

3.1

TwinCATS 2020-2023 Road Project Prioritization System

Project Name: Red Arrow Hwy Agency: Village of Stevensville
 Proposed Year: 2021 Total Points: 29

Criteria	Points	
System Preservation	18 points max	
a. Most recent PASER rating		
3-4	<u>10</u>	<u>10</u>
5-6	8	
1-2	5	
b. Extension of Remaining Service Life (RSL) based on MDOT Geometric Guidelines		
Extends RSL by 15 years or more (4R project)	8	
Extends RSL by 10-14 years (3R Project)	<u>6</u>	<u>6</u>
Extends RSL by 5-9 years (Preventative Maintenance)	4	
Extends RSL by 2-4 years (Preventative Maintenance)	2	
Safety	7 points max	
a. Expected Crash Reduction - Based on MDOT approved Crash Reduction Factors		
50% or greater	5	
40%-49.9%	4	
30% - 39.9%	3	
20% - 29.9%	2	
10% - 19.9%	1	
Less than 10%	<u>0</u>	<u>0</u>
b. Addressing High Crash Locations.		
Number of crashes is 20% higher than MPO median (4 or more)	<u>2</u>	<u>2</u>
Number of crashes are within 20% of MPO median (2-3)	1	
Number of crashes is lower than 20% of the MPO median (0-1)	0	
Non-motorized Transportation / Complete Streets	6 points max	
a. Follows the Complete Streets Policy	4	
b. Pedestrian and bicycle elements of the project connect to existing bicycle and pedestrian facilities or those that can reasonably expect to be completed between 2019 and 2023.	2	

Criteria	Points	
Regional Connectivity	10 points max	
a. Average daily traffic (ADT) based on most recent traffic count		
ADT is 10,000 or more	5	5
ADT is 5,000 – 9,999	4	
ADT is 2,000 – 4,999	3	
ADT is less than 2,000	0	
b. Functional Classification of the Road		
Principal Arterial	3	3
Minor Arterial	2	
Major Collector	1	
Minor Collector	0	
c. Fixed route transit (TCATA Red or Blue line) uses the road	2	
Strategic Investment/ Project Planning	11 points max	
a. Project is identified in an Asset Management or Capital Improvement Plan	3	3
b. Project is identified as a priority in another planning document such as a master plan or parks and recreation plan	1	
c. Project crosses jurisdictional boundaries (i.e. city to township) and is arranged in such a way to be bid as a single project.	1	
d. Project continues resurfacing, reconstruction, or preventative maintenance on a segment of roadway adjacent to a project completed during the 2017-2020 TIP cycle or through Rural Task Force funding.	2	
e. Additional Local Match		
Agency will provide 40% or more local match	4	
Agency will provide 30% to 39.9% local match	2	
Note: An 18.15% local match is the minimum required		
Project Readiness (no points)	Yes	
Coordination with sewer or other infrastructure (no points)	Yes	
Total Score (out of 52)		29

3.1

Twin Cities Area Transportation Study
2020-2023 Transportation Improvement Program (TIP)
Federal Surface Transportation Block Grant Funds
Project Application

Click "Enable Editing" to begin filling out this form. You may save this form at any time.

Section 1. Applicant Information

Agency Name	Village of Steenville		
Contact Name	Steve Slavicek	Title	Village President
Phone Number	(269) 429-1802	Email	steveslavicek@hotmail.com

Section 2. Project Information

Project Name/Road Name	Red Arrow Highway		
Project Limits (e.g. Napier Ave. to Britain Ave.)	John Beers Rd to 750 ft north of Puetz Rd		
Project Length (nearest hundredth of a mile)	.47 Mile	Proposed Year of Funding	2021
Primary Work Type	<input type="checkbox"/> Reconstruct <input checked="" type="checkbox"/> Restore & Rehabilitate <input type="checkbox"/> Roadside Facility <input type="checkbox"/> Resurface <input type="checkbox"/> Traffic Operations/Safety <input type="checkbox"/> Other		
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	The plan for the project is to mill the existing surface down to a depth of 3", place a 1" scratch course of asphalt with a geosynthetic paving fabric, and pave the roadway with 2" of hot mix asphalt.		
Was this project awarded funding for the 2017-2020 TIP, but was either canceled or failed to be obligated	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please explain:		

Section 3. Project Funding

Federal Funding Requested	\$ 412,810.00
Local Match (18.15% minimum)	\$ 91,550.00
Total	\$ 504,360.00
Local Match Percentage (local match/total cost)	18.15%
Does your agency have the financial capacity to Advance Construct (AC) all or part of this project if necessary? If yes, what is the maximum dollar amount your agency is willing to Advance Construct (AC)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Maximum Dollar Amount you can AC? \$

Section 4. System Preservation

2018 PASER rating (available as an excel file)	4
Current state of drainage	<input checked="" type="checkbox"/> Adequate <input type="checkbox"/> Minor and tolerable drainage problems <input type="checkbox"/> Occasional drainage problems with some maintenance required <input type="checkbox"/> Inadequate drainage, frequent flooding, excessive maintenance required
Expected increase in Remaining Service life (RSL)	<input type="checkbox"/> 0-3 years <input type="checkbox"/> 4-6 <input type="checkbox"/> 7-9 <input checked="" type="checkbox"/> 10-14 <input type="checkbox"/> 15-20 Use MDOT's <u>Guidelines for Geometrics on Local Projects</u>
What MDOT guidelines does the project conform to?	<input type="checkbox"/> Reconstruction (4R) <input checked="" type="checkbox"/> Resurfacing, restoration, and Rehabilitation (3R) <input type="checkbox"/> Preventative Maintenance (PM)

Section 5. Safety

Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2013-2017) (see [Michigan Crash Facts](#) for crash data)

Total Crashes	11	Pedestrian & Bicycle Crashes	0
Fatalities	0	Serious Injuries	1

Using the attached Crash Reduction Factors sheet, please check each safety counter measure that will be included in the project

Describe any other safety improvements this project will provide	
--	--

Section 6. Complete Streets

Does this project meet the [TwinCATS Complete Streets Policy](#), approved in 2014?

☐ Yes ☒ No

If yes, Please explain what pedestrian and/or bicycle improvements are included

If No, please state the reason why this project should be exempt from the TwinCATS Complete Streets Policy.

We are not altering the existing geometric design of the roadway. There is not evidence of constance pedestrian traffic (goat trails) as well as no non-motorized facilities to connect to.

Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed from 2020-2023?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please provide a map of the connecting facilities
Section 7. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	<input type="checkbox"/> Less than 2000 <input type="checkbox"/> 2000-5000 <input type="checkbox"/> 5000-10,000 <input checked="" type="checkbox"/> Above 10,000 Year of count: 2014 Source: SWMPC
National Functional Classification (NFC) for this roadway (Berrien County NFC Map)	Other Principal Arterial
Does one of <u>TCATA fixed route transit lines</u> use the road? (Only indicate yes if it carries a current route, not a planned route).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Section 8. Strategic Planning & Investment	
Is the project identified in a Asset Management Plan, or Capital Improvement Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please cite the plan and page number: CIP
Is the project identified in another planning documents such as a master plan or parks and recreation plan	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please cite the plan and page number:
Does the project cross jurisdictional boundaries?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, will it be bid as a single project?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	0
Is there a completed a utilities assessment that included televising the sewers in the project area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Sure If yes, which items are required:
Does this project perform Resurfacing, Reconstruction, or Preventative Maintenance on a segment adjacent to a segment where a federally-funded project was done during the <u>2017-2020 TwinCATS TIP</u> cycle or <u>RTF</u> cycle?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No What segment was the PREVIOUS project done on?

Section 9. Existing and Proposed Roadway Design

	Existing			Proposed		
Number of Vehicle Lanes	Through Traffic Lanes	Center Turn Lane	On Street Parking	Through Traffic Lanes	Center Turn Lane	On Street Parking
	4		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Shoulder Surface	<input type="checkbox"/> Paved <input checked="" type="checkbox"/> Unpaved		Width (ft.) 2.5 ft	<input type="checkbox"/> Paved <input checked="" type="checkbox"/> Unpaved		Width (ft.) 3 ft
Sidewalk/ path information	Placement <input type="checkbox"/> One Side <input type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> None		Width (ft.)	Placement <input type="checkbox"/> One Side <input type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> None		Width (ft.)
On road bicycle facilities	<input type="checkbox"/> Bike Lane <input type="checkbox"/> Other (specify) <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input checked="" type="checkbox"/> None			<input type="checkbox"/> Bike Lane <input type="checkbox"/> Other (specify) <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input checked="" type="checkbox"/> None		
Utilities, Sewer and Water	<input type="checkbox"/> Utilities Upgrades Needed <input type="checkbox"/> Sewer and water work needed			<input type="checkbox"/> Replaced Utilities <input type="checkbox"/> Relocating Utilities <input type="checkbox"/> Sewer and Water Line Work		
Please describe any improvements being made as part of this project to crosswalks, signage or signals, or streetscape elements not discussed in project description			Replace permanent signs and update pavement markings.			
Does this project enhance connectivity of pedestrian or bicyclists to fixed route or Dial-A-Ride transit?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how?			

Section 10. Estimated Project Schedule

Activity	Estimated Date
Resolution of Support for <input checked="" type="checkbox"/> Local Match Submitted to SWMPC	August 2020
Project Application Submitted to MOT	August 2020
Grade Inspection Package Submitted to MDOT	September 2020
Grade Inspection Meeting Scheduled	October 2020
Final Plan and Estimate to MDOT	November 2020
Right of Way (ROW) certified*	November 2020
Rail Road Permits*	N/A
Environmental Mitigation*	N/A
Project Obligated	December 2020
Project Letting	February 2021
Construction Start <input type="checkbox"/>	April 2021
Project Completion	June 2021

*Enter NA if these items will not be required.

Village of Stevensville

N. Red Arrow Highway

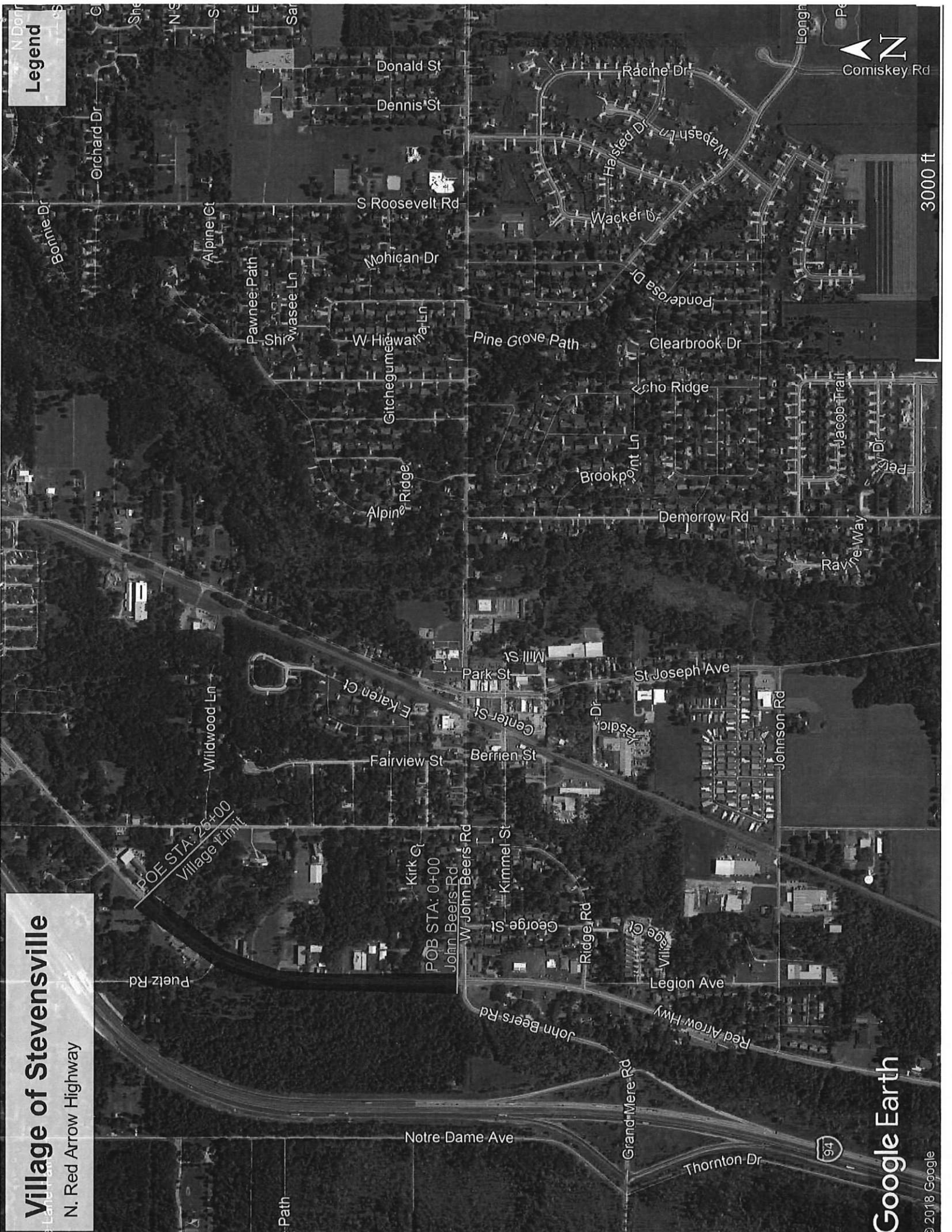
Legend



3000 ft

Google Earth

© 2018 Google



[< Back](#)

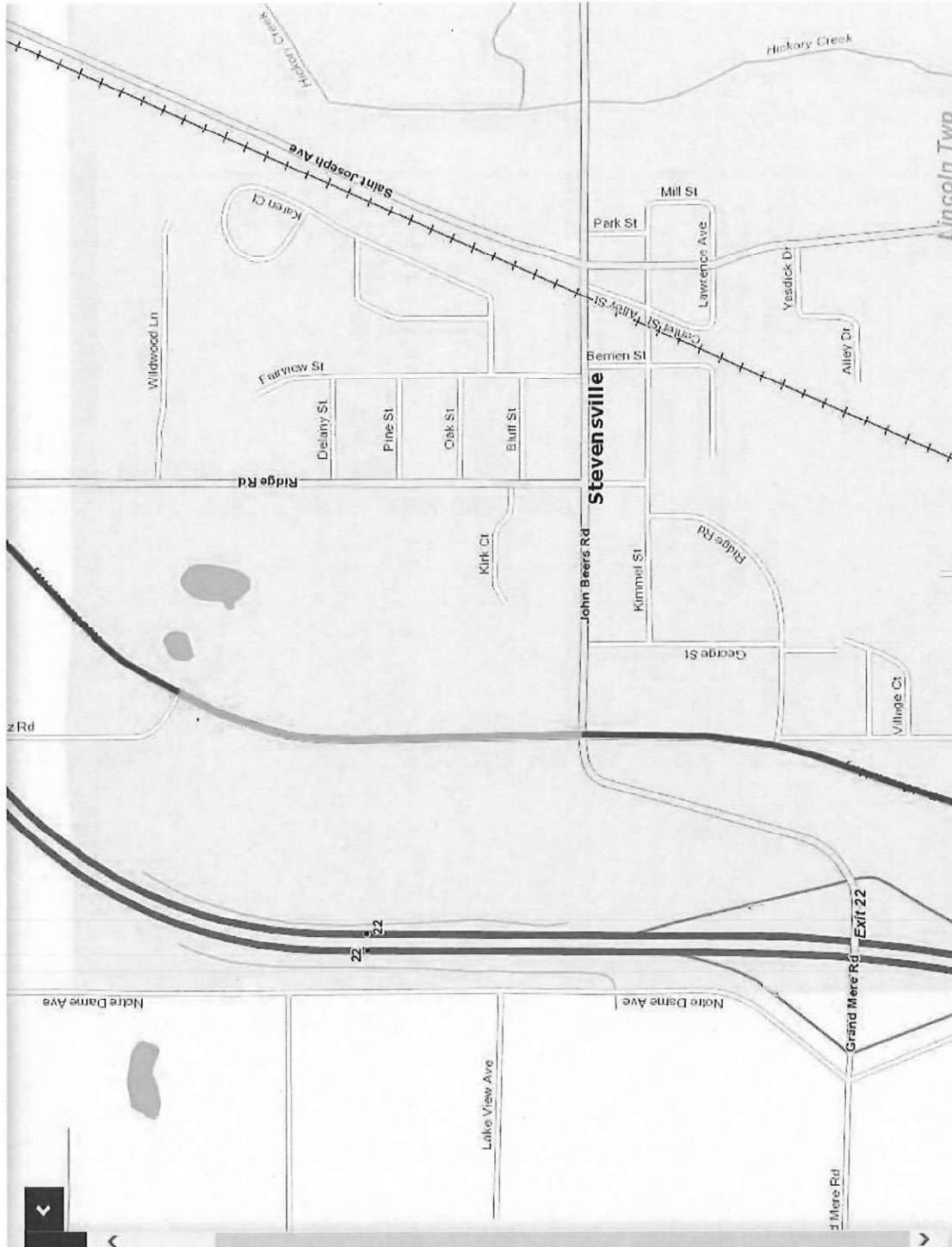
PASER Road Rating

PR 1359407	BMP 23.428	EMP 23.497
YEAR	RATING	SURFACE LANES
2016	4-Poor	Asphalt 4
2014	4-Poor	Asphalt 4
2012	4-Poor	Asphalt 4

PR 1359407	BMP 23.497	EMP 23.829
YEAR	RATING	SURFACE LANES
2016	4-Poor	Asphalt 4
2014	5-Fair	Asphalt 4
2012	4-Poor	Asphalt 4

Traffic

Traffic ID	115202
AADT:	11005
COUNT YEAR:	2014



Project Name: Red Arrow Highway Improvements (John Beers Rd to North Village Limit)

Project Number:

Prepared by: Eric Kamps, EIT

Checked by: Tim Drews, PE

Pay Item Description	Unit	Qty	Unit Price	Total
Mobilization	LSUM	1.00	\$ 40,000.00	\$ 40,000.00
Cold Milling HMA Surface	Syd	13,900.00	\$ 2.25	\$ 31,275.00
Dr Structure Cover, Type	Ea	6.00	\$ 640.00	\$ 3,840.00
Dr Structure Cover, Adj. Case 1	Ea	6.00	\$ 490.00	\$ 2,940.00
Dr Structure, Temp Lowering	Ea	6.00	\$ 325.00	\$ 1,950.00
Pavt for Butt Joints, Rem	Syd	110.00	\$ 5.50	\$ 605.00
Pavt, Cleaning	LSUM	1.00	\$ 5,000.00	\$ 5,000.00
HMA, 5E1	Ton	1,620.00	\$ 85.00	\$ 137,700.00
HMA, 4E1	Ton	810.00	\$ 80.00	\$ 64,800.00
HMA Approach	Ton	75.00	\$ 110.00	\$ 8,250.00
Hand Patching	Ton	25.00	\$ 160.00	\$ 4,000.00
Shoulder, CII, 3 inch	Syd	850.00	\$ 5.50	\$ 4,675.00
Geosynthetic Paving Fabric, Composite	Syd	13,900.00	\$ 5.50	\$ 76,450.00
Pavt Mrkg, Polyurea, 4 inch, White	Ft	6,250.00	\$ 1.50	\$ 9,375.00
Pavt Mrkg, Polyurea, 4 inch, Yellow	Ft	5,000.00	\$ 1.50	\$ 7,500.00
Traffic Control	LSUM	1.00	\$ 40,000.00	\$ 40,000.00

Construction:	\$ 438,360.00
Contingency (15%):	\$ 66,000.00
Construction Subtotal:	\$ 504,360.00
Engineering/Administration (15%):	\$ 66,000.00
Total:	\$ 570,360.00

Roadway: 2500 ft long by 47.5 ft wide

Remove 10 ft from each end of project and driveway/intersections for butt joints

2 inch top course with 1 inch scratch course (for paving fabric)

3 ft wide shoulder along west side where possible

Pavt Mrkg were used on Red Arrow and John Beers Intersection project

Roadway Segment - N. Red Arrow Highway									
Year	Primary Road	Intersecting Road	Distance	Crash Type	Unit 1 Injury	Unit 2 Injury	Weather	Light	Description
7/3/2013	Red Arrow Hwy	Puetz Rd	15' S	Rear End	O	O	Cloudy	Daylight	Vehicle 1 was waiting to make left turn, Vehicle 2 could not stop and struck Vehicle 1
11/25/2013	Red Arrow Hwy	John Beers Rd	1000' N	Other/Unknown	O	C	Snow/Blowing Snow	Daylight	Vehicle 1 lost control, and crossed the centerline and collide with vehicle 2, causing Vehicle 2 to collide with Vehicle 3
11/25/2013	Red Arrow Hwy	Ridge Rd	1000' S	Single Motor Vehicle	O	-	Snow/Blowing Snow	Dusk	Vehicle 1 lost control and slid off the roadway
4/10/2014	Red Arrow Hwy	Puetz Rd	225' N	Rear End	O	O	Cloudy	Daylight	Vehicle 2 was waiting to make left turn, Vehicle 1 could not stop and struck Vehicle 2
9/15/2014	Red Arrow Hwy	Puetz Rd	5' S	Angle	B	O	Cloudy	Dusk	Vehicle 2 turned north onto Red Arrow Hwy and did not see Vehicle 1, causing Vehicle 1 to strike Vehicle 2
10/9/2014	Red Arrow Hwy	Puetz Rd	1320' S	Single Motor Vehicle	O	-	Clear	Dark-Lighted	Vehicle 1 struck deer in roadway
4/4/2015	Red Arrow Hwy	John Beers Rd	100' N	Single Motor Vehicle	O	-	Clear	Dark-Unlighted	Vehicle 1 struck deer in roadway
7/27/2015	Red Arrow Hwy	Puetz Rd	5' S	Other/Unknown	C	O	Clear	Daylight	Vehicle 1 made a left turn onto Puetz Rd and didn't see Vehicle 2, causing him to strike Vehicle 2
9/14/2016	Red Arrow Hwy	Puetz Rd	50' S	Rear End-Left Turn	O	O	Clear	Daylight	Vehicle 1 was stopped attempting to make left turn, Vehicle 2 tried to change lanes but struck the rear of Vehicle 1
10/13/2017	Red Arrow Hwy	Puetz Rd	200' N	Sideswipe-Opposite	O	O	Clear	Dark-Lighted	Vehicle 1 was south bound and Vehicle 2 was north bound when one vehicle crossed the center line and the sideswipe occurred
11/15/2017	Red Arrow Hwy	John Beers Rd	2640' N	Single Motor Vehicle	O	-	Clear	Dark-Unlighted	Vehicle 1 struck deer in roadway

Roadway Segment		
Intersecting Road	Count	Percentage
Puetz Rd	7	64%
John Beers Rd	3	27%
Ridge Rd	1	9%

Roadway Segment		
Crash Type	Count	Percentage
Single Motor Vehicle	4	36%
Rear End	2	18%
Rear End-Left Turn	1	9%
Angle	1	9%
Other/Unknown	2	18%
Sideswipe-Opposite	1	9%

The crash analysis indicates that none of the crashes meet requirements for safety counter measures and Crash Reduction Factors per HSIP.

TwinCATS 2020-2023 Road Project Prioritization System

Project Name: Red Arrow Hwy.

Agency: Village of Stevensville

Proposed Year: 2021

Total Points: 28

Criteria	Points	
System Preservation	18 points max	
a. Most recent PASER rating		
3-4	10	10
5-6	8	
1-2	5	
b. Extension of Remaining Service Life (RSL) based on MDOT Geometric Guidelines		
Extends RSL by 15 years or more (4R project)	8	
Extends RSL by 10-14 years (3R Project)	6	6
Extends RSL by 5-9 years (Preventative Maintenance)	4	
Extends RSL by 2-4 years (Preventative Maintenance)	2	
Safety	7 points max	
a. Expected Crash Reduction - Based on MDOT approved Crash Reduction Factors		
50% or greater	5	
40%-49.9%	4	
30% - 39.9%	3	
20% - 29.9%	2	
10% - 19.9%	1	
Less than 10%	0	0
b. Addressing High Crash Locations.		
Number of crashes is 20% higher than MPO median (4 or more)	2	2
Number of crashes are within 20% of MPO median (2-3)	1	
Number of crashes is lower than 20% of the MPO median (0-1)	0	
Non-motorized Transportation / Complete Streets	6 points max	
a. Follows the Complete Streets Policy	4	
b. Pedestrian and bicycle elements of the project connect to existing bicycle and pedestrian facilities or those that can reasonably expect to be completed between 2019 and 2023.	2	

Criteria	Points	
Regional Connectivity	10 points max	
a. Average daily traffic (ADT) based on most recent traffic count		
ADT is 10,000 or more	5	5
ADT is 5,000 – 9,999	4	
ADT is 2,000 – 4,999	3	
ADT is less than 2,000	0	
b. Functional Classification of the Road		
Principal Arterial	3	
Minor Arterial	2	2
Major Collector	1	
Minor Collector	0	
c. Fixed route transit (TCATA Red or Blue line) uses the road	2	
Strategic Investment/ Project Planning	11 points max	
a. Project is identified in an Asset Management or Capital Improvement Plan	3	3
b. Project is identified as a priority in another planning document such as a master plan or parks and recreation plan	1	
c. Project crosses jurisdictional boundaries (i.e. city to township) and is arranged in such a way to be bid as a single project.	1	
d. Project continues resurfacing, reconstruction, or preventative maintenance on a segment of roadway adjacent to a project completed during the 2017-2020 TIP cycle or through Rural Task Force funding.	2	
e. Additional Local Match		
Agency will provide 40% or more local match	4	
Agency will provide 30% to 39.9% local match	2	
Note: An 18.15% local match is the minimum required		
Project Readiness (no points)	Yes	
Coordination with sewer or other infrastructure (no points)	Yes	
Total Score (out of 52)	28	

3.2

Twin Cities Area Transportation Study
2020-2023 Transportation Improvement Program (TIP)
Federal Surface Transportation Block Grant Funds
Project Application

Click "Enable Editing" to begin filling out this form. You may save this form at any time.

Section 1. Applicant Information

Agency Name	Village of Steenville		
Contact Name	Steve Slavicek	Title	Village President
Phone Number	(269) 429-1802	Email	steveslavicek@hotmail.com

Section 2. Project Information

Project Name/Road Name	Red Arrow Highway		
Project Limits (e.g. Napier Ave. to Britain Ave.)	John Beers Rd to 1,250 ft south of Johnson Rd		
Project Length (nearest hundredth of a mile)	.72 Mile	Proposed Year of Funding	2021
Primary Work Type	<input type="checkbox"/> Reconstruct <input checked="" type="checkbox"/> Restore & Rehabilitate <input type="checkbox"/> Roadside Facility <input type="checkbox"/> Resurface <input type="checkbox"/> Traffic Operations/Safety <input type="checkbox"/> Other		
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	The plan for the project is to mill the existing surface down to a depth of 3", place a 1" scratch course of asphalt with a geosynthetic paving fabric, and pave the roadway with 2" of hot mix asphalt.		
Was this project awarded funding for the 2017-2020 TIP, but was either canceled or failed to be obligated	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please explain:		

Section 3. Project Funding

Federal Funding Requested	\$ 656,725.00
Local Match (18.15% minimum)	\$ 145,650.00
Total	\$ 802,375.00
Local Match Percentage (local match/total cost)	18.15%
Does your agency have the financial capacity to Advance Construct (AC) all or part of this project if necessary? If yes, what is the maximum dollar amount your agency is willing to Advance Construct (AC)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Maximum Dollar Amount you can AC? \$

Section 4. System Preservation

2018 PASER rating (available as an excel file)	3
Current state of drainage	<input checked="" type="checkbox"/> Adequate <input type="checkbox"/> Minor and tolerable drainage problems <input type="checkbox"/> Occasional drainage problems with some maintenance required <input type="checkbox"/> Inadequate drainage, frequent flooding, excessive maintenance required
Expected increase in Remaining Service life (RSL)	<input type="checkbox"/> 0-3 years <input type="checkbox"/> 4-6 <input type="checkbox"/> 7-9 <input checked="" type="checkbox"/> 10-14 <input type="checkbox"/> 15-20 Use MDOT's Guidelines for Geometrics on Local Projects
What MDOT guidelines does the project conform to?	<input type="checkbox"/> Reconstruction (4R) <input checked="" type="checkbox"/> Resurfacing, restoration, and Rehabilitation (3R) <input type="checkbox"/> Preventative Maintenance (PM)

Section 5. Safety

Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2013-2017) (see [Michigan Crash Facts](#) for crash data)

Total Crashes	20	Pedestrian & Bicycle Crashes	0
Fatalities	0	Serious Injuries	2

Using the attached Crash Reduction Factors sheet, please check each safety counter measure that will be included in the project

Describe any other safety improvements this project will provide	
--	--

Section 6. Complete Streets

Does this project meet the TwinCATS Complete Streets Policy , approved in 2014?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, Please explain what pedestrian and/or bicycle improvements are included	
If No, please state the reason why this project should be exempt from the TwinCATS Complete Streets Policy.	We are not altering the existing geometric design of the roadway. There is no evidence of consistent pedestrian traffic (goat trails) as well as no non-motorized facilities to connect to.

Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed from 2020-2023?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please provide a map of the connecting facilities
Section 7. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	<input type="checkbox"/> Less than 2000 <input type="checkbox"/> 2000-5000 <input type="checkbox"/> 5000-10,000 <input checked="" type="checkbox"/> Above 10,000 Year of count: 2014 Source: SWMPC
National Functional Classification (NFC) for this roadway (Berrien County NFC Map)	Minor Arterial
Does one of TCATA fixed route transit lines use the road? (Only indicate yes if it carries a current route, not a planned route).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Section 8. Strategic Planning & Investment	
Is the project identified in a Asset Management Plan, or Capital Improvement Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please cite the plan and page number: CIP
Is the project identified in another planning documents such as a master plan or parks and recreation plan	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please cite the plan and page number:
Does the project cross jurisdictional boundaries?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, will it be bid as a single project?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	0
Is there a completed a utilities assessment that included televising the sewers in the project area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Sure If yes, which items are required:
Does this project perform Resurfacing, Reconstruction, or Preventative Maintenance on a segment adjacent to a segment where a federally-funded project was done during the 2017-2020 TwinCATS TIP cycle or RTF cycle?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No What segment was the PREVIOUS project done on?

Section 9. Existing and Proposed Roadway Design

	Existing			Proposed		
Number of Vehicle Lanes	Through Traffic Lanes	Center Turn Lane	On Street Parking	Through Traffic Lanes	Center Turn Lane	On Street Parking
	4		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Shoulder Surface	<input type="checkbox"/> Paved <input checked="" type="checkbox"/> Unpaved		Width (ft.) 2.5 ft	<input type="checkbox"/> Paved <input checked="" type="checkbox"/> Unpaved		Width (ft.) 3 ft
Sidewalk/ path information	Placement <input type="checkbox"/> One Side <input type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> None		Width (ft.)	Placement <input type="checkbox"/> One Side <input type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> None		Width (ft.)
On road bicycle facilities	<input type="checkbox"/> Bike Lane <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input checked="" type="checkbox"/> None			<input type="checkbox"/> Bike Lane <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input checked="" type="checkbox"/> None		
Utilities, Sewer and Water	<input type="checkbox"/> Utilities Upgrades Needed <input type="checkbox"/> Sewer and water work needed			<input type="checkbox"/> Replaced Utilities <input type="checkbox"/> Relocating Utilities <input type="checkbox"/> Sewer and Water Line Work		
Please describe any improvements being made as part of this project to crosswalks, signage or signals, or streetscape elements not discussed in project description			Replace permanent signs and update pavement markings.			
Does this project enhance connectivity of pedestrian or bicyclists to fixed route or Dial-A-Ride transit?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how?			

Section 10. Estimated Project Schedule

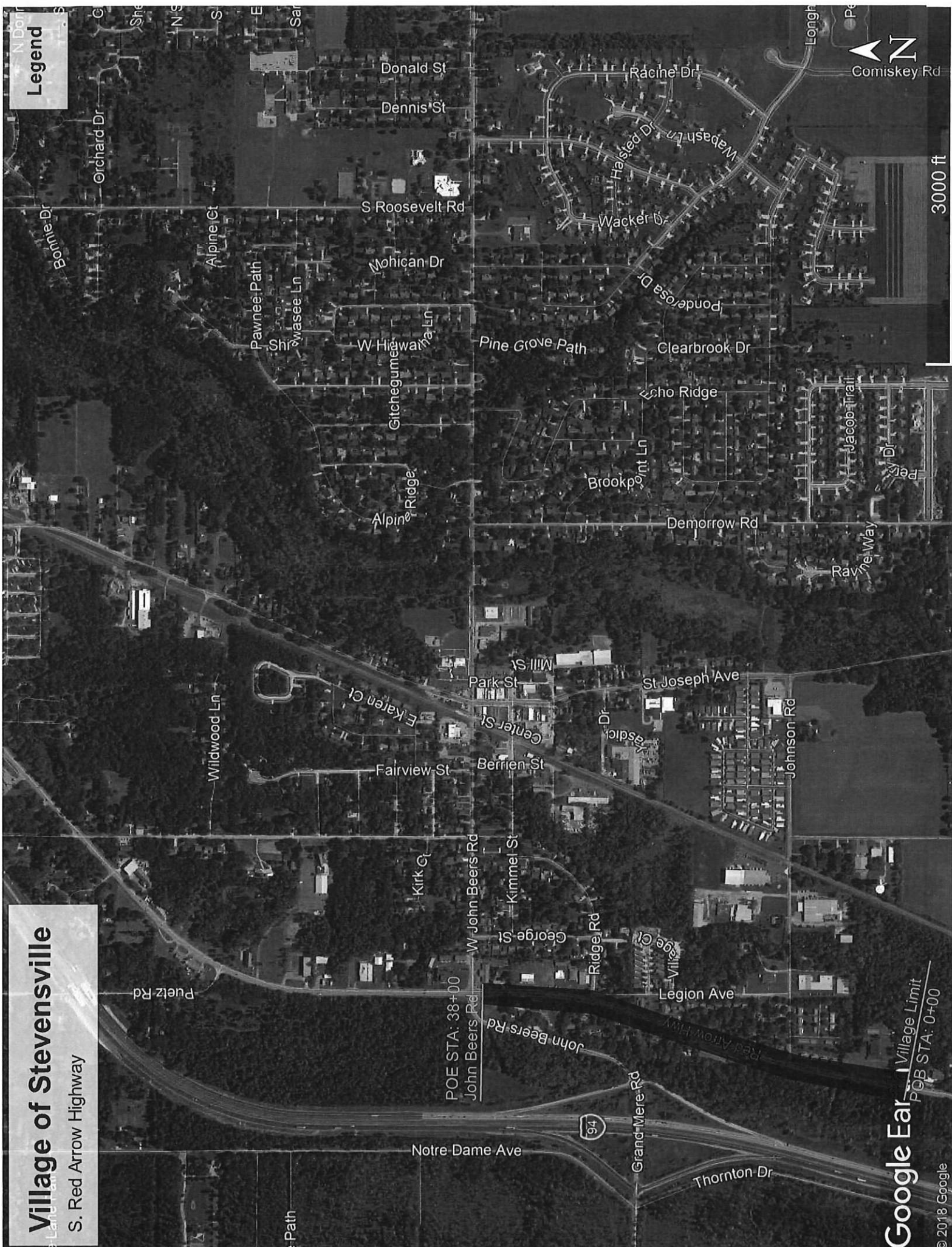
Activity	Estimated Date
Resolution of Support for <input type="checkbox"/> Local Match Submitted to SWMPC	August 2020
Project Application Submitted to MOT	August 2020
Grade Inspection Package Submitted to MDOT	September 2020
Grade Inspection Meeting Scheduled	October 2020
Final Plan and Estimate to MDOT	November 2020
Right of Way (ROW) certified*	November 2020
Rail Road Permits*	N/A
Environmental Mitigation*	N/A
Project Obligated	December 2020
Project Letting	February 2021
Construction Start <input type="checkbox"/>	April 2021
Project Completion	June 2021

*Enter NA if these items will not be required.

Village of Stevensville

S. Red Arrow Highway

Legend



Google Earth

© 2018 Google

[< Back](#)

OWNER: VILLAGE OF STEVENSVILLE

Red Arrow Hwy

2016

Poor

3

PASER Road Rating

PR 1359407 BMP 22.91 EMP 23.239

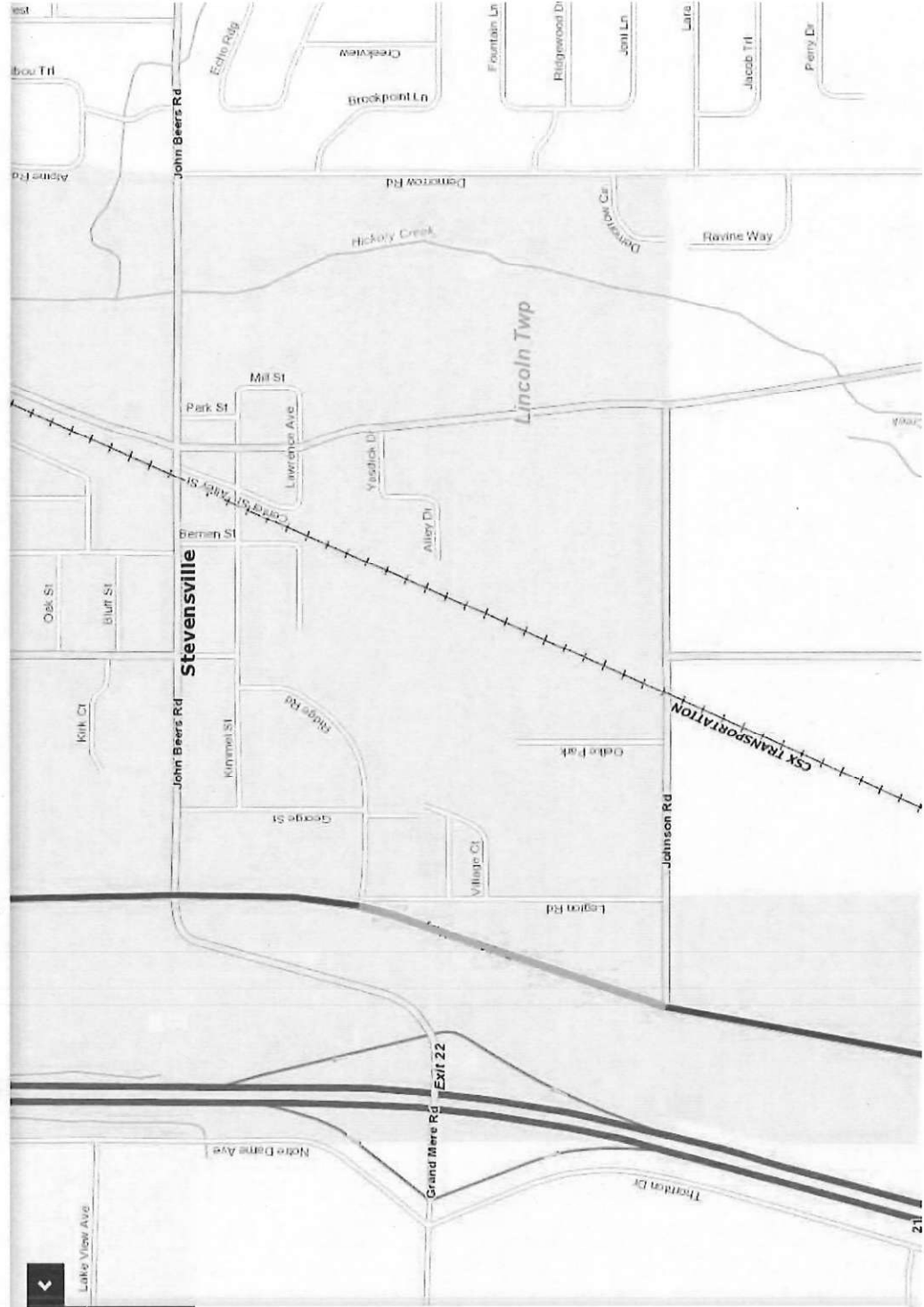
YEAR	RATING	SURFACE	LANES
2016	3-Poor	Asphalt	4
2014	4-Poor	Asphalt	4
2012	4-Poor	Asphalt	4

Traffic

Traffic ID 115202

AADT: 11005

COUNT YEAR: 2014



Project Name: Red Arrow Highway Improvements (South Village Limit to John Beers Rd)

Project Number:

Prepared by: Eric Kamps, EIT

Checked by: Tim Drews, PE

Pay Item Description	Unit	Qty	Unit Price	Total
Mobilization	LSUM	1.00	\$ 64,000.00	\$ 64,000.00
Cold Milling HMA Surface	Syd	23,300.00	\$ 2.25	\$ 52,425.00
Dr Structure Cover, Type	Ea	8.00	\$ 640.00	\$ 5,120.00
Dr Structure Cover, Adj. Case 1	Ea	8.00	\$ 490.00	\$ 3,920.00
Dr Structure, Temp Lowering	Ea	8.00	\$ 325.00	\$ 2,600.00
Pavt for Butt Joints, Rem	Syd	120.00	\$ 5.50	\$ 660.00
Pavt, Cleaning	LSUM	1.00	\$ 7,500.00	\$ 7,500.00
HMA, 5E1	Ton	2,700.00	\$ 85.00	\$ 229,500.00
HMA, 4E1	Ton	1,350.00	\$ 80.00	\$ 108,000.00
HMA Approach	Ton	100.00	\$ 110.00	\$ 11,000.00
Hand Patching	Ton	25.00	\$ 160.00	\$ 4,000.00
Shoulder, CII, 3 inch	Syd	2,700.00	\$ 5.50	\$ 14,850.00
Geosynthetic Paving Fabric, Composite	Syd	23,300.00	\$ 5.50	\$ 128,150.00
Pavt Mrkg, Polyurea, 4 inch, White	Ft	9,500.00	\$ 1.50	\$ 14,250.00
Pavt Mrkg, Polyurea, 4 inch, Yellow	Ft	7,600.00	\$ 1.50	\$ 11,400.00
Traffic Control	LSUM	1.00	\$ 40,000.00	\$ 40,000.00

Construction:	\$ 697,375.00
Contingency (15%):	\$ 105,000.00
Construction Subtotal:	\$ 802,375.00
Engineering/Administration (15%):	\$ 105,000.00
Total:	\$ 907,375.00

Roadway: 3800 ft long by 50 ft wide

Remove 10 ft from each end of project and driveway/intersections for butt joints

2 inch top course with 1 inch scratch course (for paving fabric)

3 ft wide shoulder along both sides where possible

Pavt Mrkg were used on Red Arrow and John Beers Intersection project

Roadway Segment - S. Red Arrow Highway										
Year	Primary Road	Intersecting Road	Distance	Crash Type	Unit 1 Injury	Unit 2 Injury	Weather	Light	Road Surface Condition	Description
1/22/2013	Red Arrow Hwy	Johnson Rd	10' N	Angle	O	A	Snow/Blowing Snow	Daylight	Snowy	Vehicle 1 pulled into the path of Vehicle 2 causing the vehicles to collide
7/20/2013	Red Arrow Hwy	Defay Rd	3200' N	Single Motor Vehicle	O	-	Clear	Daylight	Dry	Vehicle pulling trailer lost control, trailer flipped over
8/22/2013	Red Arrow Hwy	Johnson Rd	20' N	Rear End	O	O	Rain	Daylight	Wet	Vehicle 2 was stopped to make left turn, Vehicle 1 struck them
11/6/2013	Red Arrow Hwy	John Beers Rd	1000' S	Other/Unknown	O	O	Rain	Daylight	Wet	Vehicle 2 struck trash container that had come loose from Vehicle 1
11/25/2013	Red Arrow Hwy	Ridge Rd	150' S	Sideswipe-Opposite	O	O	Snow/Blowing Snow	Dark-Lighted	Icy	Vehicle 1 lost control on icy road and struck Vehicle 2
11/26/2013	Red Arrow Hwy	John Beers Rd	2640' S	Angle	O	O	Clear	Dark-Lighted	Dry	Vehicle 1 pulled into the path of Vehicle 2 causing the vehicles to collide
10/29/2014	Red Arrow Hwy	Johnson Rd	100' S	Single Motor Vehicle	O	-	Cloudy	Dark-Unlighted	Dry	Vehicle 1 struck deer in roadway
1/16/2015	Red Arrow Hwy	Defay Rd	1728' N	Other/Unknown	O	-	Cloudy	Dark-Unlighted	Wet	Vehicle 1 struck deer in roadway
3/25/2015	Red Arrow Hwy	John Beers Rd	528' S	Angle	A	C	Clear	Daylight	Wet	Vehicle 2 pulled into the path of Vehicle 1 causing the vehicles to collide
11/16/2015	Red Arrow Hwy	Ridge Rd	2640' S	Single Motor Vehicle	O	-	Clear	Dark-Lighted	Dry	Vehicle 1 struck deer in roadway
2/24/2016	Red Arrow Hwy	Johnson Rd	1320' S	Single Motor Vehicle	O	-	Clear	Dark-Unlighted	Dry	Vehicle 1 struck deer in roadway
4/1/2016	Red Arrow Hwy	Johnson Rd	20' N	Rear End	O	O	Clear	Daylight	Dry	Vehicle 2 was stopped to make left turn, Vehicle 1 struck them
5/6/2016	Red Arrow Hwy	Johnson Rd	200' S	Sideswipe-Same	O	O	Clear	Dark-Unlighted	Dry	Vehicle 1 tried to changes lanes into right lane and collided with Vehicle 2
11/18/2016	Red Arrow Hwy	Johnson Rd	100' S	Single Motor Vehicle	O	-	Cloudy	Dark-Unlighted	Dry	Vehicle 1 struck a tree that had fallen into the roadway
11/21/2016	Red Arrow Hwy	Johnson Rd	1000' S	Other	B	O	Clear	Dark-Lighted	Dry	Vehicle 2 struck a deer in roadway, Vehicle 1 was following Vehicle 2 and was unable to stop
12/7/2016	Red Arrow Hwy	Johnson Rd	1000' S	Rear End	O	O	Cloudy	Dark-Lighted	Dry	Vehicle 1 was stopped to make left turn, Vehicle 2 struck them
12/22/2016	Red Arrow Hwy	Johnson Rd	1320' S	Rear End-Left Turn	O	O	Cloudy	Dusk	Wet	Vehicle 2 was stopped to make left turn, Vehicle 1 struck them
7/23/2017	Red Arrow Hwy	John Beers Rd	600' S	Single Motor Vehicle	O	-	Clear	Dark-Lighted	Dry	Vehicle 1 struck something in the roadway
7/25/2017	Red Arrow Hwy	Defay Rd	1800' N	Single Motor Vehicle	O	-	Clear	Dark-Unlighted	Dry	Vehicle 1 struck deer in roadway
10/25/2017	Red Arrow Hwy	Johnson Rd	1320' S	Rear End	O	O	Clear	Daylight	Dry	Vehicle 1 was following Vehicle 2 and was unable to stop

Roadway Segment		
Intersecting Road	Count	Percentage
Defay Rd	3	15%
Johnson Rd	11	55%
Ridge Rd	2	10%
John Beers Rd	4	20%

Roadway Segment		
Crash Type	Count	Percentage
Single Motor Vehicle	7	35%
Rear End	4	20%
Angle	3	15%
Other/Unknown	2	10%
Sideswipe-Same	1	5%
Sideswipe-Opposite	1	5%
Other	1	5%
Rear End - Left Turn	1	5%

The crash analysis indicates that none of the crashes meet requirements for safety counter measures and Crash Reduction Factors per HSIP.

TwinCATS 2020-2023 Road Project Prioritization System

Project Name: John Beers Road Agency: Village of Stevensville
 Proposed Year: 2021 Total Points: 33

Criteria	Points	
System Preservation	18 points max	
a. Most recent PASER rating		
3-4	<u>10</u>	<u>10</u>
5-6	8	
1-2	5	
b. Extension of Remaining Service Life (RSL) based on MDOT Geometric Guidelines		
Extends RSL by 15 years or more (4R project)	<u>8</u>	<u>8</u>
Extends RSL by 10-14 years (3R Project)	6	
Extends RSL by 5-9 years (Preventative Maintenance)	4	
Extends RSL by 2-4 years (Preventative Maintenance)	2	
Safety	7 points max	
a. Expected Crash Reduction - Based on MDOT approved Crash Reduction Factors		
50% or greater	5	
40%-49.9%	4	
30% - 39.9%	3	
20% - 29.9%	2	
10% - 19.9%	<u>1</u>	
Less than 10%	<u>0</u>	<u>0</u>
b. Addressing High Crash Locations.		
Number of crashes is 20% higher than MPO median (4 or more)	2	
Number of crashes are within 20% of MPO median (2-3)	<u>1</u>	<u>1</u>
Number of crashes is lower than 20% of the MPO median (0-1)	0	
Non-motorized Transportation / Complete Streets	6 points max	
a. Follows the Complete Streets Policy	<u>4</u>	<u>4</u>
b. Pedestrian and bicycle elements of the project connect to existing bicycle and pedestrian facilities or those that can reasonably expect to be completed between 2019 and 2023.	<u>2</u>	<u>2</u>

Criteria	Points	
Regional Connectivity	10 points max	
a. Average daily traffic (ADT) based on most recent traffic count		
ADT is 10,000 or more	5	
ADT is 5,000 – 9,999	4	
ADT is 2,000 – 4,999	3	3
ADT is less than 2,000	0	
b. Functional Classification of the Road		
Principal Arterial	3	
Minor Arterial	2	
Major Collector	1	
Minor Collector	0	
c. Fixed route transit (TCATA Red or Blue line) uses the road	2	
Strategic Investment/ Project Planning	11 points max	
a. Project is identified in an Asset Management or Capital Improvement Plan	3	3
b. Project is identified as a priority in another planning document such as a master plan or parks and recreation plan	1	
c. Project crosses jurisdictional boundaries (i.e. city to township) and is arranged in such a way to be bid as a single project.	1	
d. Project continues resurfacing, reconstruction, or preventative maintenance on a segment of roadway adjacent to a project completed during the 2017-2020 TIP cycle or through Rural Task Force funding.	2	
e. Additional Local Match		
Agency will provide 40% or more local match	4	
Agency will provide 30% to 39.9% local match	2	
Note: An 18.15% local match is the minimum required		
Project Readiness (no points)	Yes	
Coordination with sewer or other infrastructure (no points)	Yes	
Total Score (out of 52)	33	

33

Twin Cities Area Transportation Study 2020-2023 Transportation Improvement Program (TIP) Federal Surface Transportation Block Grant Funds Project Application

Click "Enable Editing" to begin filling out this form. You may save this form at any time.

Section 1. Applicant Information

Agency Name	Village of Steenville		
Contact Name	Steve Slavicek	Title	Village President
Phone Number	(269) 429-1802	Email	steveslavicek@hotmail.com

Section 2. Project Information

Project Name/Road Name	John Beers Rd		
Project Limits (e.g. Napier Ave. to Britain Ave.)	St. Joseph Ave to Red Arrow Highway		
Project Length (nearest hundredth of a mile)	.43 Mile	Proposed Year of Funding	2021
Primary Work Type	<input checked="" type="checkbox"/> Reconstruct <input type="checkbox"/> Restore & Rehabilitate <input type="checkbox"/> Roadside Facility <input type="checkbox"/> Resurface <input type="checkbox"/> Traffic Operations/Safety <input type="checkbox"/> Other		
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	The plan for the project is to remove the existing asphalt roadway, curb and gutter, and sidewalk along the south side of the roadway. The proposed roadway will be 29 ft wide with curb and gutter. 6 ft sidewalks will be placed on both sides of roadway behind the curb and gutter.		
Was this project awarded funding for the 2017-2020 TIP, but was either canceled or failed to be obligated	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please explain:		

Section 3. Project Funding

Federal Funding Requested	\$ 792,227.50
Local Match (18.15% minimum)	\$ 175,675.00
Total	\$ 967,902.50
Local Match Percentage (local match/total cost)	18.15%
Does your agency have the financial capacity to Advance Construct (AC) all or part of this project if necessary? If yes, what is the maximum dollar amount your agency is willing to Advance Construct (AC)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Maximum Dollar Amount you can AC? \$

Section 4. System Preservation

2018 PASER rating (available as an excel file)	4
Current state of drainage	<input type="checkbox"/> Adequate <input checked="" type="checkbox"/> Minor and tolerable drainage problems <input type="checkbox"/> Occasional drainage problems with some maintenance required <input type="checkbox"/> Inadequate drainage, frequent flooding, excessive maintenance required
Expected increase in Remaining Service life (RSL)	<input type="checkbox"/> 0-3 years <input type="checkbox"/> 4-6 <input type="checkbox"/> 7-9 <input type="checkbox"/> 10-14 <input checked="" type="checkbox"/> 15-20 Use MDOT's Guidelines for Geometrics on Local Projects
What MDOT guidelines does the project conform to?	<input checked="" type="checkbox"/> Reconstruction (4R) <input type="checkbox"/> Resurfacing, restoration, and Rehabilitation (3R) <input type="checkbox"/> Preventative Maintenance (PM)

Section 5. Safety

Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2013-2017) (see [Michigan Crash Facts](#) for crash data)

Total Crashes	9	Pedestrian & Bicycle Crashes	0
Fatalities	0	Serious Injuries	0

Using the attached Crash Reduction Factors sheet, please check each safety counter measure that will be included in the project

Describe any other safety improvements this project will provide	
--	--

Section 6. Complete Streets

Does this project meet the TwinCATS Complete Streets Policy , approved in 2014?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, Please explain what pedestrian and/or bicycle improvements are included	Included in the project, two 6 ft concrete sidewalks are proposed. Two 5 ft bikes lanes will also be constructed.
If No, please state the reason why this project should be exempt from the TwinCATS Complete Streets Policy.	
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed from 2020-2023?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please provide a map of the connecting facilities

Section 7. Regional Connectivity

What is the most current daily traffic count for the limits of this project?	<input type="checkbox"/> Less than 2000 <input checked="" type="checkbox"/> 2000-5000 <input type="checkbox"/> 5000-10,000 <input type="checkbox"/> Above 10,000 Year of count: 2014 Source: SWMPC
National Functional Classification (NFC) for this roadway (Berrien County NFC Map)	Minor Arterial
Does one of <u>TCATA fixed route transit lines</u> use the road? (Only indicate yes if it carries a current route, not a planned route).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Section 8. Strategic Planning & Investment

Is the project identified in a Asset Management Plan, or Capital Improvement Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please cite the plan and page number: CIP
Is the project identified in another planning documents such as a master plan or parks and recreation plan	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please cite the plan and page number:
Does the project cross jurisdictional boundaries?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, will it be bid as a single project?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	0
Is there a completed a utilities assessment that included televising the sewers in the project area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure If yes, which items are required: Railroad Permit
Does this project perform Resurfacing, Reconstruction, or Preventative Maintenance on a segment adjacent to a segment where a federally-funded project was done during the <u>2017-2020 TwinCATS TIP</u> cycle or <u>RTF</u> cycle?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No What segment was the PREVIOUS project done on?

Section 9. Existing and Proposed Roadway Design

	Existing			Proposed		
Number of Vehicle Lanes	Through Traffic Lanes	Center Turn Lane	On Street Parking	Through Traffic Lanes	Center Turn Lane	On Street Parking
	2		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Shoulder Surface	<input checked="" type="checkbox"/> Paved <input type="checkbox"/> Unpaved		Width (ft.) 3.5	<input checked="" type="checkbox"/> Paved <input type="checkbox"/> Unpaved		Width (ft.) 3.5
Sidewalk/ path information	Placement <input checked="" type="checkbox"/> One Side <input type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input type="checkbox"/> None		Width (ft.) 6	Placement <input type="checkbox"/> One Side <input checked="" type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input type="checkbox"/> None		Width (ft.) 6
On road bicycle facilities	<input type="checkbox"/> Bike Lane <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input checked="" type="checkbox"/> None			<input checked="" type="checkbox"/> Bike Lane <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input type="checkbox"/> None		
Utilities, Sewer and Water	<input type="checkbox"/> Utilities Upgrades Needed <input type="checkbox"/> Sewer and water work needed			<input type="checkbox"/> Replaced Utilities <input type="checkbox"/> Relocating Utilities <input type="checkbox"/> Sewer and Water Line Work		
Please describe any improvements being made as part of this project to crosswalks, signage or signals, or streetscape elements not discussed in project description			Replace permanent signs and update pavement markings.			
Does this project enhance connectivity of pedestrian or bicyclists to fixed route or Dial-A-Ride transit?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how?			

Section 10. Estimated Project Schedule

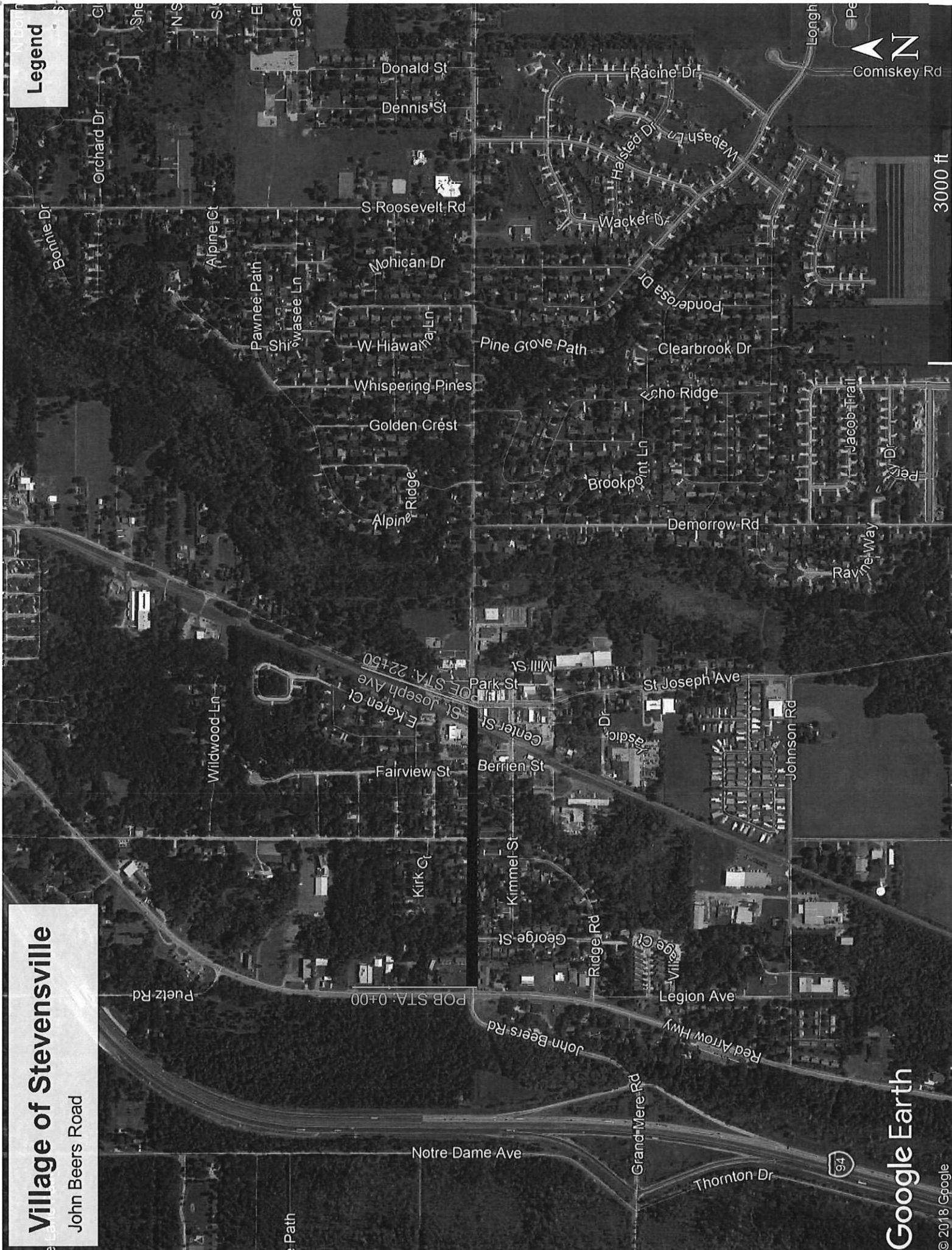
Activity	Estimated Date
Resolution of Support for <input checked="" type="checkbox"/> Local Match Submitted to SWMPC	August 2020
Project Application Submitted to MOT	August 2020
Grade Inspection Package Submitted to MDOT	September 2020
Grade Inspection Meeting Scheduled	October 2020
Final Plan and Estimate to MDOT	November 2020
Right of Way (ROW) certified*	November 2020
Rail Road Permits*	November 2020
Environmental Mitigation*	N/A
Project Obligated	December 2020
Project Letting	February 2021
Construction Start <input type="checkbox"/>	April 2021
Project Completion	July 2021

*Enter NA if these items will not be required.

Village of Stevensville

John Beers Road

Legend



3000 ft

Google Earth

© 2018 Google



Interactive Map

[< Back](#)

OWNER: VILLAGE OF STEVENSVILLE

W John Beers Rd

2016
Poor

4

PASER Road Rating

PR 1364508 BMP 1.596 EMP 1.701

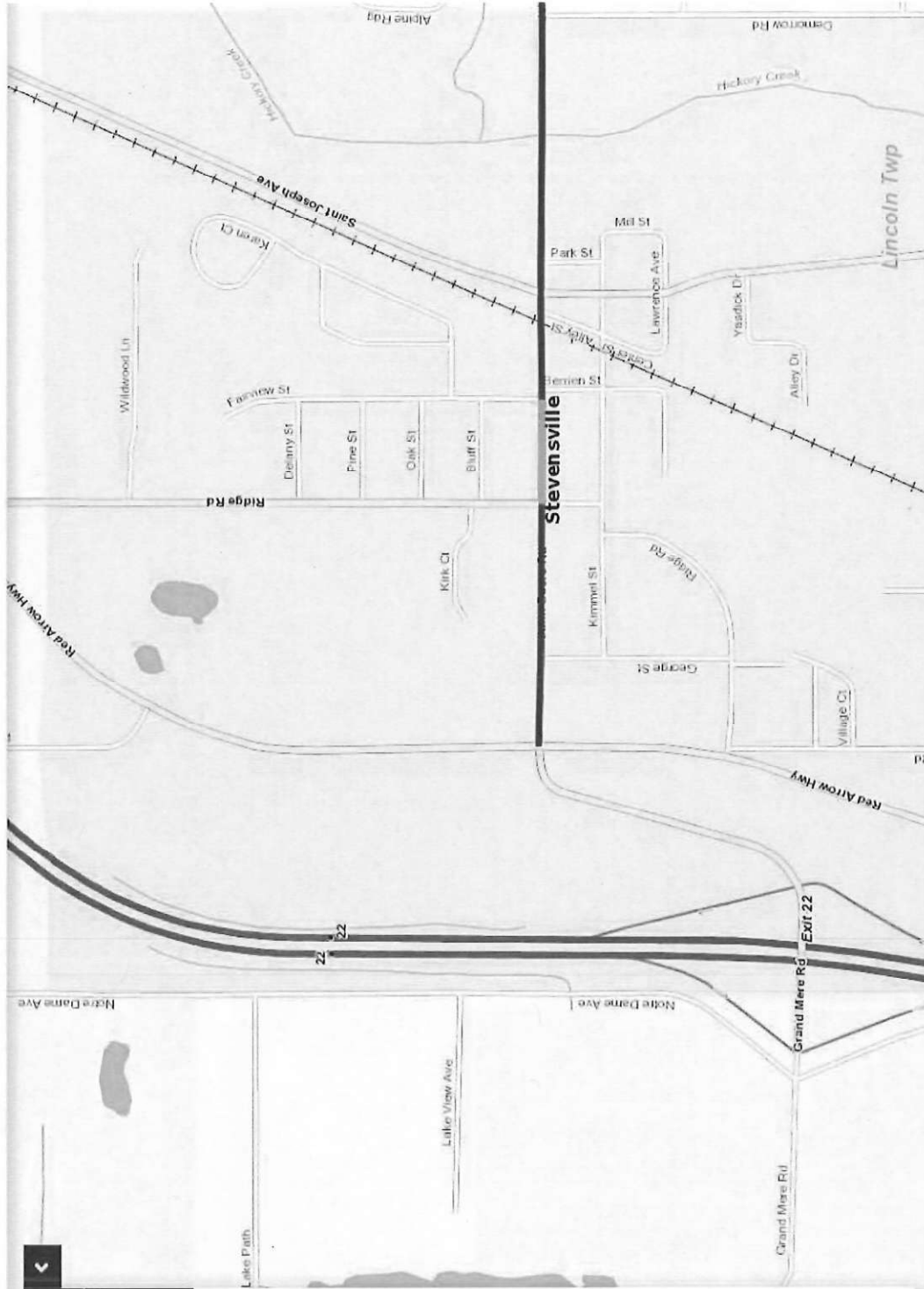
YEAR	RATING	SURFACE	LANES
2016	4-Poor	Asphalt	2
2014	5-Fair	Asphalt	2
2012	4-Poor	Asphalt	2

Traffic

Traffic ID 115208

AADT: 4455

COUNT YEAR: 2014



Project Name: John Beers Road Reconstruction (St. Joseph St to Red Arrow Hwy)

Project Number:

Prepared by: Eric Kamps, EIT

Checked by: Tim Drews, PE

Pay Item Description	Unit	Qty	Unit Price	Total
Mobilization	LSUM	1.00	\$ 75,000.00	\$ 75,000.00
Pavt, Rem	Syd	8,750.00	\$ 7.75	\$ 67,812.50
Curb and Gutter, Rem	Ft	4,500.00	\$ 8.75	\$ 39,375.00
Sidewalk, Rem	Syd	1,250.00	\$ 9.50	\$ 11,875.00
Dr Structure Cover, Type ____	Ea	18.00	\$ 640.00	\$ 11,520.00
Dr Structure Cover, Adj. Case 1	Ea	18.00	\$ 490.00	\$ 8,820.00
Subbase, CIP	Cyd	2,750.00	\$ 11.00	\$ 30,250.00
Aggregate Base, 8 inch	Syd	8,250.00	\$ 8.75	\$ 72,187.50
HMA, 5E1	Ton	850.00	\$ 85.00	\$ 72,250.00
HMA, 4E1	Ton	850.00	\$ 80.00	\$ 68,000.00
HMA Approach	Ton	110.00	\$ 110.00	\$ 12,100.00
Hand Patching	Ton	25.00	\$ 160.00	\$ 4,000.00
Sidewalk, Conc, 4 inch	Sft	22,500.00	\$ 5.00	\$ 112,500.00
Sidewalk, Conc, 6 inch	Sft	4,500.00	\$ 6.75	\$ 30,375.00
Sidewalk Ramp, Conc, 6 inch	Sft	750.00	\$ 8.25	\$ 6,187.50
Detectable Warning Surface	Ft	60.00	\$ 82.00	\$ 4,920.00
Curb and Gutter, Conc, Det ____	Ft	4,500.00	\$ 18.50	\$ 83,250.00
Pavt Mrkg, Polyurea, 4 inch, White	Ft	4,550.00	\$ 1.50	\$ 6,825.00
Pavt Mrkg, Polyurea, 4 inch, Yellow	Ft	4,500.00	\$ 1.50	\$ 6,750.00
Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	Ea	1.00	\$ 220.00	\$ 220.00
Pavt Mrkg, Ovly Cold Plastic, Thru and Lt Turn Arrow Sym	Ea	1.00	\$ 300.00	\$ 300.00
Pavt Mrkg, Ovly Cold Plastic, Direction Arrow Sym, Bike	Ea	9.00	\$ 125.00	\$ 1,125.00
Pavt Mrkg, Ovly Cold Plastic, Bike	Ea	9.00	\$ 140.00	\$ 1,260.00
Segmental Retaining Wall	Syd	100.00	\$ 440.00	\$ 44,000.00
Traffic Control	LSUM	1.00	\$ 50,000.00	\$ 50,000.00
Railroad Permit/Training	LSUM	1.00	\$ 20,000.00	\$ 20,000.00

Construction:	\$ 840,902.50
Contingency (15%):	\$ 127,000.00
Construction Subtotal:	\$ 967,902.50
Engineering/Administration (15%):	\$ 127,000.00
Total:	\$ 1,094,902.50

Roadway: 2250 ft long by 30 ft wide existing with 1 side 5 ft sidewalk

Remove existing sidewalk and curb and gutter

2 inch top course and 2 inch base course

11 ft lanes with 3.5 ft paved bike lane, with curb and gutter

6 ft sidewalk along both sides

Pavt Mrkg were used on Red Arrow and John Beers Intersection project

Roadway Segment - John Beers Road							
Year	Primary Road	Intersecting Road	Distance	Crash Type	Unit 1 Injury	Unit 2 Injury	Description
7/27/2013	John Beers Rd	Fairview St	100' W	Single Motor Vehicle	O	-	Vehicle 1 swerved to avoid striking dog, ran off the roadway and hit mailbox
9/28/2013	John Beers Rd	St. Joseph Ave	20' W	Sideswipe-Same	O	O	Vehicle 2 did not see Vehicle 1 next to them at intersection and turned into the side of them
10/7/2014	John Beers Rd	St. Joseph Ave	30' W	Rear End	O	O	Vehicle 1 was unable to stop at intersection and struck Vehicle 2
12/27/2014	John Beers Rd	Fairview St	200' W	Rear End	O	O	Vehicle 2 was backing into driveway, Vehicle 1 was going too fast and struck Vehicle 2
3/17/2015	John Beers Rd	St. Joseph Ave	100' W	Rear End	O	O	Vehicle 2 was stopped prior to intersection, Vehicle 1 didn't see Vehicle 2 and struck it
5/8/2015	John Beers Rd	Ridge Rd	152' W	Other/Unknown	O	O	Vehicle 2 was turning left into driveway, Vehicle 1 pass a Village vehicle working in roadway, and collided with Vehicle 2
2/4/2015	John Beers Rd	St. Joseph Ave	3' W	Rear End	O	O	Vehicle 1 was unable to stop at intersection and struck Vehicle 2
1/10/2016	John Beers Rd	St. Joseph Ave	30' W	Rear End	O	O	Vehicle 1 was unable to stop at intersection and struck Vehicle 2
10/13/2016	John Beers Rd	Red Arrow Hwy	150' E	Angle	O	O	Vehicle 2 was traveling east, Vehicle 1 did not see Vehicle 2, Vehicle 1 pulled into roadway and struck Vehicle 2

Roadway Segment		
Crash Type	Count	Percentage
Single Motor Vehicle	1	11%
Rear End	5	56%
Angle	1	11%
Other/Unknown	1	11%
Sideswipe-Same	1	11%

Roadway Segment		
Intersecting Road	Count	Percentage
St. Joseph Ave	5	56%
Center St	0	0%
Berrien St	0	0%
Fairview St	2	22%
Ridge Rd	1	11%
George St	0	0%
Red Arrow Hwy	1	11%

The crash analysis indicates that none of the crashes meet requirements for safety counter measures and Crash Reduction Factors per HSIP.

3.4

TwinCATS 2020-2023 Road Project Prioritization System

Project Name: John Beers Road Agency: Village of Stevensville
 Proposed Year: 2021 Total Points: 33

Criteria	Points	
System Preservation	18 points max	
a. Most recent PASER rating		
3-4	10	10
5-6	8	
1-2	5	
b. Extension of Remaining Service Life (RSL) based on MDOT Geometric Guidelines		
Extends RSL by 15 years or more (4R project)	8	8
Extends RSL by 10-14 years (3R Project)	6	
Extends RSL by 5-9 years (Preventative Maintenance)	4	
Extends RSL by 2-4 years (Preventative Maintenance)	2	
Safety	7 points max	
a. Expected Crash Reduction - Based on MDOT approved Crash Reduction Factors		
50% or greater	5	
40%-49.9%	4	
30% - 39.9%	3	
20% - 29.9%	2	
10% - 19.9%	1	
Less than 10%	0	0
b. Addressing High Crash Locations.		
Number of crashes is 20% higher than MPO median (4 or more)	2	
Number of crashes are within 20% of MPO median (2-3)	1	
Number of crashes is lower than 20% of the MPO median (0-1)	0	
Non-motorized Transportation / Complete Streets	6 points max	
a. Follows the Complete Streets Policy	4	4
b. Pedestrian and bicycle elements of the project connect to existing bicycle and pedestrian facilities or those that can reasonably expect to be completed between 2019 and 2023.	2	2

Criteria	Points	
Regional Connectivity	10 points max	
a. Average daily traffic (ADT) based on most recent traffic count		
ADT is 10,000 or more	5	
ADT is 5,000 – 9,999	4	
ADT is 2,000 – 4,999	3	3
ADT is less than 2,000	0	
b. Functional Classification of the Road		
Principal Arterial	3	3
Minor Arterial	2	
Major Collector	1	
Minor Collector	0	
c. Fixed route transit (TCATA Red or Blue line) uses the road	2	
Strategic Investment/ Project Planning	11 points max	
a. Project is identified in an Asset Management or Capital Improvement Plan	3	3
b. Project is identified as a priority in another planning document such as a master plan or parks and recreation plan	1	
c. Project crosses jurisdictional boundaries (i.e. city to township) and is arranged in such a way to be bid as a single project.	1	
d. Project continues resurfacing, reconstruction, or preventative maintenance on a segment of roadway adjacent to a project completed during the 2017-2020 TIP cycle or through Rural Task Force funding.	2	
e. Additional Local Match		
Agency will provide 40% or more local match	4	
Agency will provide 30% to 39.9% local match	2	
Note: An 18.15% local match is the minimum required		
Project Readiness (no points)	Yes	
Coordination with sewer or other infrastructure (no points)	Yes	
Total Score (out of 52)	33	

3.4

Twin Cities Area Transportation Study
2020-2023 Transportation Improvement Program (TIP)
Federal Surface Transportation Block Grant Funds
Project Application

Click "Enable Editing" to begin filling out this form. You may save this form at any time.

Section 1. Applicant Information

Agency Name	Village of Steenville		
Contact Name	Steve Slavicek	Title	Village President
Phone Number	(269) 429-1802	Email	steveslavicek@hotmail.com

Section 2. Project Information

Project Name/Road Name	John Beers Road/Grand Mere Road		
Project Limits (e.g. Napier Ave. to Britain Ave.)	Red Arrow Highway to Notre Dame Ave		
Project Length (nearest hundredth of a mile)	.44 Mile	Proposed Year of Funding	2021
Primary Work Type	<input checked="" type="checkbox"/> Reconstruct <input type="checkbox"/> Restore & Rehabilitate <input type="checkbox"/> Roadside Facility <input type="checkbox"/> Resurface <input type="checkbox"/> Traffic Operations/Safety <input type="checkbox"/> Other		
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	The plan for the project is to remove the existing asphalt roadway and reconstruct the roadway with 5.5 inches of hot mix asphalt. This would create two 11 ft lanes with 5 ft shoulders for bike lanes.		
Was this project awarded funding for the 2017-2020 TIP, but was either canceled or failed to be obligated	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please explain:		

Section 3. Project Funding

Federal Funding Requested	\$ 485,800.00
Local Match (18.15% minimum)	\$ 107,725.00
Total	\$ 593,525.00
Local Match Percentage (local match/total cost)	18.15%
Does your agency have the financial capacity to Advance Construct (AC) all or part of this project if necessary? If yes, what is the maximum dollar amount your agency is willing to Advance Construct (AC)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Maximum Dollar Amount you can AC? \$

Section 4. System Preservation

2018 PASER rating (available as an excel file)	3
Current state of drainage	<input type="checkbox"/> Adequate <input checked="" type="checkbox"/> Minor and tolerable drainage problems <input type="checkbox"/> Occasional drainage problems with some maintenance required <input type="checkbox"/> Inadequate drainage, frequent flooding, excessive maintenance required
Expected increase in Remaining Service life (RSL)	<input type="checkbox"/> 0-3 years <input type="checkbox"/> 4-6 <input type="checkbox"/> 7-9 <input type="checkbox"/> 10-14 <input checked="" type="checkbox"/> 15-20 Use MDOT's Guidelines for Geometrics on Local Projects
What MDOT guidelines does the project conform to?	<input checked="" type="checkbox"/> Reconstruction (4R) <input type="checkbox"/> Resurfacing, restoration, and Rehabilitation (3R) <input type="checkbox"/> Preventative Maintenance (PM)

Section 5. Safety

Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2013-2017) (see [Michigan Crash Facts](#) for crash data)

Total Crashes	4	Pedestrian & Bicycle Crashes	0
Fatalities	0	Serious Injuries	1

Using the attached Crash Reduction Factors sheet, please check each safety counter measure that will be included in the project

Describe any other safety improvements this project will provide	
--	--

Section 6. Complete Streets

Does this project meet the TwinCATS Complete Streets Policy , approved in 2014?	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>meets policy goals</i>
If yes, Please explain what pedestrian and/or bicycle improvements are included	
If No, please state the reason why this project should be exempt from the TwinCATS Complete Streets Policy.	We are not altering the existing geometric design of the roadway. There is no evidence of constance pedestrian traffic (goat trails) as well as no non-motorized facilities to connect to.

Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed from 2020-2023?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please provide a map of the connecting facilities
---	--

Section 7. Regional Connectivity

What is the most current daily traffic count for the limits of this project?	<input type="checkbox"/> Less than 2000 <input checked="" type="checkbox"/> 2000-5000 <input type="checkbox"/> 5000-10,000 <input type="checkbox"/> Above 10,000 Year of count: 2012 Source: SWMPC
National Functional Classification (NFC) for this roadway (Berrien County NFC Map)	Other Principal Arterial
Does one of TCATA fixed route transit lines use the road? (Only indicate yes if it carries a current route, not a planned route).	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Section 8. Strategic Planning & Investment

Is the project identified in a Asset Management Plan, or Capital Improvement Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please cite the plan and page number: CIP
Is the project identified in another planning documents such as a master plan or parks and recreation plan	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please cite the plan and page number:
Does the project cross jurisdictional boundaries?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, will it be bid as a single project?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	0
Is there a completed a utilities assessment that included televising the sewers in the project area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Sure If yes, which items are required:
Does this project perform Resurfacing, Reconstruction, or Preventative Maintenance on a segment adjacent to a segment where a federally-funded project was done during the 2017-2020 TwinCATS TIP cycle or RTE cycle?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No What segment was the PREVIOUS project done on?

Section 9. Existing and Proposed Roadway Design

	Existing			Proposed		
Number of Vehicle Lanes	Through Traffic Lanes	Center Turn Lane	On Street Parking	Through Traffic Lanes	Center Turn Lane	On Street Parking
	2		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Shoulder Surface	<input checked="" type="checkbox"/> Paved <input type="checkbox"/> Unpaved		Width (ft.) 3 ft	<input checked="" type="checkbox"/> Paved <input type="checkbox"/> Unpaved		Width (ft.) 5 ft
Sidewalk/ path information	Placement <input type="checkbox"/> One Side <input type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> None		Width (ft.)	Placement <input type="checkbox"/> One Side <input type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> None		Width (ft.)
On road bicycle facilities	<input type="checkbox"/> Bike Lane <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input checked="" type="checkbox"/> None			<input type="checkbox"/> Bike Lane <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input checked="" type="checkbox"/> None		
Utilities, Sewer and Water	<input type="checkbox"/> Utilities Upgrades Needed <input type="checkbox"/> Sewer and water work needed			<input type="checkbox"/> Replaced Utilities <input type="checkbox"/> Relocating Utilities <input type="checkbox"/> Sewer and Water Line Work		
Please describe any improvements being made as part of this project to crosswalks, signage or signals, or streetscape elements not discussed in project description			Replace permanent signs and update pavement markings.			
Does this project enhance connectivity of pedestrian or bicyclists to fixed route or Dial-A-Ride transit?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how?			

Section 10. Estimated Project Schedule

Activity	Estimated Date
Resolution of Support for <input type="checkbox"/> Local Match Submitted to SWMPC	August 2020
Project Application Submitted to MOT	August 2020
Grade Inspection Package Submitted to MDOT	September 2020
Grade Inspection Meeting Scheduled	October 2020
Final Plan and Estimate to MDOT	November 2020
Right of Way (ROW) certified*	November 2020
Rail Road Permits*	N/A
Environmental Mitigation*	N/A
Project Obligated	December 2020
Project Letting	February 2021
Construction Start <input type="checkbox"/>	April 2021
Project Completion	July 2021

*Enter NA if these items will not be required.

Village of Stevensville

Grand Mere Road

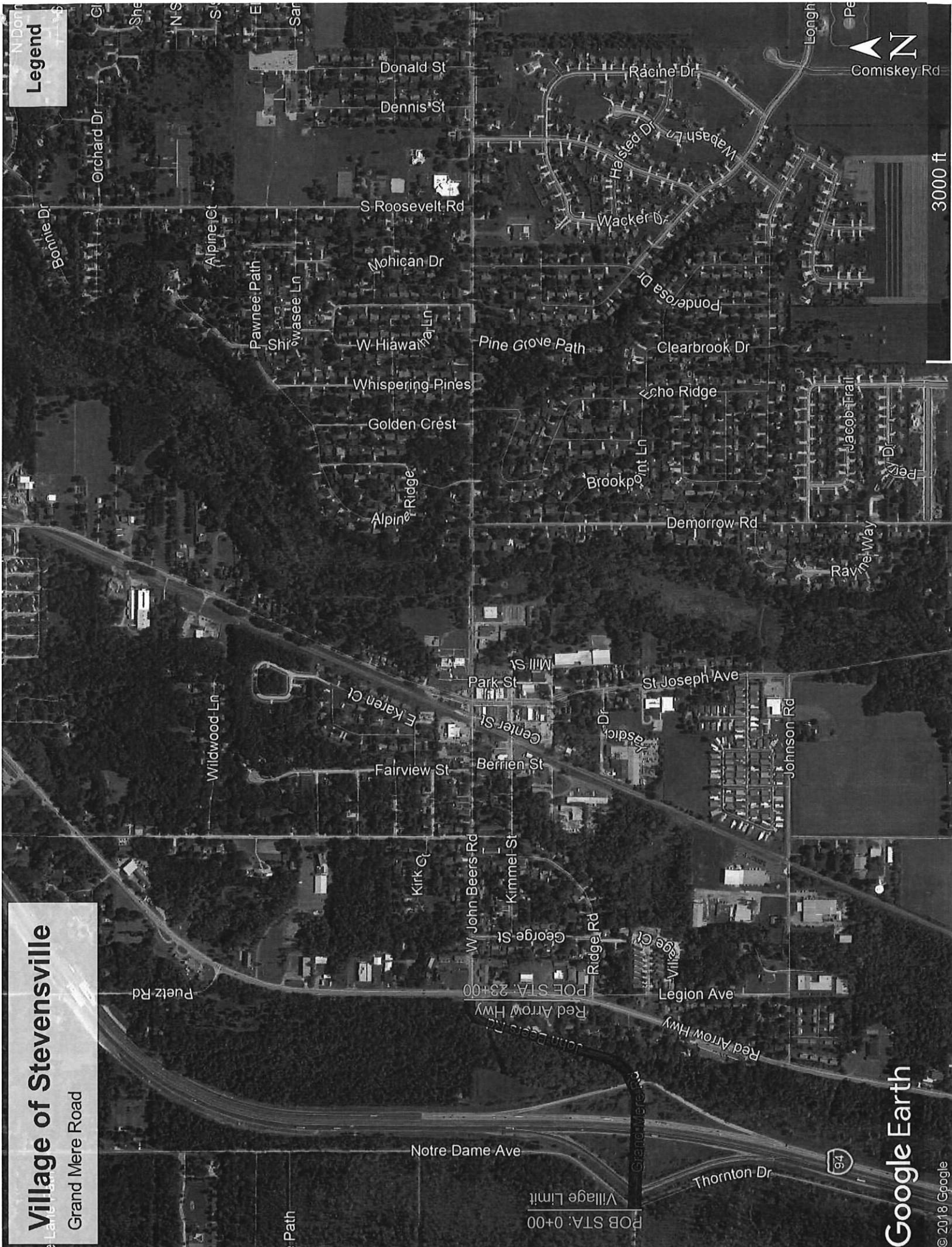
Legend



3000 ft

Google Earth

© 2018 Google





Interactive Map

[< Back](#)

OWNER: VILLAGE OF STEVENSVILLE

Grand Mere Rd

2016

Poor

3

PASER Road Rating

PR 1364508 BMP 0.971 EMP 1.032

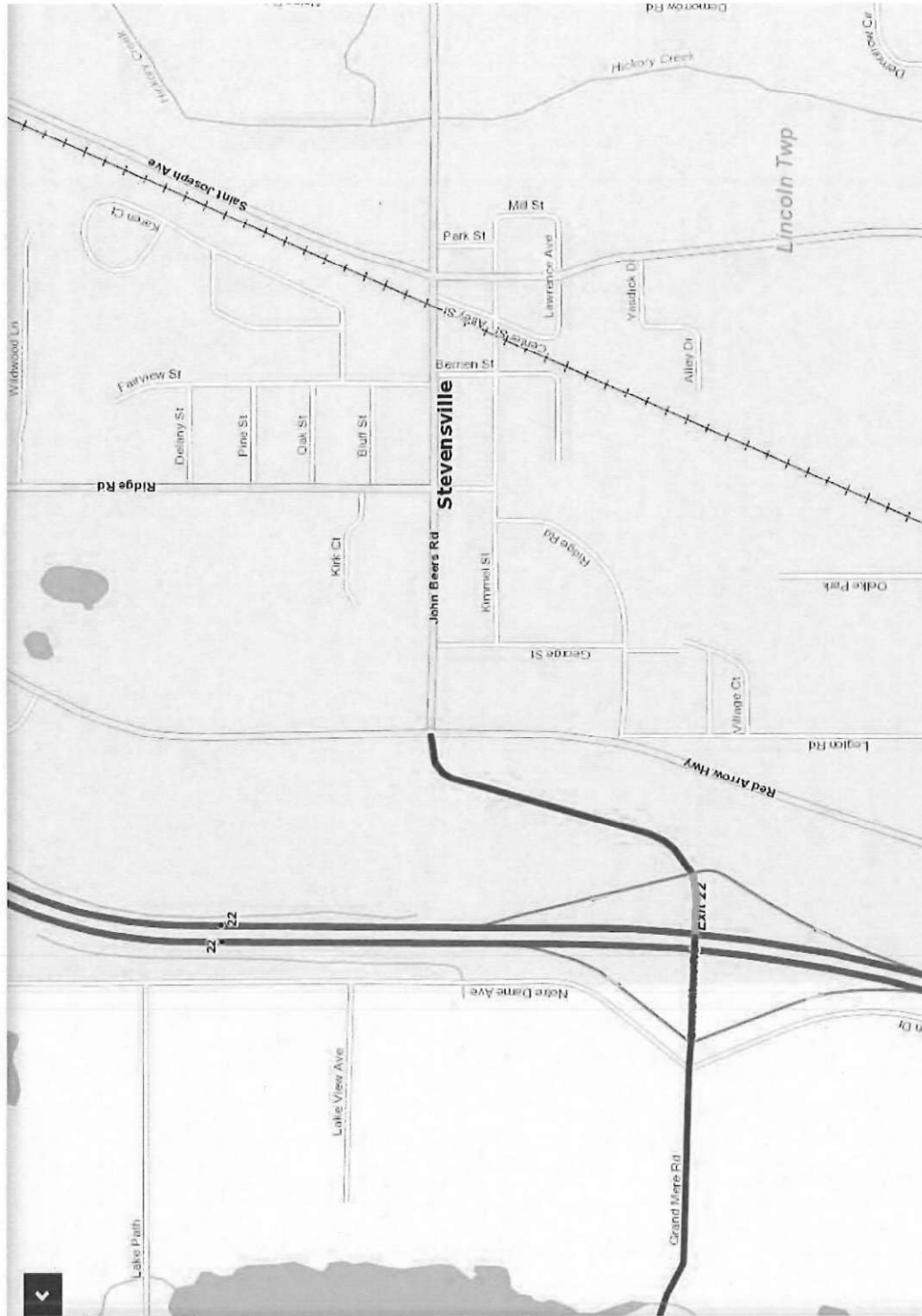
YEAR	RATING	SURFACE	LANES
2016	3-Poor	Asphalt	2
2014	5-Fair	Asphalt	2
2012	3-Poor	Asphalt	2

Traffic

Traffic ID 115205

AADT: 2629

COUNT YEAR: 2012



Project Name: John Beers Rd/Grand Mere Rd Reconstruction (Red Arrow Hwy to West Village Limits)

Project Number:

Prepared by: Eric Kamps, EIT

Checked by: Tim Drews, PE

Pay Item Description	Unit	Qty	Unit Price	Total
Mobilization	LSUM	1.00	\$ 47,000.00	\$ 47,000.00
Pavt, Rem	Syd	8,600.00	\$ 7.75	\$ 66,650.00
Dr Structure Cover, Type ____	Ea	7.00	\$ 640.00	\$ 4,480.00
Dr Structure Cover, Adj. Case 1	Ea	7.00	\$ 490.00	\$ 3,430.00
Subbase, CIP	Cyd	2,875.00	\$ 11.00	\$ 31,625.00
Aggregate Base, 8 inch	Syd	8,600.00	\$ 8.75	\$ 75,250.00
HMA, 5E1	Ton	775.00	\$ 85.00	\$ 65,875.00
HMA, 4E1	Ton	2,000.00	\$ 80.00	\$ 160,000.00
HMA Approach	Ton	150.00	\$ 110.00	\$ 16,500.00
Hand Patching	Ton	25.00	\$ 160.00	\$ 4,000.00
Pavt Mrkg, Polyurea, 4 inch, White	Ft	4,650.00	\$ 1.50	\$ 6,975.00
Pavt Mrkg, Polyurea, 4 inch, Yellow	Ft	4,600.00	\$ 1.50	\$ 6,900.00
Pavt Mrkg, Ovly Cold Plastic, Rt Turn Arrow Sym	Ea	1.00	\$ 220.00	\$ 220.00
Pavt Mrkg, Ovly Cold Plastic, Thru and Lt Turn Arrow Sym	Ea	1.00	\$ 300.00	\$ 300.00
Pavt Mrkg, Ovly Cold Plastic, Sharrow Symbol	Ea	6.00	\$ 220.00	\$ 1,320.00
Traffic Control	LSUM	1.00	\$ 25,000.00	\$ 25,000.00

Construction:	\$ 515,525.00
Contingency (15%):	\$ 78,000.00
Construction Subtotal:	\$ 593,525.00
Engineering/Administration (15%):	\$ 78,000.00
Total:	\$ 671,525.00

Roadway: 2300 ft long by 32 ft wide existing

Remove existing pavement

1.5 inch top course and 2 inch base and leveling courses

Pavt Mrkg were used on Red Arrow and John Beers Intersection project

Roadway Segment - John Beers Rd/Grand Mere Rd									
Year	Primary Road	Intersecting Road	Distance	Crash Type	Unit 1 Injury	Unit 2 Injury	Weather	Light	Road Surface Condition
6/10/2014	Grand Mere Rd	John Beer Rd	500' S	Single Motor Vehicle	C	-	Cloudy	Daylight	Wet
7/13/2014	John Beers Rd	Thorton Dr	40' E	Single Motor Vehicle	B	-	Clear	Daylight	Dry
11/16/2016	John Beers Rd	Red Arrow Hwy	200' W	Single Motor Vehicle	O	-	Clear	Daylight	Dry
9/8/2017	John Beers Rd	I-94	75' E	Angle	O	O	Cloudy	Daylight	Dry
									Description
									Driver lost control of vehicle, vehicle turned over
									Driver was intoxicated, lost control, vehicle struck utility pole
									Driver swerved to miss deer, struck guardrail
									Vehicle 1 was attempting to make left turn from closed lane, pulled into path of vehicle 2

Roadway Segment		
Crash Type	Count	Percentage
Single Motor Vehicle	3	75%
Angle	1	25%

Roadway Segment		
Intersecting Road	Count	Percentage
Red Arrow Hwy	1	25%
John Beers Rd	1	25%
I-94	1	25%
Thorton Dr	1	25%

The crash analysis indicates that none of the crashes meet requirements for safety counter measures and Crash Reduction Factors per HSIP.