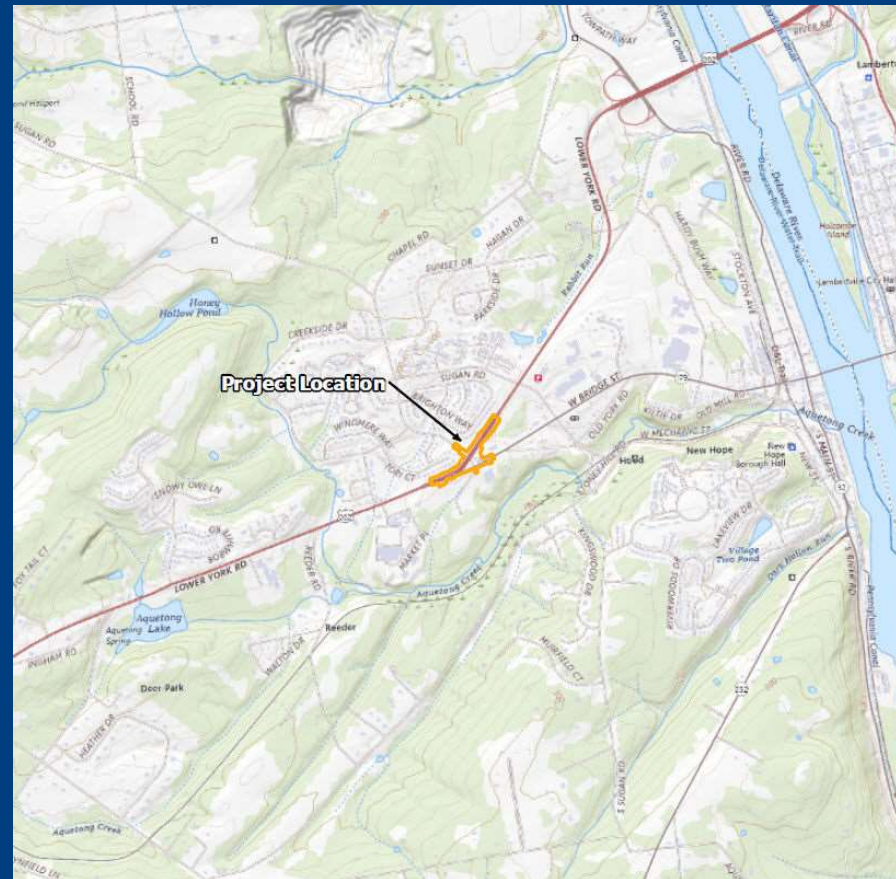


# U.S. 202 & ROUTE 179 ROUNDABOUT PROJECT PUBLIC MEETING



Solebury Township  
Bucks County, PA  
MPMS #118022

US 202 (Lower York Rd) and Route 179 (W Bridge St)  
Roundabout Intersection Improvement Project

JUNE 2026



Pennsylvania  
Department of Transportation

# WELCOME

US 202 (Lower York Rd) and  
Route 179 (W Bridge St) Roundabout  
Intersection Improvement Project  
**Public Meeting**

JUNE 2026

# INTRODUCTIONS



- Nathan Parrish, P.E.  
Consultant Project Manager



- Martin Zimany, P.E.  
Project Manager

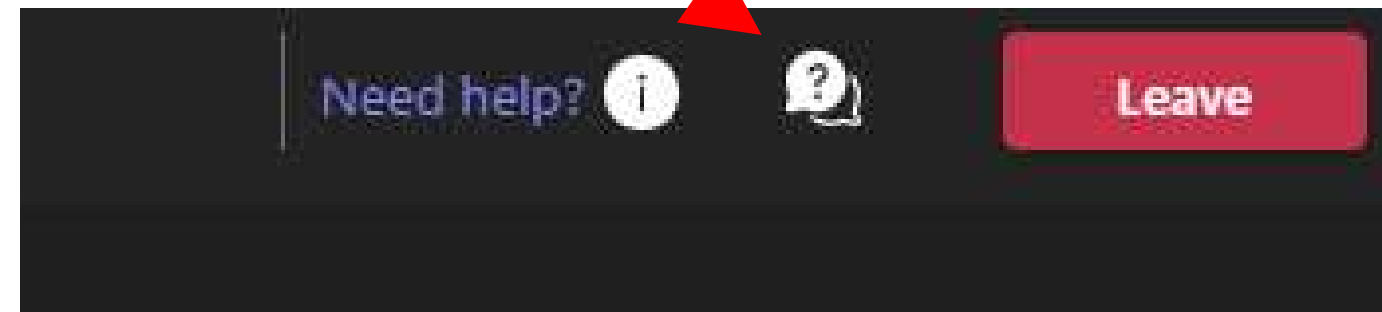


- Andrew Thomas, P.E.  
Transportation Engineer



# QUESTIONS?

Questions can be submitted by clicking on the Q&A feature located at the top of your screen



Please note the slide number in your question

4

# MEETING OUTLINE

Project Timeline & Project Overview

Project Purpose

Roundabout Education

Safety Considerations & Area Projects

Proposed Design & Operations

Environmental Overview & Traffic Simulation

Construction Staging & Project Schedule

Questions and Answers

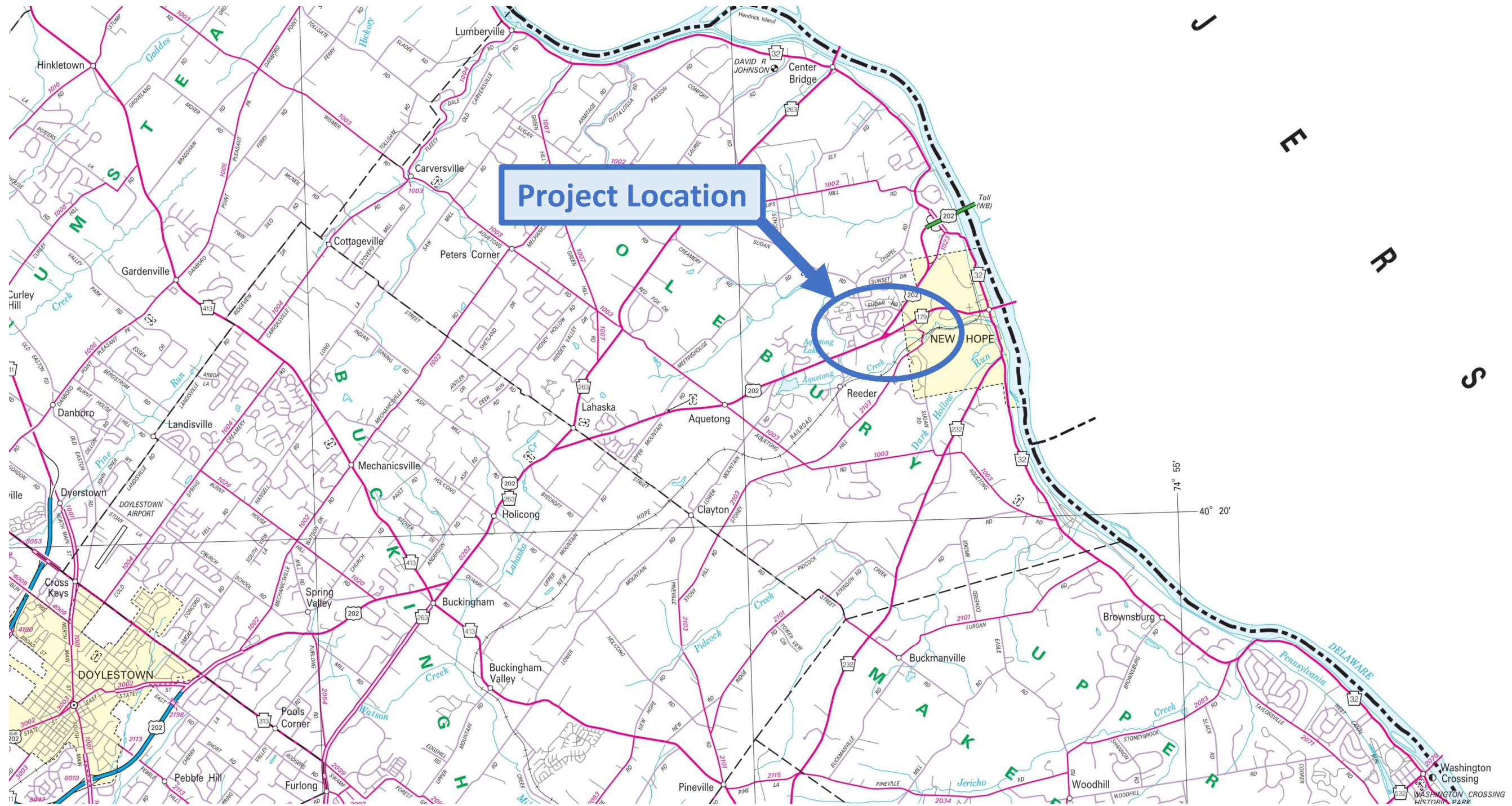


# PROJECT TIMELINE OVERVIEW

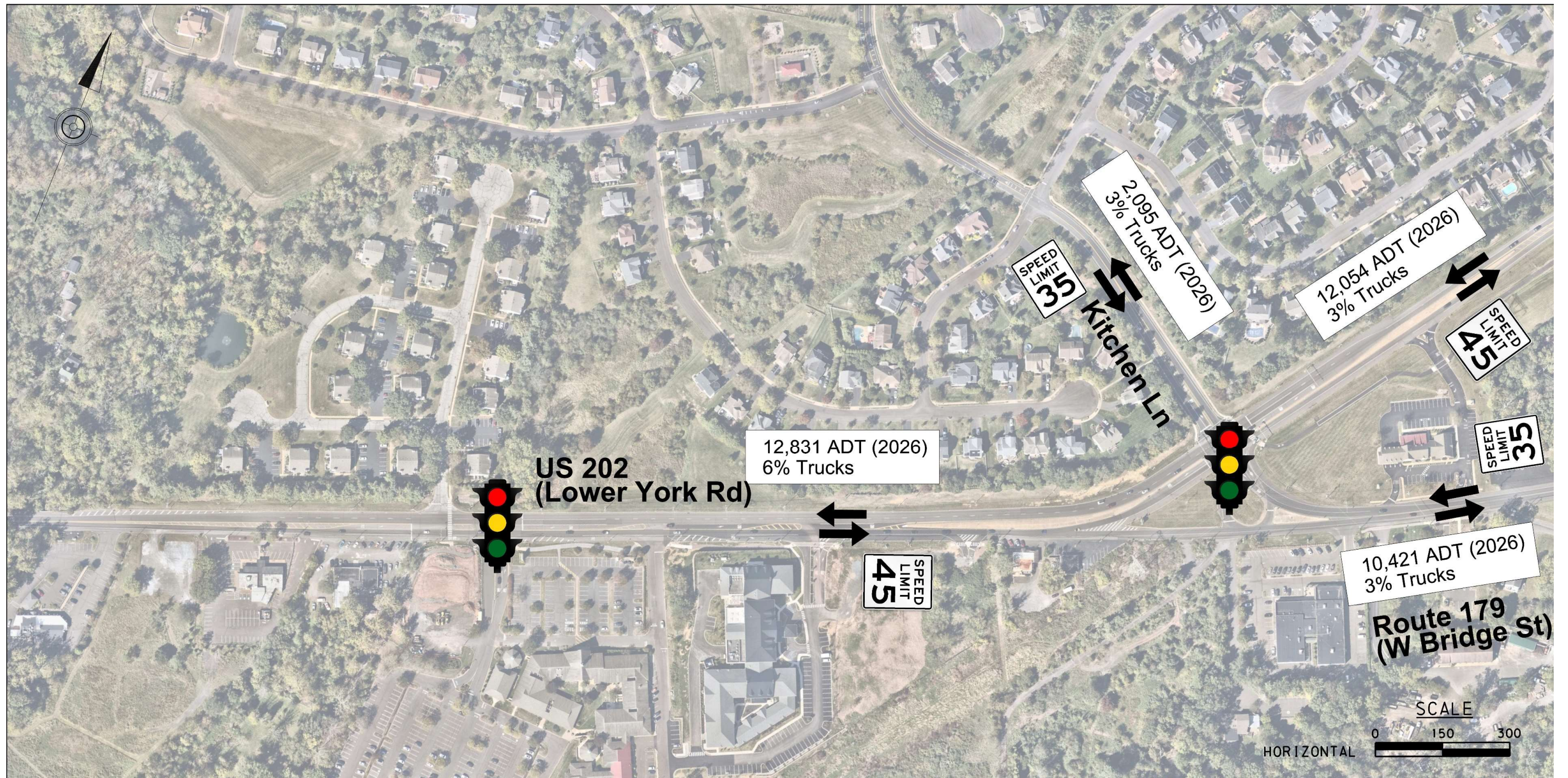
## Project Related Activities/Schedule

- |                                  |                       |
|----------------------------------|-----------------------|
| • Preliminary Studies (Township) | 2020                  |
| • Preliminary Engineering        | Spring 2023 – current |
| • Final Design                   | Fall 2026 (approx.)   |
| • Construction Start             | Spring 2028 (approx.) |

# PROJECT OVERVIEW

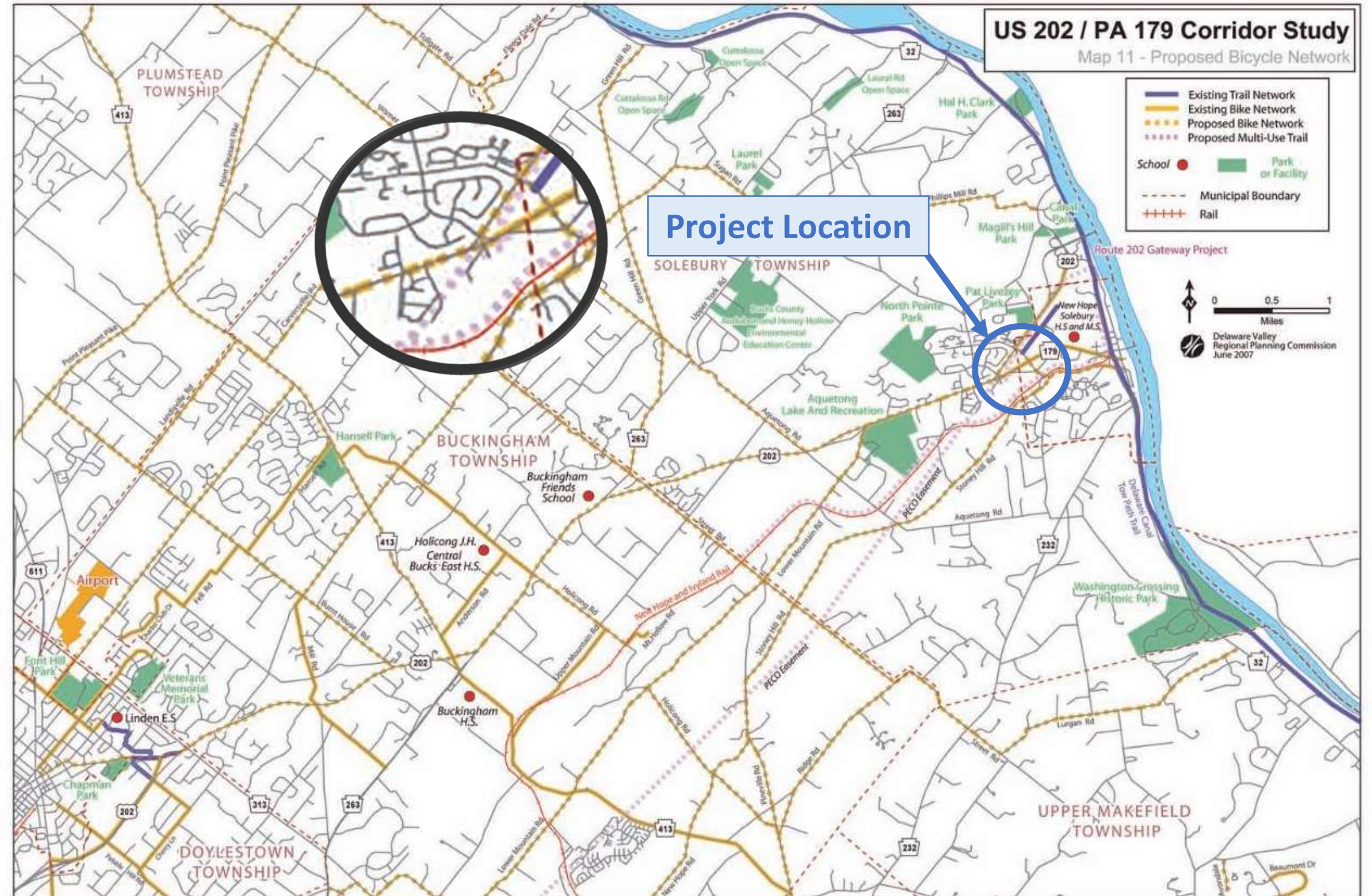


# PROJECT OVERVIEW

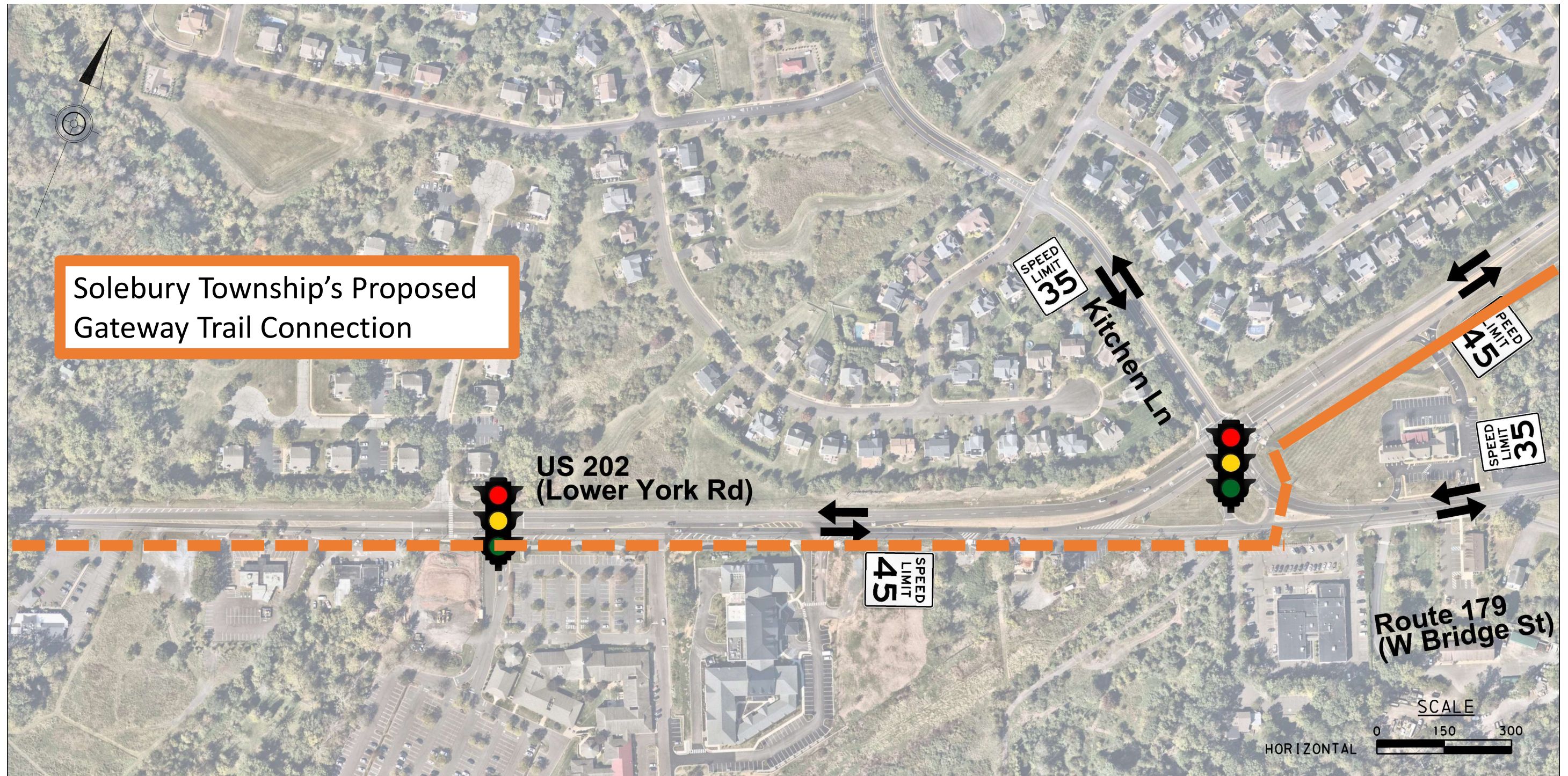


# PROJECT OVERVIEW

Image from DVRPC  
US 202 / PA 179 Corridor Study  
Proposed Bicycle Network  
June 2007



# PROJECT OVERVIEW



# PURPOSE

## US 202 & Route 179 Lower York Rd & W Bridge St

- US 202/Route 179 intersection experiences significant congestion and delays caused by:
  - Operational deficiencies.
  - Geometric constraints.
  - Safety and capacity gaps.
- Existing pedestrian facilities are limited.

## Existing Queue Lengths

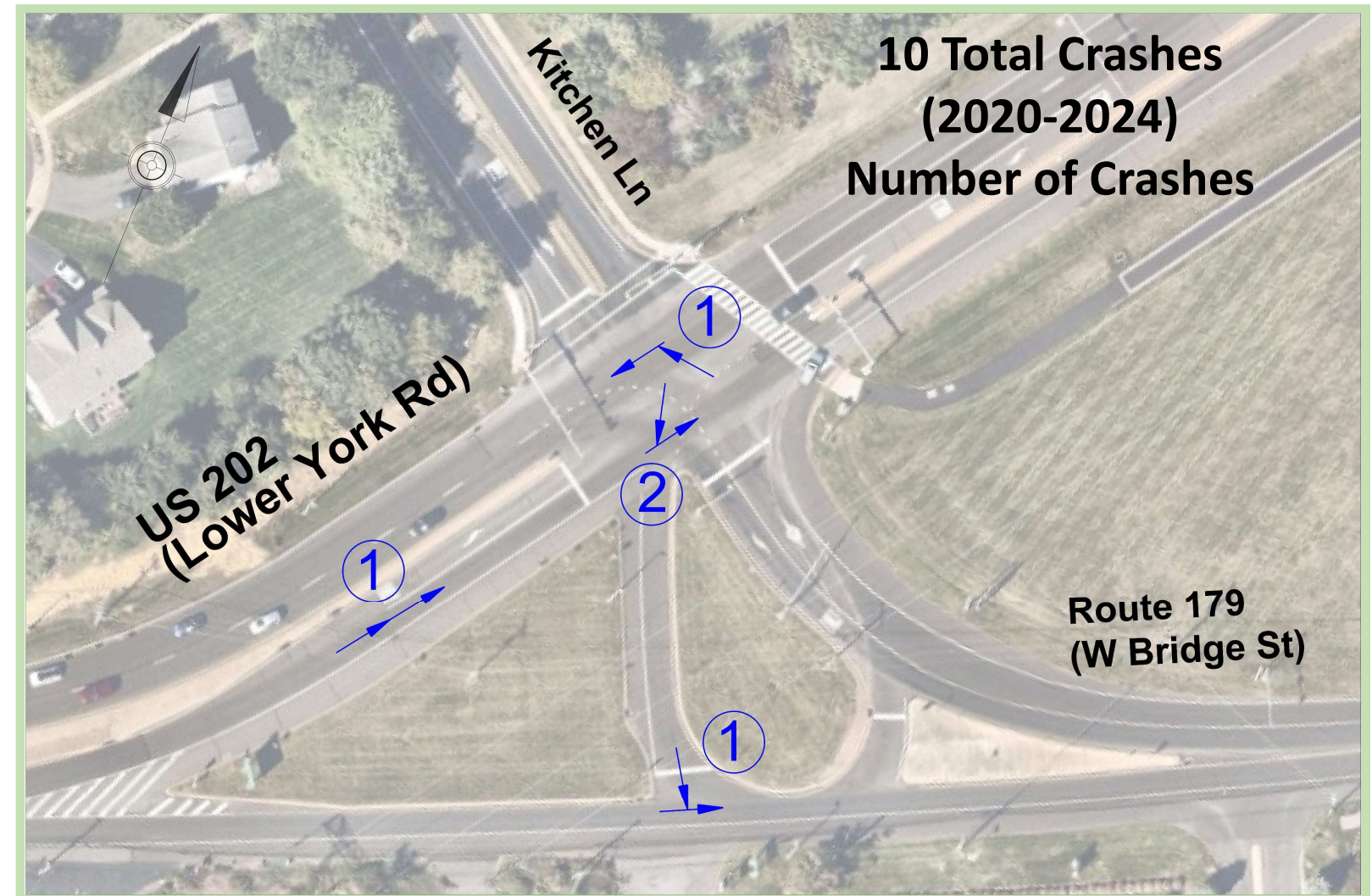


# PURPOSE

## US 202 & Route 179 Lower York Rd & W Bridge St

- US 202/Route 179 intersection has a history of turning vehicle angle crashes.
  - 80% of reported crashes were angle crashes
  - 80% of reported crashes had no weather or environmental factors
- Four additional rear-end and one angle crash occurred along US 202 NB, south of the intersection.
  - Likely caused by congestion and queue spillback.

## Existing Crash History



# WHY A ROUNDABOUT?

## Roundabouts:

- Relieve congestion and modal tension.
- Improve accessibility for vehicular users and pedestrian/trail users.
- Reduce the number of crashes and the severity by reducing user speeds.
- Greatly reduce the occurrence of head-on and right-angle crashes.



*Source: PennDOT website*

# WHY A ROUNDABOUT?

- Roundabouts are an FHWA Proven Safety Countermeasure.
- They address items in PennDOT's Strategic Highway Safety Plan (SHSP).

## Safety Statistics

In September 2024, PennDOT released data for 47 roundabouts on state routes at intersections that were previously stop- or signal-controlled. These roundabouts were reviewed based on having at least three years of data available before and after the roundabout's installation and at least one crash at the intersection during the 20 year review period. These 47 comprise all the roundabouts on state routes that met the review parameters. Department data based on police-submitted crash reports spanning the years 2004 through 2023 shows:




- Crashes involving injuries were reduced by 51 percent.
- The total number of crashes dropped seven percent.

In addition to the 47 roundabouts meeting the review criteria, 46 other roundabouts have been installed on state routes.

*Source: PennDOT Roundabout Website*

# WHY A ROUNDABOUT?

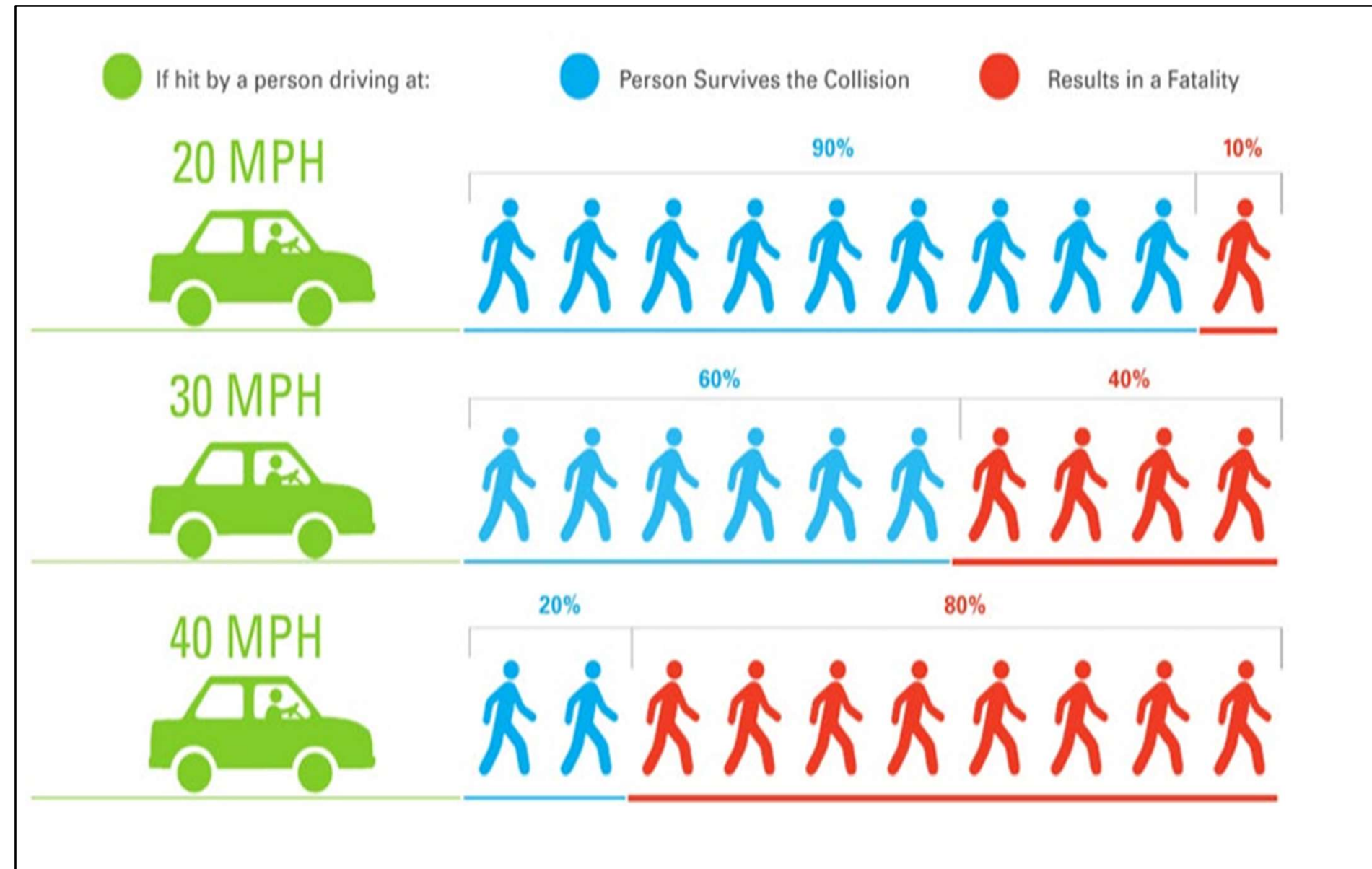
## Roundabout Operation Characteristics

Roundabouts		Traffic Circles
<p><b>Yield-at-Entry Rule:</b></p> <ul style="list-style-type: none"> <li>• Entering traffic yields to circulating traffic, which always keeps moving.</li> <li>• Very efficient with heavy traffic.</li> <li>• No weaving distance is needed, so roundabouts are small and fit in compact spaces.</li> </ul>	<p><b>YIELD</b></p> 	<p><b>Entering traffic may interfere with circulating traffic:</b></p> <ul style="list-style-type: none"> <li>• Circulating traffic can not clear when entering traffic fills circle.</li> <li>• Heavy traffic causes gridlock.</li> <li>• Circles must be large to provide long weaving distances.</li> </ul>
<p><b>Entering traffic is deflected slowly around the central island:</b></p> <ul style="list-style-type: none"> <li>• Deflection controls speed without enforcement, thereby reducing accidents.</li> <li>• Deflection forms gaps in traffic so other vehicles can enter.</li> <li>• Entry flare adds lanes</li> </ul>	<p><b>DEFLECTION</b></p> 	<p><b>Inconsistent entry design may allow traffic to enter at high speed:</b></p> <ul style="list-style-type: none"> <li>• Serious accidents can result on high speed streets.</li> <li>• Fast entries impede gap acceptance and defeat the yielding process.</li> </ul>
<p><b>Flare increases capacity at the intersection, where capacity is needed most:</b></p> <ul style="list-style-type: none"> <li>• Flare promotes narrow streets between roundabouts, saving cost and neighborhood impacts.</li> </ul>	<p><b>FLARE</b></p> 	<p><b>Poor entry conditions may not benefit from flare:</b></p> <ul style="list-style-type: none"> <li>• Poor intersection capacity even with large traffic circles.</li> <li>• Higher capacity requires wide streets between circles, wasting money and land</li> </ul>

# ROUNDAABOUT BENEFITS

## Benefits of Roundabouts

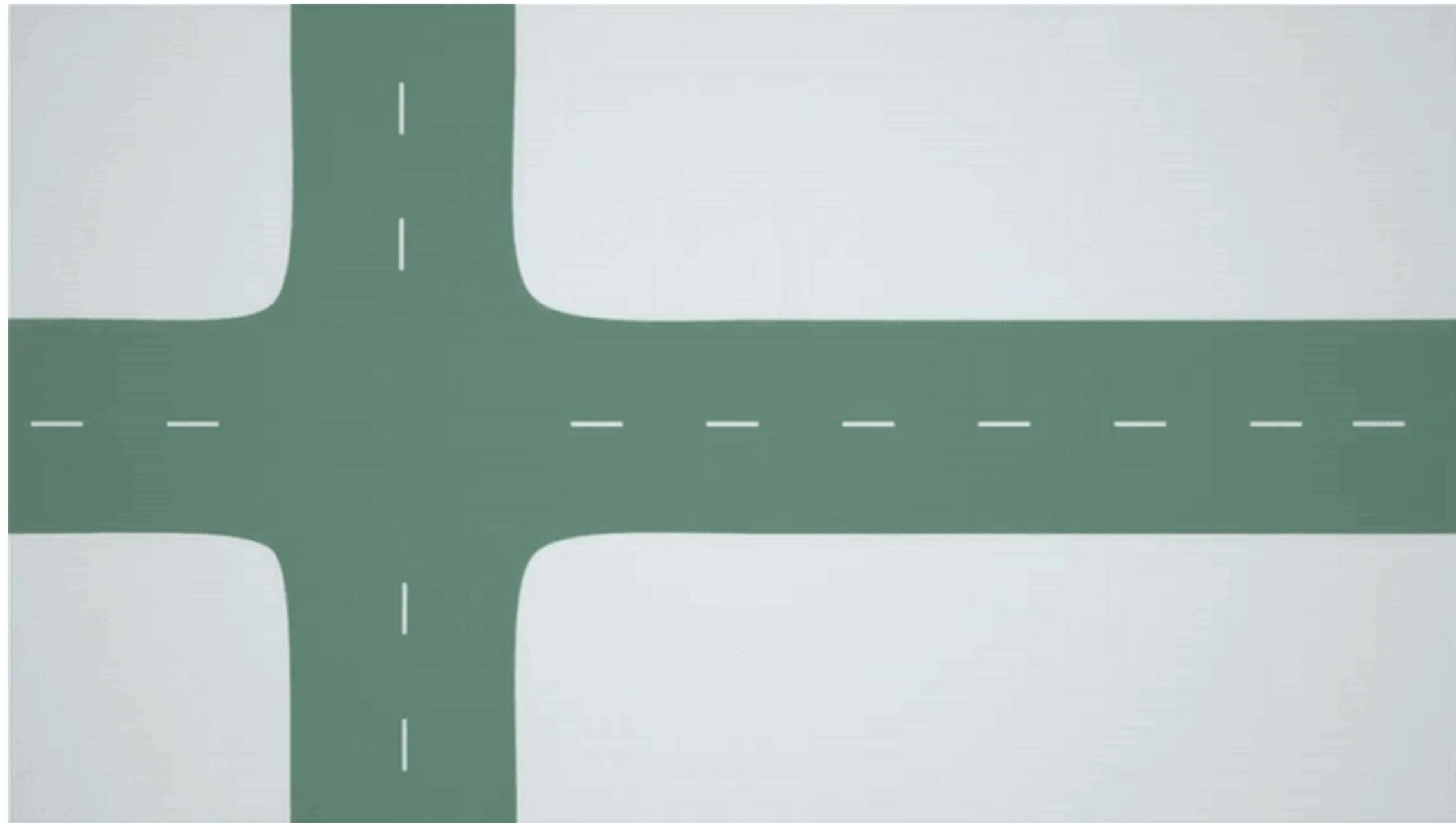
- Improves safety
- Slower vehicle speeds
- Efficient traffic flow
- Reduces pollution and fuel use
- Traffic calming
- Gateway opportunity



Source: PennDOT Design Manual 2

# ROUNDABOUTS

## Vehicular Conflicts at Intersections



Source: Utah Department of Transportation

# ROUNDAABOUTS & PEDESTRIANS

## Pedestrian Crossings at Roundabouts

- Crosswalks set back one car length
- Separates conflicts between cars and pedestrians
- Allows pedestrians to cross when cars are queued



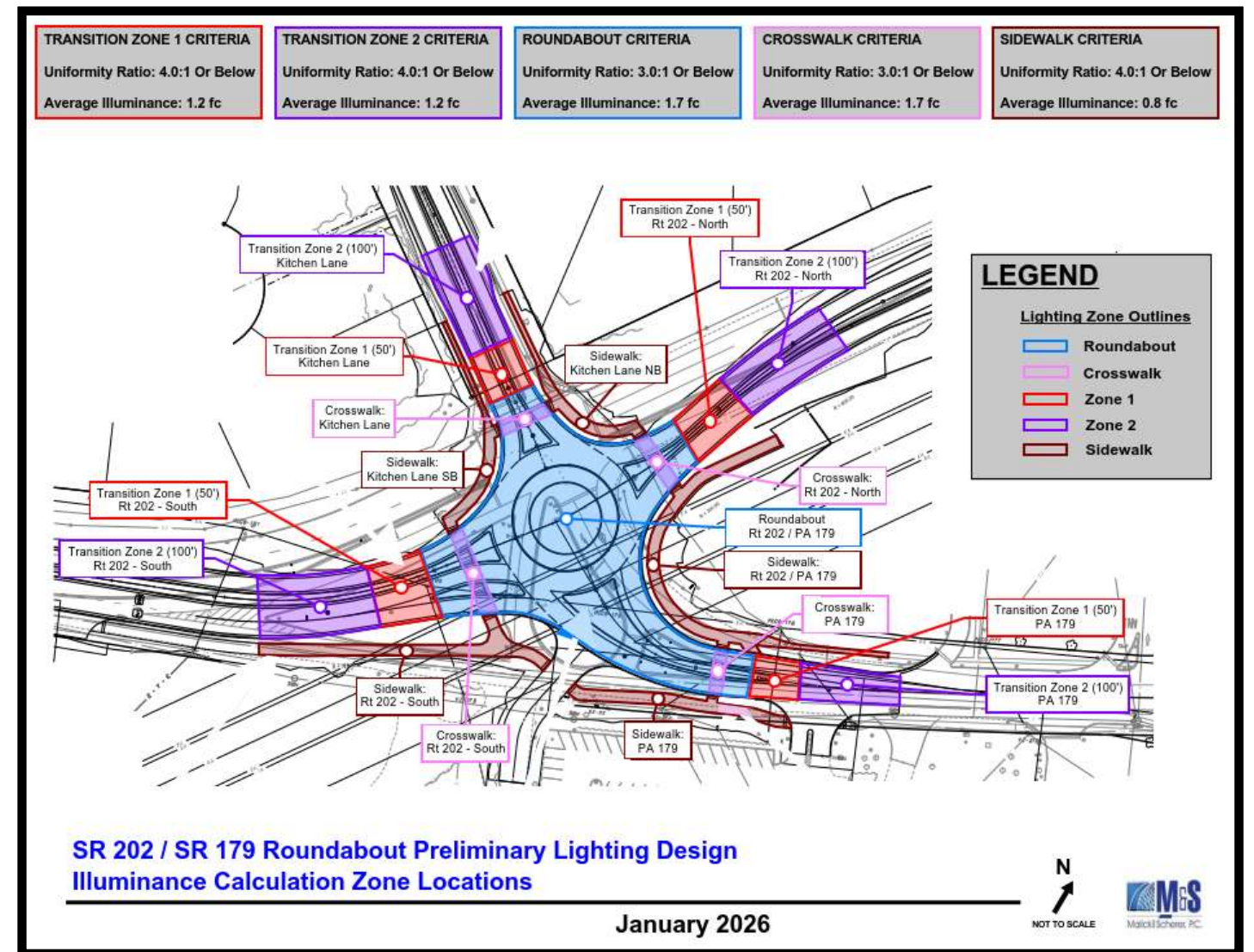
Source: AARP Website

# SAFETY CONSIDERATIONS

## Roundabout Intersection Lighting Example and Preliminary Illuminance Zones



Source: Overland Park, Kansas (Streetlight Design Manual)



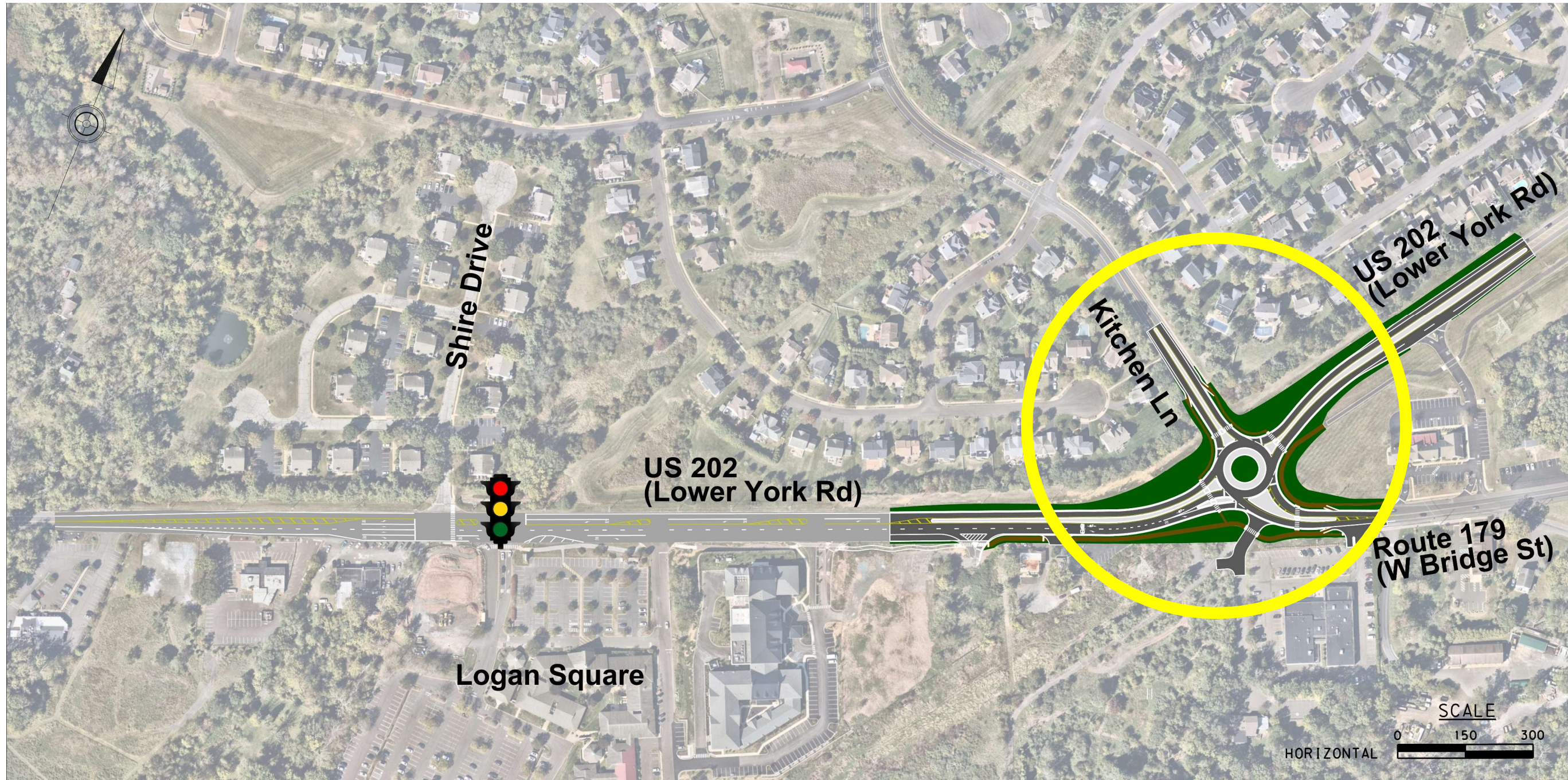
# AREA ROUNDABOUT PROJECTS



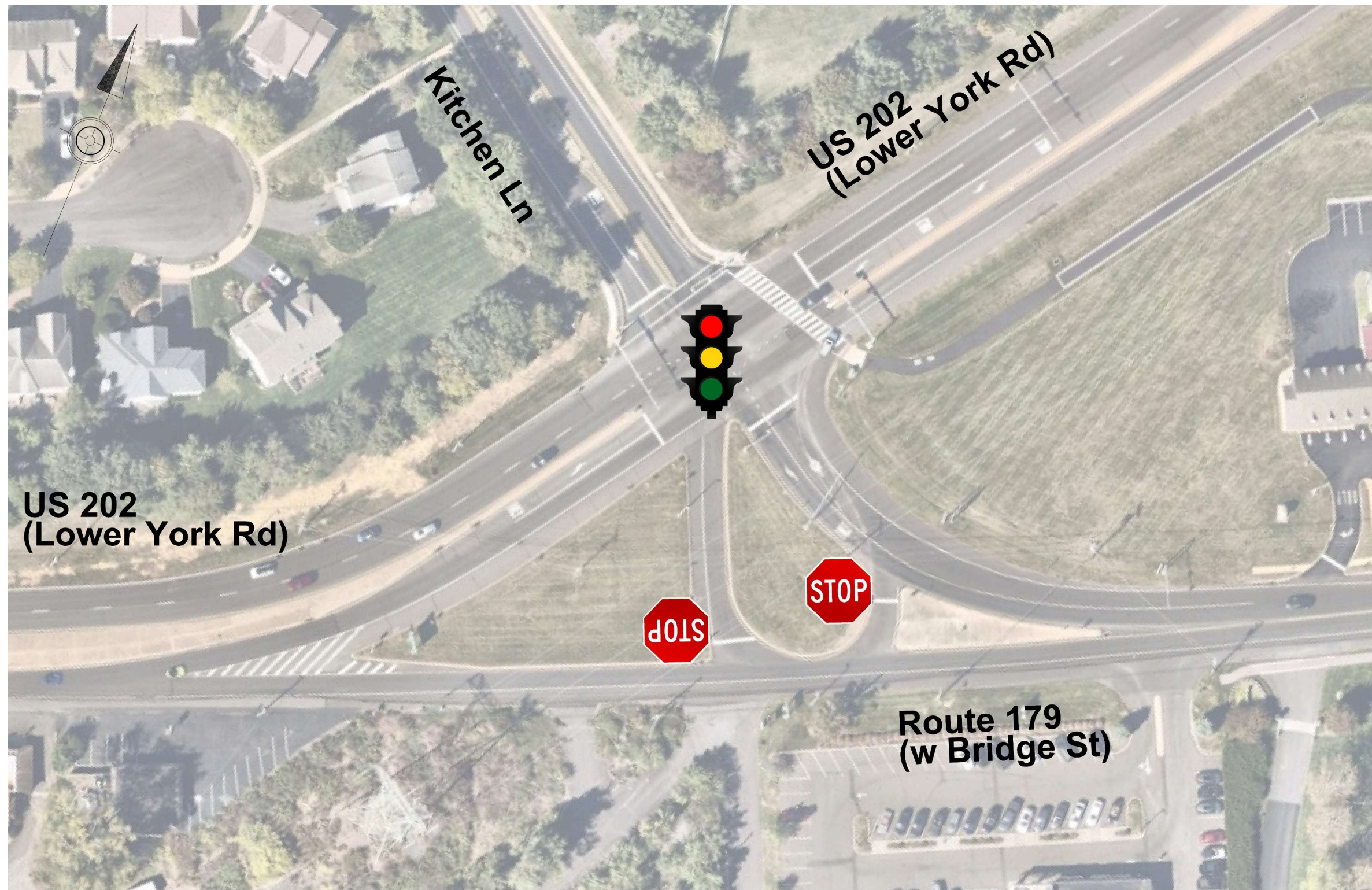
# PROPOSED DESIGN



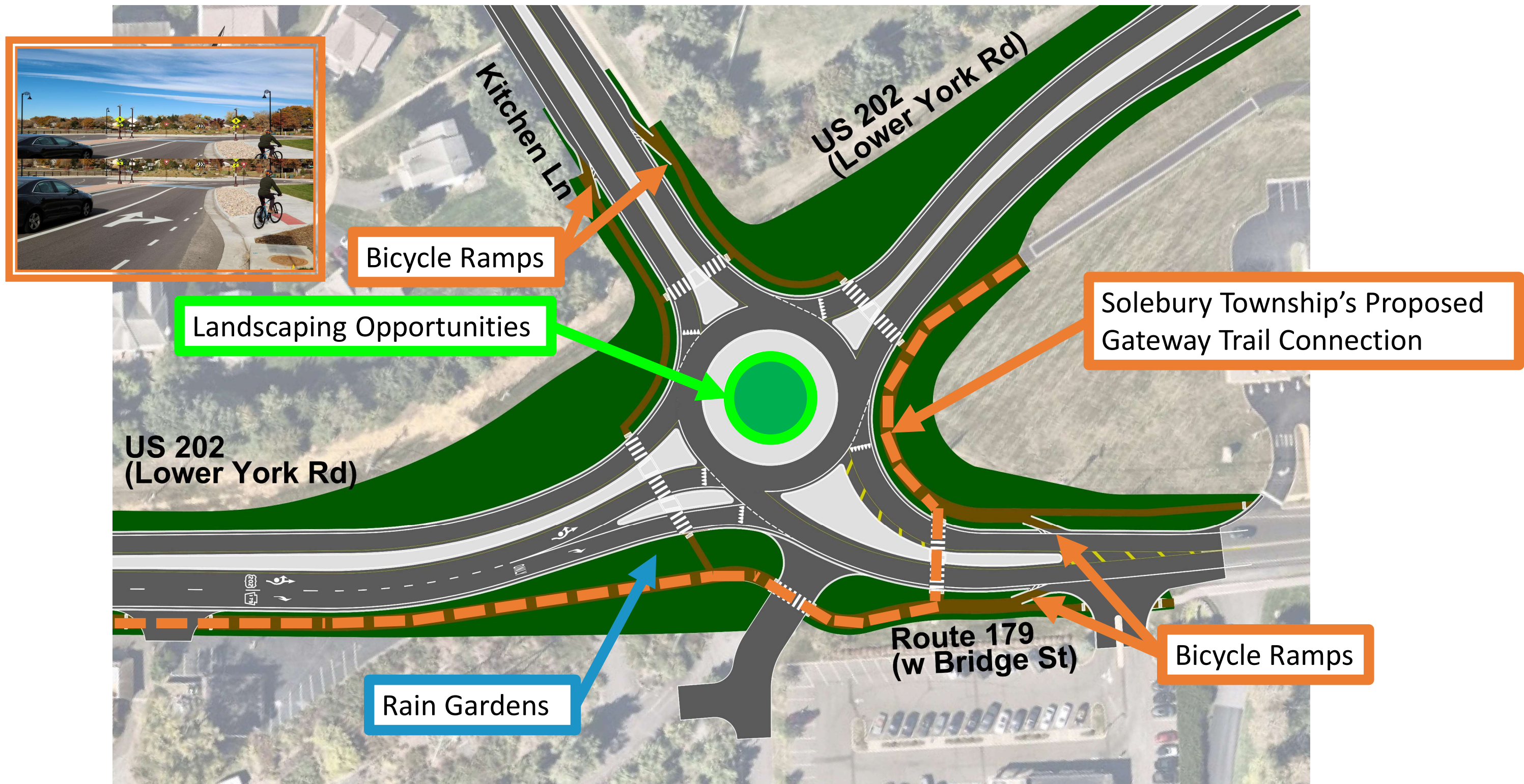
# PROPOSED DESIGN



# PROPOSED DESIGN

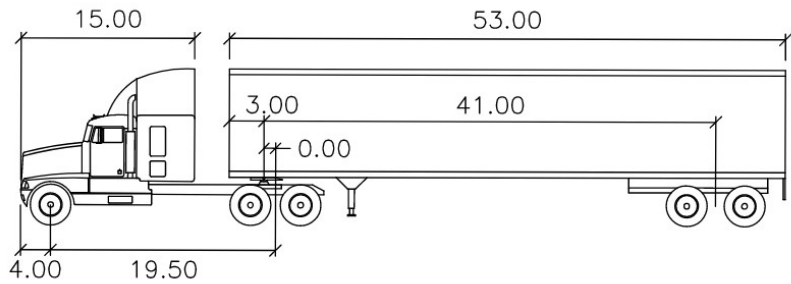


# PROPOSED DESIGN



# OPERATIONS

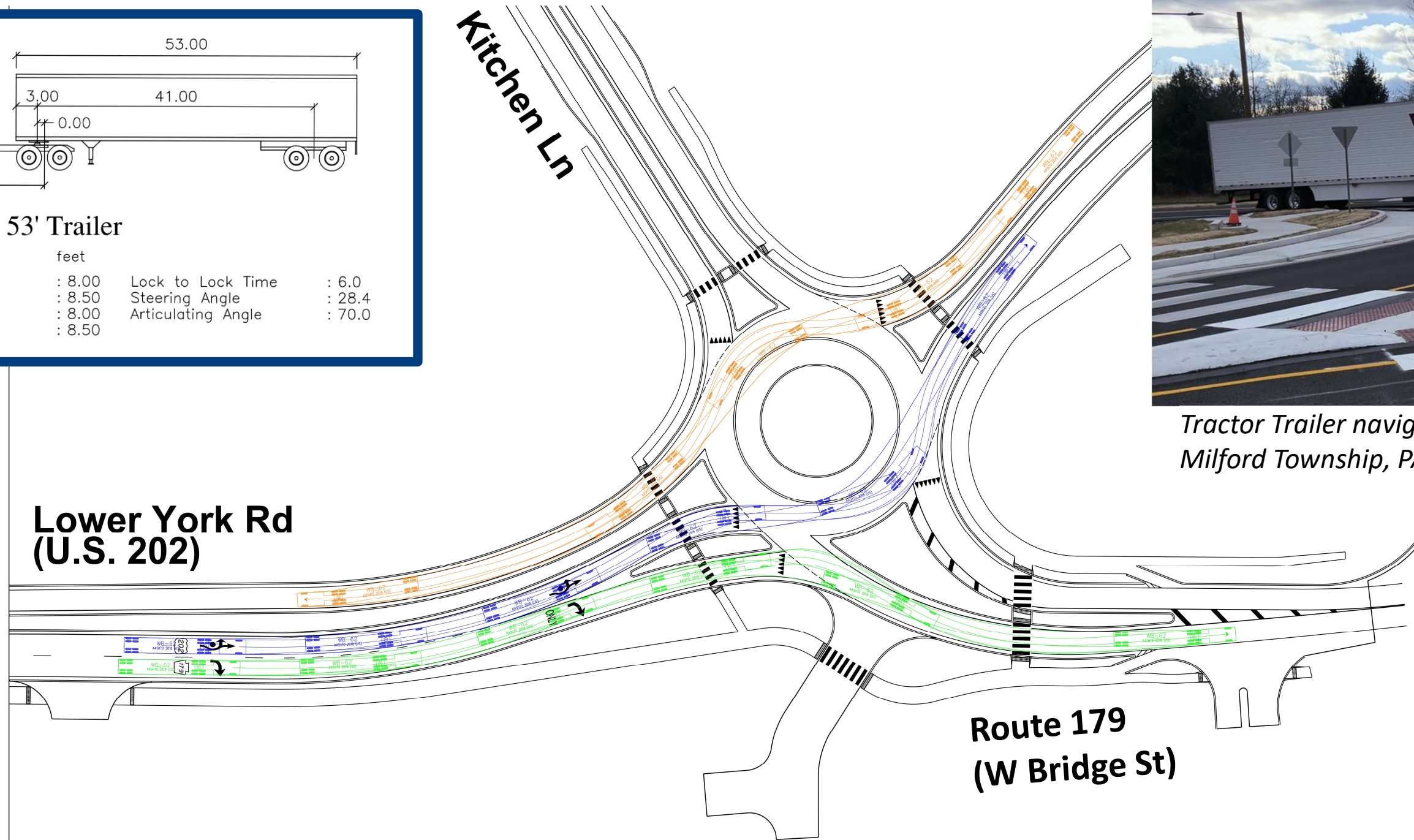
## Large Vehicles Accommodations



WB-62 with 53' Trailer

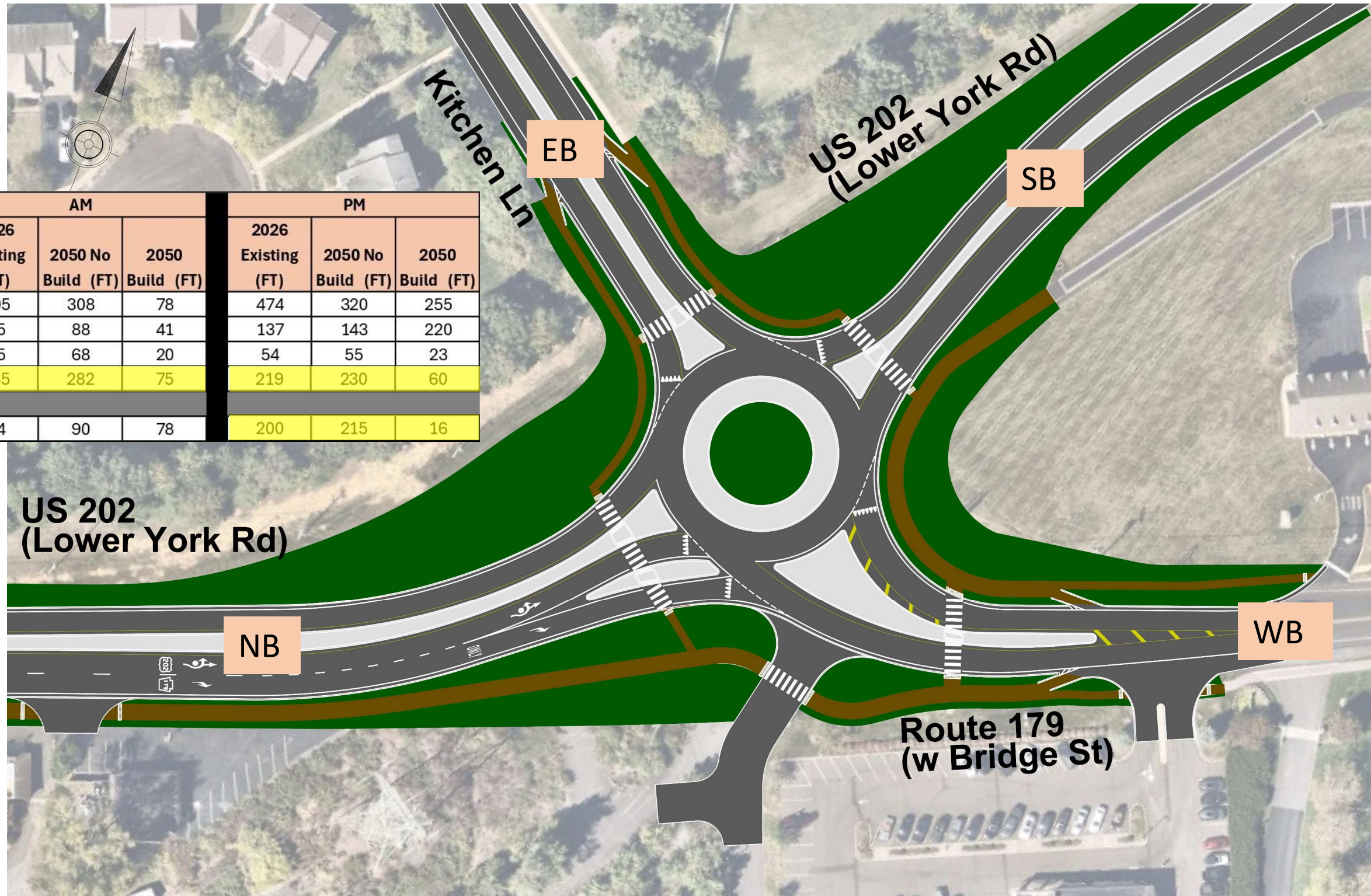
feet

Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 70.0
Trailer Track	: 8.50		



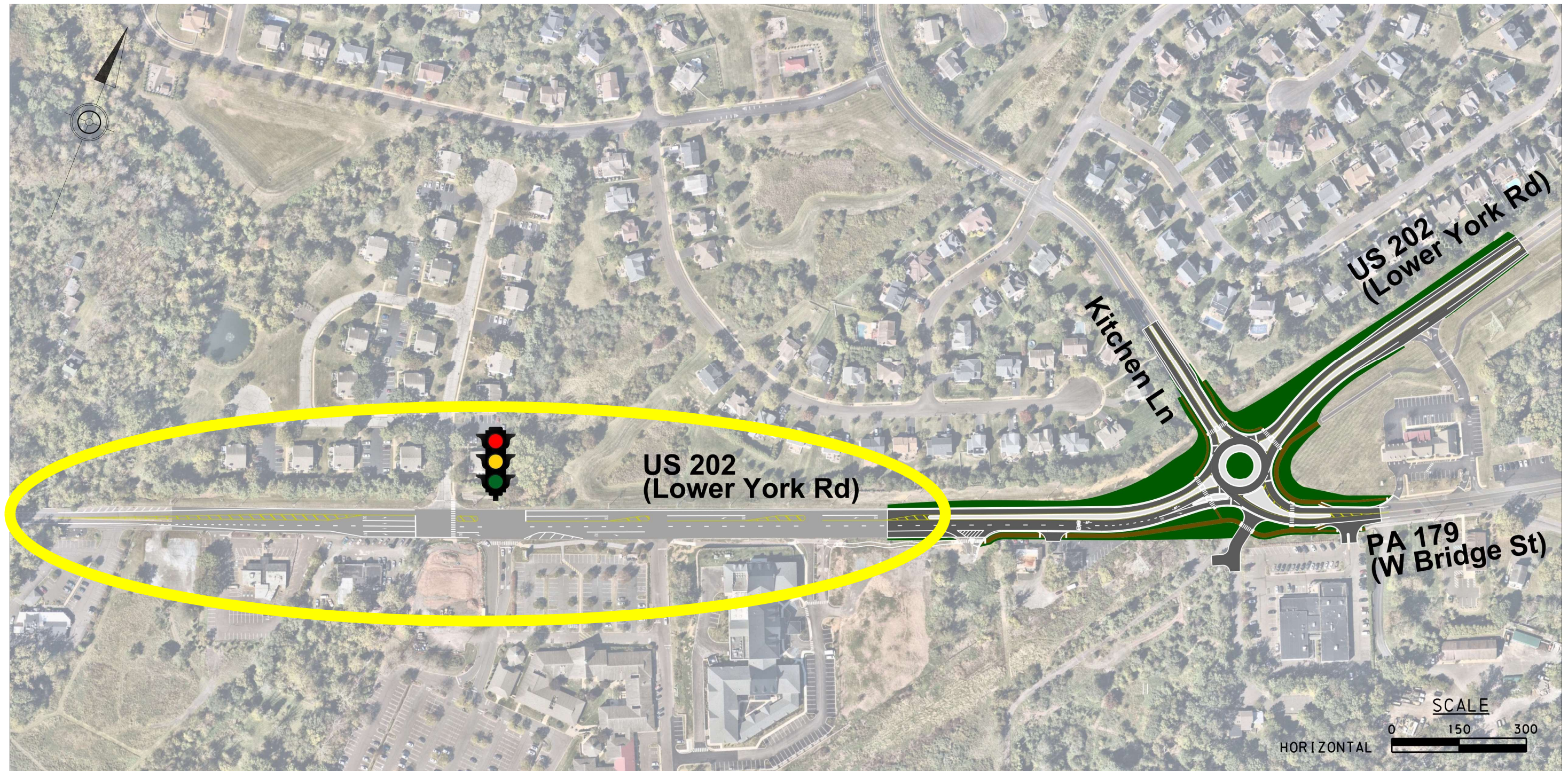
Tractor Trailer navigating a roundabout in Milford Township, PA

# OPERATIONS



Street	Approach	AM			PM		
		2026 Existing (FT)	2050 No Build (FT)	2050 Build (FT)	2026 Existing (FT)	2050 No Build (FT)	2050 Build (FT)
PA 179	WB	295	308	78	474	320	255
US 202	SB	85	88	41	137	143	220
Kitchens Lane	EB	65	68	20	54	55	23
US 202	NB	265	282	75	219	230	60
Intersection Delay (sec)		84	90	78	200	215	16

# PROPOSED DESIGN



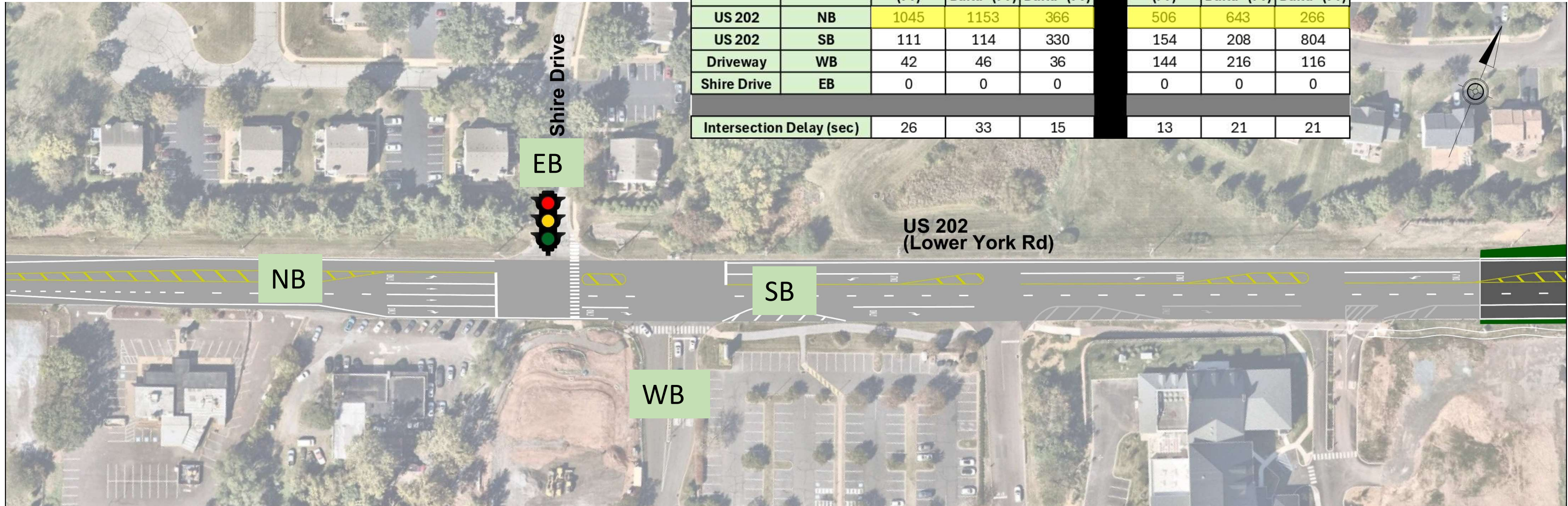
# PROPOSED DESIGN



# PROPOSED DESIGN



# OPERATIONS



Street	Approach	AM			PM		
		2026 Existing (FT)	2050 No Build (FT)	2050 Build (FT)	2026 Existing (FT)	2050 No Build (FT)	2050 Build (FT)
US 202	NB	1045	1153	366	506	643	266
US 202	SB	111	114	330	154	208	804
Driveway	WB	42	46	36	144	216	116
Shire Drive	EB	0	0	0	0	0	0
Intersection Delay (sec)		26	33	15	13	21	21

# ENVIRONMENTAL OVERVIEW

PennDOT follows the standard NEPA Process.

Items of importance:

Streams:

- Unnamed tributaries at north and south ends of the project area.
- Project does **not** impact Aquetong Creek.

Wetlands:

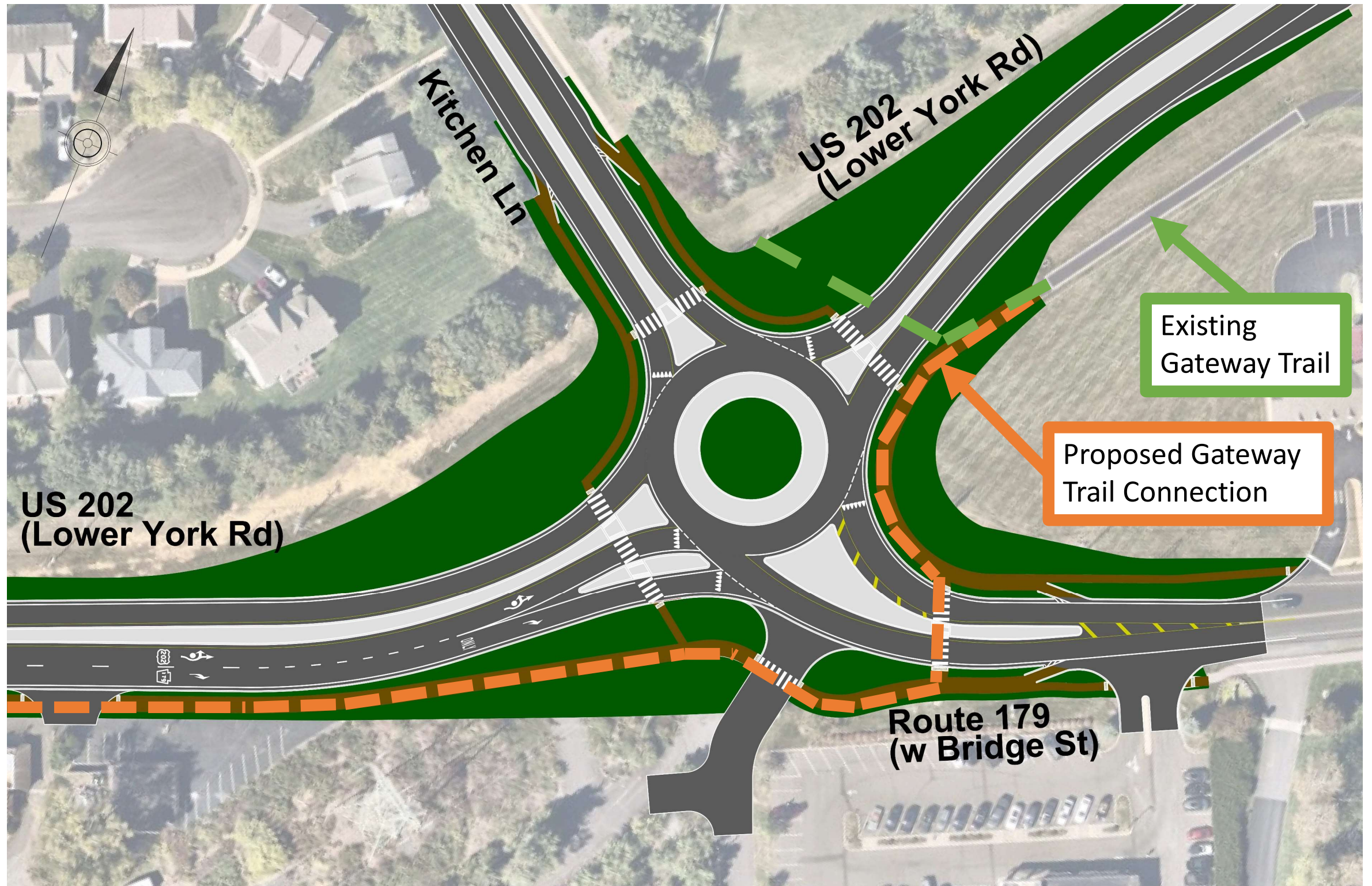
- No wetlands have been identified within the project limits.

Floodplains:

- No floodplain impacts.

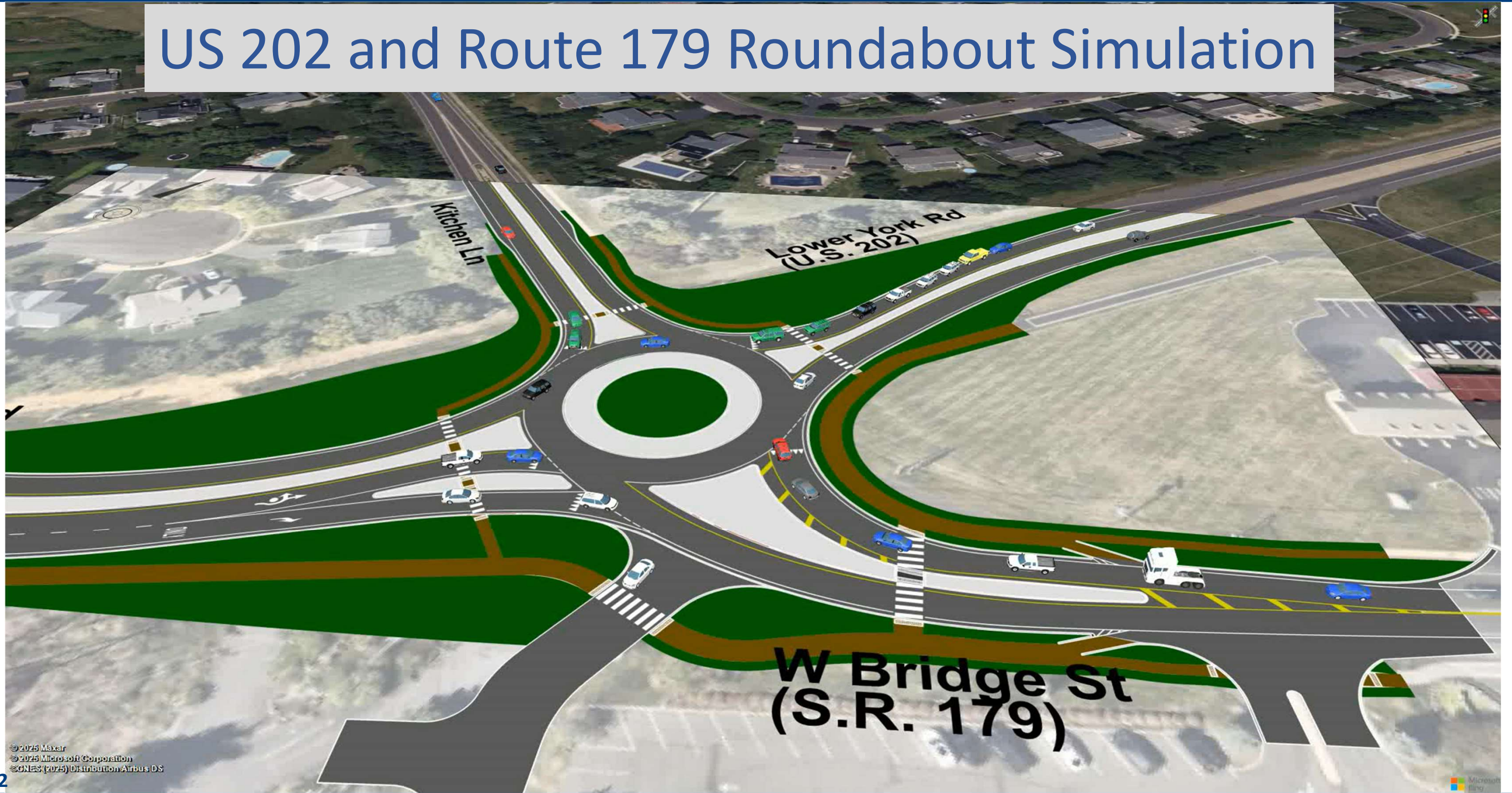
Solebury Gateway Trail:

- The project results in a Section 4(f) De Minimus Use to the Solebury Gateway Trail.
- As a result of the project, portions of the trail require relocation.
- The trail relocation will be incorporated into the PennDOT project.
- The project will not adversely impact the trail's recreational features, and coordination with Solebury Township is ongoing.
- This meeting is seeking comment from the public on the project's use of the trail and potential temporary closure of a portion of the trail.



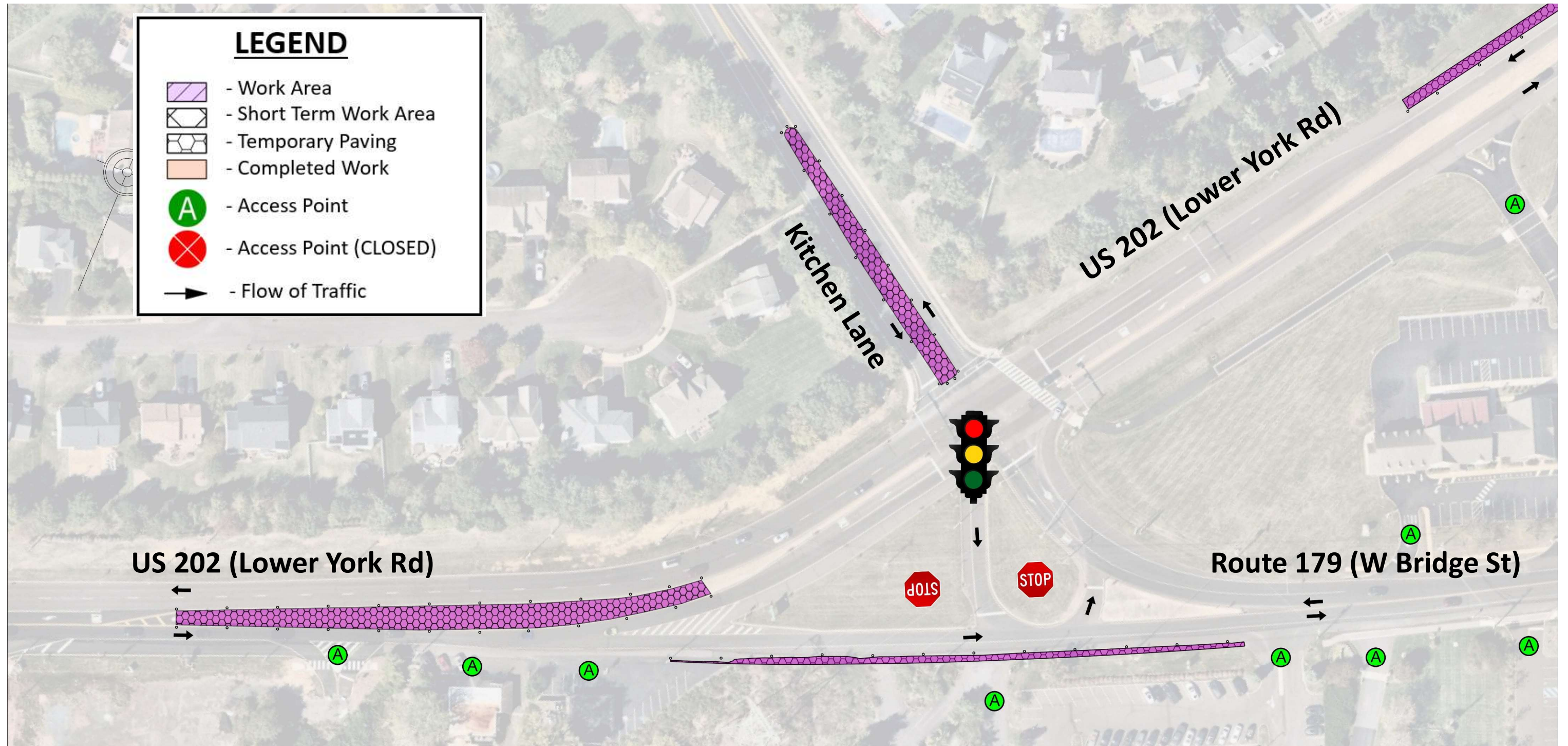
# TRAFFIC SIMULATION (PM PEAK)

## US 202 and Route 179 Roundabout Simulation

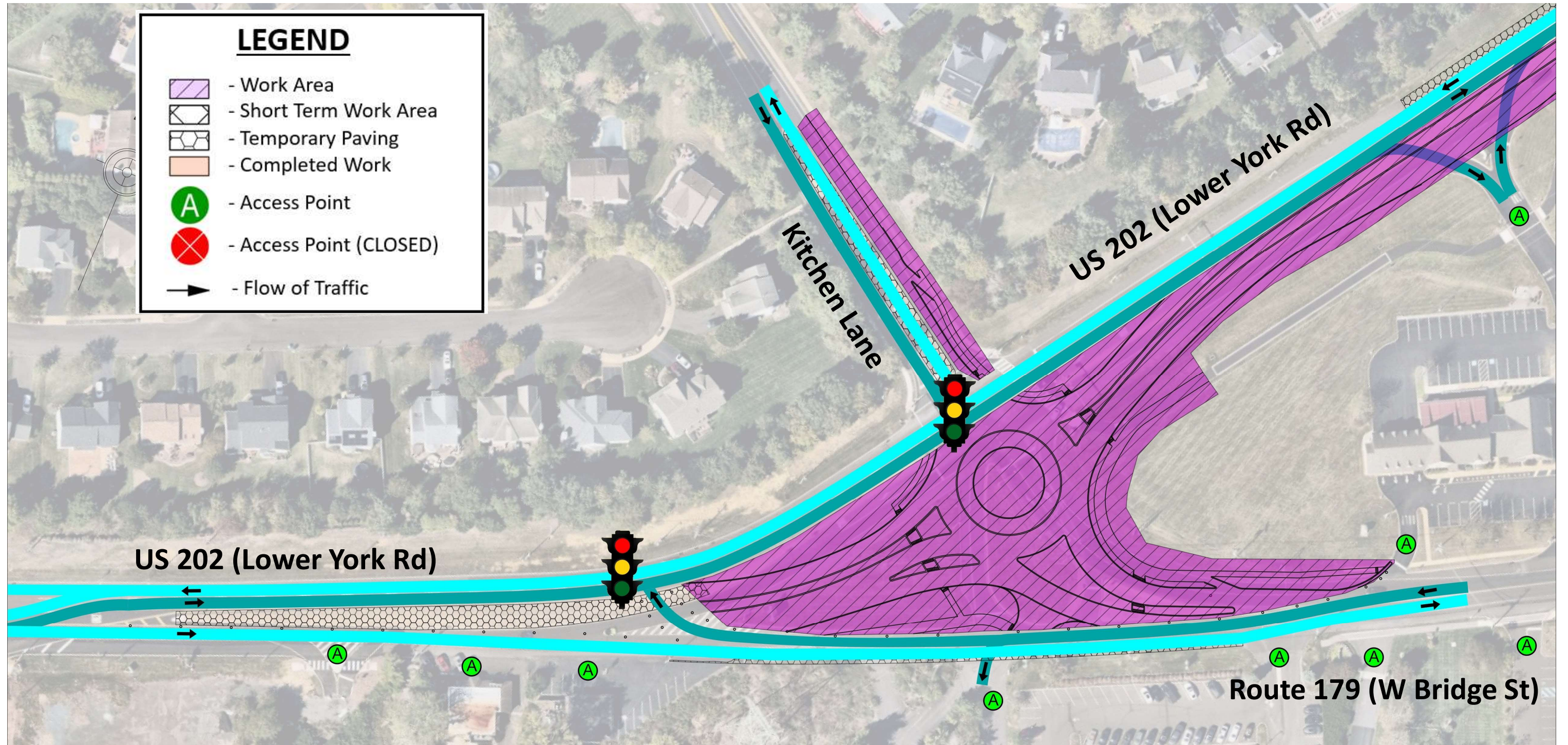


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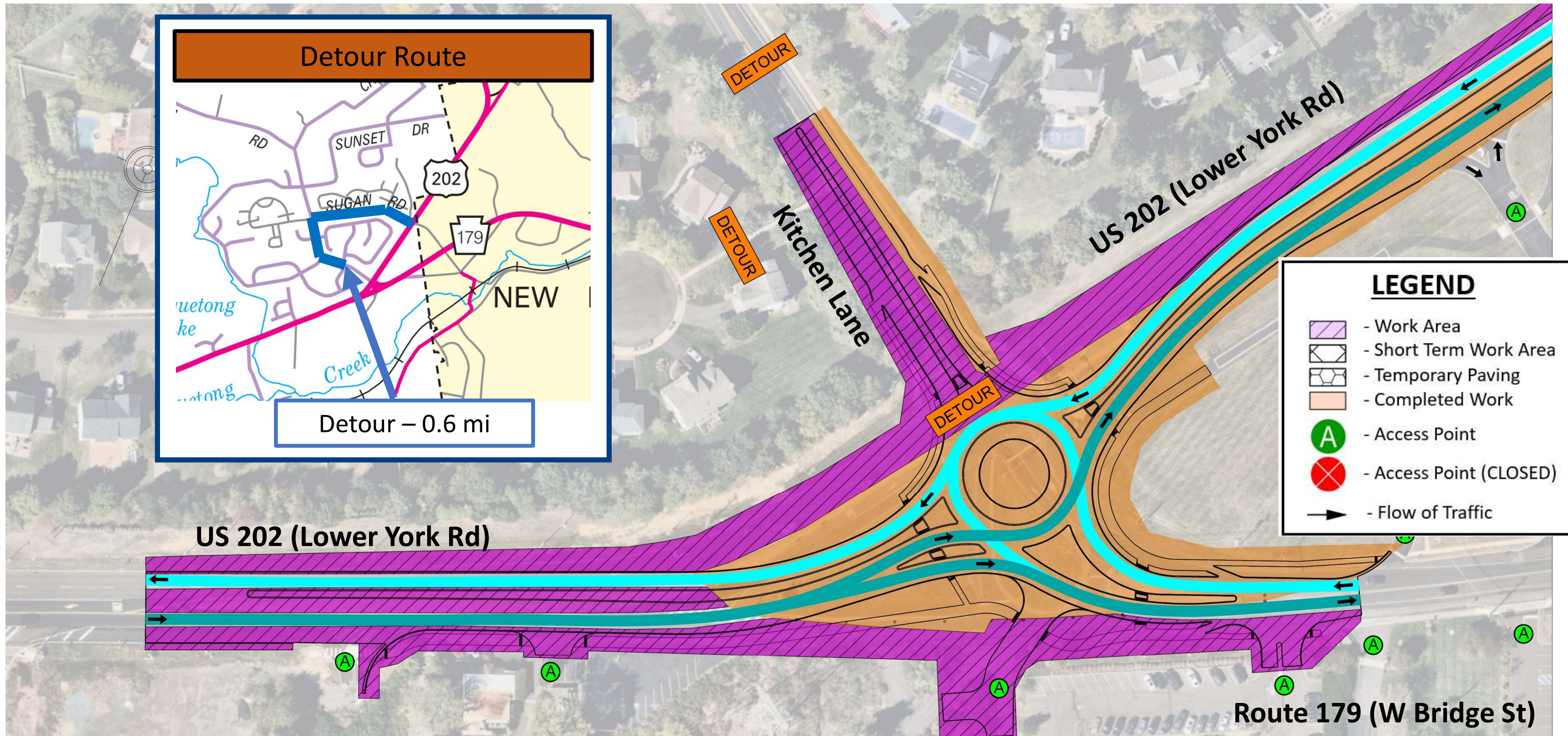
# CONSTRUCTION - STAGE 1



# CONSTRUCTION - STAGE 2

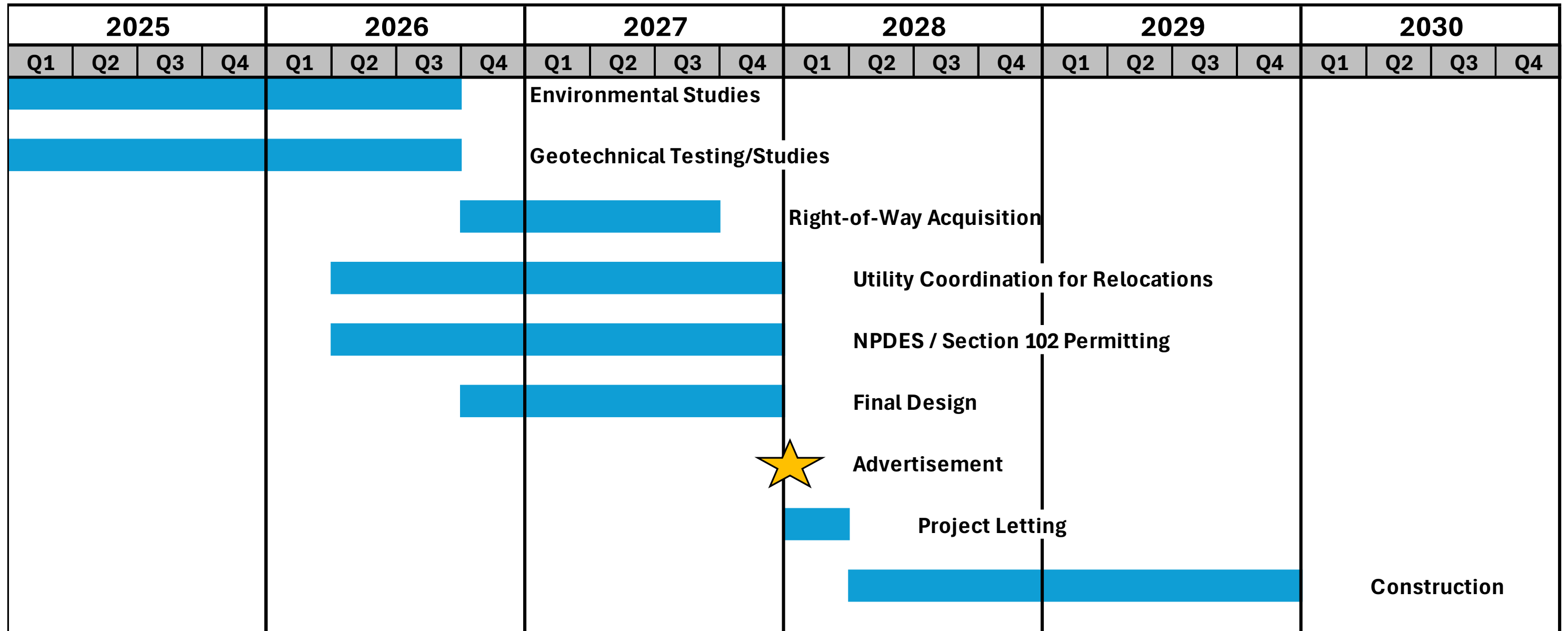


# CONSTRUCTION - STAGE 3



# PROJECT SCHEDULE OVERVIEW

## Proposed Design/Construction Schedule



Public Involvement Notes:

- 2-week comment period after virtual public meeting: June 9<sup>th</sup> to June 23<sup>rd</sup> (submit via project website feedback form)
- In-person Plans Display on Tuesday, June 16<sup>th</sup>, from 5:30-6:00pm at Solebury Township Municipal Building (see project website for details)

# QUESTIONS?

**Submit Official Comments/Questions via the Project Website:**

<https://www.pa.gov/agencies/penndot/projects-near-you/district-6-projects/us-202-and-route-179-roundabout-project>

# THANK YOU

## Contact Information

Consultant Project Manager, Nathan Parrish, P.E.

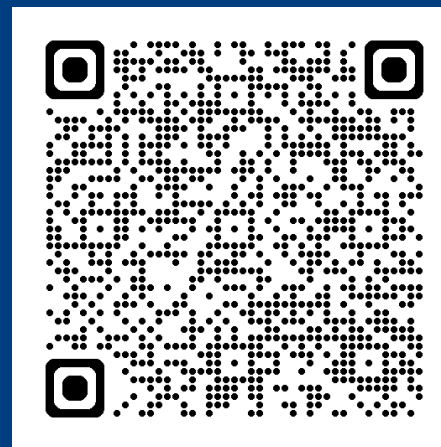
c-nparrish@pa.gov

## For more information about roundabouts:

<https://www.pa.gov/agencies/penndot/programs-and-doing-business/road-design/roundabouts>

## Project Webiste:

<https://www.pa.gov/agencies/penndot/projects-near-you/district-6-projects/us-202-and-route-179-roundabout-project>



JUNE 2026