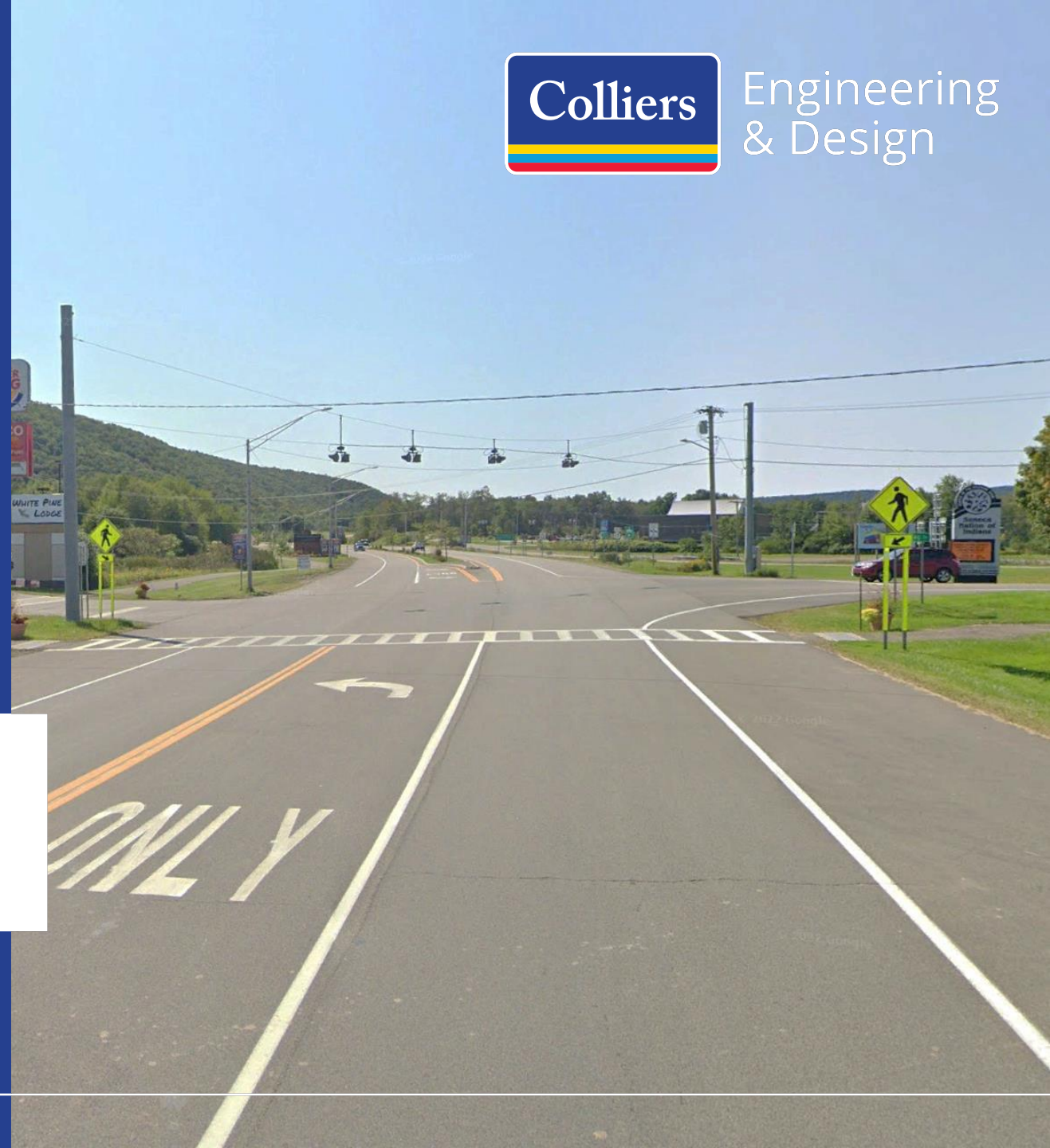




Engineering
& Design

Broad Street & RC Hoag Drive Intersection Improvements

Community Meeting – August 13, 2025
Allegany Community Center, Jo-Jo Redeye Room
3677 Administration Drive, Salamanca, NY



Meeting Agenda

- 01 Background
- 02 Concepts
- 03 Recommendation
- 04 How to provide input





Location, Need, Purpose, Objectives

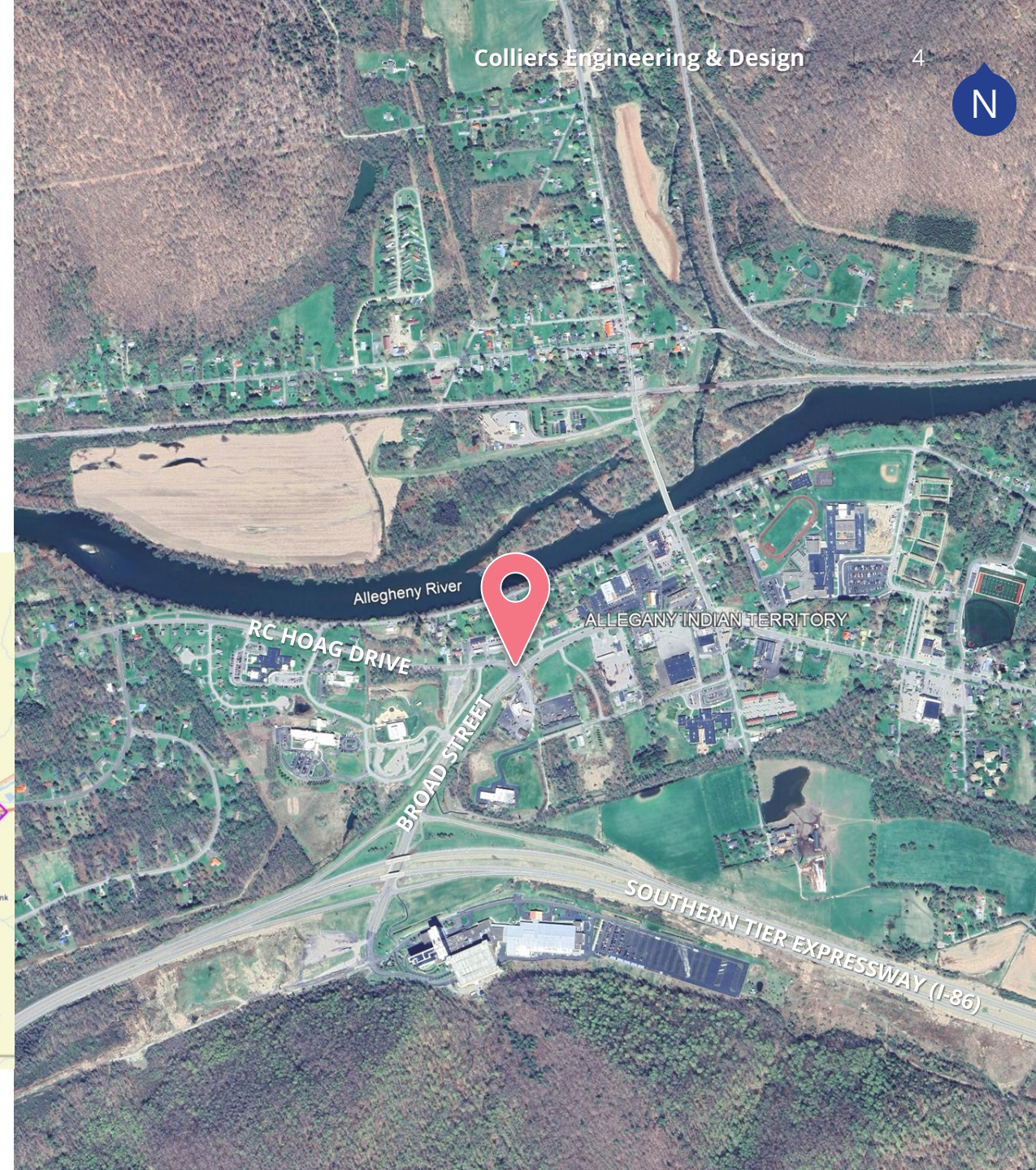
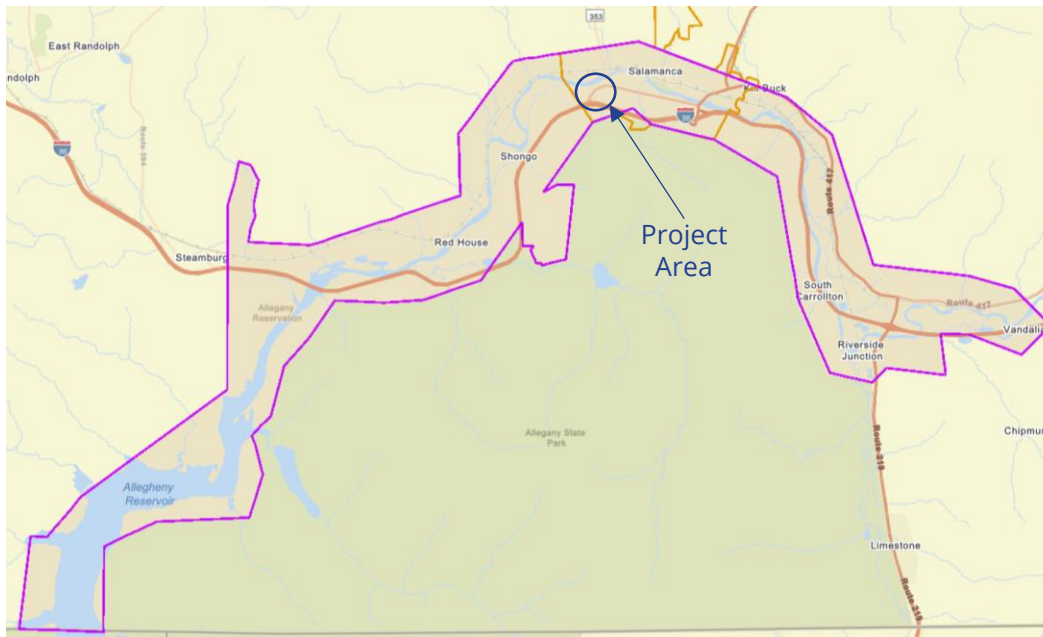
Background



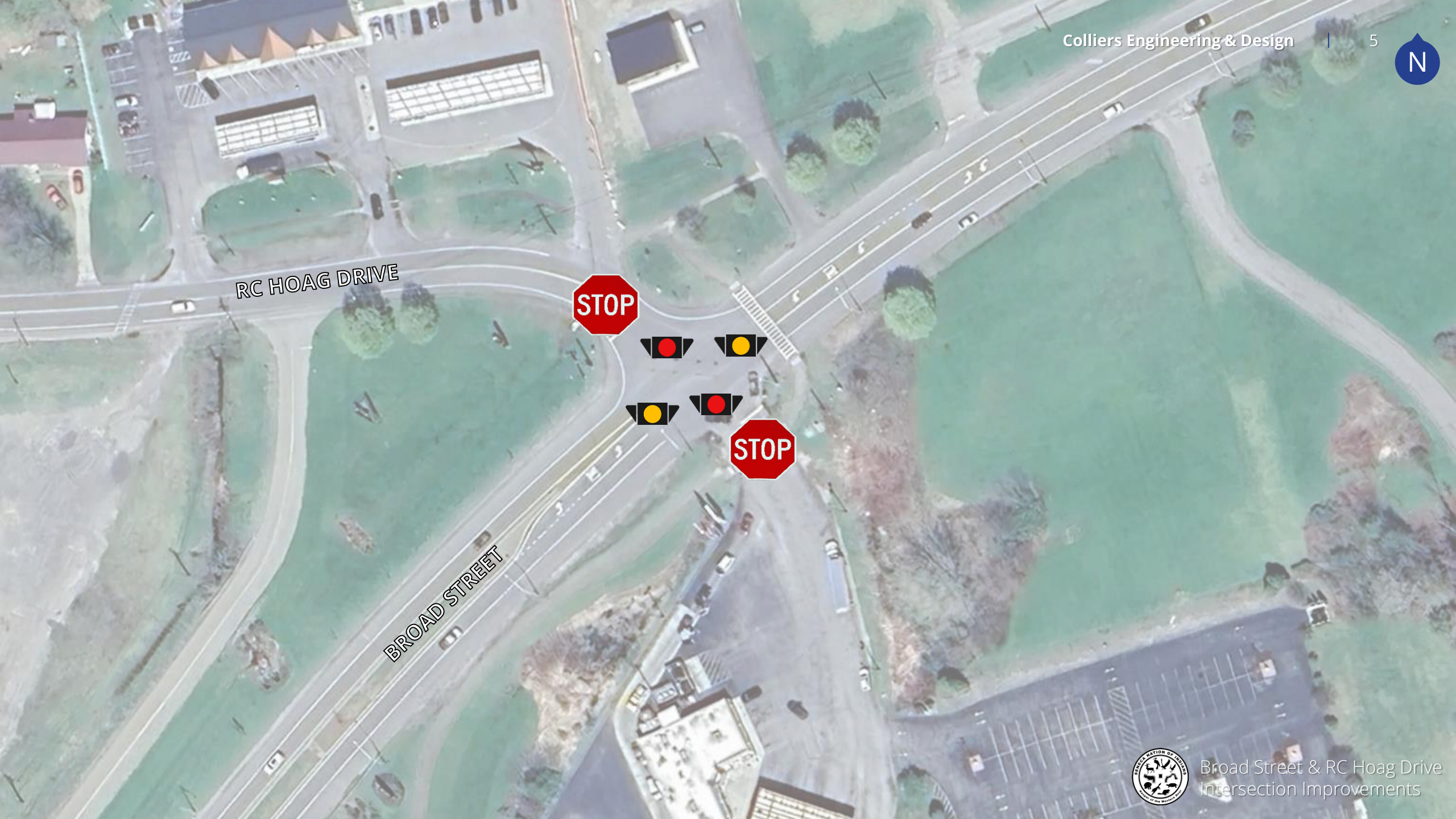
Project Location

Broad Street (NY Route 417) and RC Hoag Drive

City of Salamanca, on the Seneca Allegany Territory



Broad Street & RC Hoag Drive Intersection Improvements

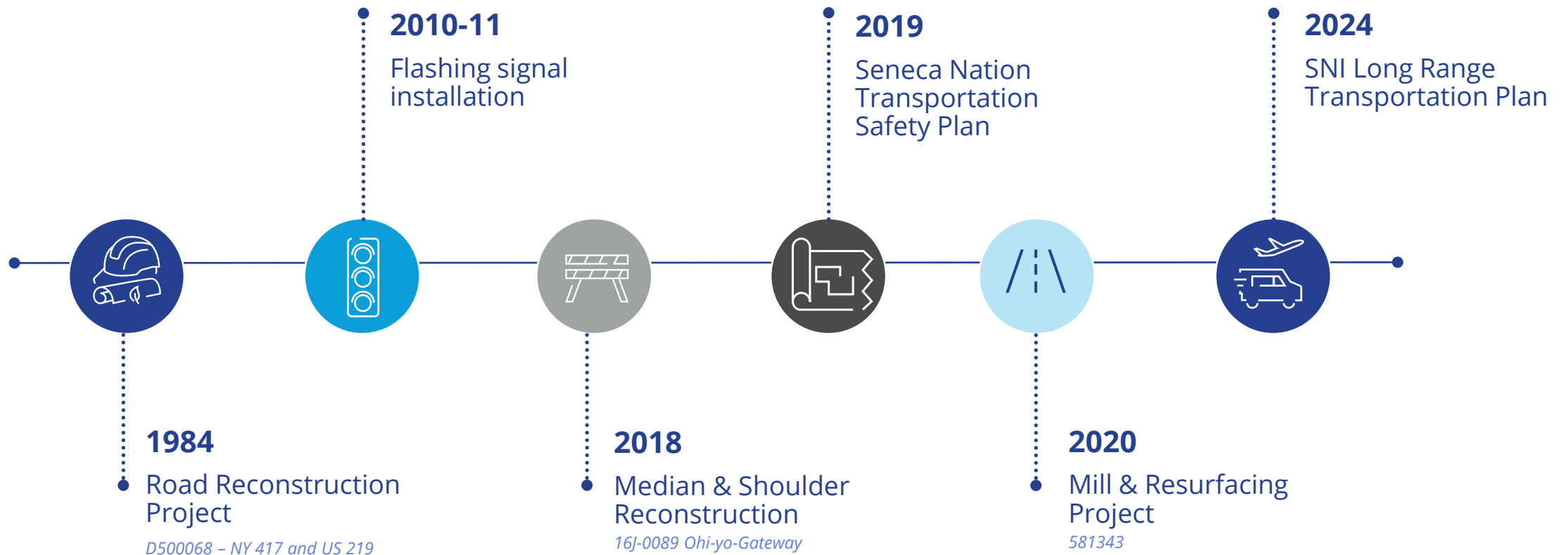


RC HOAG DRIVE

BROAD STREET



Over the years



Grant Application

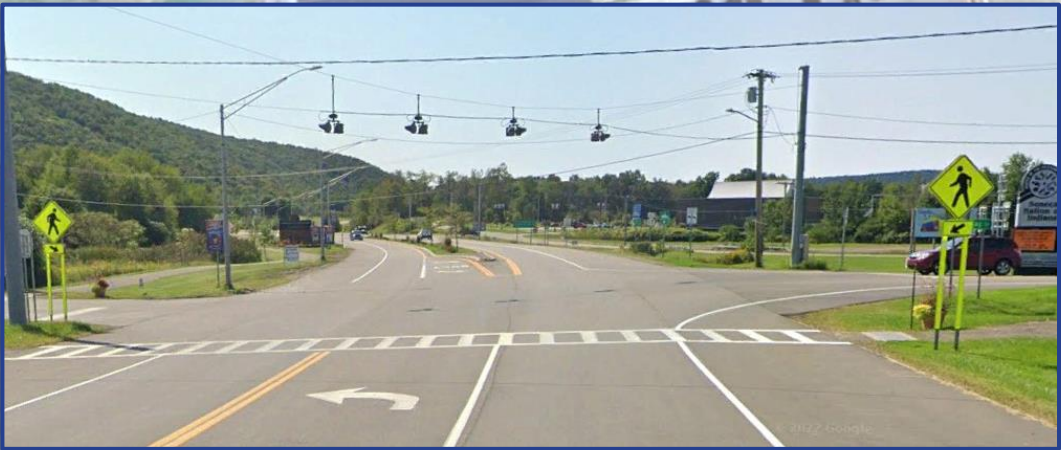
- [The Broad Street and RC Hoag Drive](#) intersection was identified as needing safety improvements in the 2019 Seneca Nation Transportation Safety Plan (SNTSP)
 - Suggested countermeasures included a roundabout, street lighting, sidewalks, and beacons at pedestrian crossings
- [US DOT, Federal Highway Administration \(FHWA\) Safe Streets for All \(SS4A\) Grant Program](#) – applied in Fiscal Year 2023
 - The Seneca Nation was awarded \$2.5M to address safety concerns at the intersection
 - Funding for environmental studies, design, land agreements, utility relocation, & construction
 - Specifically for the design and construction of a roundabout



Project Objectives

- ✓ Improve intersection safety for all roadway users
- ✓ Lower vehicle speeds on Broad Street
- ✓ Improve pedestrian and bicycle crossings
- ✓ Create a gateway into the community
- ✓ Improve roadway lighting
- ✓ Maintain intersection capacity





Existing and Future Traffic Volumes				
Roadway (Approach)	Broad Street (East)	Broad Street (West)	RC Hoag Drive (North)	Driveway (South)
Year	ADT	ADT	ADT	ADT
Existing (2025)	8,829	7,647	2,220	2,050
ETC (2030)	9,060	7,850	2,280	2,110
ETC+20 (2050)	10,010	8,670	2,520	2,330
<div>Notes:<div>1. ETC = Estimated Time of Completion</div><div>2. RC Hoag Drive & Driveway volumes are estimated based on intersection counts</div></div>				

Speed Data		
Roadway (Approach)	Broad Street (East)	Broad Street (West)
Existing Speed Limit	30 MPH	30 MPH
85 th Percentile Speed	36 MPH	36 MPH EB 39 MPH WB

Traffic Composition Data		
Roadway (Approach)	Broad Street (East)	Broad Street (West)
Directional Split	48/52	48/52
% Trucks	3.1%	4.0%
<div>Notes:<div>1. Directional splits and percent trucks are based on daily traffic</div><div>2. Order of splits = EB/WB</div></div>		



Crash History



Study Period
May 1, 2020 – April 30, 2025



13 Intersection Crashes
38% Right-angle collisions
Failure to yield the right-of-way

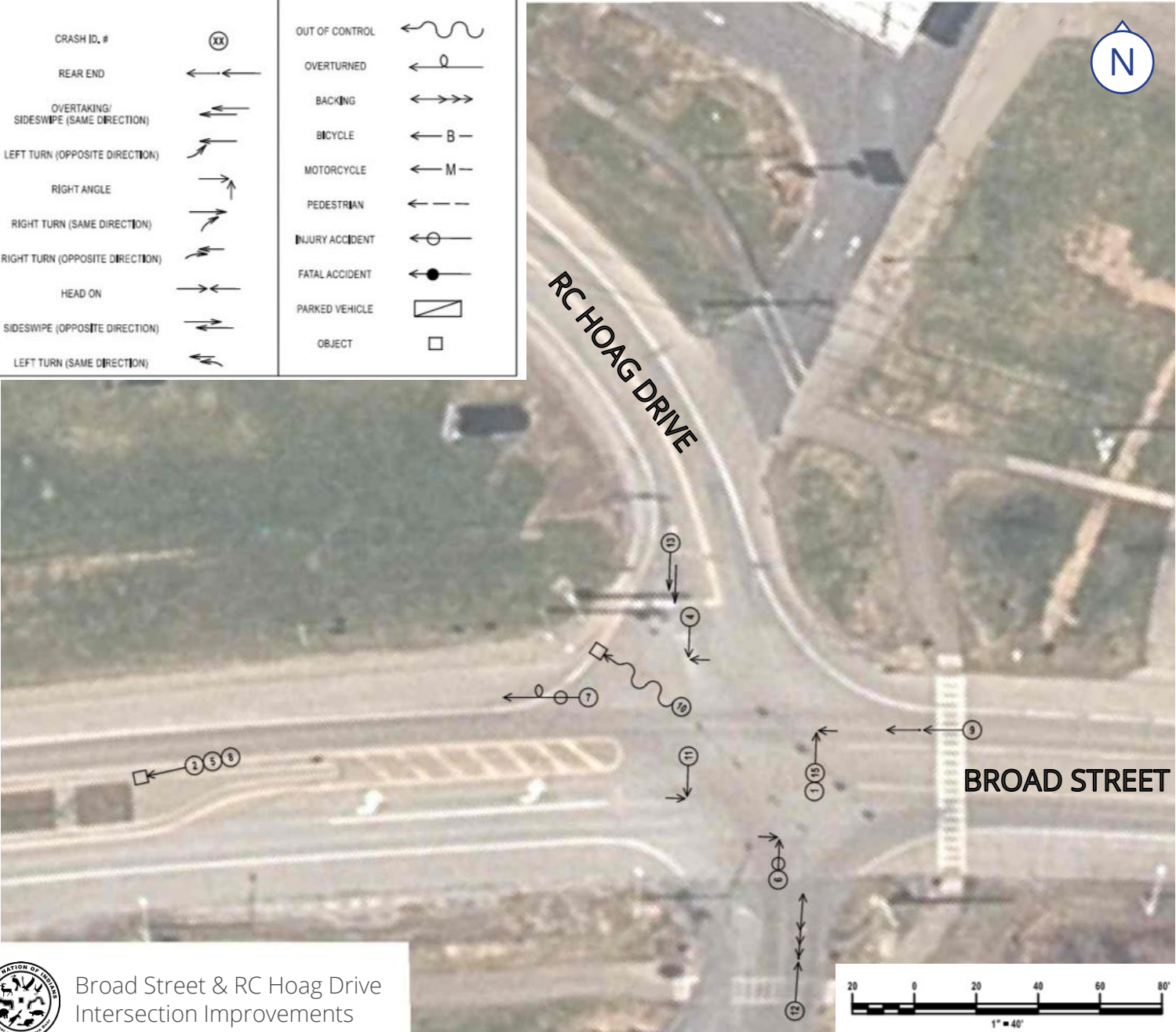


2 Injury Crashes



Crash rate is higher than statewide average
0.59 c/mev vs. 0.28 c/mev

LEGEND	
CRASH ID, #	⊙
REAR END	←←
OVERTAKING/ SIDESWIPE (SAME DIRECTION)	←←
LEFT TURN (OPPOSITE DIRECTION)	↙
RIGHT ANGLE	↗
RIGHT TURN (SAME DIRECTION)	↘
RIGHT TURN (OPPOSITE DIRECTION)	↘
HEAD ON	→→
SIDESWIPE (OPPOSITE DIRECTION)	↔
LEFT TURN (SAME DIRECTION)	↖
OUT OF CONTROL	~~~~~
OVERTURNED	⊖
BACKING	↔↔↔
BICYCLE	← B —
MOTORCYCLE	← M —
PEDESTRIAN	← - - -
INJURY ACCIDENT	⊙
FATAL ACCIDENT	●
PARKED VEHICLE	▢
OBJECT	□





Concepts

Concept 1



"No Action"

- Routine maintenance only
- Keep two-way stop



Concept 1



"No Action"

- Routine maintenance only
- Keep two-way stop



Concept 2



Sign Improvements

- Add warning sign to the back of existing stop signs
- Add intersection warning signs on Broad Street



Concept 1



"No Action"

- Routine maintenance only
- Keep two-way stop



Concept 2



Sign Improvements

- Add warning sign to the back of existing stop signs
- Add intersection warning signs on Broad Street



Concept 3



All-Way Stop

- Add stop signs on Broad Street approaches, requiring all traffic to stop



Concept 1



"No Action"

- Routine maintenance only
- Keep two-way stop



Concept 2



Sign Improvements

- Add warning sign to the back of existing stop signs
- Add intersection warning signs on Broad Street



Concept 3



All-Way Stop

- Add stop signs on Broad Street approaches, requiring all traffic to stop



Concept 4



Signalized Intersection

- Install traffic signals at the intersection



Concept 1



"No Action"

- Routine maintenance only
- Keep two-way stop



Concept 2



Sign Improvements

- Add warning sign to the back of existing stop signs
- Add intersection warning signs on Broad Street



Concept 3



All-Way Stop

- Add stop signs on Broad Street approaches, requiring all traffic to stop



Concept 4



Signalized Intersection

- Install traffic signals at the intersection



Concept 5



Roundabout

- Install a roundabout at the intersection



Concept 1



"No Action"

- Routine maintenance only
- Keep two-way stop



Concept 2



Sign Improvements

- Add warning sign to the back of existing stop signs
- Add intersection warning signs on Broad Street



Concept 3



All-Way Stop

- Add stop signs on Broad Street approaches, requiring all traffic to stop



Concept 4



Signalized Intersection

- Install traffic signals at the intersection



Concept 5



Roundabout

- Install a roundabout at the intersection



All-Way Stop Concept



FLASHING RED
OVERHEAD BEACON
WITH BACKPLATES

RC HOAG DRIVE

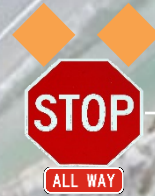
EXISTING STOP
SIGN TO REMAIN



EXISTING STOP
SIGN TO REMAIN



BROAD STREET



All-Way Stop Concept Benefits & Drawbacks



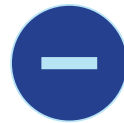
Converting a two-way stop-controlled intersection to an all-way stop could reduce total crashes by 68%



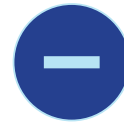
Vehicles must stop at all crosswalks



No impacts to utilities or adjacent land



Potential for high-speed, right-angle crashes remains



Potential for high-speed, rear-end crashes on Broad Street at new stop signs



Traffic Signal Concept

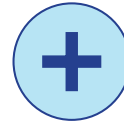


RC HOAG DRIVE

BROAD STREET



Traffic Signal Concept Benefits & Drawbacks



Converting a two-way stop-controlled intersection to a signal could reduce total crashes by 39%



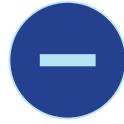
Improves intersection capacity, particularly for RC Hoag Drive and the driveway



Provides control for vehicles, pedestrians, and cyclists entering the intersection



Potential for high-speed, right-angle crashes remains



Potential for new rear-end crashes on Broad Street





CR 28 & Shortville Road Intersection, Ontario County



Roundabout Concept Benefits & Drawbacks



Converting an urban two-way stop-controlled intersection to a roundabout could reduce total crashes by 72%



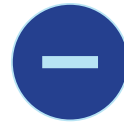
Geometry forces vehicles to slow down on approach to and within the intersection



Eliminates conflict points due to left turns and crossing maneuvers



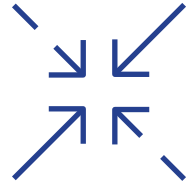

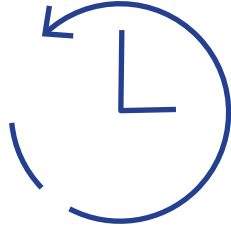

Impacts to utility poles, overhead wires, and underground utilities



Longer construction duration



Feasible Concepts Comparison

Concept				
All-Way Stop	32 Vehicle-To-Vehicle 24 Vehicle-To-Pedestrian	68% Crash Reduction (Per FHWA) 77% Injury Reduction (Per FHWA)	Overall PM Peak Level Of Service D 26.4 seconds of delay per vehicle	\$110 thousand
Signal	32 Vehicle-To-Vehicle 24 Vehicle-To-Pedestrian	39% Crash Reduction (Per FHWA) 23% Injury Reduction (Per FHWA)	Overall PM Peak Level Of Service A 9.5 seconds of delay per vehicle	\$350 thousand
Roundabout	8 Vehicle-To-Vehicle 8 Vehicle-To-Pedestrian	72% Crash Reduction (Per FHWA) 88% Injury Reduction (Per FHWA)	Overall PM Peak Level Of Service A 7.4 seconds of delay per vehicle	\$2.2 million



Overall Average Delay

PM Peak

All-Way Stop
26.4 seconds



Signal
9.3 seconds



Roundabout
7.4 seconds





Recommendation

A roundabout is the most effective crash reduction measure remaining under consideration and would best meet the project's objectives.

W. Hetzel St

R C Hoag Dr

Broad St

Seneca Nation's Recommendation: Roundabout Concept

- + Will eliminate identified right angle collision patterns
- + Will geometrically force drivers to reduce vehicular speeds on approach to and within the intersection
- + Results in two to three times less delay to the traveling public
- + Shortens pedestrian crossings to only one direction of traffic at a time

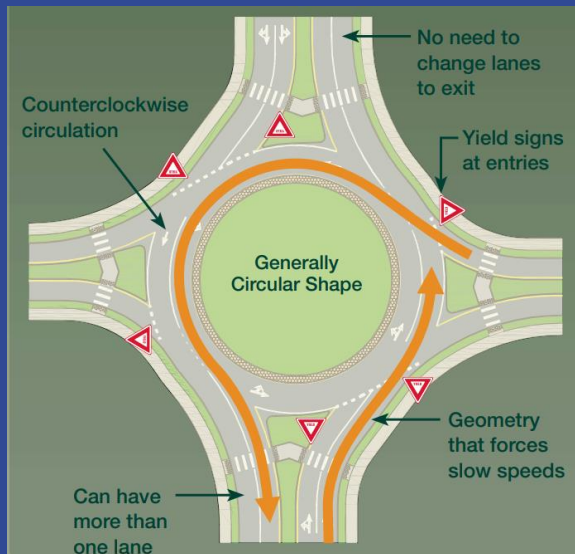


What is a roundabout?

A roundabout is a type of circular intersection with yield control of entering traffic, islands on the approaches, and appropriate roadway curvature to reduce vehicle speeds.

Modern roundabouts are different from rotaries and other traffic circles. For example, roundabouts are typically smaller than the large, high-speed rotaries still in use in some parts of the country. In addition, roundabouts are typically larger than neighborhood traffic circles used to calm traffic.

A roundabout has these characteristics:



Source: Roundabouts: An Informational Guide. Federal Highway Administration, Washington, D.C., latest version, except as noted.

Why consider a roundabout?

Compared to other types of intersections, roundabouts have demonstrated safety and other benefits.

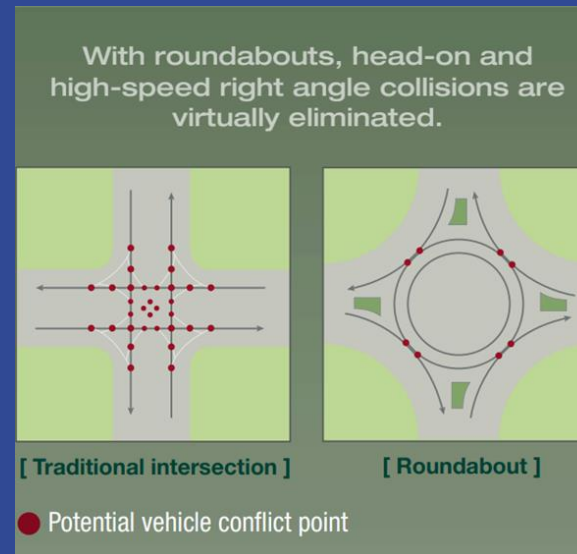
Roundabouts:

Improve safety

- More than 90% reduction in fatalities*
- 76% reduction in injuries**
- 35% reduction in all crashes

Reduce congestion

- Efficient during both peak hours and other times
- Typically less delay



Reduce pollution and fuel use

- Fewer stops and hard accelerations, less time idling

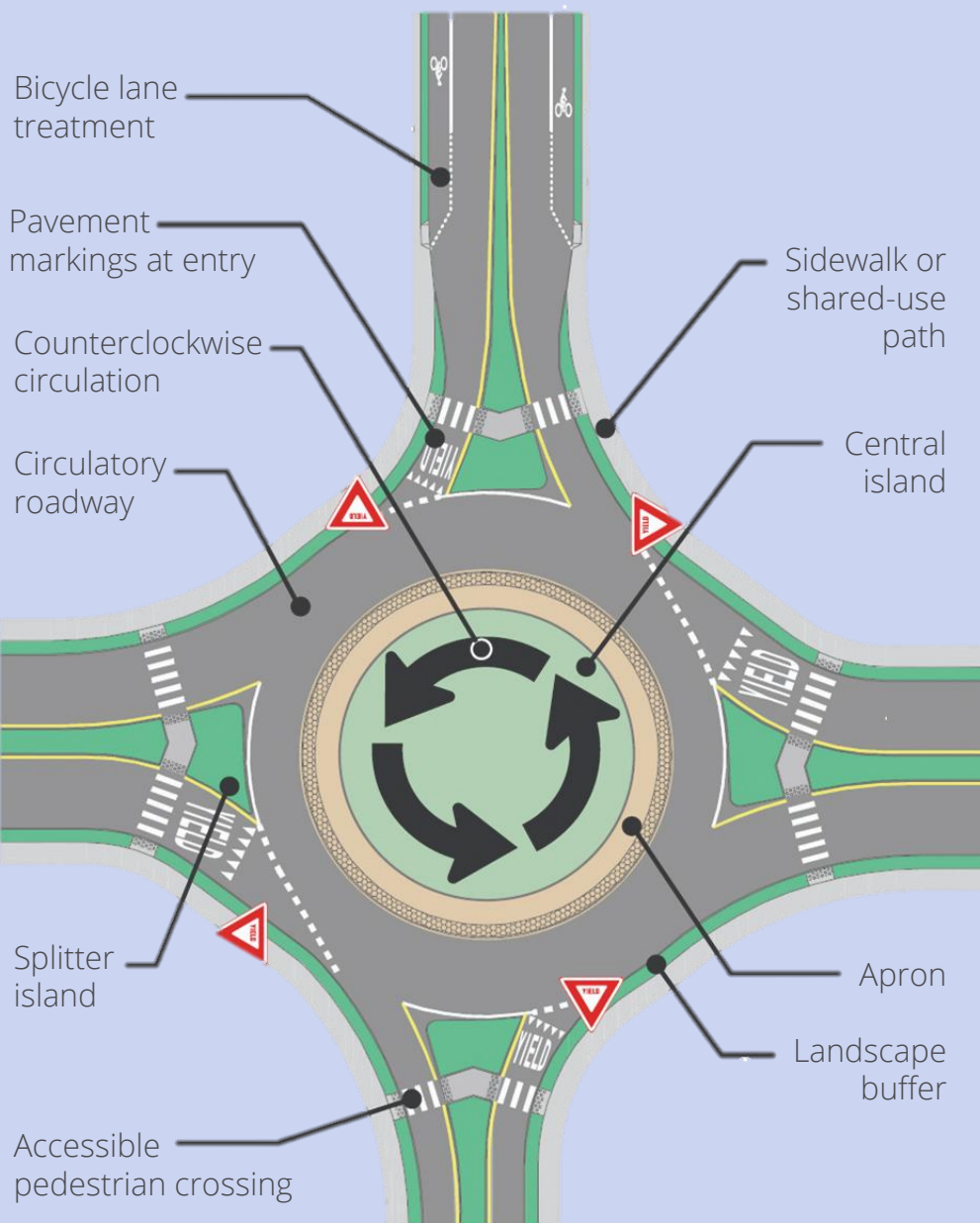
Save Money

- Often no signal equipment to install, power, and maintain
- Smaller roundabouts may require less space than traditional intersections
- Often less pavement needed, especially if long turn lanes are no longer necessary

Complement other common community values

- Quieter operation
- Functional and aesthetically pleasing





Navigating Roundabouts as a Driver

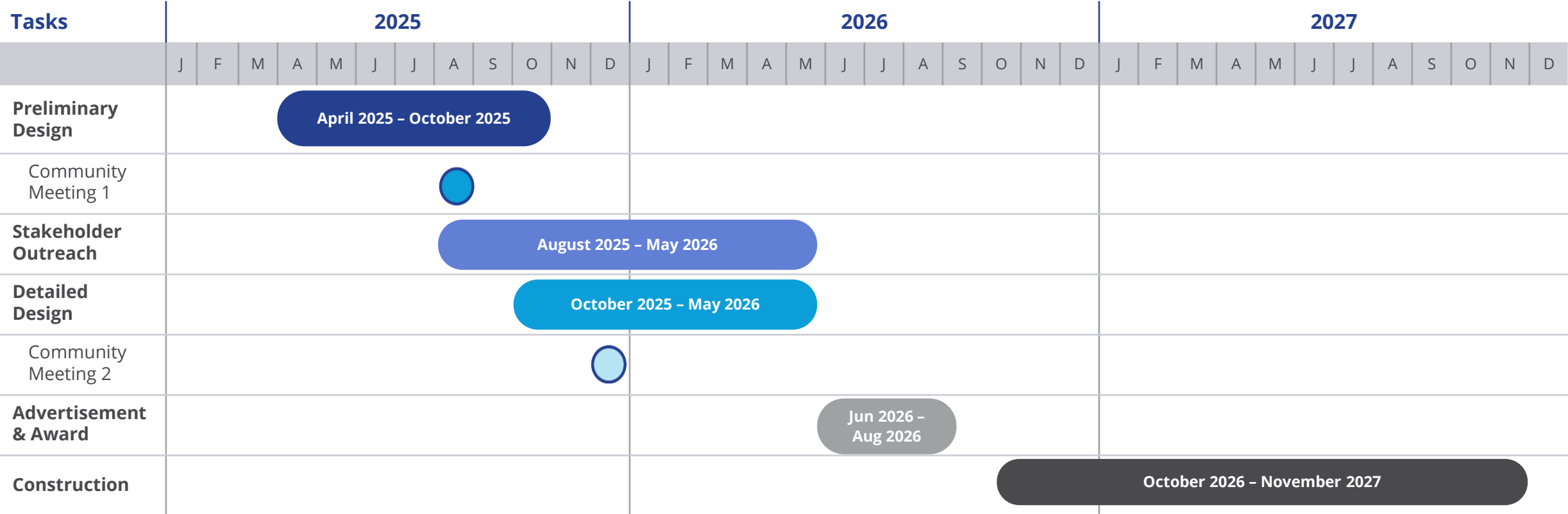
General Procedure

- Reduce your speed
- Keep to the right of the splitter island
- Watch for and yield to pedestrians in the crosswalk or waiting to cross
- Move up to the yield line and wait for an acceptable gap in traffic.
- Within the roundabout, you do not have to stop except to avoid a collision; you have the right-of way over entering traffic. Always keep to the right of the center island, and travel in a counterclockwise direction.
- When you have passed the last exit before the one you want, use your right-turn signal and continue to use your signal though your exit. Maintain a slow speed.

Additional Resources

- 1 FHWA Roundabout Information Guide & Other Resources**
<https://highways.dot.gov/safety/intersection-safety/intersection-types/roundabouts>
- 2 Minnesota DOT Roundabout Animation**
www.dot.state.mn.us/roundabouts/emergency.html
- 3 Washington State DOT Video on How to Drive in a Roundabout**
<https://www.youtube.com/watch?v=DYzPFV5JNts>

Anticipated Schedule





Broad Street & RC Hoag Drive
Intersection Improvements

Ways you can provide input on or before August 29th:

Write or email:

Timothy Waterman

Transportation Planner
Seneca Nation Department of Transportation
90 Ohi:yo Way
Salamanca NY, 14779

Timothy.Waterman@sni.org

Fill out and return a comment sheet
available on the Seneca Nation
Department of Transportation
webpage:

 [https://sni.org/community-
services/department-of-transportation/](https://sni.org/community-services/department-of-transportation/)



Broad Street & RC Hoag Drive Intersection Improvements

Questions?

