	Bridge Key	Location	Facility	Feature Intersected	Remarks
Clarion	11102	Twp #12 - Shettler	T-327 Shettler Rd	Canoe Creek	SD, FO, Posted, DL=1.15 mi, SB, Owner: Township
	11133	Twp #26 - Curll	T-444 Curll Rd	Piney Creek	FO, Posted, DL=2.5mi Owner: Township
	11137	Twp #30 - Limestone	T-685 Limestone Road	Piney Creek	FO, Posted, DA, DL=0.37mi, Owner: Township
	11158	Twp #200 - Hagentown	T-647 Hagentown Rd	Trib. To Allegheny River	SD, Posted, DL=0.44mi, SB, Owner: Township
	11159	Twp #36 - Sled	T-462 Sled Road	Fiddlers Run	FO, Posted, DL=3.2mi, SB, Owner: Township
	11163	Twp #49 - Windmill	T-504 Windmill Rd	Town Run	SD, FO, Posted, DL=1.94mi, DRPC, SB, Owner: Township
	11166	.2 mi.W.Of Rt 28	Twp Rd 513	Pine Creek	FO, Posted,DL=1.92mi, SB Owner: Township
	11168	S.Int.Of T-840 & T-510	Twp Rd 840	Town Run	FO, Posted, DL=3mi, DRPC, SB, Owner: Township
	11171	E.Of Jct.Rt.338 & T382	Twp Rd 382	Turkey Run	SD, FO, Posted, DL=3.6mi, SB, Owner: Township
	11173	Twp #15 - Mehrten	T-345 Mehrten Rd	Beaver Creek	SD, FO, Closed, Owner: Township



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Results (Final List of Potential Candidates)

County	Bridge Key	Location	Facility	Feature Intersected	Remarks
Crawford	13389	1.4 mi. SE. L.Cooley	T-709,Three Brg.Rd	Over E.Br.Muddy Creek	FO, Posted, DL=4.52mi, SB, Owner: Township
	13390	.5 mi SE SR0077athens Twp	T-743,Hamilton Rd.	Over Muddy Creek	SD, FO, Closed, Owner: County
	13393	.5 mi..NW SR0077 Athens Twp	T-776,Eddie Road	Over Muddy Creek	SD, FO, Closed, Owner: County
	13408	3.2 mi.NE. Beaver Center	T-885,Jerusalam Rd	Over Stone Run	FO, Posted, DL=1.72mi, FOBD, Owner: County
	13415	Conneaut Township	T-346,Russell Road	Over Linesville Creek	SD, FO, Posted, DL=3mi, Owner: Township
	13416	.7 mi.W.SR-4003 On T-605	T-605, West Road	Over Linesville Creek	SD, FO, Closed and Partially Removed, Owner: Township
	13450	1mi East of Titusville	T-993,Messerall Rd	Over Pine Creek	SD, FO, Closed and Partially Removed, Owner: County
	13492	6 mi.S.of Townville	T-477,Jay Road	Over Sugar Creek E.Br.	FO, Posted, DL=4.51 mi, SB, Owner: Township
	13493	6 mi.S.Townville	T-477,Jay Road	Over Sugar Creek	FO, Posted, DL=1.66mi, SB, Owner: Township
	13499	1.5 mi. NW Venango	T-807,Kightlinger	Over Coulter Run	SD, FO, Posted, DL=0.68mi, SB, Owner: Township
	13513	Just South Of Saegertown	T-600,Craig Road	Over Woodcock Creek	SD, FO, Posted, DA, DL=1.82mi, Owner: County
	13545	City Of Titusville	Linden Place	Over Church Run	SD, FO, Posted, DL=0.18mi, Owner: City
	13550	Conneautville-Center St.	Center Street	Over Conneaut Creek	SD, FO, Posted, DL= 0.56mi, Owner: County
	13554	Just Outside Saegertown	T-962,Jordan Drive	Over French Creek	SD, FO, Posted, DL=1.21mi, Owner: County



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Results (Final List of Potential Candidates)

County	Bridge Key	Location	Facility	Feature Intersected	Remarks
Venango	33869	Clinton Township	T-380,Phipps Road	Over Scrubgrass Ck. Br.	SD, FO, Posted,DL=3.17mi, Owner: Township
	33896	Mineral Township	T-300,Henderson St	Over South Sandy Creek	SD, FO, Posted,DL=4.3mi, Owner:Township
	33914	Plum Township	T-627,Williams Rd	Over Sugar Creek Mid.Br.	SD, FO, Posted,DL=2.8mi, Owner:Township
	33919	Richland Township	T-377,Valley Churc	Over Pine Run	SD, FO, Posted, DL=2.51mi, SB, Owner:Township
	33923	Richland Township	T-590,Mcfeeters Rd	Over Pine Run	FO, Posted, DL=3.13mi, Owner:Township
	45678	Allegheny Twp	T-632	Tr.Pithole Ck.	SD, FO, Posted,DL=1.85mi, Owner:Township



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Results (Final List of Potential Candidates)

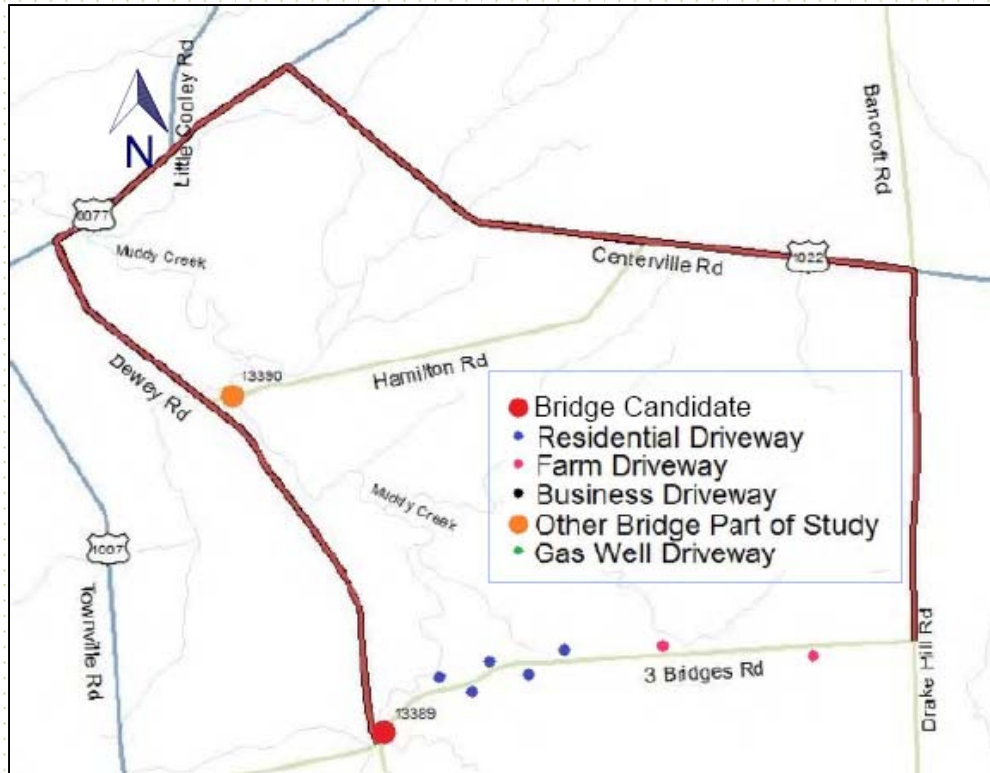
County	Bridge Key	Location	Facility	Feature Intersected	Remarks
Warren	34231	Columbus Township	T-350,Alterbottom	Over Tamarack Swamp Trib	SD, Closed, No Plans to Reopen it. Owner:Township
	34232	Columbus Township	T-350,Alderbottom	Over Tamarack Swamp Trib	SD, Closed, No Plans to Reopen it. Owner:Township
	34243	Eldred Township	T-355,Chapel Hill	Over Caldwell Creek	SD, FO, Posted, DL= 2.0mi, Owner:Township
	34286	Sugar Grove Township	T-460,Stoddard Rd.	Over Stillwater Creek	Box Culvert, SD, FO, Posted,DA, DL=3.2mi, Owner:Township
	41318	Spring Creek Township	T-326,Jinks Road	Over Whitney Run	SD, FO, Posted, DL=3.77mi, Owner:Township



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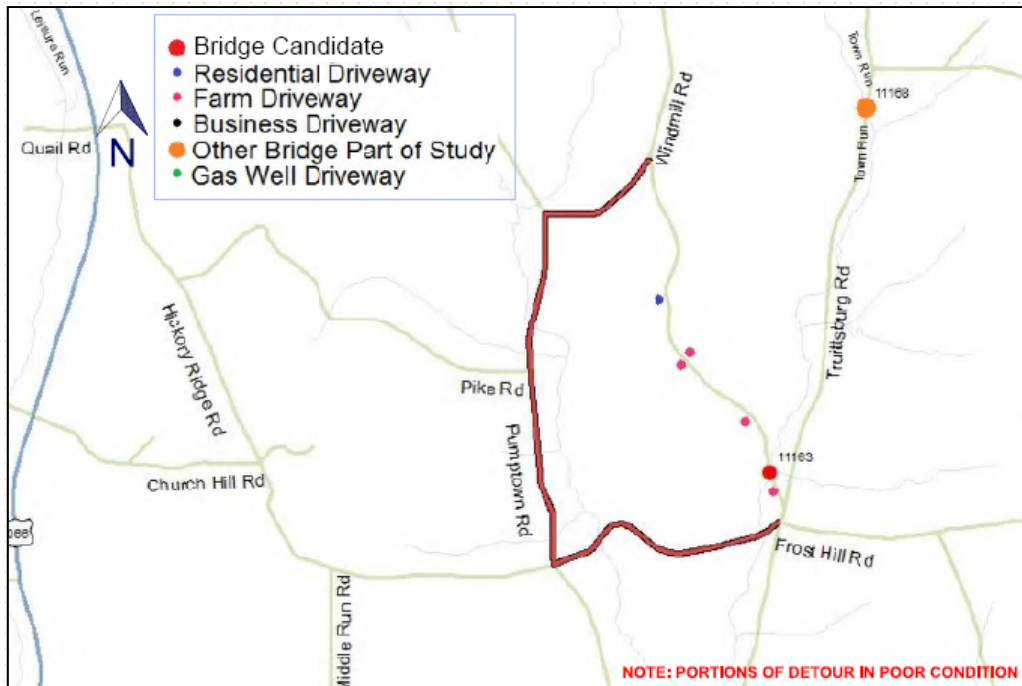
Mitigation Strategies



Bridge Key	13389
County	Crawford
Location	1.4 MI. SE. L.COOLEY
Facility	T-709,THREE BRG.RD
Feature Intersected	OVER E.BR.MUDDY CREEK
Length (ft)	40
SD	No
FO	Yes
Detour Length (mi)	4.52
Cost of Bridge Replacement (\$)	\$ 624,000



Bridge Key	13415
County	Crawford
Location	CONNEAUT TOWNSHIP
Facility	T-346, RUSSELL ROAD
Feature Intersected	OVER LINESVILLE CREEK
Length (ft)	33
SD	Yes
FO	Yes
Detour Length (mi)	3
Cost of Bridge Replacement (\$)	\$ 514,800



Bridge Key	11163
County	Clarion
Location	TWP #49 - WINDMILL
Facility	T-504 WINDMILL RD
Feature Intersected	TOWN RUN
Length (ft)	26
SD	Yes
FO	Yes
Detour Length (mi)	1.94
Cost of Bridge Replacement (\$)	\$ 405,600

Questions?



iramirez@qespavements.com

Appendix 7 Public Involvement Survey

**NORTHWEST RPO BRIDGE INVENTORY STUDY
PUBLIC PARTICIPATION SURVEY**

Your concerns and ideas are important for the successful completion of this study. Please answer the following questions:

1. Do you have concerns or questions regarding any of the bridges selected as potential candidates for closure and removal in this study? If so, please indicate the bridge(s) location and describe your concerns.

2. Do you have any concerns regarding the traffic detour route identified in the study or the turnaround options proposed for this/these specific bridge(s)?

3. How often do you drive across the bridge(s) you are concerned about (e.g., several times per day, once a day, twice a day, once a week, etc.)?

4. Would you like to be contacted by a local official regarding your response to this survey?

Yes ____ No ____

Name: _____

Address: _____

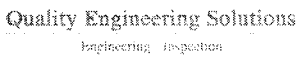
City, State, Zip Code: _____

Telephone: _____ Email: _____

Please return this survey to any of the QES representatives

You can return it via mail to the following address: Quality Engineering Solutions
P.O. Box 3004
Conneaut Lake, PA 16316

Appendix 8 Public Informational Meetings Sign-in Sheets



01/20/16 Meadville, PA

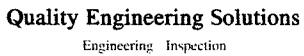
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Quality Engineering Solutions
Engineering Inspection

**NORTHWEST RPO BRIDGE INVENTORY STUDY
PUBLIC INFORMATIONAL MEETING SIGN-IN SHEET
01/21/16 Titusville, PA**

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01/27/16 Clarion, PA

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