

Intersection Improvements at CR 8A (Valley Drive / Locust Avenue), CR 8B (Navesink Avenue) and Monmouth Avenue

In the Township of Middletown

Public Information Center

March 31, 2015

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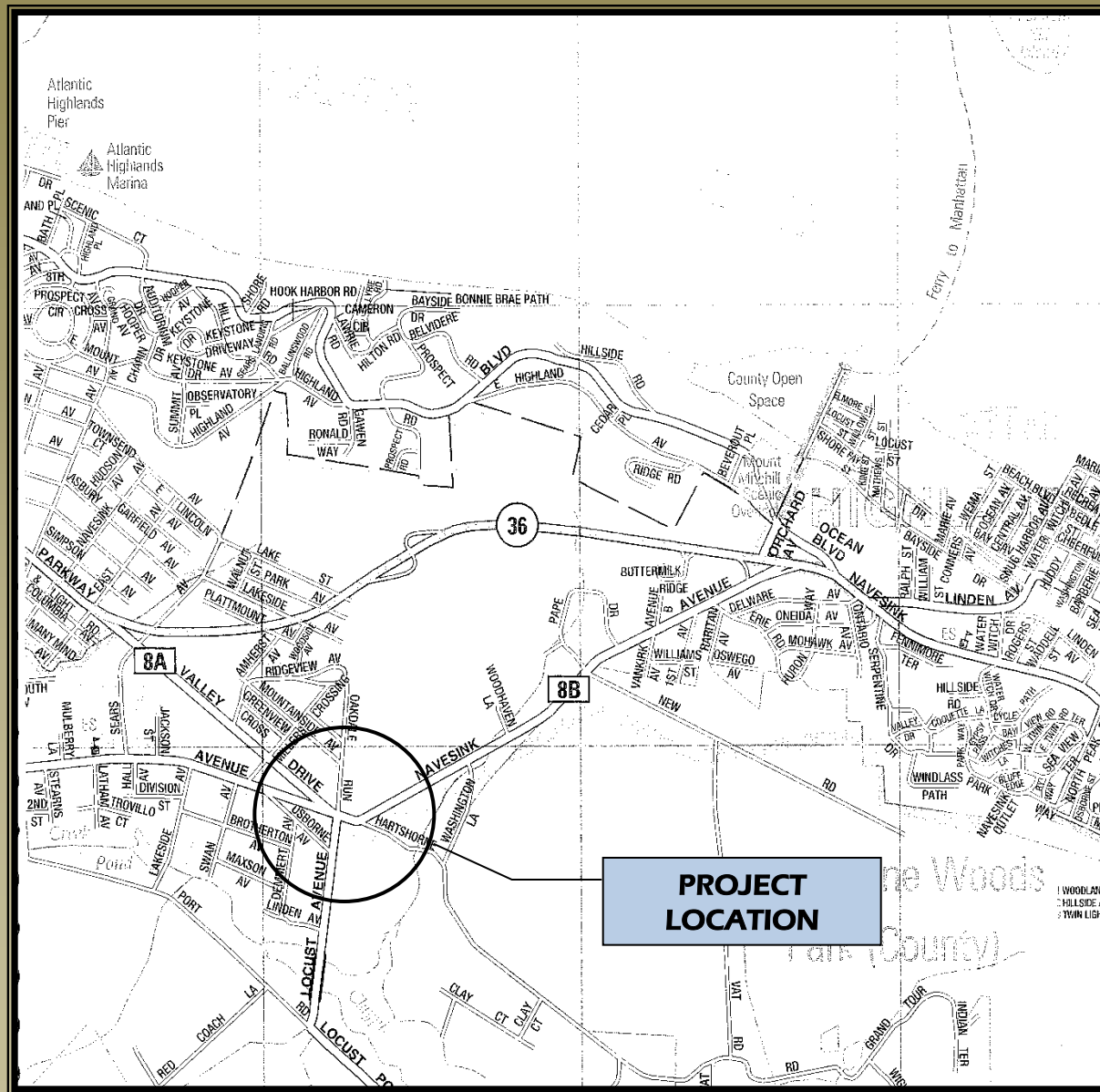
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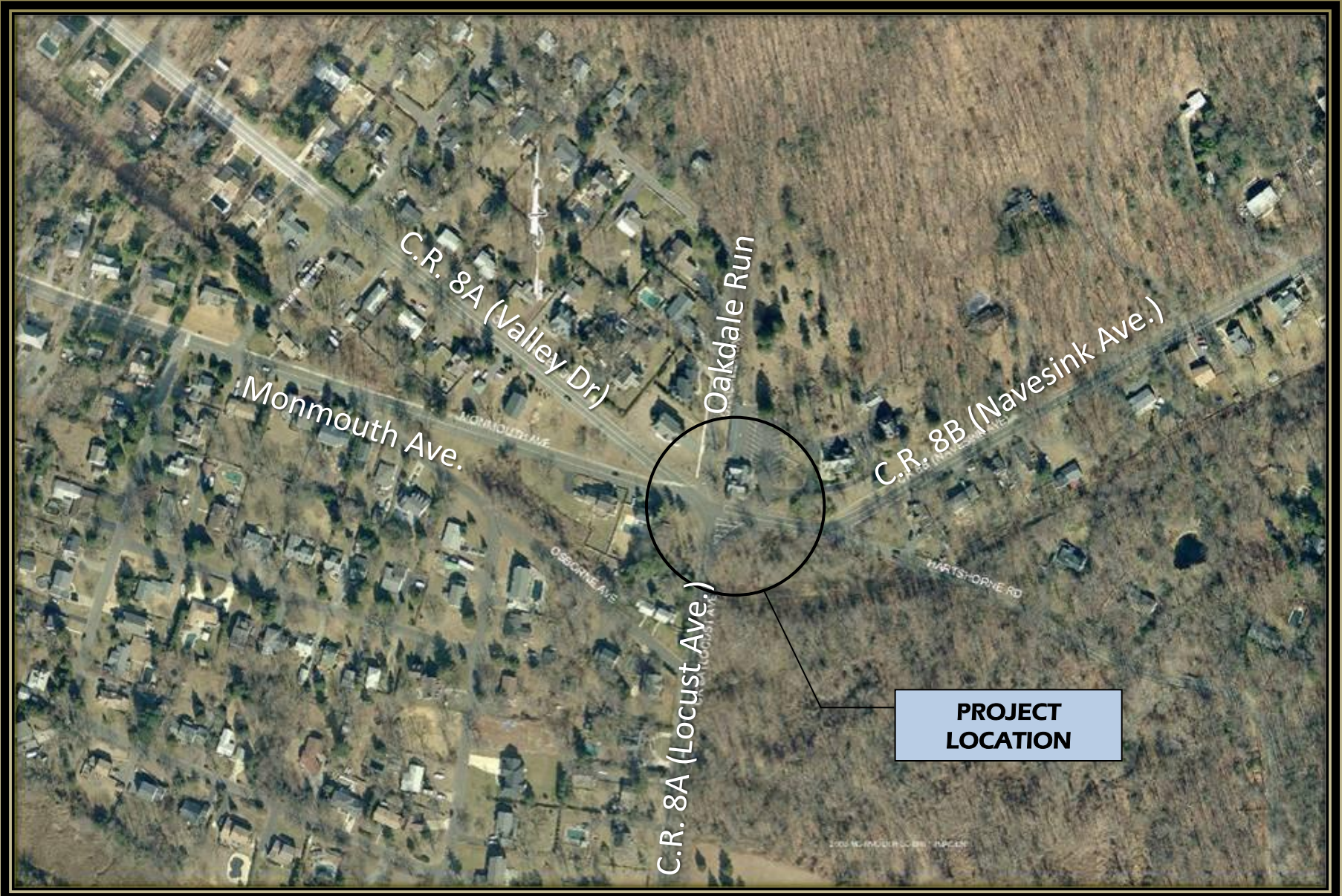
Vincent J. Cardone, P.E. – Principal Engineer, Traffic



Location Map



Location Map



Existing Conditions & Problem Statement

Existing Conditions

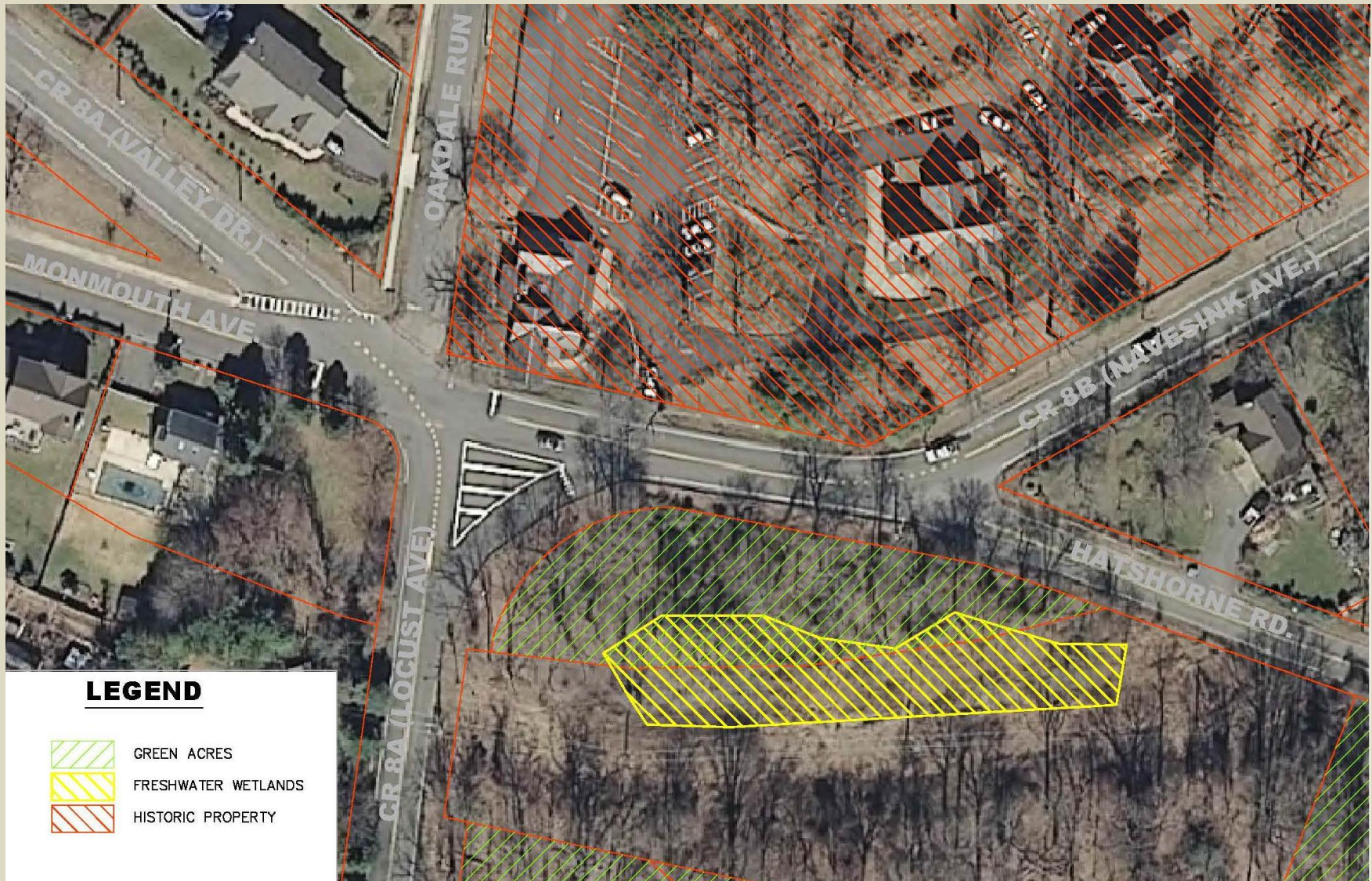
The roadways traversing the intersection serve as connections between State Route 36 to the north, the Oceanic Bridge and County Route 12A (Navesink River Road) to the south, and State Route 35 to the west.

Problem Statement

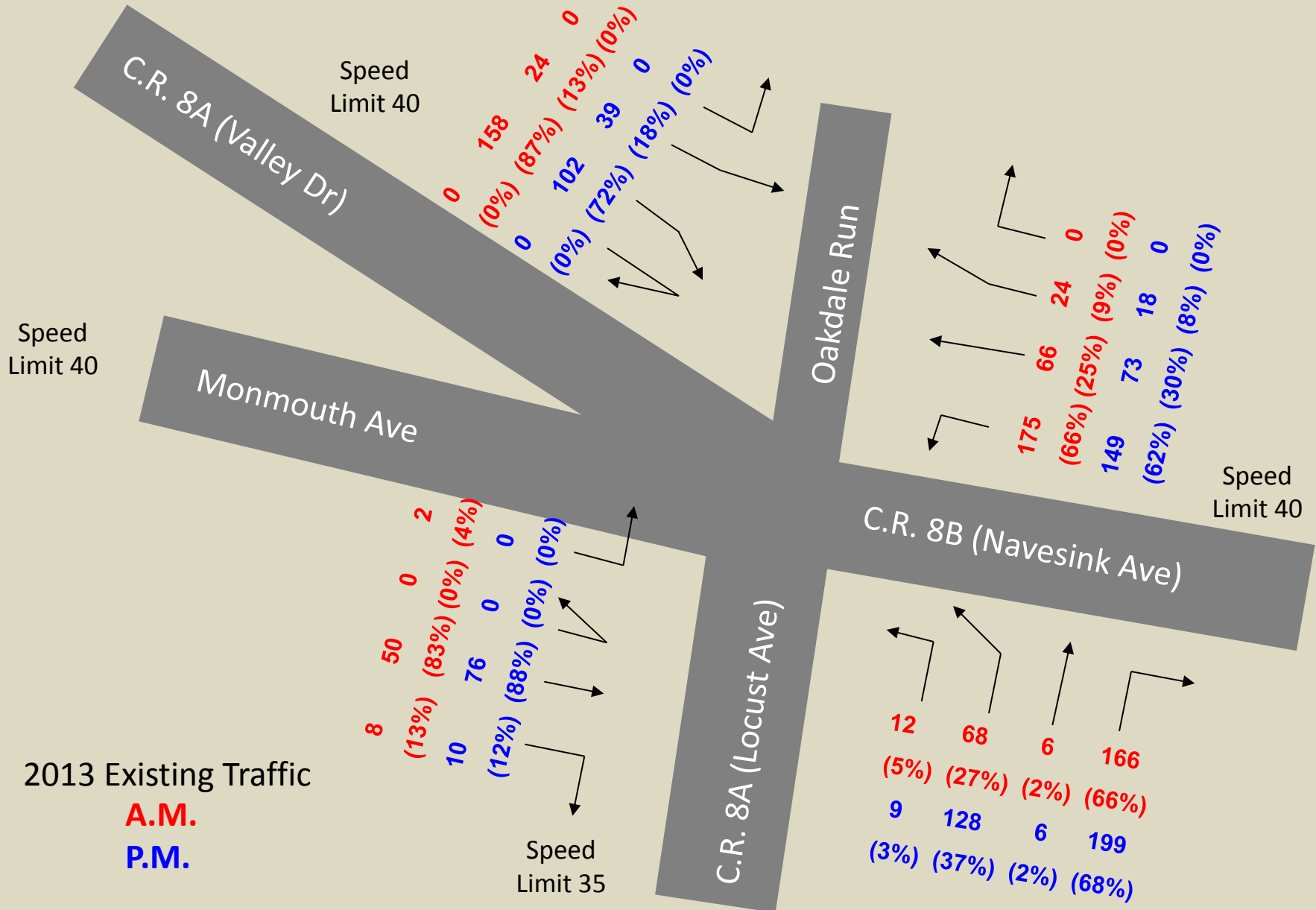
The Intersection's primary movement (using 2013 traffic data) are the northbound to eastbound and conversely the westbound to southbound turning movements. The secondary major movement is the north/south through move. The unconventional geometry of the existing intersection contributes to the following:

- 5 Legged Intersection
- Confusion regarding which movement has the right of way
- The legs with the largest movements are stop- and yield-controlled
- Odd angles & sight distance issues
- Perceived speeding issues
- 20 reported crashes between 2011 and 2014.
 - The Locust Avenue - Valley Drive intersection was above the statewide average for County roadways in angle crashes and fixed-object crashes.
 - The Navesink Avenue - Hartshorne Road intersection was above the statewide average for County roadways in fixed-object crashes, particularly under slippery conditions, and in head-on collisions.

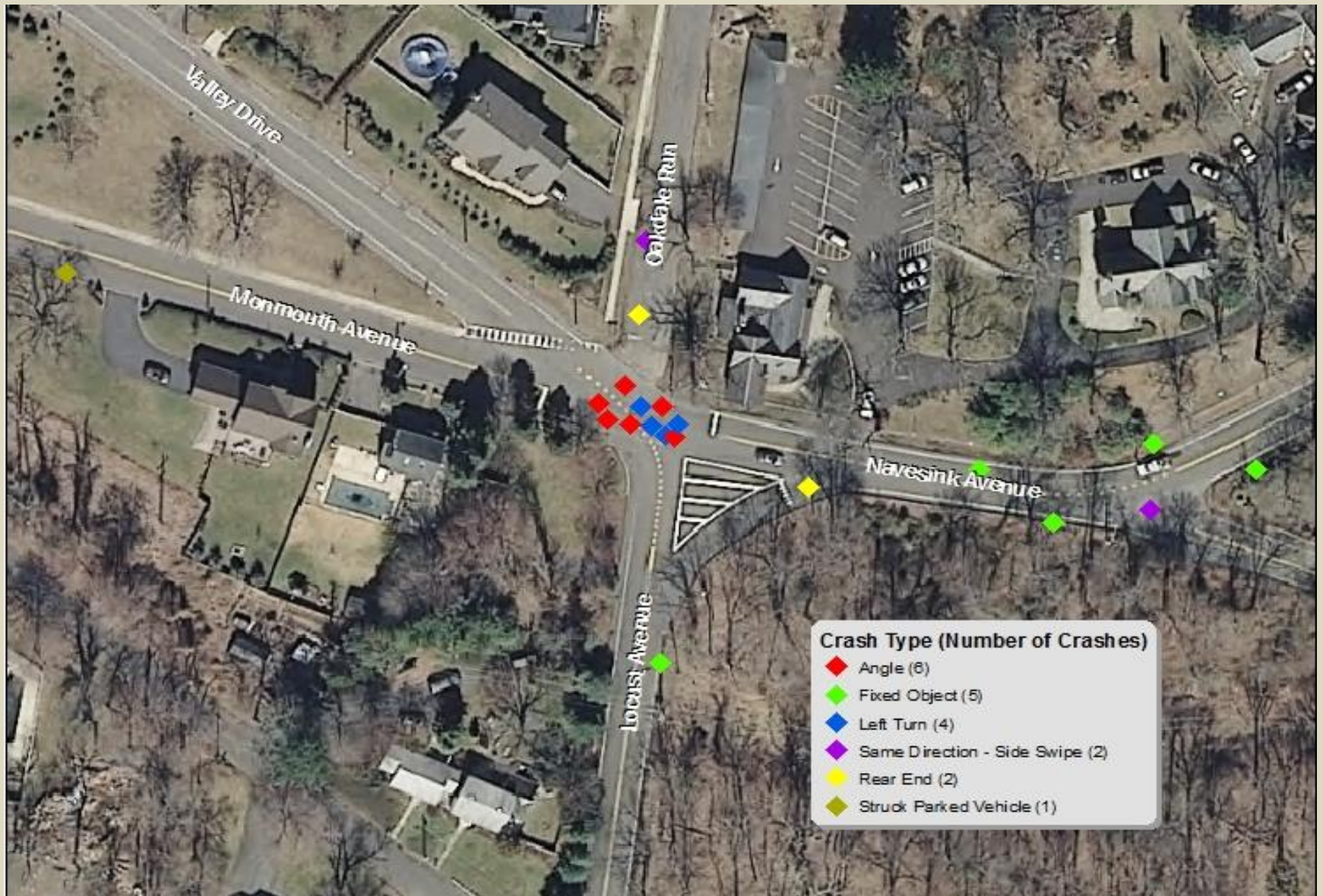
Existing Intersection Conditions



2013 Traffic Volumes



Crashes 2011-2014



Studied Intersection Improvements

MCED developed various options for intersection improvements.

- Traffic Signal – did not meet warrants
- Roadway Realignments – 4 combinations of T-type intersections
- Roundabout option
- 2013: Middletown Township supports the roundabout alternative based on previous public meetings
- July 24, 2014: The Board of Chosen Freeholders awards a contract for professional engineering services to prepare final contract documents

Proposed Roundabout Improvement

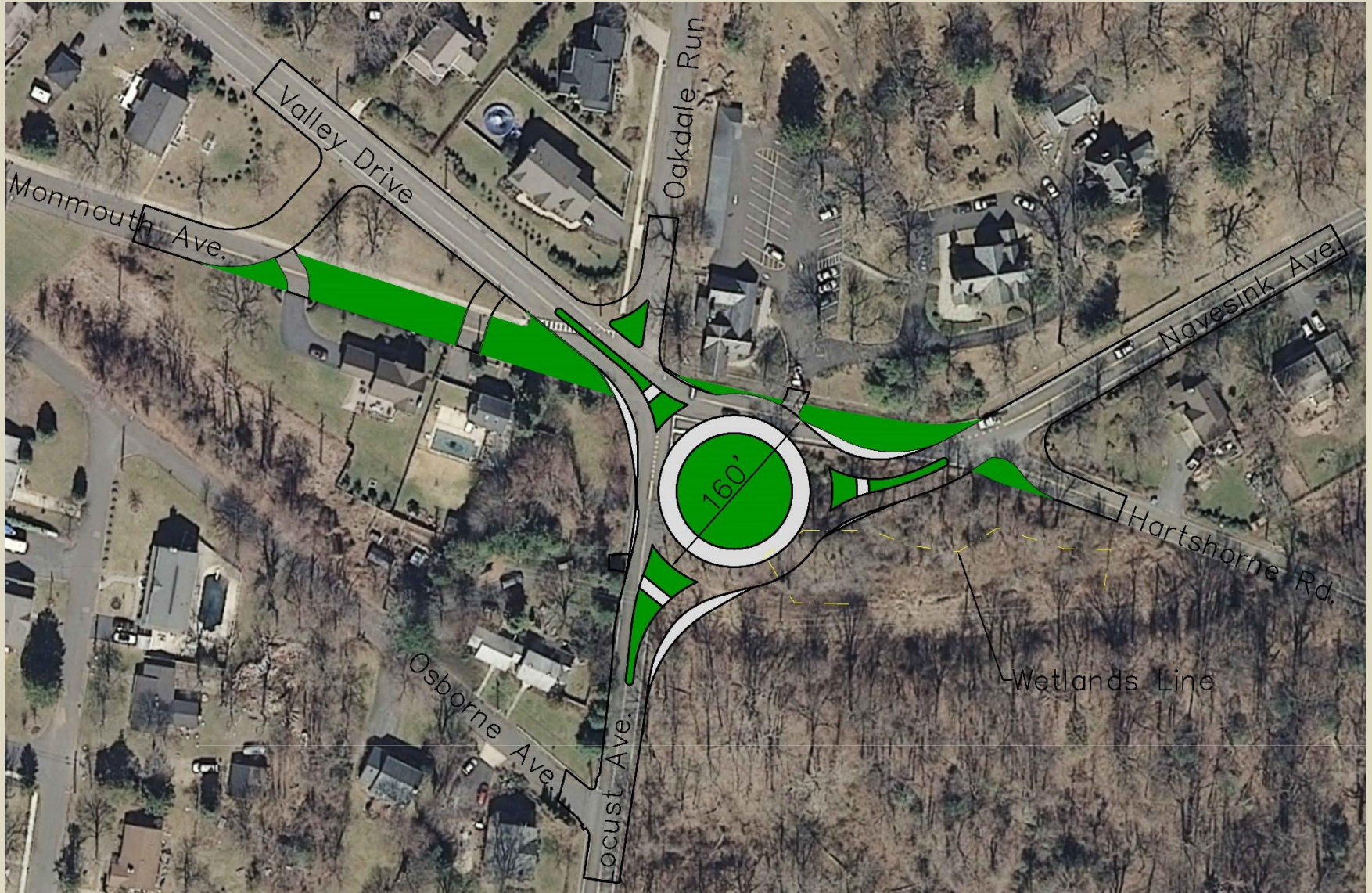
- Roundabouts offer many benefits over traditional intersections, such as:
 - Significantly reduced number of conflict points
 - Slows traffic on all approaches
 - Each approach controlled by Yield sign
 - Improved geometry & sight distance
 - Efficiently handles turns & heavy volumes from multiple approaches

3 Roundabout alternatives have been developed.

All alternatives meet current design standards and address the project need, but have differing impacts.

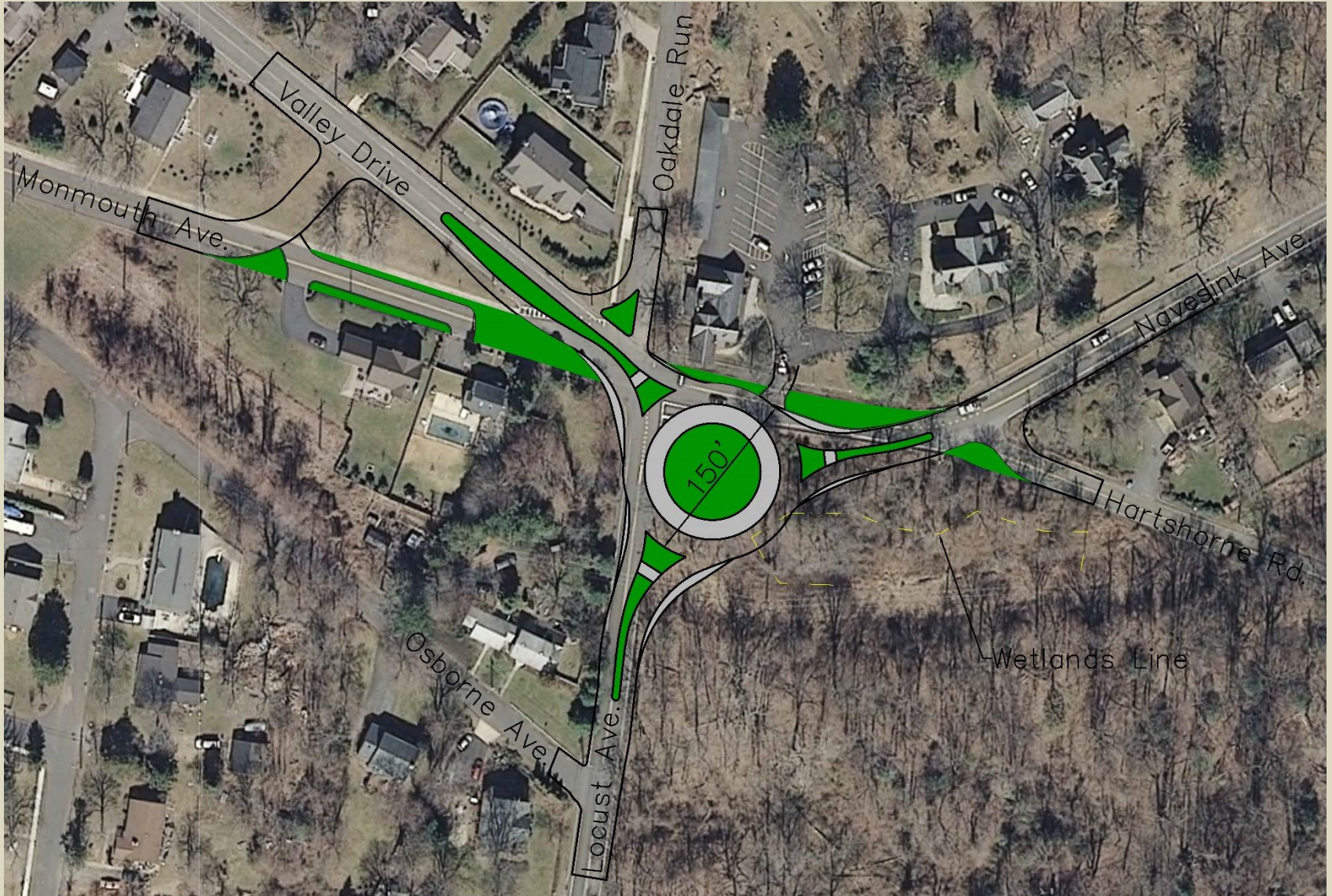
Alternative 'A'

160' diameter



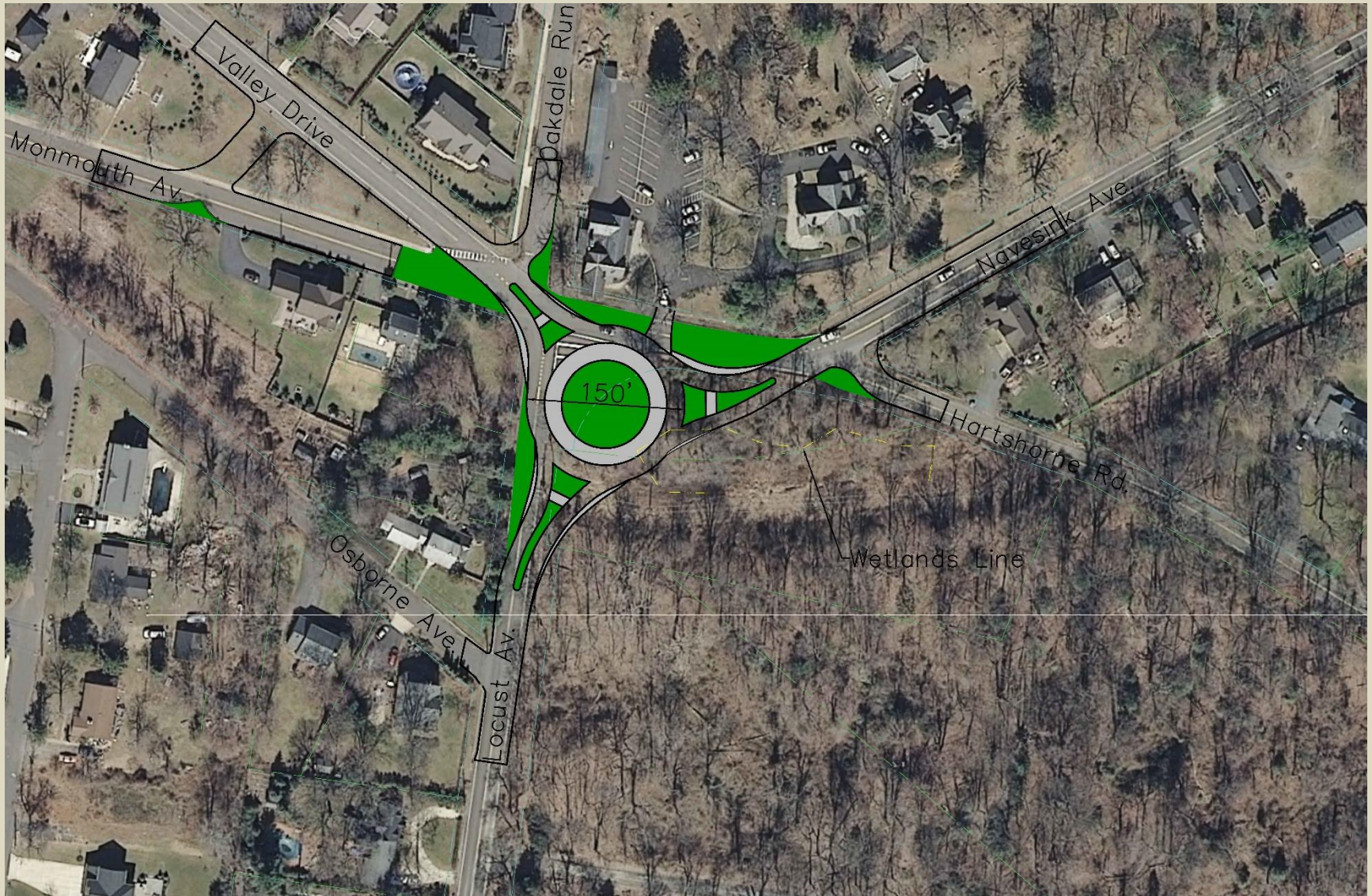
Alternative 'B'

150' diameter



Alternative 'C'

150' diameter



Alignment and Access Considerations

- *Hartshorne Road* – will be re-aligned to meet Navesink Avenue at right angles, to improve sight distance.
- *Monmouth Avenue* – will be re-aligned to meet Valley Drive, to remove the movement from the roundabout.
- *Valley Drive* – an extended splitter island may be incorporated to encourage drivers to slow down further before entering the roundabout.
- *Oakdale Run* – right-in / right-out turns only.
- *Church Driveway* – to be extended to connect directly to the roundabout.
- *Private Driveways* – #102 and 104 Monmouth Avenue can be extended to the nearest street, or combined into a shared driveway on Monmouth Avenue.

Design Constraints

- ***Environmental***

- Freshwater wetlands are located between Locust Ave and Hartshorne Road. A General Permit no. 10 will be obtained from NJDEP Division of Land Use Regulation.
- Threatened or Endangered species: the project site is a potentially suitable foraging habitat for the Black Crowned Night Heron but not a suitable nesting habitat. Disruption of foraging habitat is considered a temporary disturbance.
- Stormwater management measures will be incorporated to comply with NJDEP's Phase II Surface Water Quality Rules. The design anticipates no increase in runoff.

- ***Green Acres***

- The project will disturb less than ½ acre of Hartshorne Woods Park. The County will work with NJDEP's Green Acres Program to find an acceptable mitigation strategy.

- ***Historic Properties***

- The project does not require acquisition or disturbance of any property at the Stone Church. All 3 alternatives move the roadways further away from the Church.
- Cultural Resources studies are underway to determine if the project footprint extends to the historic limits of the Randall House tract.

- ***Private Property***

- Some private property will be purchased to accommodate the road widening and realignments.

- ***Utilities***

- Aerial and underground utilities will require relocation for the road widening and realignments.

Roundabout Alternative

Benefits:

- Increases safety by slowing traffic, reducing the number of conflicts among vehicles, and controlling each approach with a Yield sign.
- Improves geometry & sight distance.
- Efficiently handles the major movements.
- Provides upgraded and ADA-compliant pedestrian facilities.

Impacts:

- Freshwater Wetlands disturbance.
- Green Acres acquisition & mitigation.
- Acquisition of property anticipated from six different parcels.

Next Steps

- Selection of the preferred alternative based on public input.
- Plan endorsement from the Township – May 2015
- Right-of-Way acquisition process – Summer 2015
- Securing necessary State approvals –Spring / Summer 2016
- Bid and award project for construction – Summer 2016

An aerial photograph of a suburban neighborhood. The image shows several houses with dark roofs, some with swimming pools, and many bare trees, suggesting a late autumn or winter setting. A road with a crosswalk and a parking lot are visible in the center. The text "Questions?" is overlaid in the upper half of the image.

Questions?

Thank You!