



EXAMPLE APPLICATION

WINNEBAGO COUNTY

— ILLINOIS —

June 14, 2024

Ms. Trisha Thompson, P.E.
Region 2 Engineer
Illinois Department of Transportation
819 Depot Avenue
Dixon, IL 61021

Attn: Shawn L. Ortgiesen, P.E.
District Local Roads Engineer

**Re: FY 2026 Local Highway Safety Improvement Program Submittal
Winnebago Road (CH # 16) / Telegraph Rd (CH #21) Intersection Improvements
Winnebago County, Illinois
Section: 24-00729-00-SP**

Dear Ms. Thompson,

Per circular letter 2024-13, Winnebago County is submitting the noted candidate for the FY 2026 Local Highway Safety Improvement Program. The application with required attachments is prepared in accordance with said Circular Letter dated April 22, 2024. Both existing road surfaces are chip and seal and the intersection is controlled by stop signs on Winnebago Road. The proposed project consists of providing asphalt pavement surfaces to all 4 approaches, four-foot-wide paved shoulders, thermo plastic pavement markings, raised reflectors and rumble strips (transverse and longitudinal) and widening of turning radii to accommodate farming vehicles. In addition, we are proposing to install four way stop signs with flashing beacons, two street lights, advance warning signs with solar powered flashing beacons and other related improvements.

As per the circular letter, the HSIP application form and associated documents are attached. Winnebago County appreciates your consideration of this funding request and look forward to working with IDOT staff in the completion of this important project to increase safety at this rural intersection. Please call me or Prafull Soni at 815-319-4000 with any questions.

Very truly yours,

Carlos Molina, P.E.
County Engineer, Winnebago County Highway Department

Enclosure

Winnebago Rd and Telegraph Rd Intersection Improvement Project

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Illinois Department of Transportation

Office of Highways Project Implementation / Bureau of Local Roads & Streets
2300 South Dirksen Parkway / Room 205 / Springfield, Illinois / 62764

Local Roads & Streets Grant Application

Program Information

1.	IDOT Grant Program	Local Highway Safety Improvement Program
2.	Solicitation Cycle	Fiscal Year 2026

Applicant Information

3.	Lead Applicant Name (Local Public Agency)	Winnebago County, Illinois
4.	Partners/Co-Applicants	None
5.	Employer / Taxpayer Identification Number (EIN, TIN) for Lead Applicant	
6.	Organizational UEI Number (SAM.GOV) for Lead Applicant	
7.	Business Address for Lead Applicant	Street address: 404 Elm Street City: Rockford State: Illinois County: Winnebago Zip + 4: 61101-1239

Applicant's Name and Contact Information for Person to be involving this Application

8.	First Name	Carlos
9.	Last Name	Molina
10.	Suffix	
11.	Title	County Engineer
12.	Organizational Affiliation	Employee
13.	Telephone Number	815-319-4031
14.	Fax Number	815-319-4001
15.	Email address	cmolina@hwy.wincoil.gov

Applicant's Project

16.	Description of Applicant's Project	<u>Section: 24-00729-00-SP</u> Winnebago Road and Telegraph Road Intersection Improvements
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Illinois Department of Transportation

HSIP Candidate Form

FY 2026

ID:	Contract:	Award Date:	Completion Date:
District: 02	County: Winnebago	City: Burritt Township	
Key route: 16 & 21	Marked route:		
Road Name: Winnebago Rd (CH#16)	Intersecting Roadway: Telegraph Rd (CH#21) <input type="checkbox"/>		
Length: N/A	<input checked="" type="checkbox"/> N/A	Mile station: to	

Location Description: Rural Intersection -Both intersecting Roads-Major Collectors

<input checked="" type="checkbox"/> Rural	<input type="checkbox"/> Urban	Lanes: 2
AADT(Segment):	Total Entering AADT (Intersection): 2581	Speed Limit: 55 mph
Friction Test Results: Not Available	<input type="checkbox"/> N/A	Lighting Present: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N

CHSP Emphasis Area(s): ☐ District Documentation ☒ Systematic Improvements ☐ N/APeer Group: Rural Minor Leg Stop Control Intersection ☐ N/A

Other:

Crashes Details

Year	Total Crashes	Fatal Crashes	Fatalities	A-Injury Crashes	A-Injuries	B-Injury Crashes	B-Injuries	C-Injury Crashes	C-Injuries	PDO	Wet-Weather Crashes	Darkness (Not lighted) Crashes
2016	6	0	0	0	0	1	1	1	1	4	1	0
2017	2	0	0	0	0	1	2	0	0	1	0	0
2018	2	0	0	0	0	1	2	0	0	1	1	0
2019	4	1	1	0	0	1	2	0	0	2	1	2
2021	3	0	0	0	0	0	0	1	1	2	0	0
Total	17	1	1	0	0	4	7	2	2	10	3	2

Location Description: The intersection of Winnebago Rd (CH #16) and Telegraph Rd (CH# 21) is located in a rural area. Both roads are "Major Collector Roads" as per functional classification. All 4 approaches are narrow two lane chip & seal roads surrounded by farm fields.

Problem Description: Many drivers disregarded stop signs/ stopped but failed to yield R-O-W or thought of four way stops which lead to angle crashes.

Previous Safety Improvements: Flashing red/ yellow beacons (lower light output) with additional signs, removal of tree line at S/W sides.

Collision Diagram: ☒ Y ☐ N Images: ☒ Y ☐ N

Predominant Crash Types: Angle collisions (82.3%) and Rear Ended (5.9%) ,Fixed Object(5.9%) and Other Object (5.9%)

Proposed Improvement(s): Installation 4-way stop signs-flashing beacons, warning signs, HMA paving -4 approaches, thermo-plastic pavement markings, raised pavement reflectors, paved shoulders, rumble strips and widening of turning radii to accommodate farming equipment.

Estimated Project Cost (\$000's): \$663.5 Benefit-Cost Ratio: 6.99

Local Projects: None

Annual Fatal Crash Rate (Fatal Crashes/100 Miles): N/A Annual A-Injury Crash Rate (A-Injury Crashes/100 Miles): N/A

Local Roads Rural Functional Class: Major Collector Roads(Both)

Approved: Central HSIP Approval Date:

Signed: Funding: ☐ HSIP ☐ HRRR ☐ RAIL

State Safety Engineer

Comment:

Distribution: ☐ OPP ☐ District ☐ BSPE ☐ LRS ☐ BDE

PROJECT DESCRIPTION - PROJECT DATA INPUT (LOCAL INTERSECTIONS)

Section:24-00729-00-SP

<i>Project:</i>	Intersection Improvement -Winnebago rd and Telegraph Rd					<i>Prepared by:</i>	Prafull Soni		
<i>District:</i>	2		<i>County:</i>	Winnebago		<i>City:</i>	Burritt Township		
<i>Key Route:</i>	Winnebago Rd		<i>Marked Route:</i>	Couny Highway 16		<i>MilePost:</i>			
<i>Location:</i>	Intersection of Winnebago Road and Telegraph Road					<i>Current AADT:</i>	Major Street	1525	
							Minor Street	1050	
<i>Crash data:</i>	6		Years				<i>Traffic Growth factor:</i>	3.0%	
	From	2016	to	2021				<i>Interest rate:</i>	4.0%
<i>Peer Group:</i>	Peer Group 1 - Rural Minor Leg Stop Control Intersection								

<i>Messages</i>
Please provide a detailed cost estimation for all countermeasures along with this summary sheet.
3.2.1.I1.1 - Pavement - Widening and Resurfacing or Widening alone AADT is not within HSM limits
3.2.2.AL.1 - Pavement - Resurfacing alone does not fully match HSM Setting/Facility Type Criteria
The combined effect of multiple countermeasures is limited to 0.60 or the smallest CMF

LOCAL INTERSECTION CRASH SEVERITY DISTRIBUTION BY CRASH TYPE FOR ANALYSIS PERIOD

<i>Crash Type</i>	All Crashes (Aggregated crash input only)	CRASH TYPE																	SPECIAL CASE		Total
		Angle	Animal	Fixed Object	Head On	Left Turn	Other Noncollision	Other Object	Overtuned	Pedestrian	Pedalcyclist	Parked Vehicle	Rear End	Right Turn	Sideswipe Same Direction	Sideswipe Opposite Direction	Turning	Train	Night Time	Wet Pavement	
<i>Crash Severity</i>	ALL	AG	AN	FO	HO	LT	OtherNC	OtherO	OVT	PD	PDC	PKV	RE	RT	SSD	SOD	T	TR	NGT	WP	TOT
Fatal Crashes		1																	0	0	1
A-Injury Crashes		0																	0	0	0
B-Injury Crashes		4																	0	0	4
C-Injury Crashes		2																	0	0	2
PDO Crashes		7		1				1					1						0	0	10

LOCAL INTERSECTION BENEFIT COST ANALYSIS

BENEFIT CALCULATIONS				COUNTERMEASURE COST CALCULATIONS							
COUNTERMEASURE		CMF *	Crash Type affected by this improvement	Unit Cost	Quantity	Units	Total Cost	Service Life	Present Worth	EUAC **	
3.2.1.I1.1 - Pavement - Widening and Resurfacing or Widening alone		0.69	All	\$363,000	0.78	Miles	\$283,140	15	\$283,140	\$25,500	
3.2.2.AL.1 - Pavement - Resurfacing alone		0.95	All	\$141,500	0.78	Miles	\$110,370	10	\$184,932	\$16,650	
3.4.3.I1.1 - Signalization - Flashing Beacon		Varies	RE=0.92; AG,LT,RT,T,SOD=0.87	\$10,000	8	Unit Qnty	\$80,000	10	\$134,045	\$12,100	
3.2.21.IR.1 - Pavement - Increase Width of Paved Shoulder		0.95	All	\$244,000	0.78	Miles	\$190,320	15	\$190,320	\$17,150	
TOTAL BENEFIT		\$499,150		TOTAL COST							\$71,400

BENEFIT/ COST		6.99	ANNUAL NUMBER OF FATALITIES POTENTIALLY PREVENTED		0.07	TOTAL FATALITIES PREVENTED		0.42
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***NOTE: IF THE NUMBER OF LEGS AFFECTED VARIES BY COUNTERMEASURES SELECTED, THEN CALCULATE THE BENEFIT-COST RATIO FOR EACH COUNTERMEASURE SEPARATELY (Use separate spreadsheets for each countermeasure applied).

* CMF = Crash Modification Factor
** EUAC = Estimated Uniform Annual Cost

Winnebago County Highway Department

Section: 24-00729-00-SP

Details of Traffic collisions at the Intersection of Winnebago and Telegraph Road (2016-2021)

Sr. No.	Main Road	Cross Road	Date	Time	Primary Cause	Secondary Cause	Traffic Control	Type of Crash	Weather	Light	Road Surface	Crash Injury	Is intersection realted?	Is Hit & Run ?	Is Alcohol related ?	Is school related ?	Is Drug involved?	Is work Zone related ?	Inevst. Agency	Report #	Is any citation issued ?	Total Fatalities	Total Injuries	A-Injuries	B-Injuries	C-Injuries	O-property damage
1	Winnebago Rd	Telegraph Rd.	03/16/16	8:56	Disregarding stop sign	Not applicable	Stop sign/	Other Object	Clear	Daylight	Wet	O-Property Damage	Yes	No	No	No	No	No	Win. Co.SO	16-013826	No	0	0	0	0	0	1
2	Winnebago Rd	Telegraph Rd.	07/06/16	12:49	Failing to yield right-of-way	Not applicable	Stop sign	Angle	Unknown	Daylight	Dry	B-Injury Crash	Yes	No	No	No	No	No	Win. Co.SO	16-036628	Yes	0	1	0	1	0	1
3	Winnebago Rd	Telegraph Rd.	07/08/16	18:15	Failing to yield right-of-way	Not applicable	Stop sign/Flasher	Angle	Clear	Daylight	Dry	O-Property Damage	Yes	No	No	No	No	No	Win. Co.SO	16-037108	Yes	0	0	0	0	0	2
4	Winnebago Rd	Telegraph Rd.	07/09/16	6:25	Disregarding stop sign	Failing to yield right-of-way	Stop sign/Flasher	Angle	Clear	Daylight	Dry	C-Injury Crash	Yes	No	No	No	No	No	Win. Co.SO	16-037231	Yes	0	1	0	0	1	2
5	Winnebago Rd	Telegraph Rd.	08/05/16	14:30	Disregarding stop sign	Not applicable	Stop sign/Flasher	Angle	Clear	Daylight	Dry	O-Property Damage	Yes	No	No	No	No	No	Win. Co.SO	16-043246	Yes	0	0	0	0	0	2
6	Winnebago Rd	Telegraph Rd.	11/09/16	16:25	Failing to yield right-of-way	Not applicable	Stop sign/Flasher	Angle	Clear	Daylight	Dry	O-Property Damage	Yes	No	No	No	No	No	ISP	16-16-00286	No	0	0	0	0	0	2
7	Winnebago Rd	Telegraph Rd.	05/10/17	9:45	Disregarding stop sign	Not applicable	Stop sign/Flasher	Angle	Clear	Daylight	Dry	B-Injury Crash	Yes	No	No	No	No	No	Win. Co.SO	17-026045	Yes	0	2	0	2	0	2
8	Winnebago Rd	Telegraph Rd.	09/02/17	14:05	Failing to yield right-of-way	Driving skills/knowledge/experience	Stop sign/Flasher	Angle	Clear	Daylight	Dry	O-Property Damage	Yes	No	No	No	No	No	Win. Co.SO	17-049851	Yes	0	0	0	0	0	2
9	Winnebago Rd	Telegraph Rd.	03/28/18	16:08	Disregarding stop sign	Not applicable	Stop sign/Flasher	Angle	Clear	Daylight	Dry	B-Injury Crash	Yes	No	No	No	No	No	Win. Co.SO	18-016129	Yes	0	2	0	2	0	2
10	Winnebago Rd	Telegraph Rd.	10/05/18	8:07	Failing to reduce speed to avoid crash	Distraction form outside vehicle	Stop sign/Flasher	Angle	Rain	Daylight	Wet	O-Property Damage	Yes	No	No	No	No	No	Win. Co.SO	18-053174	Yes	0	0	0	0	0	2
11	Winnebago Rd	Telegraph Rd.	05/30/19	0:33	Operating vehicle in erratic, careless, negligent	Failing to reduce speed to avoid crash	No control	Rear End	Unknown	Darkness	Dry	O-Property Damage	No	Yes	No	No	No	No	Win. Co.SO	19-027376	No	0	0	0	0	0	2
12	Winnebago Rd	Telegraph Rd.	03/09/19	21:00	Unable to determine	Improper lane usage	No control	Fixed Object	Unknown	Darkness	Wet	O-Property Damage	No	Yes	Unknown	No	Unknown	No	Win. Co.SO	19-011874	No	0	0	0	0	0	1
13	Winnebago Rd	Telegraph Rd.	07/12/19	8:30	Disregarding stop sign	Failing to yield right-of-way	Stop sign/Flasher	Angle	Clear	Daylight	Dry	B-Injury Crash	Yes	No	No	No	No	No	Win. Co.SO	19-036329	Yes	0	2	0	2	0	2
14	Winnebago Rd	Telegraph Rd.	07/27/19	9:36	Failing to yield right-of-way	Driving skills/knowledge/experience	No control	Angle	Clear	Daylight	Dry	K-Fatal	Yes	No	No	No	No	No	Win. Co.SO	19-039225	No	1	0	0	0	0	2
15	Winnebago Rd	Telegraph Rd.	11/14/20	14:00	Failing to yield right-of-way	Not applicable	Stop sign/Flasher	Angle	Clear	Daylight	Dry	O-Property Damage	Yes	No	No	No	No	No	ISP	16-20-00354	Yes	0	0	0		0	2
16	Winnebago Rd	Telegraph Rd.	07/16/21	16:50	Disregarding stop sign	Not applicable	Stop sign/Flasher	Angle	Clear	Daylight	Dry	C-Injury Crash	Yes	No	No	No	No	No	Win. Co.SO	WB21-008377	Yes	0	1	0	0	1	2
17	Winnebago Rd	Telegraph Rd.	09/11/21	13:29	Failing to yield right-of-way	Unable to determine	Stop sign/Flasher	Angle	Clear	Daylight	Dry	O-Property Damage	Yes	No	No	No	No	No	Win. Co.SO	WB21-010769	Yes	0	0	0	0	0	2
Prepared on_06-03-2024																						1	9	0	7	2	31

Intersection of Winnebago-Telegraph Road- Safety Improvement Project

Summary of Crash Data(2016-2021)

Winnebago County (Local , Rural Road)

Crash Data By Type of Collision

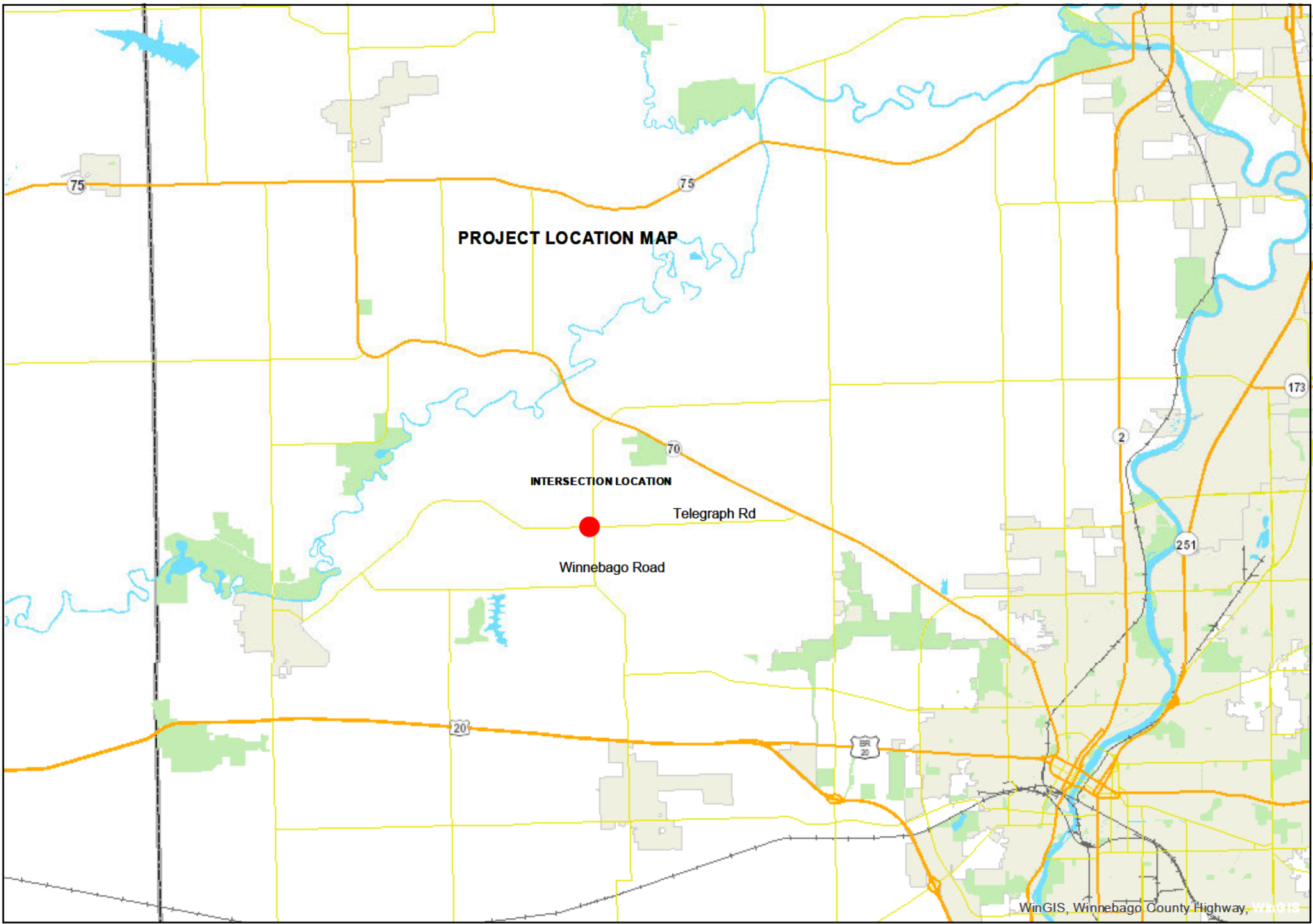
Particulars	K-Fatal	A-Inj	B-Inj	Total	Percentage
Angle	1	0	4	5	100.00%
Rear End	0	0	0	0	0.00%
Fixed Object	0	0	0	0	0.00%
Other Object	0	0	0	0	0.00%
Total	1	0	4	0	100.00%

Year	Total	Fatal Crashes	Fatal	A-Injury Crashes	A-Injuries	B-Injury Crashes	B-Injuries	C-Injury Crashes	C-Injuries
2016	2	0	0	0	0	1	1	1	1
2017	1	0	0	0	0	1	2		
2018	1	0	0	0	0	1	2		
2019	2	1	1	0	0	1	2		
2020	0	0	0	0	0	0	0		
2021	1	0	0	0	0	0	0	1	1
	7	1	1	0	0	4	7	2	2

Crash Type	Symbol	# of crashes	K	A	B	C	O	Total
Angle	ANG	14	1	0	4	2	7	14
Rear Ended	RE	1	0	0	0	0	1	1
Fixed Object	FO	1	0	0	0	0	1	1
Other Object	OO	1	0	0	0	0	1	1
		17	1	0	4	2	10	17
Injuries /Fatality			1	0	7	2	31	
Darkness			0	0	0	0	2	

Road Surface	#	%
Wet	3	17.6
Dry	14	82.4
Total	17	100

Light	#	%
Daytime	15	86.7
Darkness	2	13.3%
Total	17	100%



WinGIS cannot and does not warrant the accuracy of: property and boundary lines, dimensions of parcels and lots, location of structures or improvements, and topographic or geologic



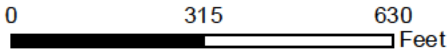
SCALE: 1:132,052

WinGIS, Winnebago County Highway, WinGIS



WinGIS, Winnebago County Highway, Whois

INTERSECTION IMPROVEMENT - WINNEBAGO RD & TELEGRAPH RD



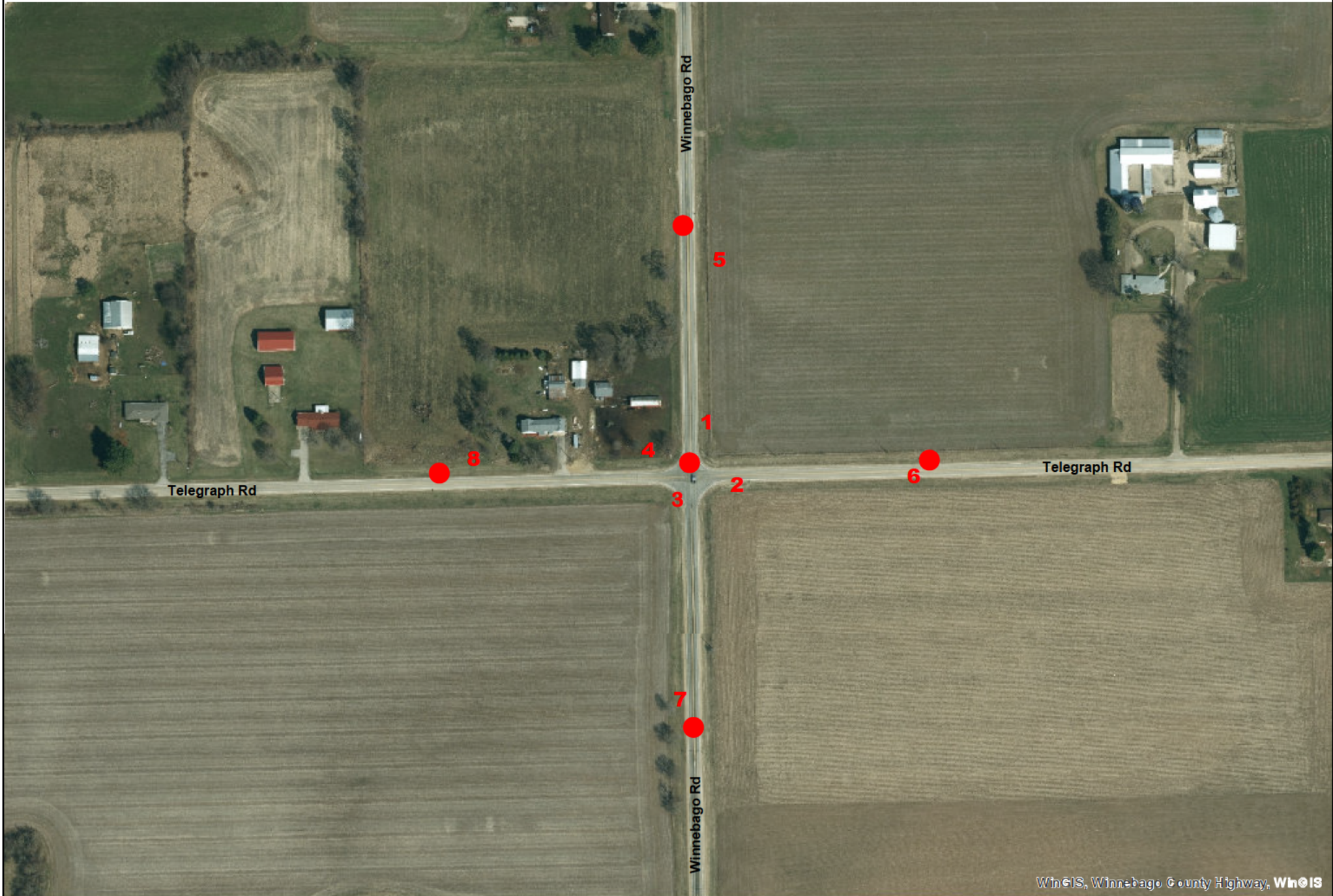
SCALE: 1:3,802



WinGIS cannot and does not warrant the accuracy of: property and boundary lines, dimensions of parcels and lots, location of structures or improvements, and topographic or geologic features on the land. Only on-site verification or field surveys by a licensed professional land surveyor can provide such accuracy.

Pictures Location

Section:24-00729-00-SP

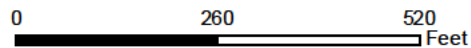


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INTERSECTION IMPROVEMENT - WINEBAGO RD & TELEGRAPH RD



WinGIS cannot and does not warrant the accuracy of: property and boundary lines, dimensions of parcels and lots, location of structures or improvements, and topographic or geologic



SCALE: 1:2,963



Pic#1-Looking North from the center of the intersection

06/04/2024



Pic # 5_ Looking South from the northside approach

06/04/2024



Pic#2-Looking East from the center of the intersection

06/04/2024



Pic # 6_ Looking West from the eastside approach

06/04/2024



Pic#3-Looking South from the center of the intersection 06/04/2024



Pic # 7_ Looking North from the southside approach 06/04/2024



Pic#4-Looking West from the center of the intersection

06/04/2024



Pic # 8_ Looking East from the westside approach

06/04/2024

Winnebago County Highway Department

Winnebago Road and Telegraph Road Intersection Improvement Project

Sr. No.	PAY CODE NUMBER	ITEMS-PARTICULAR	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	20200100	EARTH EXCAVATION	CU YD	315.00	\$35.00	\$11,025.00
2	20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	80.00	\$375.00	\$30,000.00
3	20800150	TRENCH BACKFILL	CY	45.00	\$55.00	\$2,475.00
4	28100803	STONE DUMPED RIPRAP, CLASS A2	TON	100.00	\$75.00	\$7,500.00
5	28200200	FILTER FABRIC	SY	220.00	\$6.00	\$1,320.00
6	35101400	AGGREGATE BASE COURSE, TYPE B (9")	TON	485.00	\$30.00	\$14,550.00
7	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	8650.00	\$1.00	\$8,650.00
8	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	6100.00	\$1.25	\$7,625.00
9	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	250.00	\$17.50	\$4,375.00
10	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (2")	TON	1375.00	\$100.00	\$137,500.00
11	40603560	POLYMERIZED HOT-MIX ASPHALT SURF. COURSE, MIX "D", N50 (1.5")	TON	1355.00	\$105.00	\$142,275.00
12	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	45.00	\$200.00	\$9,000.00
13	44213200	SAW CUTS	FT	100.00	\$7.50	\$750.00
14	48101200	AGGREGATE SHOULDERS, TYPE B	TON	640.00	\$25.00	\$16,000.00
15	48203100	HOT-MIX ASPHALT SHOULDERS (5")	TON	1076.00	\$85.00	\$91,460.00
16	50105220	PIPE CULVERT REMOVAL	FT	110.00	\$25.00	\$2,750.00
17	542C0223	PIPE CULVERTS, CLASS C, TYPE 1 18"	FT	66.00	\$110.00	\$7,260.00
18	542C0229	PIPE CULVERTS, CLASS C, TYPE 1 24"	FT	80.00	\$130.00	\$10,400.00
19	54262721	METAL FLARED END SECTIONS 21"	EA	2.00	\$600.00	\$1,200.00
20	54262724	METAL FLARED END SECTIONS 24"	EA	2.00	\$650.00	\$1,300.00

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21	63500105	DELINEATORS	EA	4.00	\$150.00	\$600.00
22	64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	12,000.00	\$0.85	\$10,200.00
23	67100100	MOBILIZATION	LSUM	1.00	\$30,000.00	\$30,000.00
24	70300100	SHORT TERM PAVEMENT MARKING	FOOT	4,000.00	\$1.00	\$4,000.00
25	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1,500.00	\$2.25	\$3,375.00
26	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	12,000.00	\$1.50	\$18,000.00
27	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	80.00	\$8.00	\$640.00
28	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	65.00	\$50.00	\$3,250.00
29	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1.00	8,500.00	\$8,500.00
30	88000105	FLASHING BEACON INSTALLATION-RED	EACH	4.00	\$1,500.00	\$6,000.00
31	X1400349	SOLAR-POWERED FLASHING BEACON INSTALLATION-YELLOW	EACH	4.00	\$4,000.00	\$16,000.00
32	X0327618	LANDSCAPING (SPECIAL)	LSUM	1.00	\$7,500.00	\$7,500.00
33	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1.00	\$10,000.00	\$10,000.00
34	X7200105	SIGN PANEL TYPE 1 (SPECIAL)	SQ FT	110.00	\$35.00	\$3,850.00
35	X7240600	REMOVE AND RE-ERECT EXISTING SIGN	EACH	5.00	\$100.00	\$500.00
36	X7280105	TELESCOPING STEEL SIGN SUPPORT (SPECIAL)	EACH	8.00	\$375.00	\$3,000.00
37	XX007039	ST LIGHT ASSEMBLY COMPLETE	EACH	2.00	\$11,000.00	\$22,000.00
38	Z0013798	CONSTRUCTION LAYOUT	LSUM	1.00	\$7,500.00	\$7,500.00
39	Z0055600	RUMBLE STRIP-TRANSVERSE	SQ YD	125.00	\$10.00	\$1,250.00
				Total		\$663,580.00

6/5/2024

Winnebago Rd and Telegraph Rd Intersection Safety Improvement Project (Section:24-00729-00-SP)

Project Narrative:

In response to IDOT Circular letter 2024-13 dated April 22, 2024, the Winnebago County Highway Department is pursuing an improvement to address safety deficiencies at the intersection of Winnebago Road (CH # 16) and Telegraph Road (CH # 21). Both roads are “Major Collector Roads” as per functional classification. Winnebago Road is a north-south road with average daily traffic (ADT-2022) of 1,100 and 1,700 on the North and South approaches respectively. Telegraph Road is an East-West Road with ADTs of 1,050 and 850 on the East and West approaches respectively. The overall ADT at this intersection is 2,580. The intersection is currently controlled by two-way stop signs on Winnebago Road.

A traffic collision analysis was performed using 2016-2021 crash data gathered from IDOT’s safety portal and from the local sheriff/police departments. The existing typical sections for both intersecting roads are two lanes, approximately 22 ft wide, chip & seal surfaces with narrow aggregate/grass shoulders with ditch sections. The posted speed limit for both roads is 55 MPH and it is located in rural area surrounded by agricultural fields. There are few residential units within a quarter mile of the intersection.

There were 17 traffic collisions recorded at this intersection from 2016 to 2021. There were predominantly 82% angle type crashes and the remaining crashes were rear end, fixed object and other object crashes-each at 5.9%. We have analyzed “Traffic Crash Reports” and specifically focused on the narratives described by drivers involved in traffic collisions and reported primary causes and secondary causes by the investigating officers. We found that many drivers disregarded stop signs or stopped but failed to yield right-of-way or thought it was a four way stop condition. The sight distances from all approaches meet AASHTO and IDOT standards. The County removed a tree line along the southwest right-of-way line a few years ago to improve visibility. We have observed that the prevailing speed on Telegraph Road is much higher than the posted speed which results in lesser reaction time to make appropriate decisions in negotiating the intersection. This type of situation tends to lead to angle collisions. Another safety concern is that farm vehicles and equipment are longer/wider and need more time/space to

negotiate the intersection and may lead to travelling public underestimating time to react to avoid collisions. A fatal collision at this intersection involved a RV (wider and longer) and a motorcycle.

We have reviewed counter measures, as recommended by HSIP guidelines, for minimizing the angle collisions and other type of crashes. We are proposing a project to incorporate relevant counter measures which will result in achieving a goal of “Zero fatalities”. As per HSIP program guidance, we are proposing to turn the intersection into a 4-way stop condition, provide an asphalt surface to all 4 approaches to increase visibility and skid resistance, install raised pavement reflectors and thermoplastic pavement markings, provide paved (HMA) shoulders, install new high reflective signs (stop and stop ahead), install flashing red and yellow, install two street lights, widen the turning radii and install edge, centerline and transverse rumble strips on the approaches. We will explore providing a post/mast arm combination set up for the red flashing beacons for better visibility at this rural intersection.

All proposed countermeasures will improve safety at this sub-standard intersection. It is anticipated that the total project construction cost will be **\$663,580.00** consisting of HSIP grant (90%) in the amount of **\$597,222.00** and 10% local match of **\$66,358.00**. Preliminary Engineering (Phases I and II) and Construction Engineering (CE) costs, estimated at **\$100,000.00** will be covered by County local funds. The calculated benefit/cost ratio for these systematic upgrades is **6.99**. These improvements are anticipated to substantially reduce the number of angle and other type of crashes and improve the overall safety for all motorists and users of this intersection.

Highway Safety Improvement Project (FY 2026)

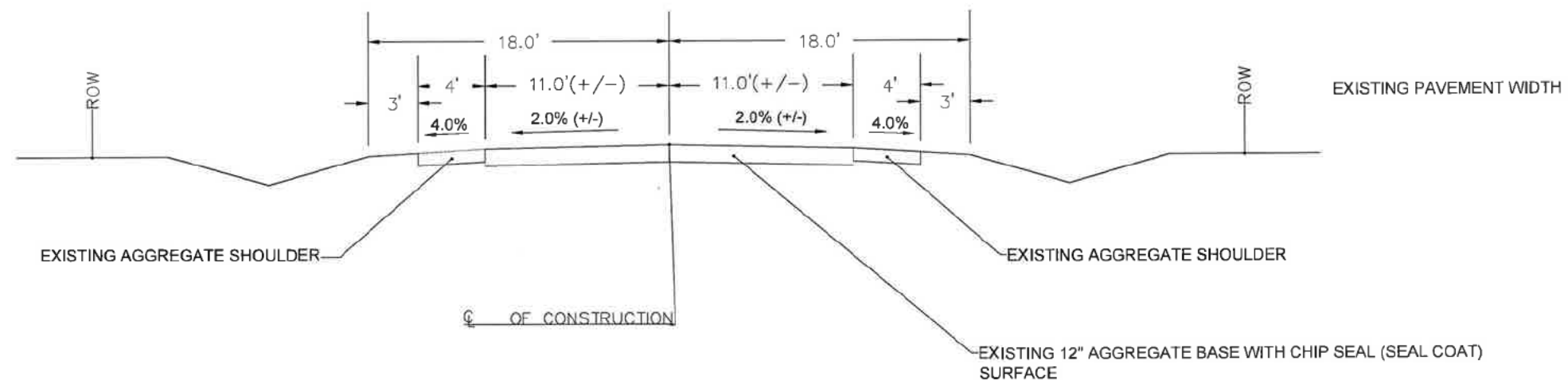
Justification for multi-way stop signs at the intersection of Winnebago Rd and Telegraph Rd

Even though the traffic volumes do not meet the MUTCD-2019 specified numbers to install multiway stop signs at the intersection; we are proposing multi-way (four-way) stop signs at this intersection for the following reasons:

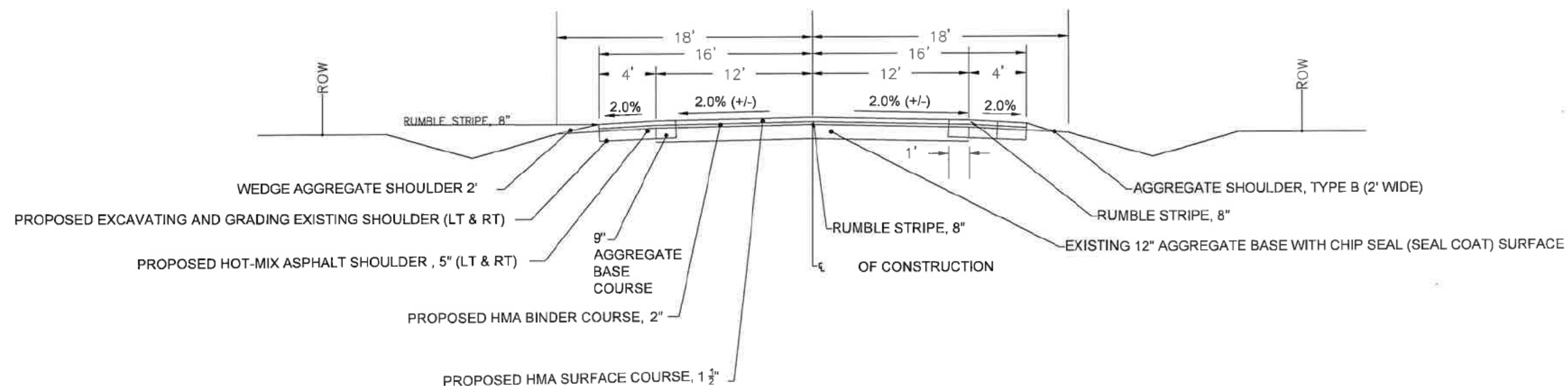
1. Traffic on Winnebago Road (NB and SB) have to stop before negotiating the intersection even though the current traffic volume is more on Winnebago Road (1,524 VPD-i.e., 59%) compared to the traffic volume EB and WB on Telegraph Road (1,057-i.e., 41%). It is unclear why a decision was made in the past to stop the higher traffic volumes on Winnebago Road; however, this has been in place for many years and it is what the traffic is used to. Current traffic volumes show that a change in traffic control may be prudent.
2. The existing traffic volume entering the intersection from all four approaches is 2,581, which is more than the required average combined vehicular traffic of 2,000.
3. Analysis of the recorded crash reports from 2016-2021, indicates that majority of accidents were "Angle Collisions" and the primary cause reported was "failing to yield right-of-way" and/or "disregarding stop sign." During these six years, there were more than 5 crashes in a 12 months period that were susceptible to correction by a multi-way stop installation.
4. The intersection is located in a rural surrounding with similar road geometries and characteristics, which may lead road users to expect that cross traffic will also stop. This type of misunderstanding leads to traffic collisions.



WINNEBAGO ROAD & TELEGRAPH ROAD EXISTING TYPICAL SECTION



WINNEBAGO ROAD & TELEGRAPH ROAD PROPOSED TYPICAL SECTION





Illinois Department of Transportation

Local Roads & Streets Federal Funds Application Risk Assessment

Local Public Agency

Winnebago County Highway Department

Risk Factor	Description	Definition of Scale (time frames are based on LPA fiscal year)	Points
General History of Performance	Have there been any changes in key organizational staff or leadership, such as Fiscal and Administrative Management, Transportation Related Program/Project Management, and/or Elected Officials?	0 points - No significant changes in the last 4 or more years; 1 point - Minor changes, but majority of key staff and officials have not changed in the last 4 years; 2 points - Significant key staff or elected leadership changes within the last 3 years; 3 points - Significant key staff and elected leadership changes within the last 3 years.	■
	What is the LPA's history with federal-aid funded transportation projects?	0 points - One or more federal-aid funded transportation projects per year; 1 point - At least one project within the past three years; 2 points - At least one project within the past 5 years; 3 points - None or more than 5 years	■
	Does LPA have qualified technical staff with experience managing federal-aid funded transportations through IDOT?	0 points - Full-time employee with experience designated as being in "responsible charge"; 1 point - LPA has qualified technical staff, but will be utilizing an engineering consultant to manage day-to-day with LPA technical staff oversight; 2 points - LPA has no technical staff and all technical work will be completed by consultant, but LPA staff has prior experience with federal-aid projects; 3 points - LPA staff have no prior experience or technical expertise and relying solely on consultant.	■
	Has the LPA been untimely in submitting invoicing, reporting on federal-aid projects as required in 2 CFR 200, and or audits as required?	0 points - No; 1 point - Delays of 6 or more months; 2 points - Delays of up to 1 year; 3 points - 1 year or more years of delay.	■
Financial Controls	Are the annual financial statements prepared in accordance with Generally Accepted Accounting Principles or on a basis acceptable by the regulatory agency?	0 points - Yes; 3 points - no	■
	What is the LPA's accounting system?	0 points -Automated accounting software; 1 point - Spreadsheets; 2 points - Paper only; 3 points - None.	■
Audits	Does the organization have written policies and procedures regarding proper segregation of duties for fiscal activities that include but are not limited to: a) authorization of transactions; b) record keeping for receipts and payments; and c) cash management?	0 points - Yes; 3 points - no	■
	When was the last time a financial statement audit was conducted?	0 points - In the past year; 1 point - In the past 2 years; 2 points - In the past three years; 3 points - 4 years or more or never.	■
	What type of financial statement audit has the organization had conducted?	0 points - Single Audit/Program Specific Audit in accordance with 2 CFR 200.501 or Financial audit conducted in accordance with Generally Accepted Auditing Standards or Generally Accepted Government Auditing Standards; 1 point - Financial review; 3 points - Other type or none	■
	Did the most recent audit disclose findings considered to be significant deficiencies or material weaknesses? Have the findings been resolved?	0 points - No; 3 points - yes, or no audits required 0 points - Yes or no findings; 1 point - In progress; 3 points - No	■ ■

Summary of Risk

General History of Performance	■
Financial Controls	■
Audits	■
Total	■

Completed By

Carlos Molina, PE.

Title/Role

County Engineer

Completed 06/14/24

BLR 04101 (04/26/23)



Uniform Grant Agreement Affidavit of
Disclosure of Conflicts of Interest-Grantee



06.068.0148

Agreement No.

Employee Name

Prafull Soni, PE

Position of Employee

Senior Civil Engineer

Grantee's disclosure of the information contained in this Form is required by the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards published in Title 2, Part 200 of the Code of Federal Regulations, 2 CFR 200.112, and 44 Ill. Admin Code 7000.40(b)(3). As an Employee or Officer of Grantee, I will remain bias-free before, during and after the award process of the Grant Agreement. Pursuant to the above referenced Uniform Guidance and Administrative Rules, I have identified below any relationship I have, or have had, of a family, political, financial, or social nature with any of Grantor's employees related to this Grant Agreement, and wait for direction from the Grants Unit Manager and the Department's Ethics Officer before proceeding to participate with Grantor in the award process. After submittal of this Disclosure to the Department's Bureau of Business Services, the Bureau of Business Services will provide this form to the Ethics Officer if a conflict is noted.

Check statement 1 or 2. If you check statement 1, please sign and date the form. If you check statement 2, please complete the information and then sign and date the form.

- ☒ 1. I do not have, nor have I had, any relationship described above nor any other conflict of interest with any of Grantor's employees for this Grant Agreement.
- ☐ 2. I have, or have had, a relationship described above or other conflict of interest with the following employees of Grantor for this Grant Agreement.

Name of Grantor's employee or officer

Nature of Potential Conflict

☒ By checking this box and typing my name below, I verify this document has been reviewed and approved by the owner and myself.

Approver Name

Date