ROADWAY EVALUATION

East Union Township SCHUYLKILL COUNTY, PENNSYLVANIA

PREPARED FOR

East Union Township Supervisors 10 EAST ELM STREET SHEPPTON, PA 18248

April 2021

PROJECT NO. 31195.02



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PURPOSE OF REPORT

The purpose of this report is to provide the East Union Township Supervisors with an assessment of roadways in the Township and to identify and prioritize recommended roadway improvements. This report also provides costs and potential funding sources for the repairs.

BACKGROUND

As a result of discussions with representatives of East Union Township Supervisors, it was determined that roadways listed below within East Union needed evaluation. These roadways consist of mostly dirt and minimally paved roads that need improvements to improve rideability and to reduce yearly maintenance costs. All roads were visited to evaluate existing conditions and identify potential pavement repairs.

ROADWAY EVALUATION

The sections of roadways that were evaluated and our observations of each are as follows. An overview of the indicated roads and photos of existing conditions are included in the appendix.

- 1. <u>West Cranberry Alley from Centre St. to Hemlock Springs Dr.</u> (1120 LF) This roadway is a dirt road in need of a durable pavement surface to improve rideability and reduce yearly maintenance costs.
- 2. <u>East Cranberry Alley from Centre St. to Shepp St.</u> (250 LF) This roadway is a dirt road in need of a durable pavement surface to improve rideability and reduce yearly maintenance costs.
- 3. <u>Girard Manor Rd. from Phineyville Rd. to Pole Rd.</u> (8750 LF) This roadway is a dirt road in need of a durable pavement surface to improve rideability and reduce yearly maintenance costs. Swale improvements are also needed.
- 4. <u>Pumping Station Rd. from Main Blvd. (SR 924) to Pole Road</u> (2400 LF) This roadway is a dirt road in need of a durable pavement surface to improve rideability and reduce yearly maintenance costs.
- 5. <u>Dombrowski Lane from Main Blvd. (SR 924) to Foose Lane</u> (924 LF) This roadway is a dirt road in need of a durable pavement surface to improve rideability and reduce yearly maintenance costs.
- Trailer Rd. from Bridge to Main Blvd. (SR 924) (1850 LF) This roadway is a dirt road in need of a durable pavement surface to improve rideability and reduce yearly maintenance costs.
- 7. <u>Foose Lane from Bridge to Paved Section</u> (1500 LF) This roadway is a dirt road in need of a durable pavement surface to improve rideability and reduce yearly maintenance costs.
- 8. <u>Old Mill Road from Bridge to Green Mountain Road</u> (1030 LF) This roadway is a dirt road in need of a durable pavement surface to improve rideability and reduce yearly maintenance costs.



9. <u>Swanks Grove Road</u> (1100 LF) - This roadway is a dirt road in need of a durable pavement surface to improve rideability and reduce yearly maintenance costs.

ROADWAY EVALUATION CONCLUSION

The observations in this report provide comprehensive overview of the conditions of the indicated roadways within East Union. Recommendations are intended to provide solutions to many recurring problems along the roadway. This report can be utilized for East Union Township Supervisors' decision-making process on roadway improvements.

ROAD PROJECT RECOMMENDATIONS

The roadways indicated below have been prioritized by their need for improvements. Suggested recommendations are as follows:

- 1. West Cranberry Lane Surface Prep to fill potholes with modified. FB-Modified Overlay and Double Asphalt Seal Coat over the roadway.
- 2. **East Cranberry Lane** Surface Prep to fill potholes with modified. FB-Modified Overlay and Double Asphalt Seal Coat over the roadway.
- 3. **Girard Manor Road** FB-Modified Leveling, FB-Modified Overlay, and Double Asphalt Seal Coat over the roadway. Scattered Subgrade Repairs (12 #3's and 4" 2A Modified) and #4s in Shoulders as specified.
- 4. **Pumping Station Road** Paver Placed 2A Modified, AEP Prime Coat Application, FB-Modified Overlay, and Double Asphalt Seal Coat over specified section. Scattered Subgrade Repairs (12 #3's and 4" 2A Modified) and #4s in Shoulders as specified.
- 5. **Dombrowski Lane** Surface Prep to apply fine grading and scrape soft areas. Paver Placed 2A Modified, AEP Prime Coat Application, FB-Modified Overlay, and Double Asphalt Seal Coat over the roadway. Scattered Subgrade Repairs (12 #3's) as specified.
- 6. **Trailer Road** Surface Prep to apply fine grading and scrape soft areas. Paver Placed 2A Modified, AEP Prime Coat Application, FB-Modified Overlay, and Double Asphalt Seal Coat over the roadway.
- Foose Lane Surface Prep to apply fine grading and scrape soft areas. Paver Placed 2A Modified, AEP Prime Coat Application, FB-Modified Overlay, and Double Asphalt Seal Coat over the roadway.
- 8. **Old Mill Road** Paver Placed 2A Modified, AEP Prime Coat Application, FB-Modified Overlay, and Double Asphalt Seal Coat over the roadway.
- 9. **Swanks Grove Road** Paver Placed 2A Modified, AEP Prime Coat Application, FB-Modified Overlay, and Double Asphalt Seal Coat over the roadway.

Proposed roadway improvement repair areas shown on aerials and cost estimates are included in the appendix. A Pennsylvania One-Call ticket will be completed to identify any utilities in the evaluated locations once the Supervisors authorize the project. Responses from utility companies and a notification letter will be sent to all utilities included in the appendix.



UTILITY CUT AND EXCAVATION ORDINANCE RECOMMENDATIONS

Utilities will be contacted upon approval of the project by East Union Township Supervisors.

POTENTIAL FUNDING SOURCES

Due to the scope of work described in the project recommendations, it is anticipated that outside sources of funding will be required. These may include:

- CFA Multimodal Transportation Fund These funds are administered by the PA-DCED. The grant award ranges from \$100,000 to \$3 million. A 30% local match is typically required, but this requirement has been waived through the end of 2020. Applications are due between March 1st and July 31st of each year, but due to COVID-19, the application period for 2020 has been extended to September 30th.
- 2. **PennDOT Multimodal Transportation Fund** These funds are administered separately from the CFA MTF by PennDOT. The grant award ranges from \$100,000 to \$3 million. A 30% local match is required and may include general funds, liquid fuels tax, Act 13 impact fees, and other statutorily allocated municipal fees/taxes. Applications are usually due in October of each year, but due to COVID-19, the deadline is uncertain.
- 3. **Transportation Alternatives** This program provides funding for sidewalks, walking lanes, streetscapes, and other projects defined as transportation alternatives. It is not applicable to roadway construction. Grant awards range from \$50,000 to \$1 million. Application deadline varies from year to year.
- 4. **Other Small Programs** Various annual programs announced each year. These funding sources provide small awards and are typically not practical for large scale projects.
- 5. **Stimulus Funds** From time to time, stimulus funding is allocated at the state and federal levels. None of these funds are currently available.
- 6. **PIB Loan** Pennsylvania Infrastructure Bank Loan. This is a low interest loan that can be paid back over a period of 10 years with Liquid Fuels funds.



COST ESTIMATE SUMMARY

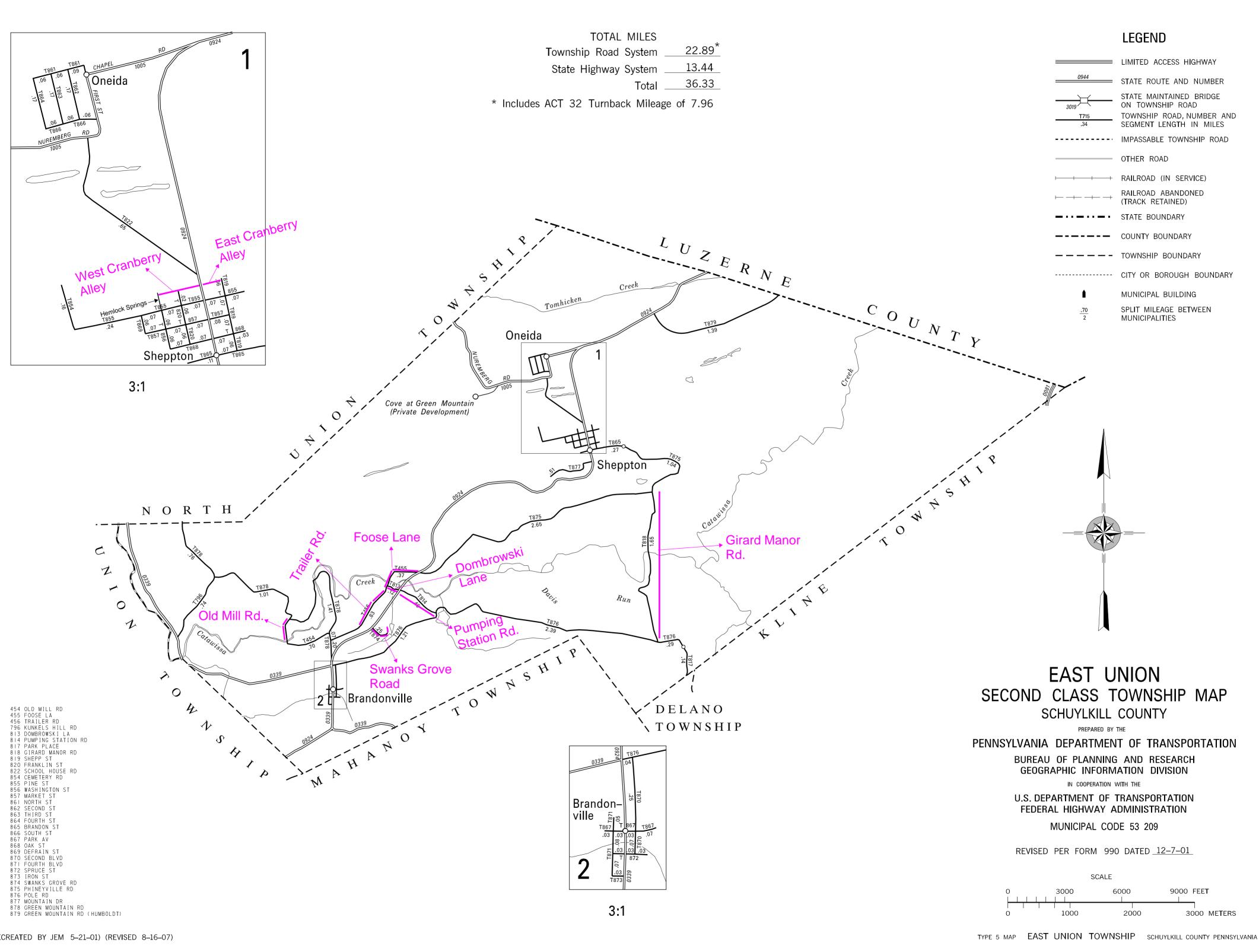
The following table provides an overview of the total cost for each roadway. Detailed cost breakdowns are provided in the appendix.

SUMMARY OF OV	ERALL COSTS
West Cranberry Lane	\$37,000
East Cranberry Lane	\$12,000
Girard Manor Rd.	\$455,000
Pumping Station Rd.	\$107,000
Dombrowski Lane	\$41,000
Trailer Rd.	\$86,000
Foose Lane	\$71,000
Old Mill Rd.	\$70,000
Swanks Grove Rd.	\$49,000
TOTAL	\$928,000



OVERVIEW OF ROADWAYS





(RECREATED BY JEM 5-21-01) (REVISED 8-16-07)

PHOTOS OF EXISTING CONDITIONS





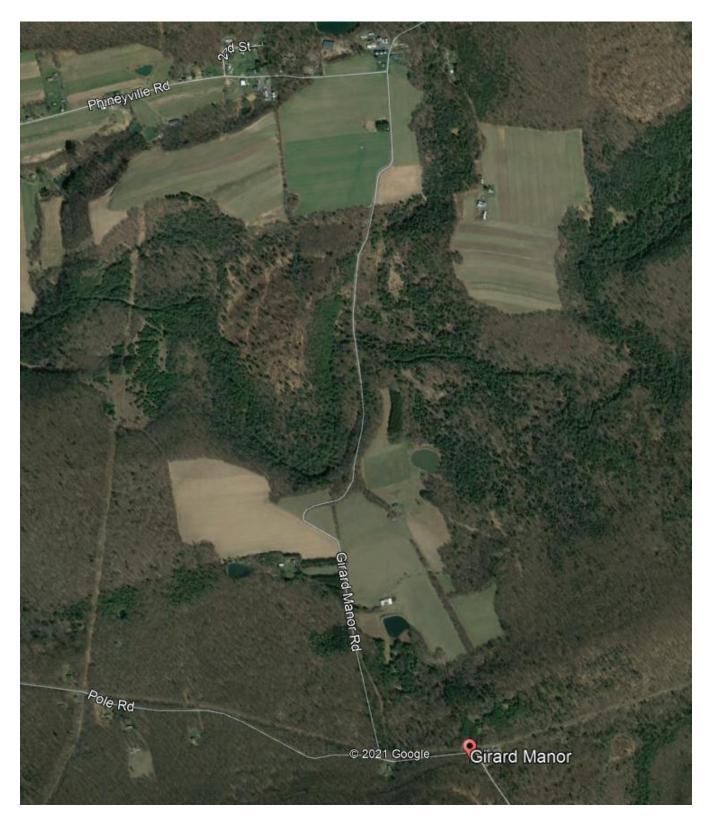
West Cranberry Lane





East Cranberry Lane





Girard Manor Rd





Pumping Station Rd

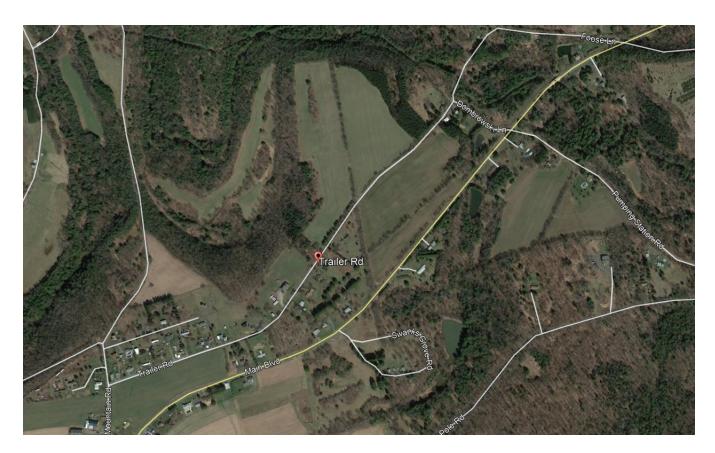




Dombrowski Lane



West Hazleton Borough | Roadway Evaluation Report | 11



Trailer Rd





Foose Rd





Old Mill Rd



West Hazleton Borough | Roadway Evaluation Report | 14

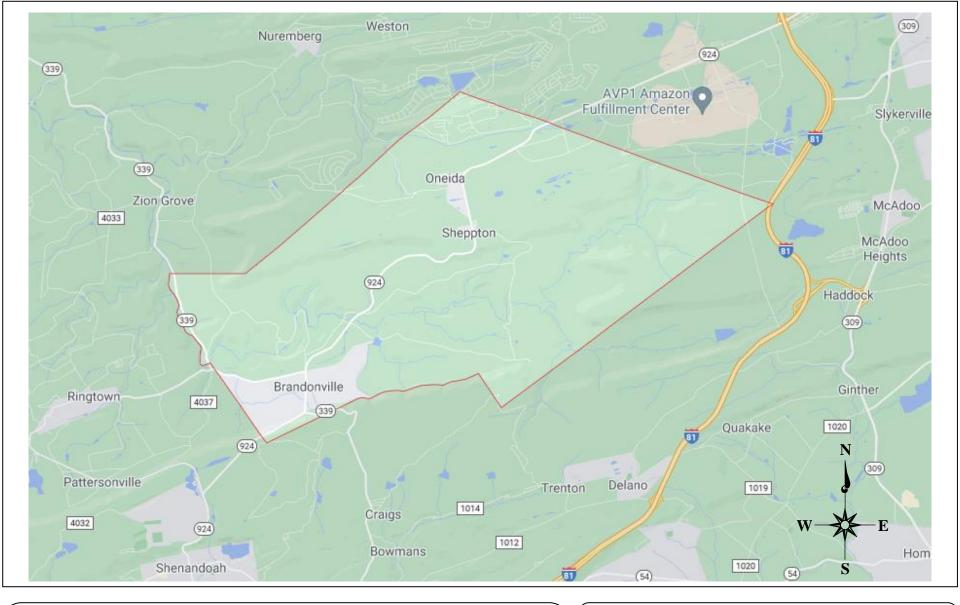


Swanks Grove Rd



REPAIR MAPS





East Union Township Road Evaluation 2021 East Union Township, Schuylkill County, Pennsylvania

FIGURE 1

Alfred Benesch & Company

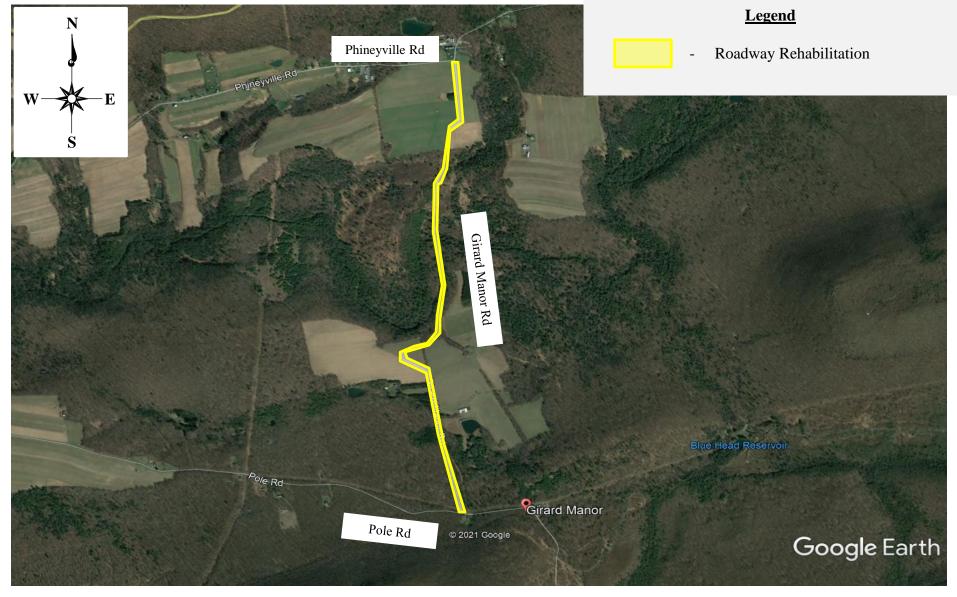
Wilkes Barre, Pennsylvania (570) 914-9030



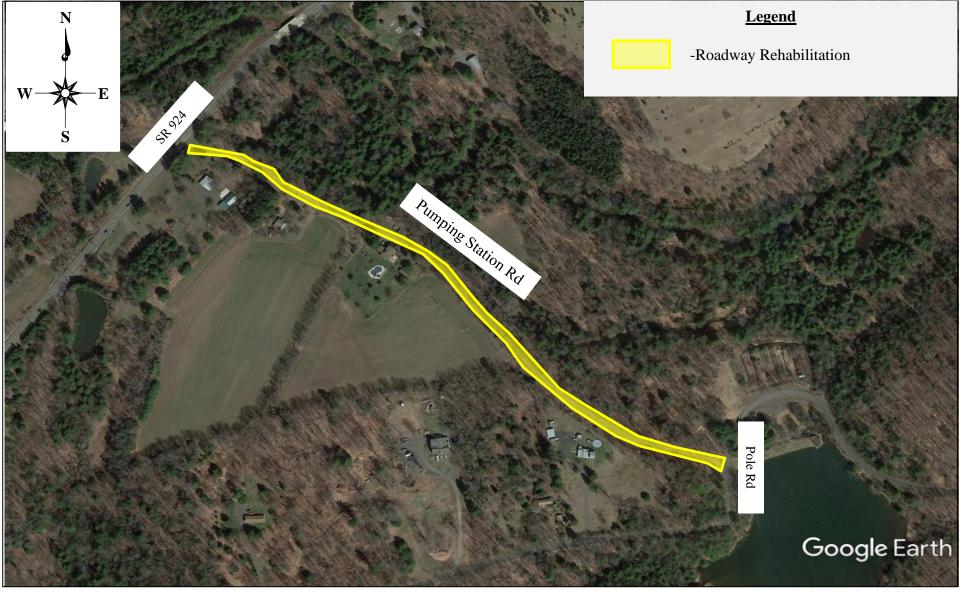




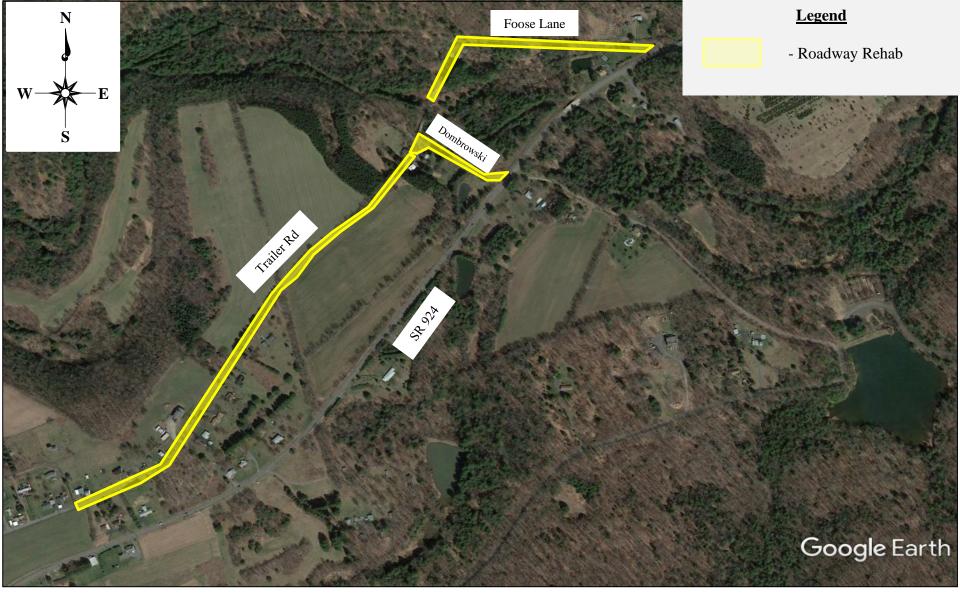




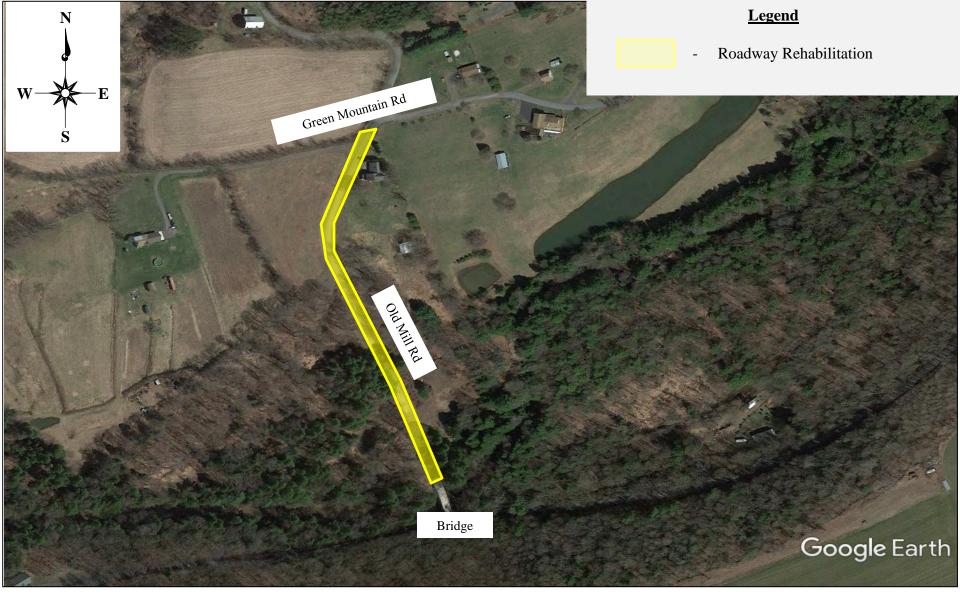




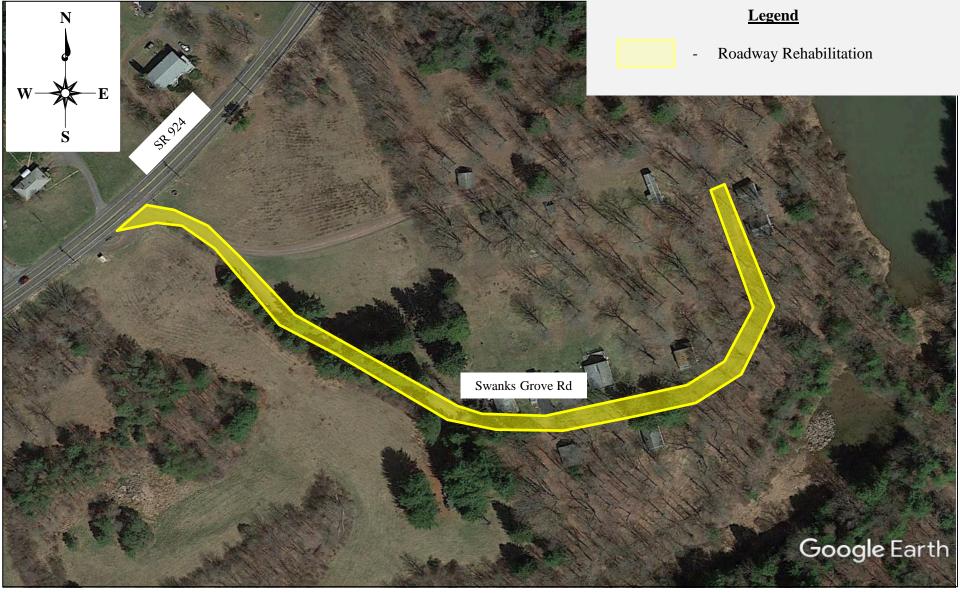














COST ESTIMATE BREAKDOWN



	West Cranberry Lane from Centre St. to Hemlock Springs Dr. (1120 LF)									
Item No.	Bid	Unit	Item Title	U	nit Price (\$)	Total Amount (\$				
	1	EACH	Surface Prep	\$	3,000.00	\$	3,000.00			
	1493	SY	FB-Modified Overlay, 2.5" Depth	\$	14.50	\$	21,648.50			
	1493	SY	Double Asphalt Seal Coat	\$	3.75	\$	5,598.75			
						\$	-			
						\$	-			
						\$	-			
						\$	-			
						\$	-			
						\$	-			
						\$	-			
						\$	-			
		8	Subtotal	\$			30,247.25			
			Construction Contingencies 5%	\$			1,512.36			
			Total	\$			31,759.61			
			Engineering 10%	\$			3,175.96			
			Inspection 6%	\$			1,905.58			
			2021 COST ESTIMATE	\$			36,841.15			
					SAY	\$	37.000.00			

SAY \$ 37,000.00

		Ea	ist Cranberry Lane from Centre St. to Shepp St. ((250	LF)		
Item No.	Bid	Unit	Item Title	U	nit Price (\$)	Total Amount (\$)	
	1	EACH	Surface Prep	\$	3,000.00	\$	3,000.00
	333	SY	FB-Modified Overlay, 2.5" Depth	\$	14.50	\$	4,828.50
	467	SY	Double Asphalt Seal Coat	\$	3.75	\$	1,751.25
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
			Subtotal	\$		8	9,579.75
			Construction Contingencies 5%	\$			478.99
			Total	\$			10,058.74
			Engineering 10%	\$			1,005.87
			Inspection 6%	\$			603.52
			2021 COST ESTIMATE	\$			11,668.14
					SAY	\$	12,000.00

		Gira	ard Manor Rd. from Phineyville Rd. to Pole Rd. ((8750	LF)		
Item No.	Bid	Unit	Item Title	U	Unit Price (\$)		al Amount (\$)
	16126	SY	FB-Modified Overlay, 2.5" Depth	\$	14.50	\$	233,827.00
	4356	SY	FB-Modified Leveling, 1.25" Depth	\$	7.50	\$	32,670.00
	16126	SY	Double Asphalt Seal Coat	\$	3.75	\$	60,472.50
	350	SY	16" Subgrade Repairs (12 #3's and 4' 2A Modified)	\$	25.00	\$	8,750.00
	2500	LF	#4's in Shoulders	\$	15.00	\$	37,500.00
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
			Subtotal	\$			373,219.50
			Construction Contingencies 5%	\$			18,660.98
			Total	\$			391,880.48
			Engineering 10%	\$			39,188.05
			Inspection 6%	\$			23,512.83
			2021 COST ESTIMATE	\$			454,581.35
					SAV	\$	455 000 00

SAY \$ 455,000.00

	Pumping Station Rd. from Main Blvd. (SR 924) to Pole Road (2400 LF)									
Item No.	Bid	Unit	Item Title	Uni	t Price (\$)	Total Amount (\$)				
	3200	SY	FB-Modified Overlay, 2.5" Depth	\$	14.50	\$	46,400.00			
	2400	SY	Paver Placed 2A Modified, 4" Depth	\$	7.85	\$	18,840.00			
	2400	SY	AEP Prime Coat Application	\$	1.30	\$	3,120.00			
	3200	SY	Double Asphalt Seal Coat	\$	3.75	\$	12,000.00			
	267	SY	16" Subgrade Repairs (12 #3's and 4' 2A Modified)	\$	25.00	\$	6,675.00			
						\$	-			
						\$	-			
						\$	-			
						\$	-			
		1	Subtotal	\$			87,035.00			
			Construction Contingencies 5%	\$			4,351.75			
			Total	\$			91,386.75			
			Engineering 10%	\$			9,138.68			
			Inspection 6%	\$			5,483.21			
			2021 COST ESTIMATE	\$			106,008.63			
	*- Ad	ditional Fund	s needed for RR crossing through PennDOT.		SAY	\$	107,000.00			

	Dombrowski Lane from Main Blvd. (SR 924) to Foose Lane (924 LF)										
Item No.	Bid	Unit	Item Title	U	nit Price (\$)	Tota	al Amount (\$)				
	1	EACH	Surface Prep	\$	3,000.00	\$	3,000.00				
	933	SY	FB-Modified Overlay, 2.5" Depth	\$	14.50	\$	13,528.50				
	933	SY	Paver Placed 2A Modified, 4" Depth	\$	7.85	\$	7,324.05				
	933	SY	AEP Prime Coat Application	\$	1.30	\$	1,212.90				
	933	SY	Double Asphalt Seal Coat	\$	3.75	\$	3,498.75				
	200	SY	12" Subgrade Repairs (12 #3's)	\$	25.00	\$	5,000.00				
						\$	-				
						\$	-				
			Subtotal	\$			33,564.20				
			Construction Contingencies 5%	\$			1,678.21				
			Total	\$			35,242.41				
			Engineering 10%	\$			3,524.24				
			Inspection 6%	\$			2,114.54				
			2021 COST ESTIMATE	\$			40,881.20				

SAY \$ 41,000.00

Trailer Rd. from Bridge to Main Blvd. (SR 924) (1850 LF)										
Item No.	Bid	Unit	Item Title	Unit Price (\$)		Total Amount (\$)				
	1	EACH	Surface Prep	\$	3,000.00	\$	3,000.00			
	2467	SY	FB-Modified Overlay, 2.5" Depth	\$	14.50	\$	35,771.50			
	2467	SY	Paver Placed 2A Modified, 4" Depth	\$	7.85	\$	19,365.95			
	2467	SY	AEP Prime Coat Application	\$	1.30	\$	3,207.10			
	2467	SY	Double Asphalt Seal Coat	\$	3.75	\$	9,251.25			
						\$	-			
						\$	-			
						\$	-			
						\$	-			
						\$	-			
.			Subtotal	\$			70,595.80			
			Construction Contingencies 5%	\$			3,529.79			
			Total	\$			74,125.59			
			Engineering 10%	\$			7,412.56			
			Inspection 6%	\$			4,447.54			
			2021 COST ESTIMATE	\$			85,985.68			
					SAY	\$	86,000.00			

			Foose Lane from Bridge to Paved Section (1500	LF)			
Item No.	Bid	Unit	Item Title	U	nit Price (\$)	Tot	al Amount (\$)
	1	EACH	Surface Prep	\$	3,000.00	\$	3,000.00
	2000	SY	FB-Modified Overlay, 2.5" Depth	\$	14.50	\$	29,000.00
	2000	SY	Paver Placed 2A Modified, 4" Depth	\$	7.85	\$	15,700.00
	2000	SY	AEP Prime Coat Application	\$	1.30	\$	2,600.00
	2000	SY	Double Asphalt Seal Coat	\$	3.75	\$	7,500.00
						\$	-
						\$	-
						\$	-
						\$	-
			Subtotal	\$			57,800.00
			Construction Contingencies 5%	\$			2,890.00
			Total	\$			60,690.00
			Engineering 10%	\$			6,069.00
			Inspection 6%	\$			3,641.40
			2021 COST ESTIMATE				70,400.40
					SAV	\$	71 000 00

SAY \$ 71,000.00

		Old	Mill Road from Bridge to Green Mountain Road	(103	60 LF)		
Item No.	Bid	Unit	Item Title	U	nit Price (\$)	Tota	al Amount (\$)
	2041	SY	FB-Modified Overlay, 2.5" Depth	\$	14.50	\$	29,594.50
	2041	SY	Paver Placed 2A Modified, 4" Depth	\$	7.85	\$	16,021.85
	2041	SY	AEP Prime Coat Application	\$	1.30	\$	2,653.30
	2397	SY	Double Asphalt Seal Coat	\$	3.75	\$	8,988.75
						\$	-
						\$	-
						\$	-
						\$	-
						\$	-
			Subtotal	\$			57,258.40
			Construction Contingencies 5%	\$			2,862.92
			Total	\$			60,121.32
			Engineering 10%	\$			6,012.13
			Inspection 6%	\$			3,607.28
			2021 COST ESTIMATE	\$			69,740.73
					SAY	\$	70,000.00

SAY \$ 70,000.00

	Swanks Grove Road (1100 LF)										
Item No.	Bid	Unit	Item Title	U	nit Price (\$)	Tot	al Amount (\$)				
	1467	SY	FB-Modified Overlay, 2.5" Depth	\$	14.50	\$	21,271.50				
	1467	SY	Paver Placed 2A Modified, 4" Depth	\$	7.85	\$	11,515.95				
	1467	SY	AEP Prime Coat Application	\$	1.30	\$	1,907.10				
	1467	SY	Double Asphalt Seal Coat	\$	3.75	\$	5,501.25				
						\$	-				
						\$	-				
						\$	-				
						\$	-				
						\$	-				
		1	Subtotal	\$			40,195.80				
			Construction Contingencies 5%	\$			2,009.79				
			Total	\$			42,205.59				
			Engineering 10%	\$			4,220.56				
			Inspection 6%	\$			2,532.34				
			2021 COST ESTIMATE	\$			48,958.48				

SAY \$ 49,000.00