

Currituck Drive Neighborhood Streetscape

Neighborhood Traffic Management Program



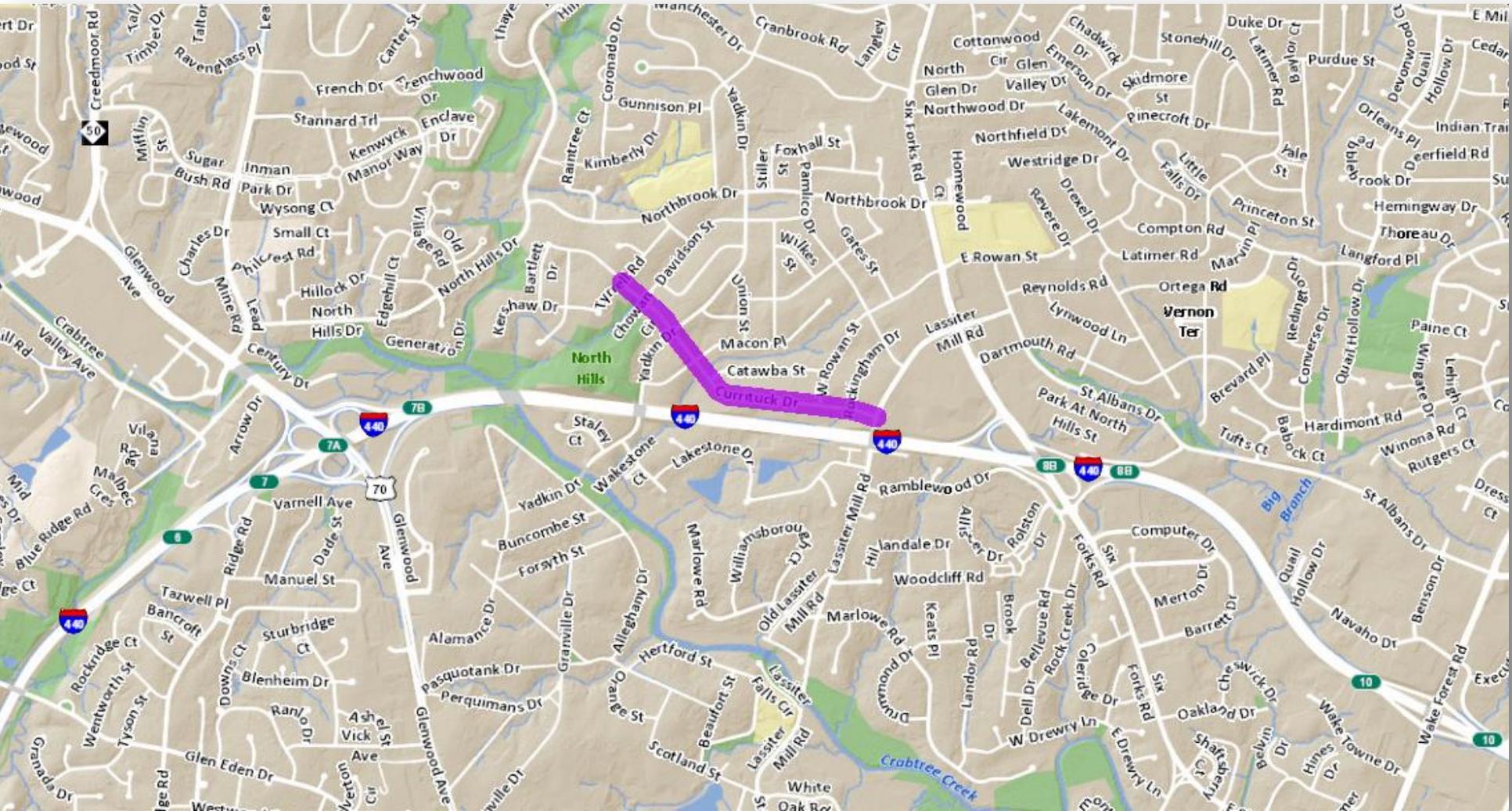
*Public Works
Committee of
City Council*

March 24, 2015

Presentation Overview

- Brief project background
- Overview of existing conditions
- Review of previous projects results
- Design concept and treatment overview
- Alternatives discussion

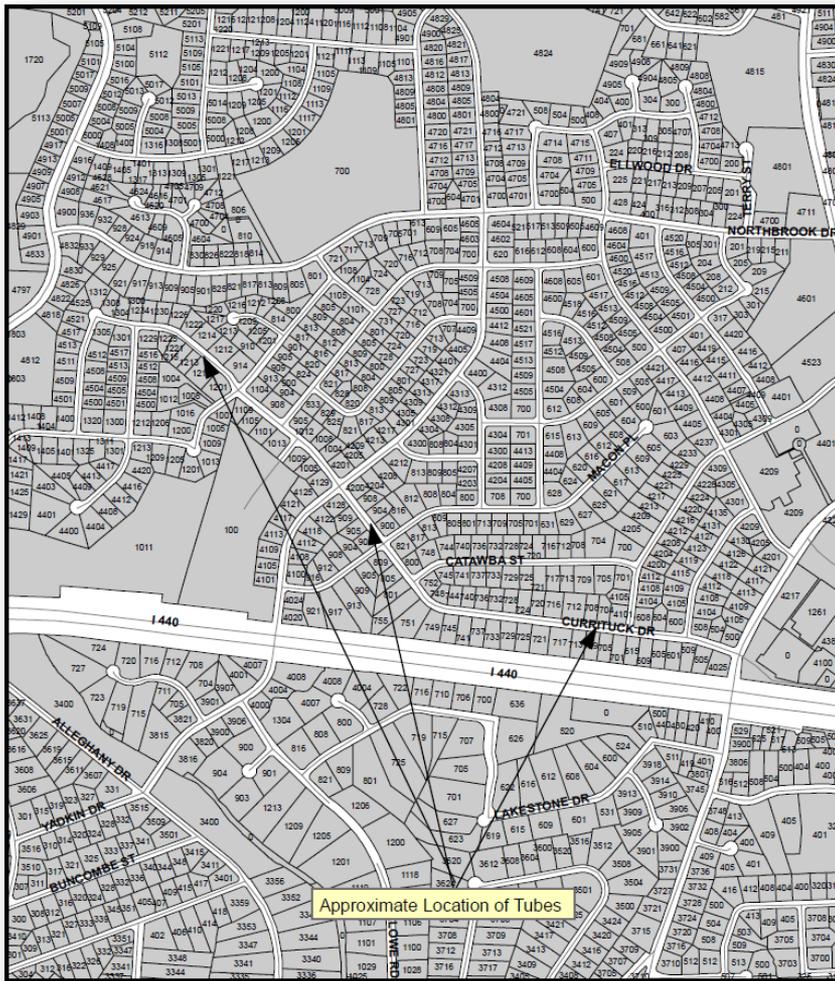
Project Location



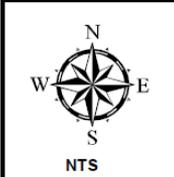
Project Timeline

- November 5, 2013 – #2 on priority list adopted by Council
- March 20, 2014 – Information session (17 attendees)
- June 2, 2014 – Successful petition submitted (80% support)
- July 8, 2014 – Neighborhood design workshop (20 attendees)
- October 16, 2014 – Neighborhood design review (19 attendees)
- February 3, 2015 – Treatments pre-marked
- Today – City Council Public Design Review
- Future – Construction Documents by Public Works

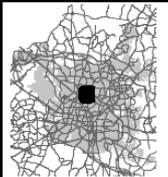
Traffic Study



- 1212 Currituck
 - < 30 mph 85th percentile
 - ~300 vehicles per day
- 904 Currituck
 - 35.3 mph 85th percentile northbound
 - 35.8 mph 85th percentile southbound
 - ~3000 vehicles per day
 - ~250 feet from stop
- 708 Currituck
 - 44.3 mph 85th percentile westbound
 - 40.0 mph 85th percentile eastbound
 - ~3500 vehicles per day



Please perform 48 hr. speed and volume counts at the 3 locations indicated above on Currituck Drive.



Workshop Summary



Evaluation of Previous Projects

Previous Designs

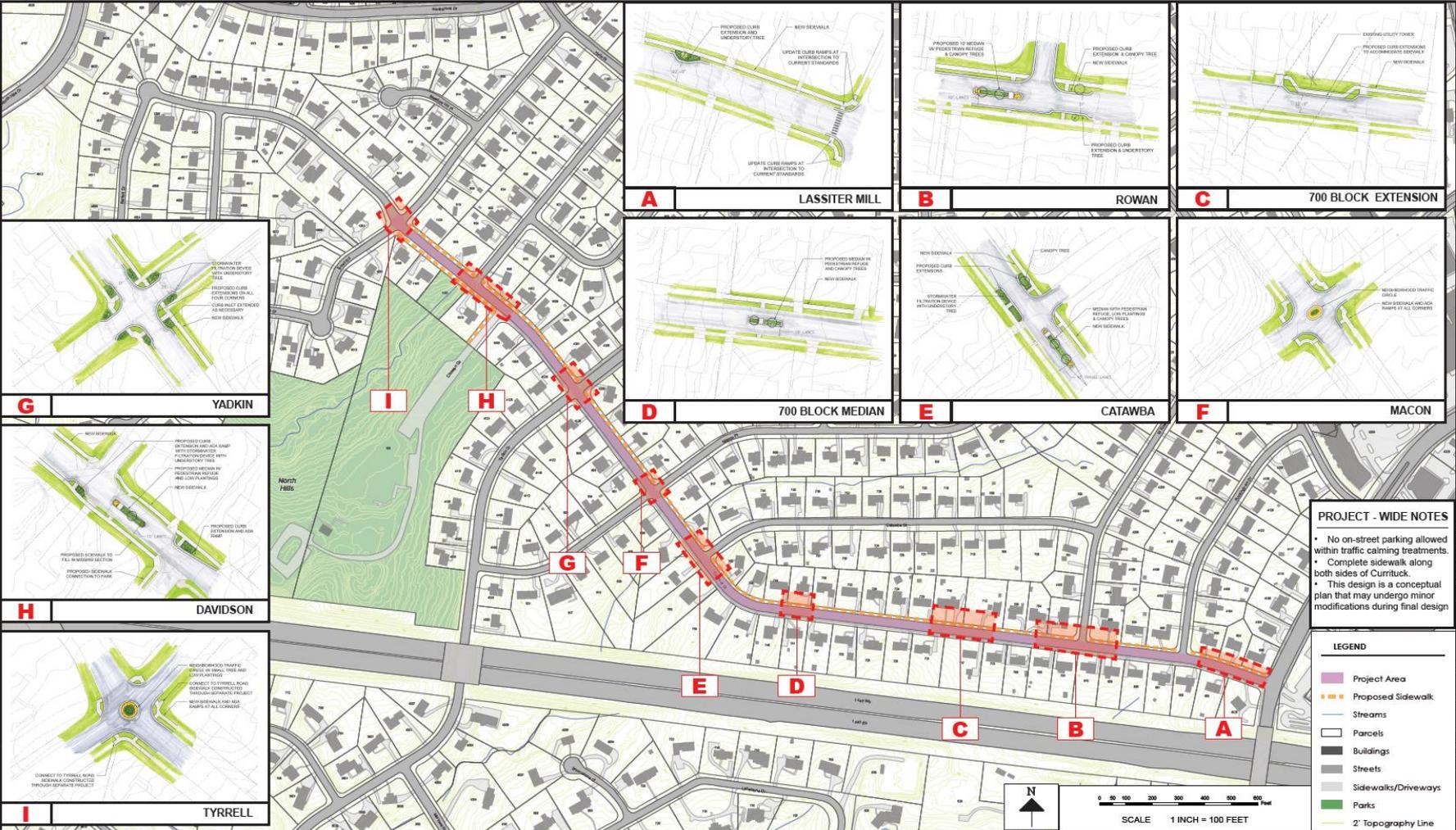
- Three are roughly similar to Currituck Drive:
 - Eagle Trace Drive
 - Plaza Place
 - Mourning Dove Road
- Generally 35 mph design speeds.
- Now 25 mph speed limits.

Average of post-speeds

- Mourning Dove: 35.6 mph
- Plaza Place: 34.5 mph
- Eagle Trace: 35.8 mph



Design Overview



Design Strategy

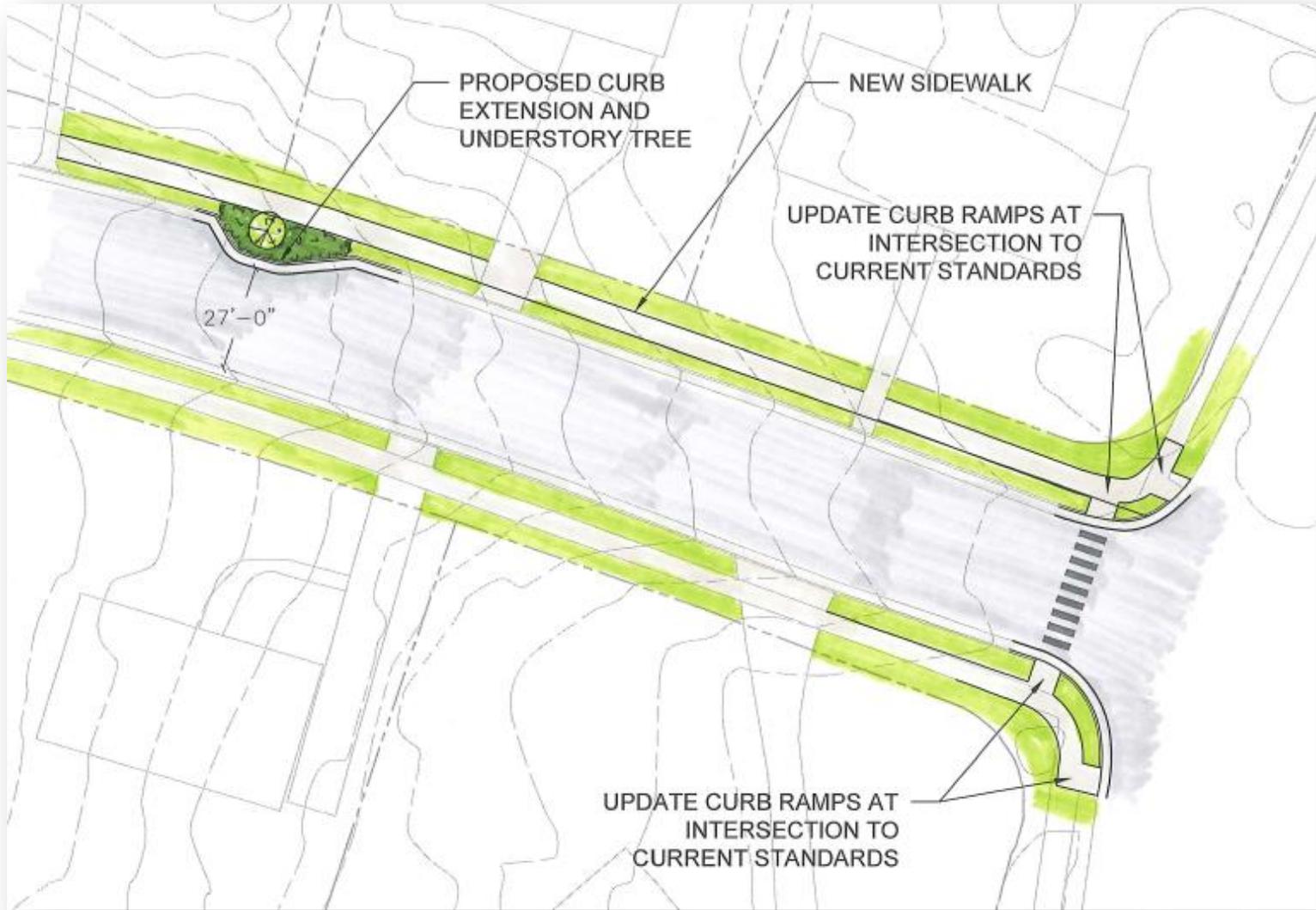
- Prevent drivers from gaining speed on rolling topography
- Rowan (B), Catawba (E), and Chowan (H)
 - Lane shift: 30 mph
- Tyrrell (I) and Macon (F): Neighborhood Traffic Circles
 - Slow design speed
 - Proven safety record
 - Generally less expensive than other intersection treatments
 - Limits left turns by very large vehicles
- Median near curve (D) separates oncoming traffic and prevents high speeds in curve.
- Other three treatments provide pedestrian benefits and visual signal to drivers.

Location A: Near Lassiter Mill



(Facing West)

Location A: Near Lassiter Mill



Location B: Rowan



© 2013 Currituck

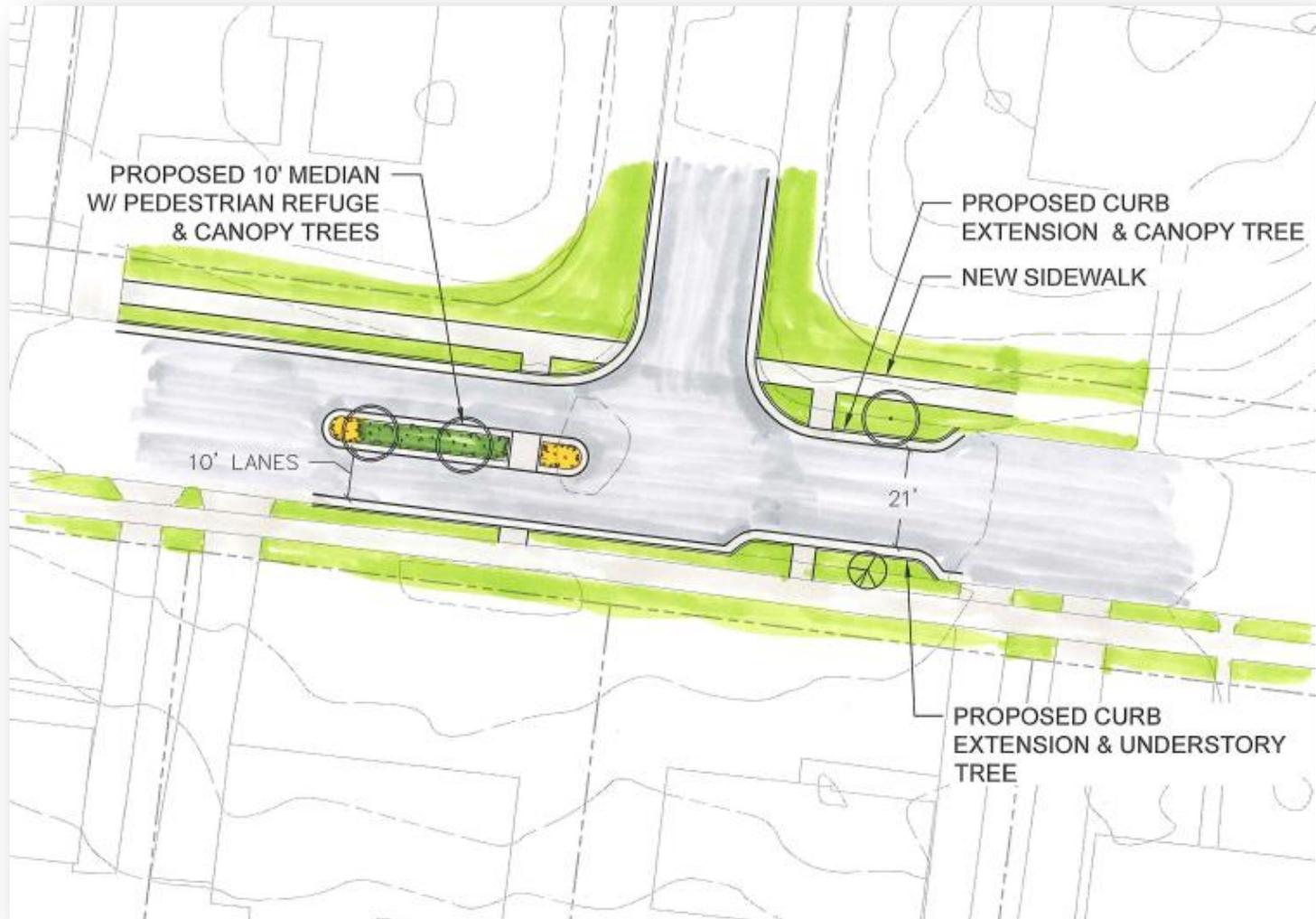
Currituck Dr



Currituck Dr

(Facing West)

Location B: Rowan



Location C: ~715 Currituck



(Facing West)

Location C: ~715 Currituck



Location D: ~740 Currituck



(Facing West)



Location D: ~740 Currituck



Location E: Catawba



Currituck Dr

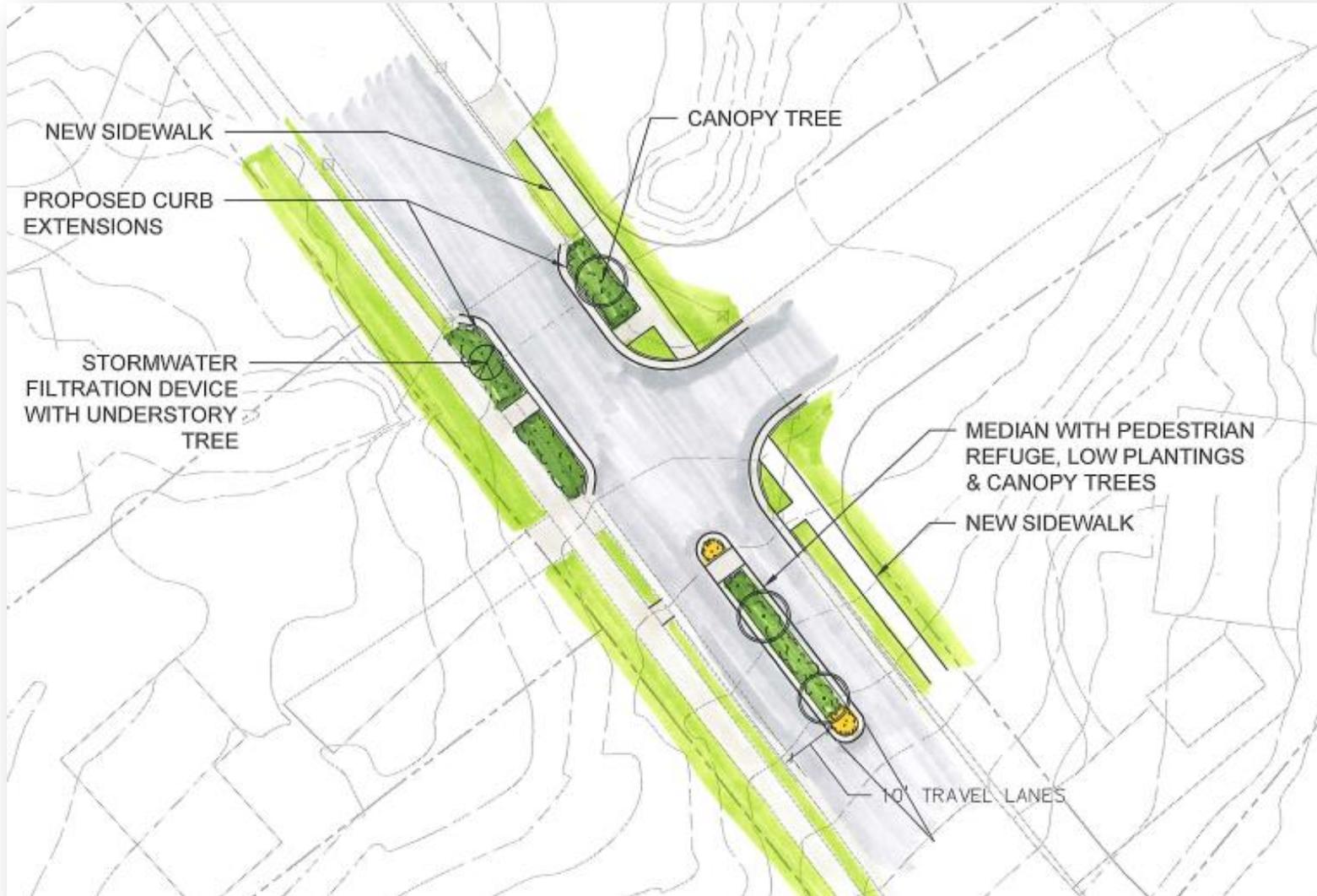


Currituck Dr



(Facing West)

Location E: Catawba



Location F: Macon



(Facing West)

Location F: Macon

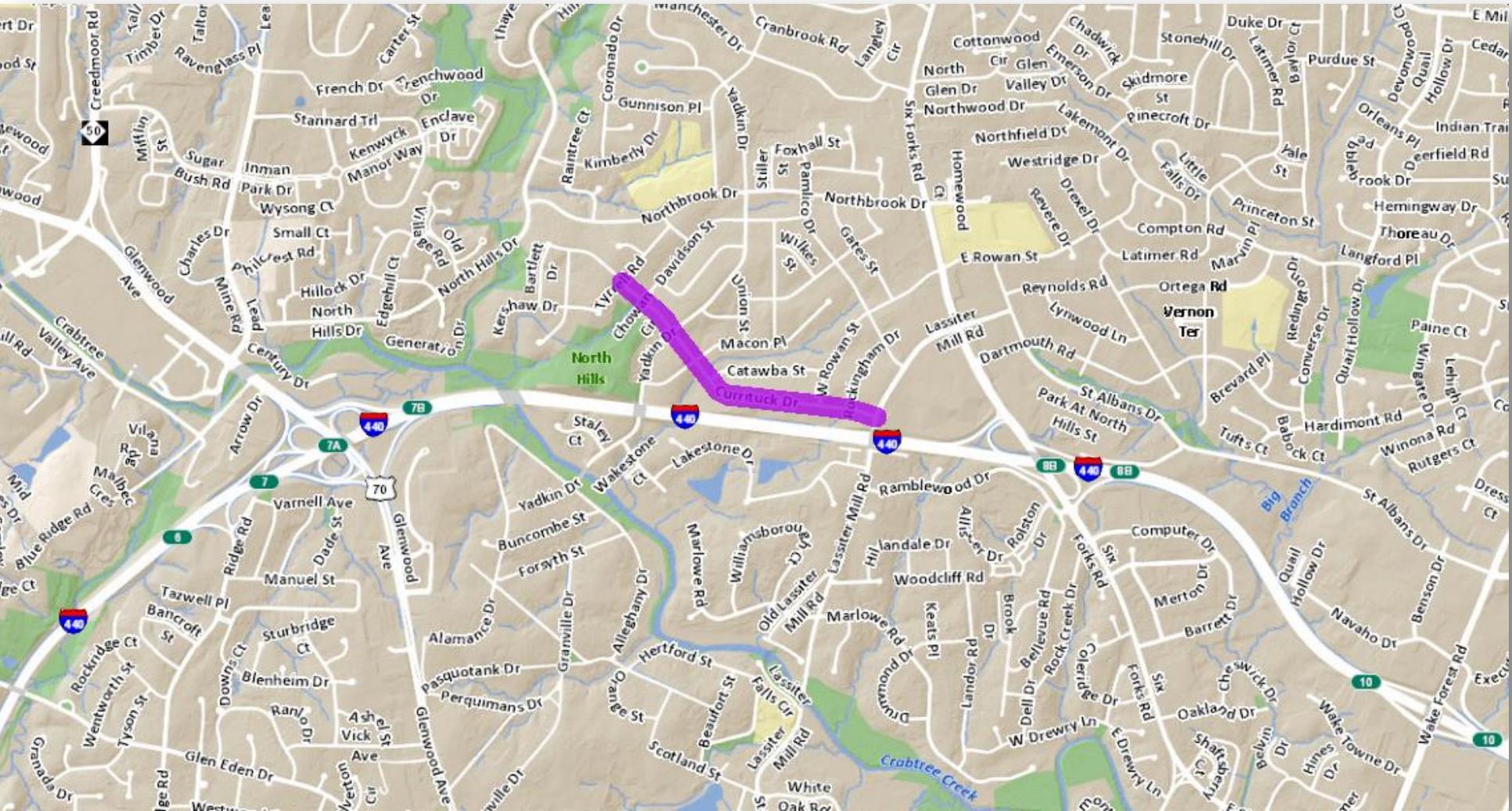


Example Neighborhood Traffic Circle



Location: *Knox St. and Dollar Ave. (NW of Duke University in Durham)*

Project Location



Location G: Yadkin



(Facing West)



Location G: Yadkin



Location H: Chowan/Davidson

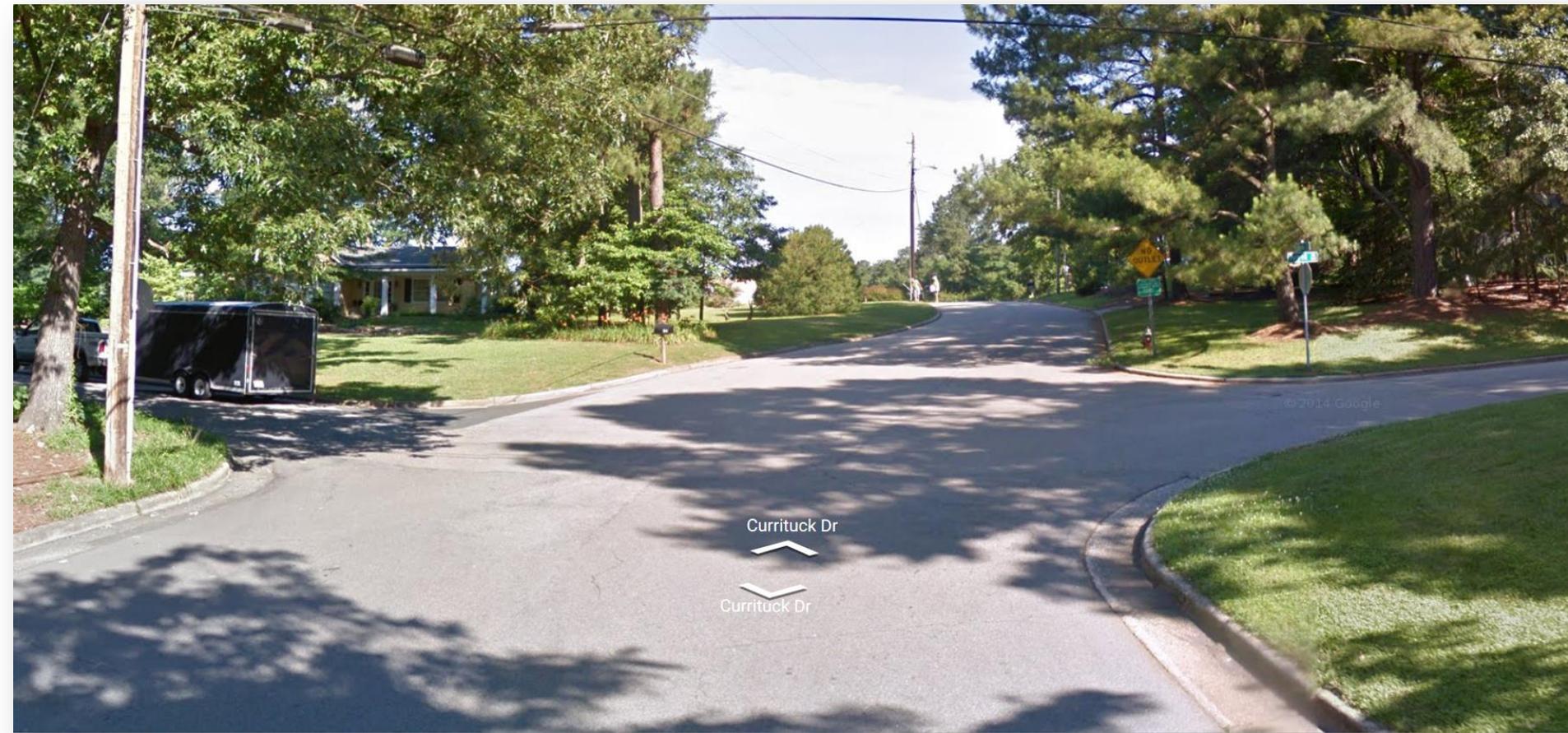


(Facing West)

Location H: Chowan/Davidson



Location I: Tyrrell



(Facing West)

Location I: Tyrrell

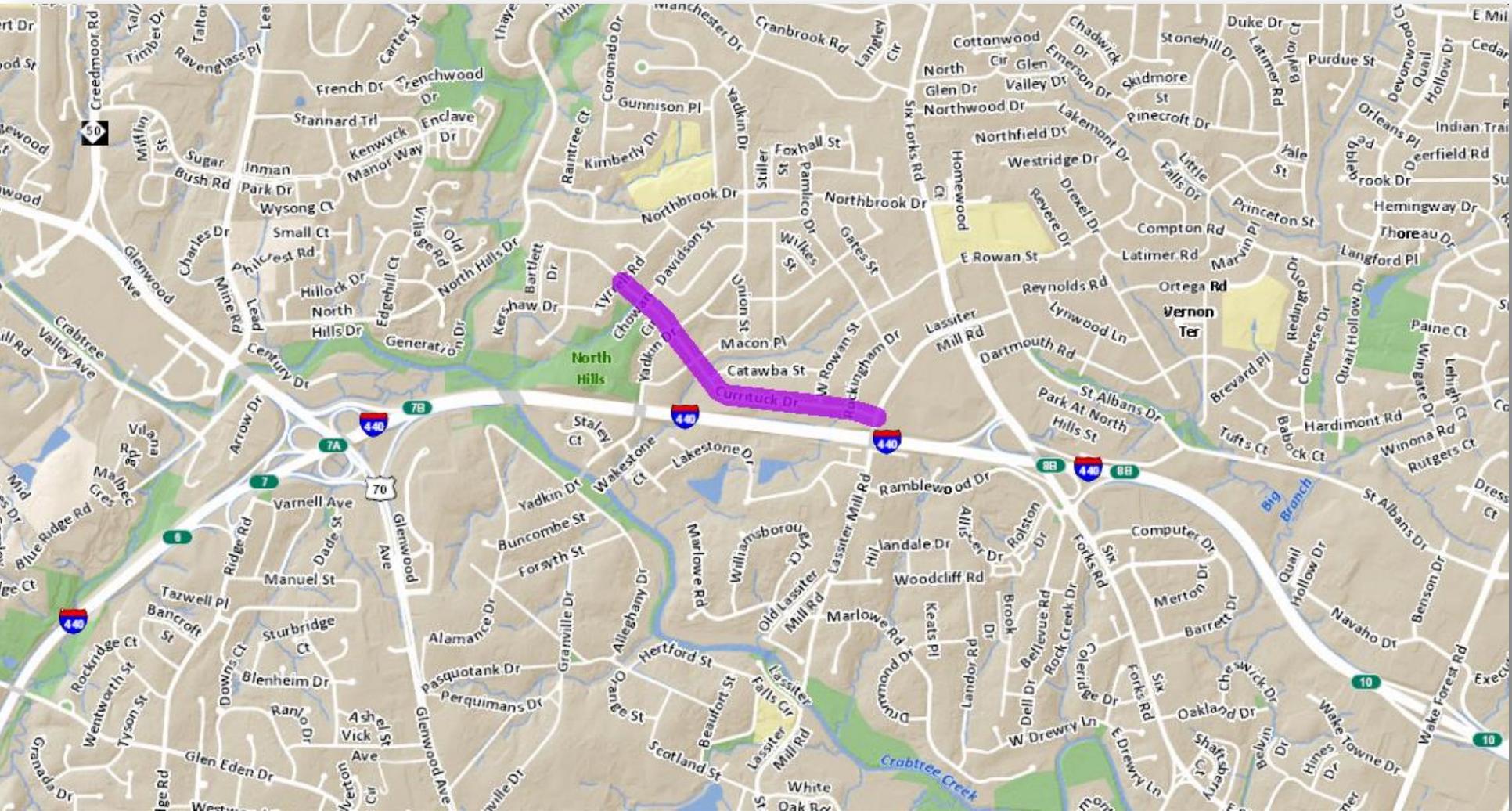


Example Neighborhood Traffic Circle



Location: *Knox St. and Dollar Ave. (NW of Duke University in Durham)*

Project Location



Alternative: Pilot Installation



- Pilot installation using flexible curbing and similar re-usable materials
- Months-long evaluation period
- Pros: Can tweak design, Get greater citizen feedback
- Cons: Lengthen process, Less attractive pilot, Removal of pilot treatments before final construction
- Additional alternative: speed humps and sidewalks

Next Steps

- Council authorization to proceed
- Final design to be developed by Public Works