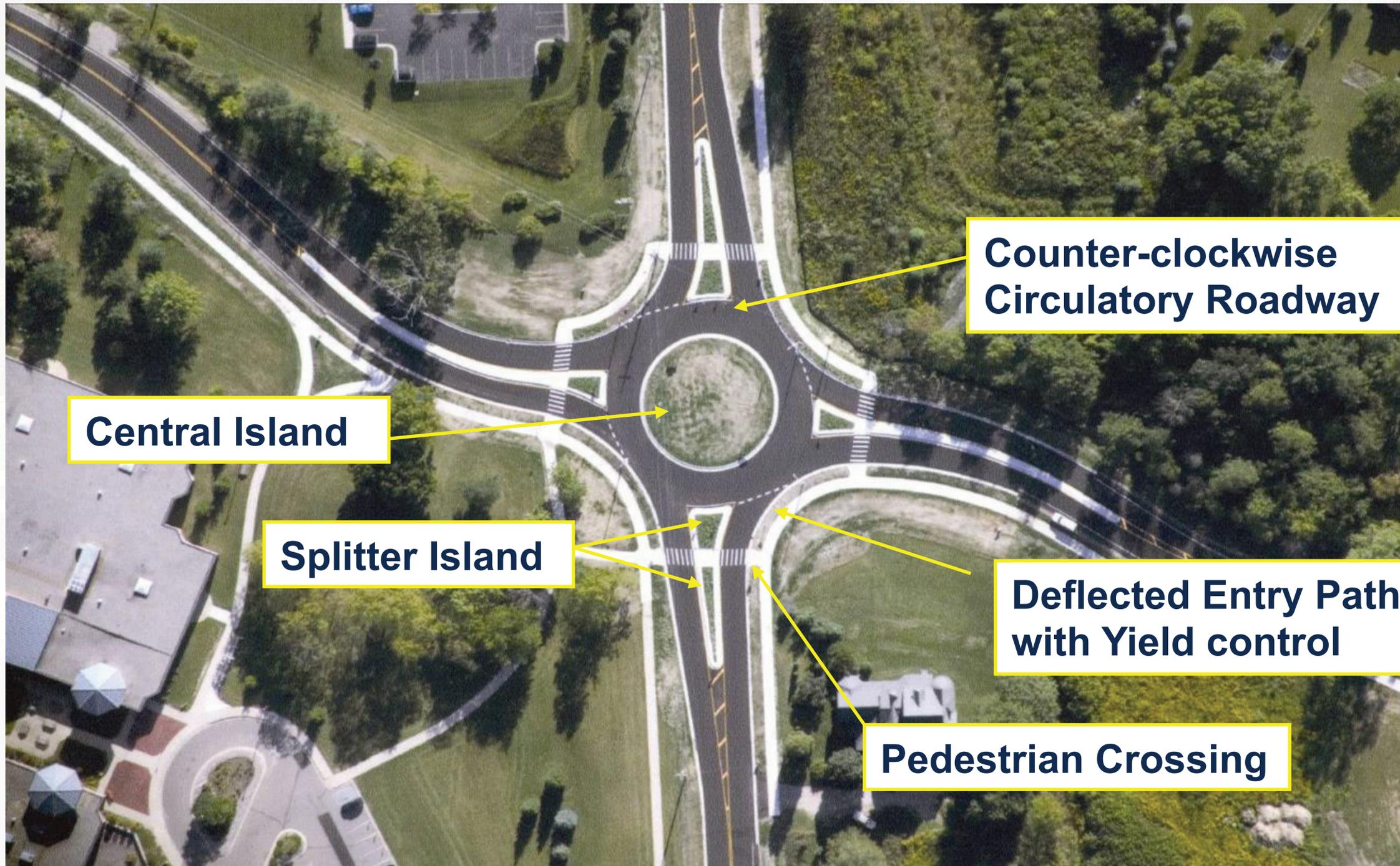
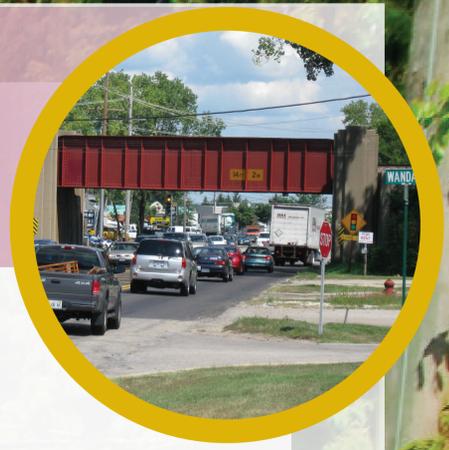


What is a Modern Roundabout?



Roundabouts

Roundabouts provide opportunities to improve safety and operational efficiency, as well as other benefits.

- Traffic Safety
- Operational Performance
- Environmental Factors
- Access Management
- Land Use
- Reduction of approach Roadway Width



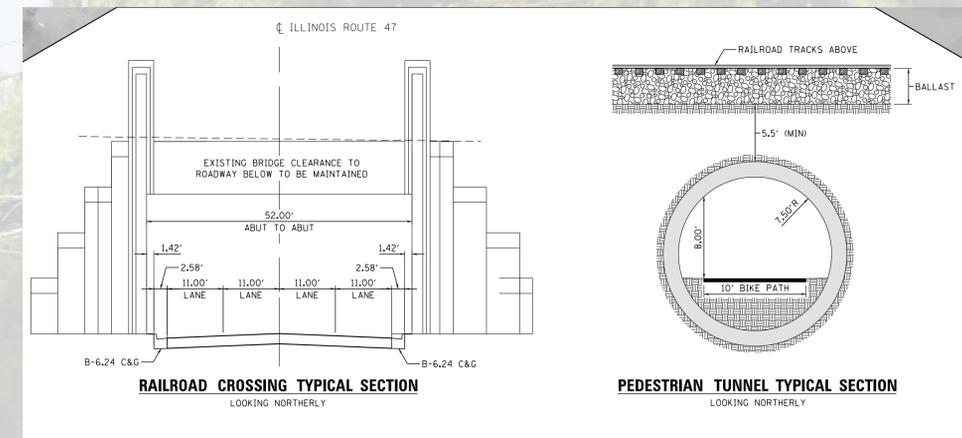
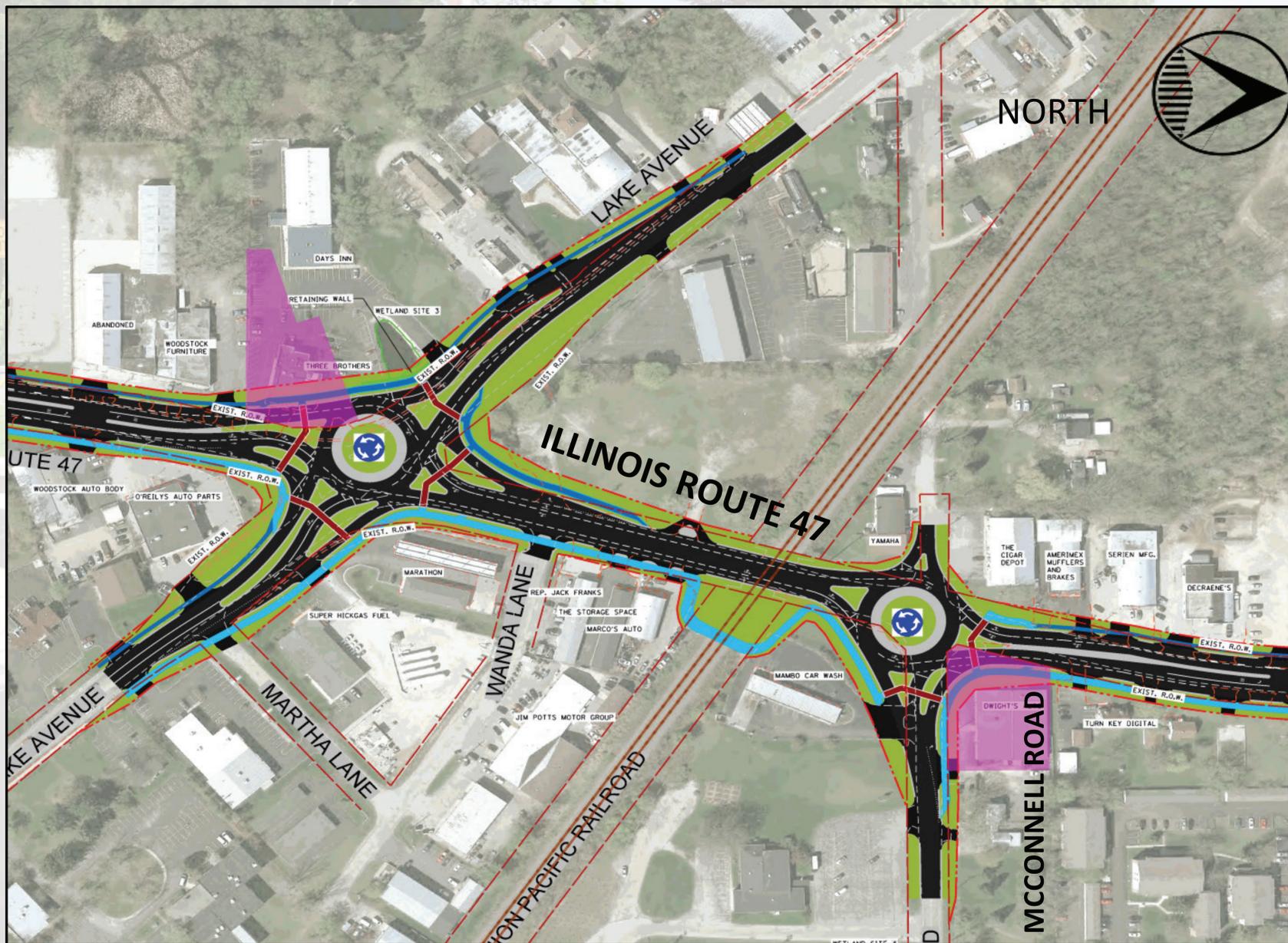
Safety

- Roundabouts reduce vehicle-vehicle crossing conflict by converting all movements to right turns
- Fewer conflict points for vehicles
- Vehicle speeds are low (approximately 20 mph)
- Reduced speed differential between users (cars and bikes)
- Lower crash severity



Lake Avenue & McConnell Road

Roundabouts



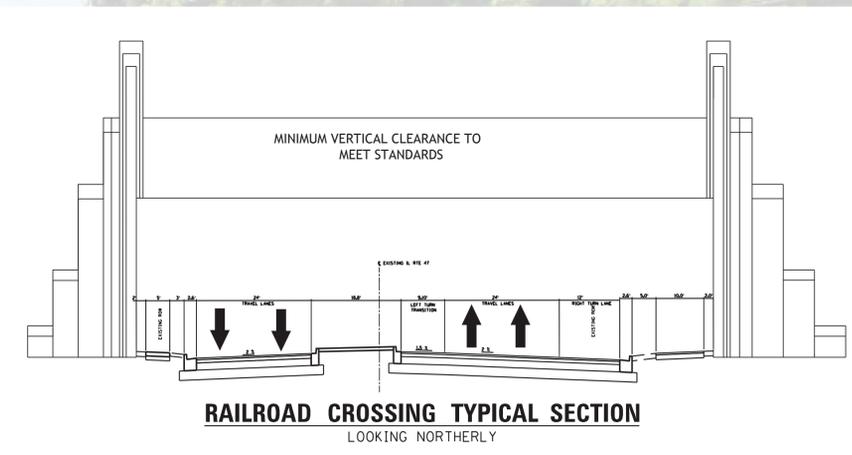
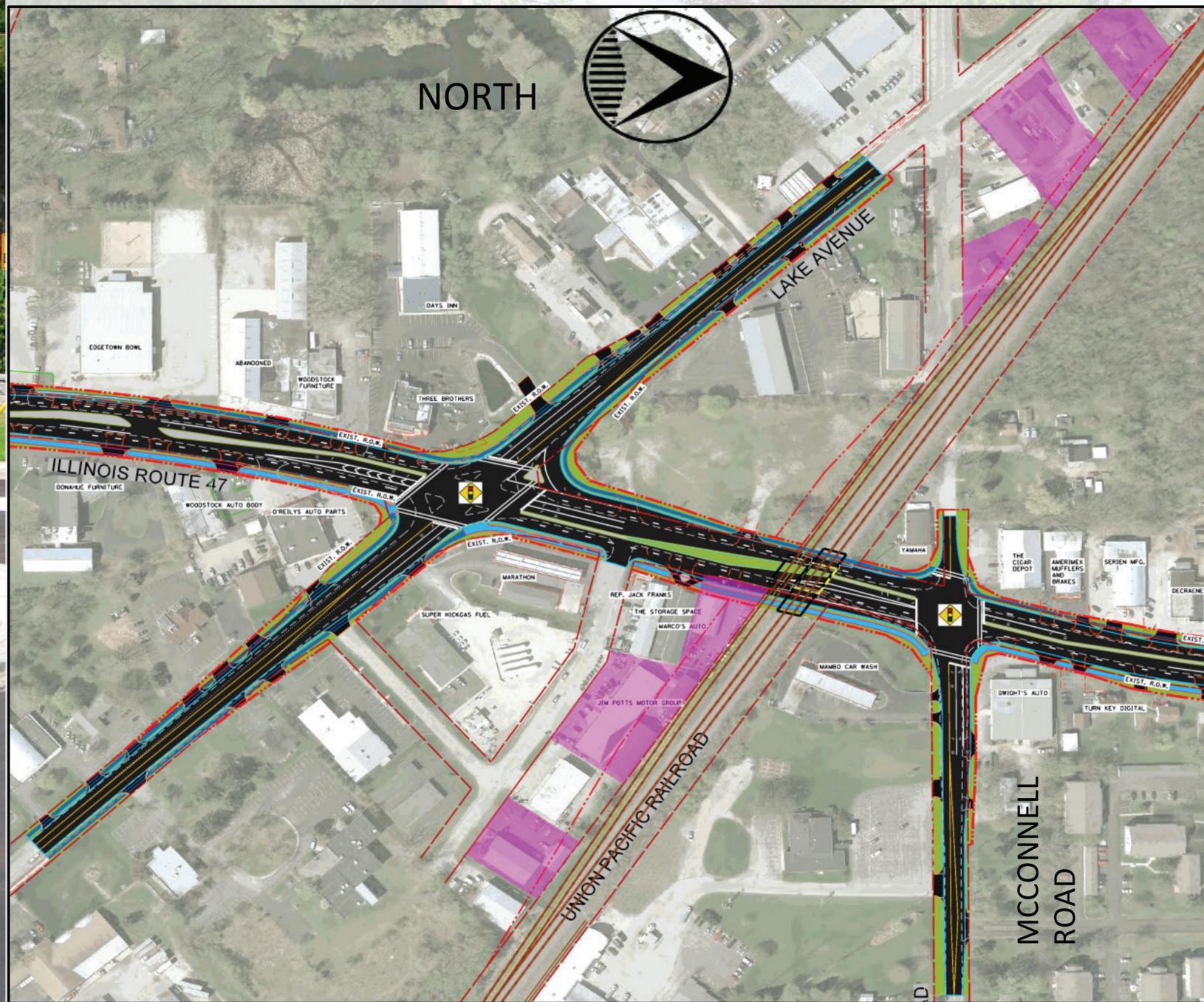
ROUNDABOUT v. SIGNALIZED IMPACTS

Impact	Roundabout	Signalized
Right of Way (ac.)	2.93	5.13
Affected Parcels	35	42
Commercial Relocations	2	4
Residential Relocations	0	2
Wetland Impacts (ac.)	0.008	0
Delay - Lake (s)	20.7 -C	37.4 -D
Delay - McConnell (s)	11.1 -B	18.5 -B
Cost	\$\$	\$\$\$\$\$

-  Potential Relocation
-  Roundabout

Lake Avenue & McConnell Road

Signalized Intersections



ROUNDBOUT v. SIGNALIZED IMPACTS

Impact	Roundabout	Signalized
Right of Way (ac.)	2.93	5.13
Affected Parcels	35	42
Commercial Relocations	2	4
Residential Relocations	0	2
Wetland Impacts (ac.)	0.008	0
Delay - Lake (s)	20.7 -C	37.4-D
Delay - McConnell (s)	11.1-B	18.5-B
Cost	\$\$	\$\$\$\$\$

 Potential Relocation

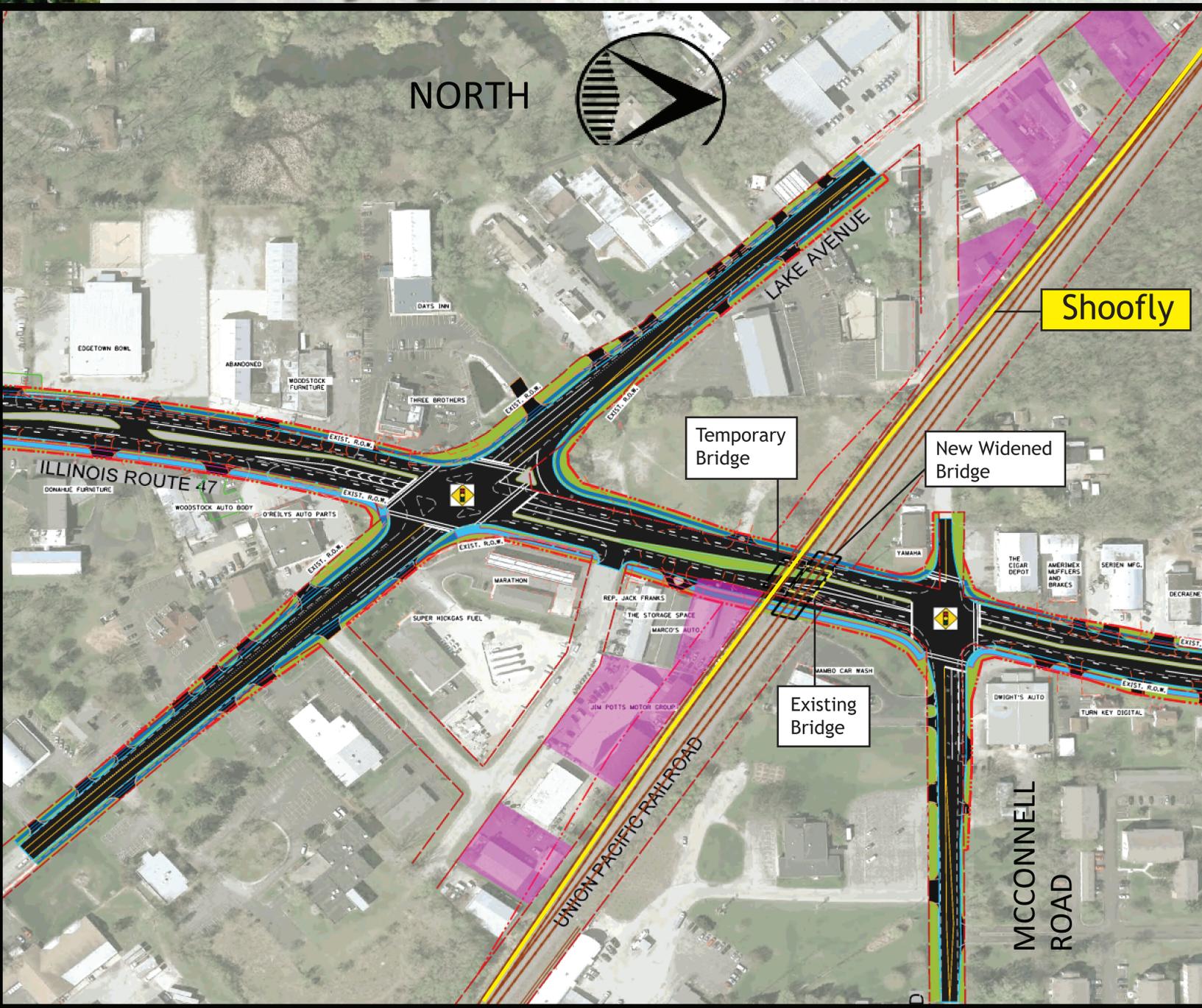
 Signalized Intersection

Lake Avenue & McConnell Road

Shoofly Exhibit



- Construction of additional turn lanes
- Require removal of the existing railroad bridge
- New railroad bridge with a wider opening
- Construction of new bridge requires a temporary railroad track called a shoofly
- Estimated additional cost of \$30 million
- 1 - 2 years to build the shoofly and permanent bridge prior to roadway construction

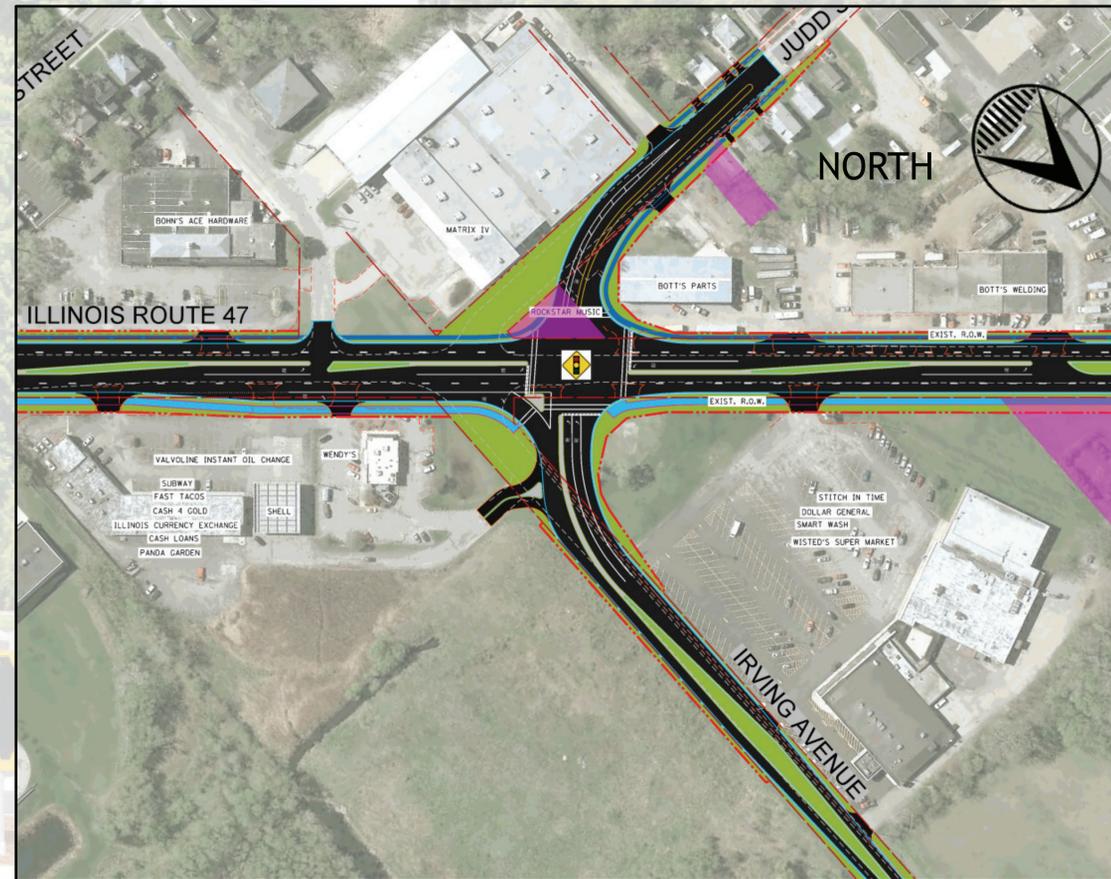


Irving Avenue/Judd Street



ROUNABOUT v. SIGNALIZED IMPACTS

Impact	Roundabout	Signalized
Right of Way (ac.)	2.16	1.84
Affected Parcels	14	15
Commercial Relocations	1	1
Residential Relocations	0	1
Operational Delay (s)	11.1-B	30.4-C

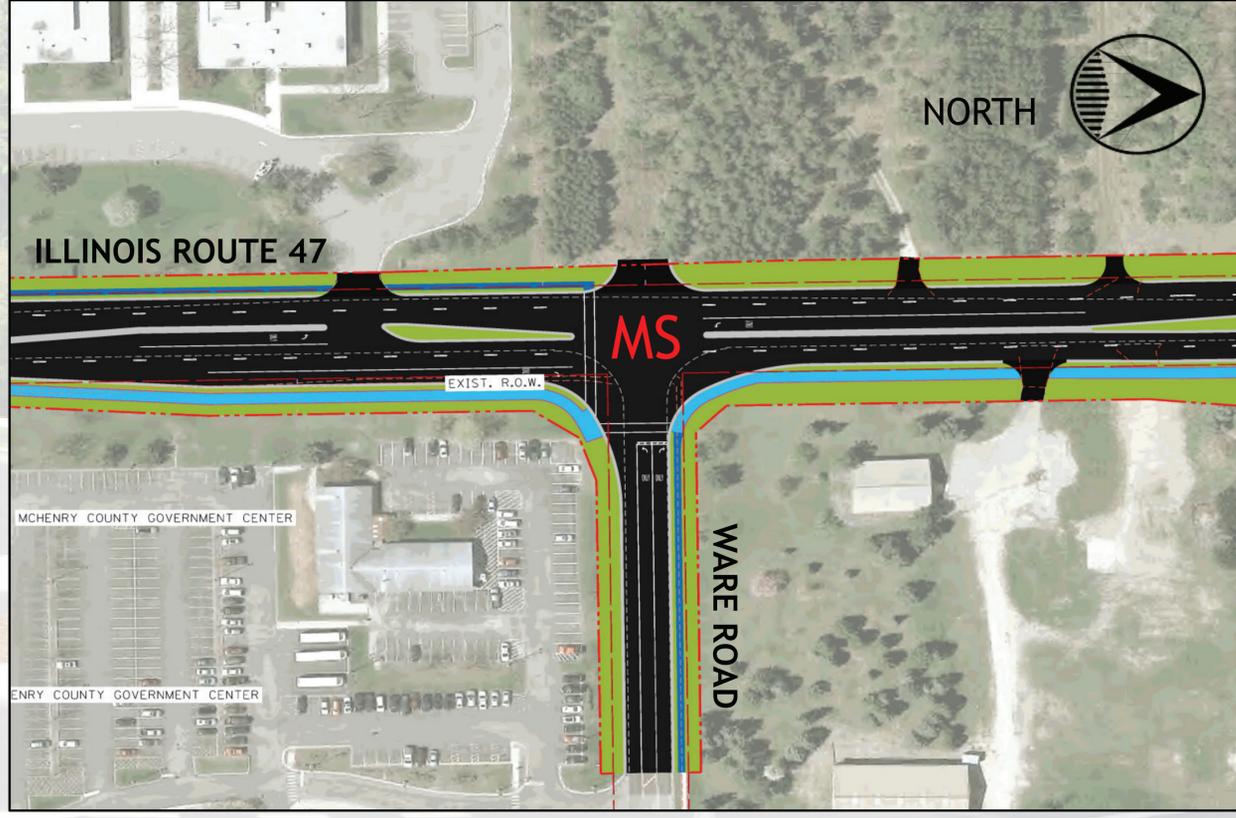
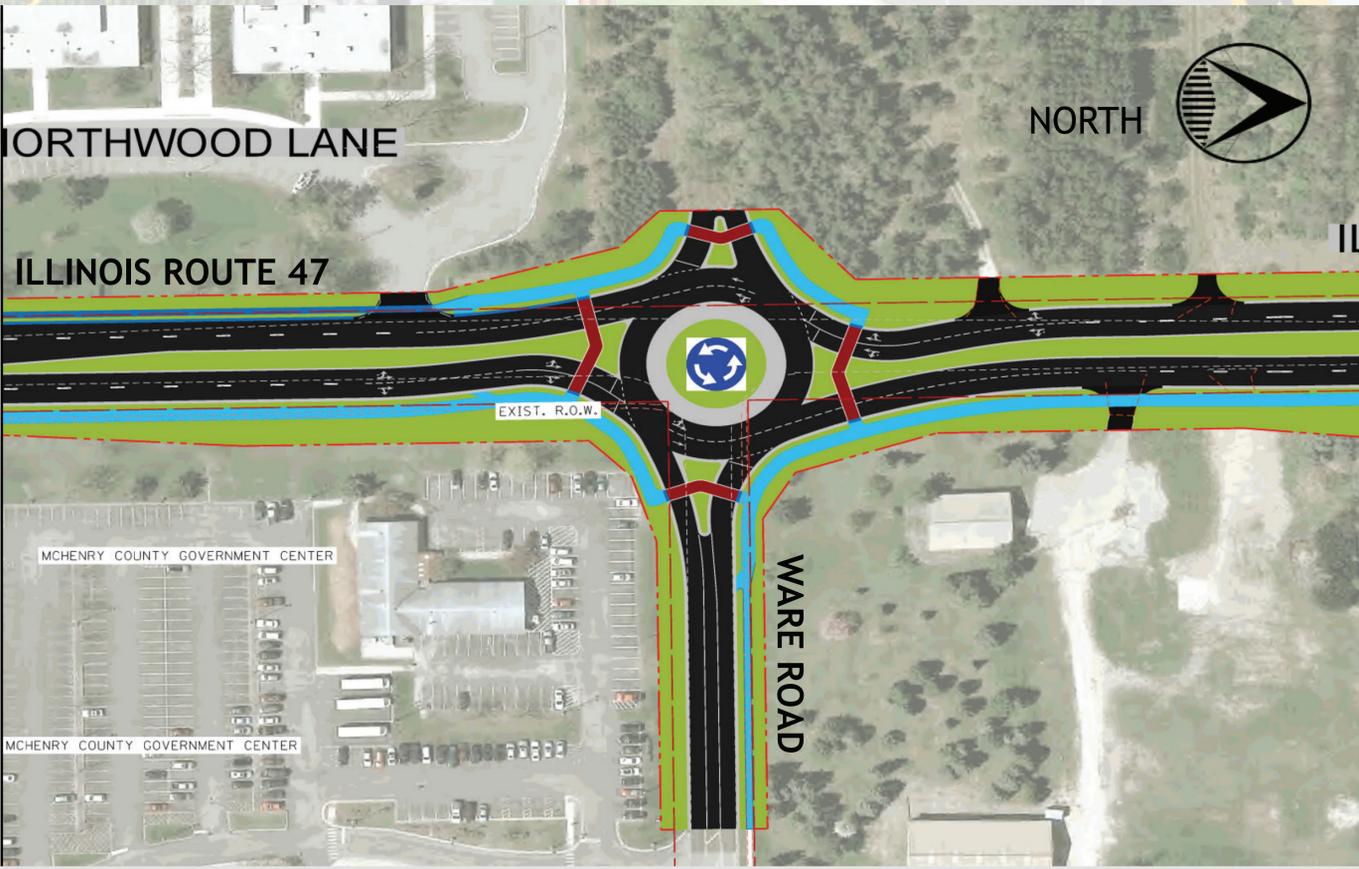


-  Potential Relocation
-  Roundabout
-  Signalized Intersection

Ware Road



ROUNDBABOUT V. ALL-WAY STOP IMPACTS		
Impact	Roundabout	Stop-Control
Right of Way (ac.)	1.15	0.83
Affected Parcels	5	5
Potential Displacements	0	0
Operational Delay (s)	16-B	> 300-F

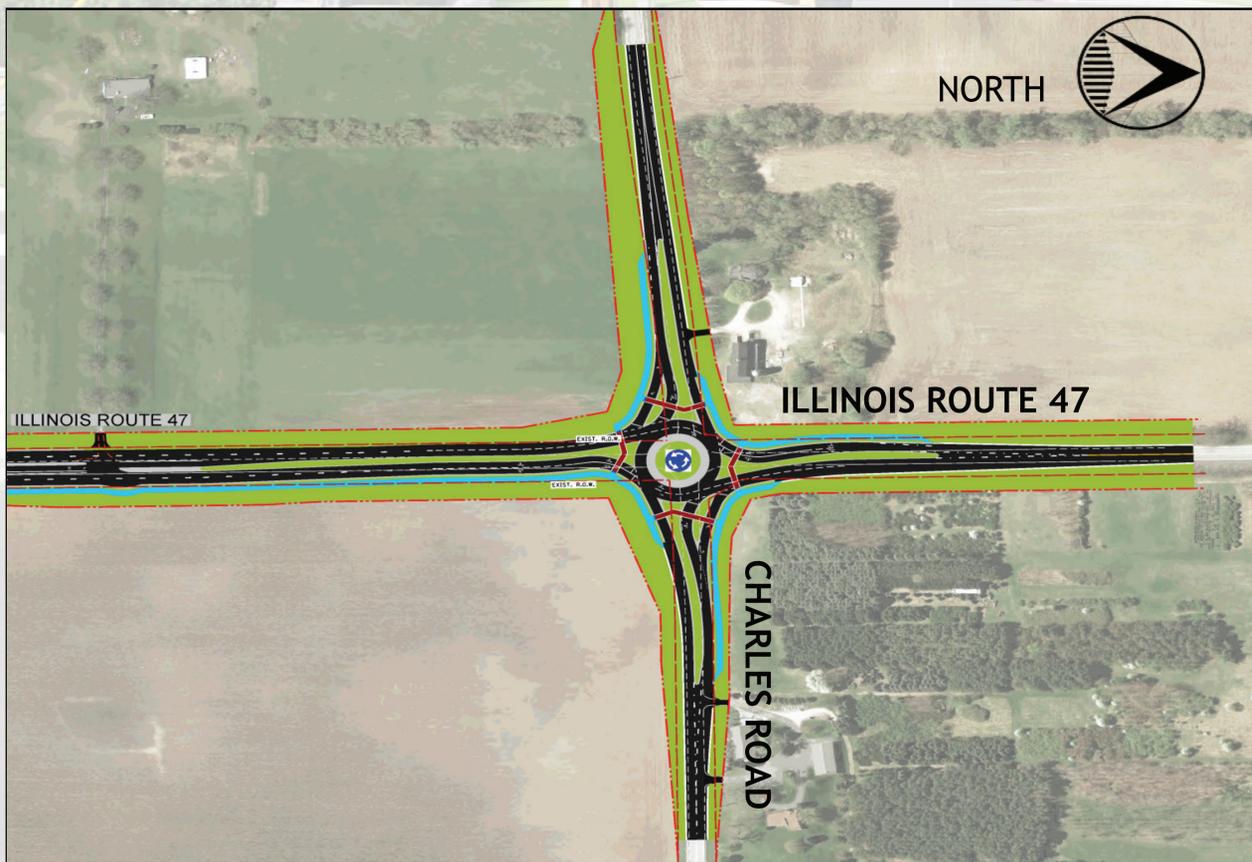
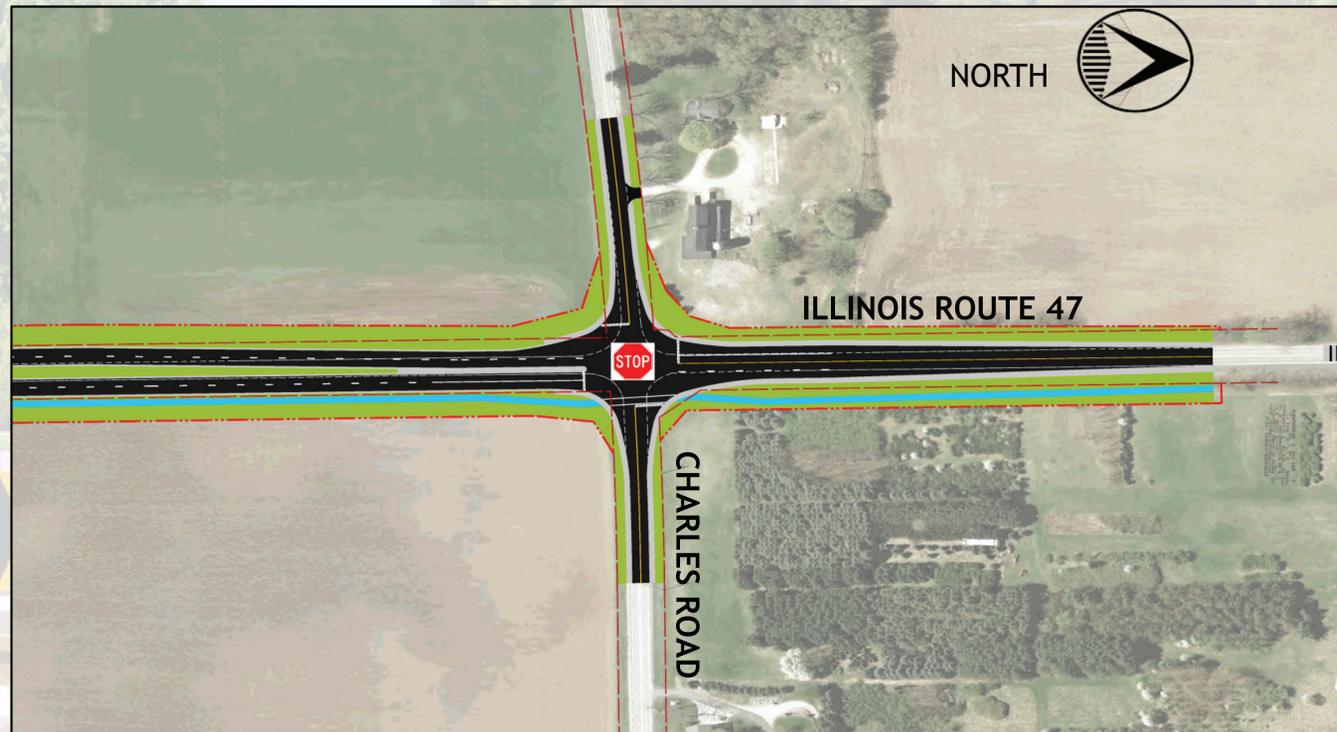


 Roundabout
 Minor Street Stop

Charles Road



ROUNDAABOUT V. ALL-WAY STOP IMPACTS		
Impact	Roundabout	Stop-Control
Right of Way (ac.)	4.1	1.2
Affected Parcels	6	4
Potential Displacements	0	0
Operational Delay (s)	21.4-B	220-F



-  Roundabout
-  4 - Way Stop