Schenectady County Engineering & Public Works

PIN 1761.86
Rosendale Road & Old River Road Intersection Improvements Project

Public Information Meeting
February 11, 2021 @ 6:00 PM

SCHENECTADY COUNTY NEW YORK

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. Department of Transportation Federal Highway Administration

Barton & Loguidice

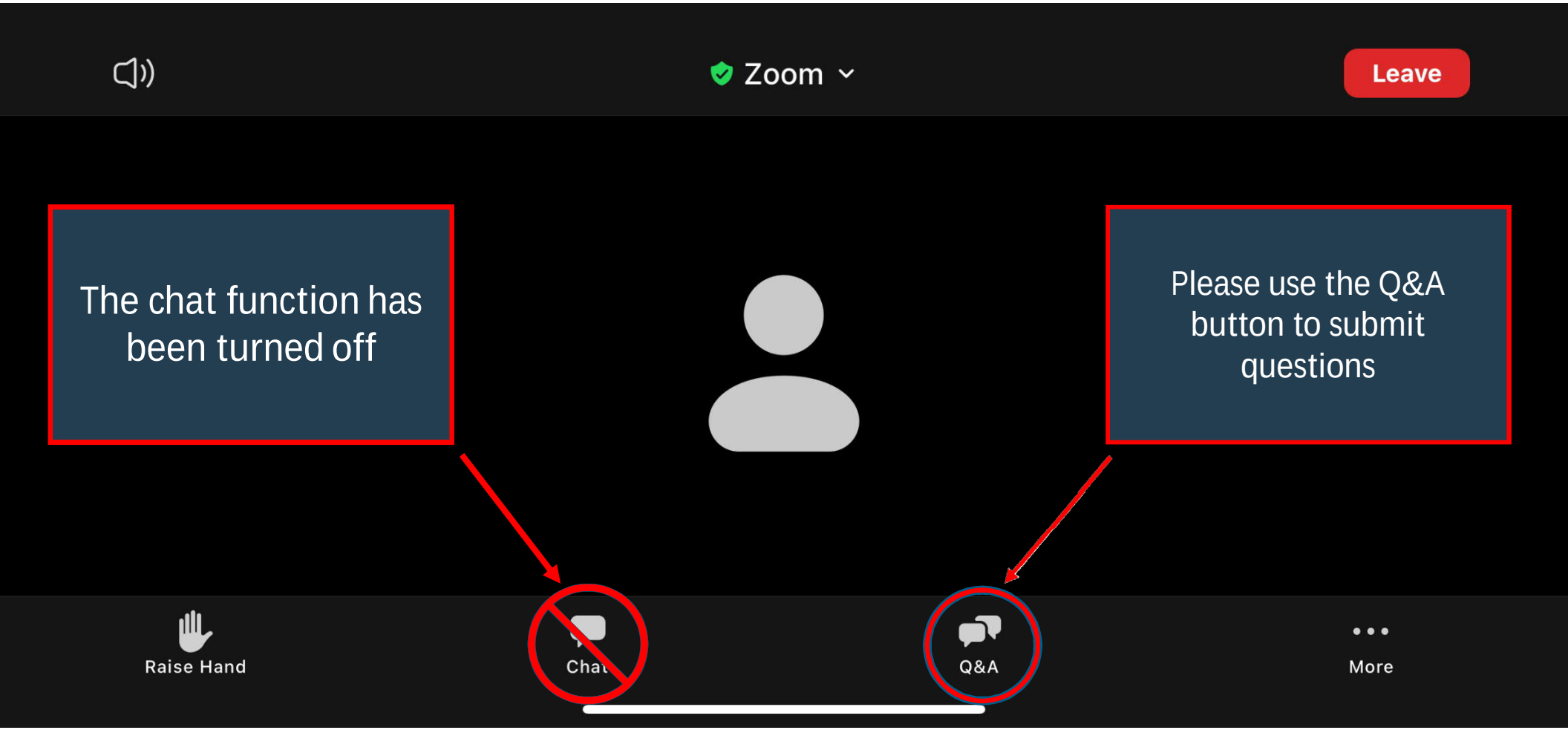
AKRF

CIVILTEC Engineering + Surveying

RKH R.K. Hite & Co., Inc.

Zoom Features Overview

Barton&Loguidice



Project Design Team

Schenectady County Engineering & Public Works

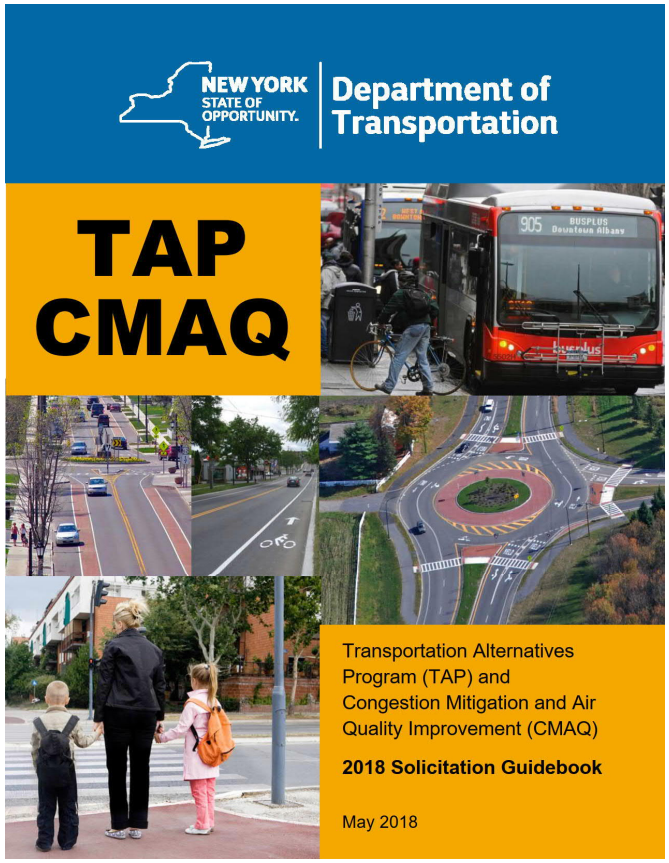
Joe Landry	Director of Public Works
Paul Sheldon, P.E.	Director of Bureau of Engineering paul.sheldon@schenectadycounty.com
Peter Knutson	Senior Civil Engineer / Project Manager

Barton & Loguidice, D.P.C. – Engineering Design Consultant

- Civil Tec Engineering & Surveying P.C. – Survey & Mapping
- AKRF, Inc. – Traffic Modeling & Cultural Resources Research
- RK Hite & Co. Inc. – Right-of-Way Incidentals & Acquisition

Project Description

- Project Limits – Intersection of Rosendale Rd. and Old River Rd.
- $2.293M Federal Congestion Mitigation and Air Quality (CMAQ) Funding - 80% Federal, 20% Local (County) Match
- Objectives
  - Improve Safety
  - Reduce Vehicle Crashes
  - Improve Intersection Geometry
- Proposed Improvements
  - Safety Improvements
  - Traffic Operational Improvements
  - Roadway Geometry Improvements
  - Reduce Driver Uncertainty



Project Coordination

- Environmental Investigation & Research – Federal-aid Process
  - State Environmental Quality Review (SEQR)
  - NYSDEC and NYS Natural Heritage Program (NHP)
  - State Historic Preservation Office (SHPO)
- Design oversight – Federal-aid Process
  - NYS Department of Transportation (NYSDOT)
  - Federal Highway Administration (FHWA)
  - NYS Department of Environmental Conservation
  - Schenectady County
- Public / Stakeholders
  - Public Information Meeting
  - Written Correspondence
- Utility owners
  - Electric, cable, telephone, municipal

Existing Conditions

Rosendale & Old River Road
PIN 1761.86

Existing Conditions

- Existing Traffic = 13,000+ veh./day (Rosendale Rd.)
  8,800 veh./day (Old River Rd.)
- Intersection Peak hours
  - 7:15 AM to 8:15 AM (peak: 1,109 vehicles, 4% trucks)
  - 4:45 PM to 5:45 PM (peak: 1,266 vehicles, 1% trucks)
- Old River Road delay
  - 40 sec./veh. average
- Vehicle Approach Speed (Measured / Posted)
  - Rosendale Road (43 mph / 30 mph)
  - Old River Road (44 mph / 30 mph)
- Narrow shoulders

- Intersection vehicle crash rate
  - 5x higher than statewide average for similar facilities (0.90 acc/MEV vs. 0.18 acc./MEV)
  - Numerous “near miss” events
  - Motorist confusion, limited sight distance

Alternatives Considered

- Alternative 1 - Null (No Build)
  - Maintain existing alignment, no improvements proposed
  - Does not meet any project objectives
- Alternative 2 - Rehabilitation
  - Maintain existing alignment, vegetation clearing, minor sight distance improvements, land grading, additional road signage
  - Does not meet all project objectives
- Alternative 3 - Reconstruction/Realignment
  - Alt. 3A – Intersection Realignment with Traffic Signal
  - Alt. 3B – Intersection Realignment with Stop Control
  - Alt. 3C – Single Lane Roundabout
  - <u>All have been analyzed further</u>

Alternative 3A – Traffic Signal

Rosendale & Old River Road
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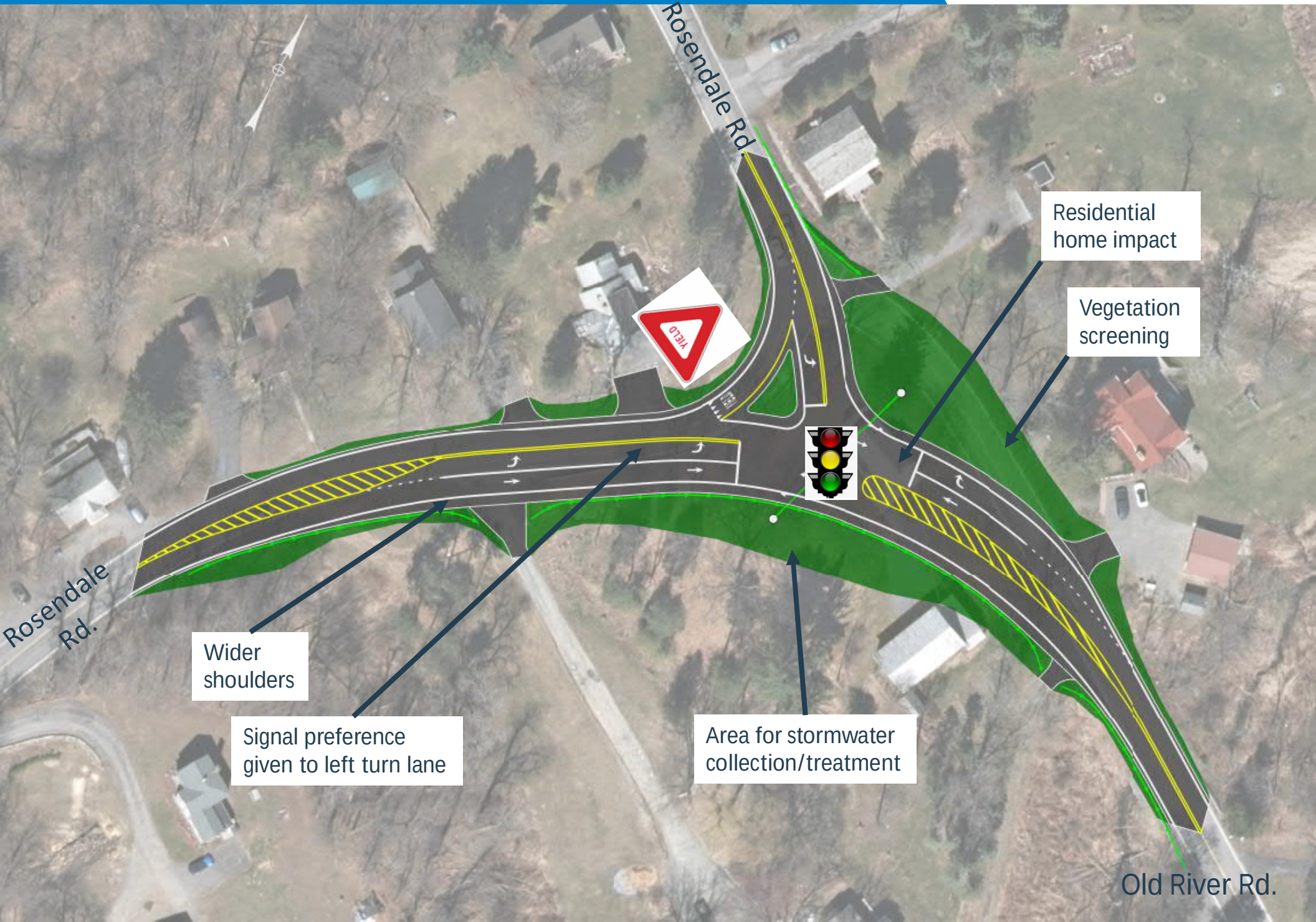

Alternative 3B – Stop Control

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Alternative 3C – Roundabout

Rosendale & Old River Road
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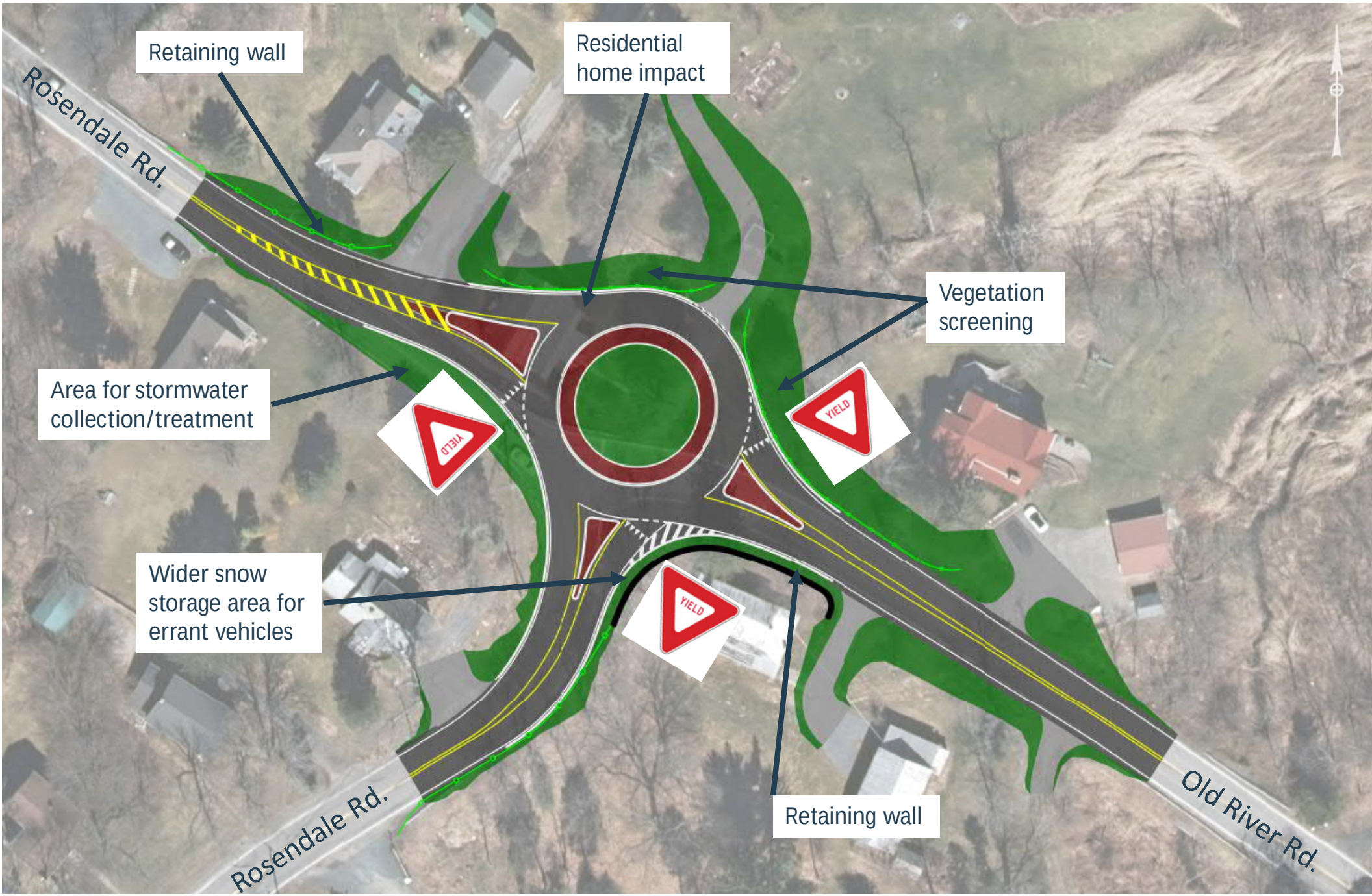


Traffic Data Collection

- Vehicle crash data obtained for 5-year period (2012-2017)
- Traffic data collected in March 2018
  - Manual turning movement counts
  - Field observations
  - Driver behaviors
- Traffic data used to develop traffic models

Traffic Modeling & Simulation

- Analyzed Stop Control, Signalized, & Roundabout operations
  - Existing (2020) AM and PM peak hours
  - Estimated Time of Completion + 20 years (ETC+20)
    - ETC+20 (2042) AM and PM peak hours
- Synchro 9 (Signalized intersection modeling)
- McTrans HCS+ (Stop control intersection modeling)
- VISSIM microsimulation software (roundabout)
  - NYSDOT utilized software
  - Calculates delays and level of service (LOS)
  - Produces 3-D video

Traffic Simulation – Alt. 3C

- ETC+20 PM Peak Hour Conditions

Approach	Volume	Delay (sec)	LOS
Rosendale Rd (NB)	571	5	A
Rosendale Rd (EB)	470	3	A
Old River Rd (WB)	330	6	A

Comparison

Design Element	Traffic Signal (Alt. 3A)	Stop Control (Alt. 3B)	Roundabout (Alt. 3C)
Safety Improvement	Yes	Yes	Yes
Traffic Calming (Speed Reduction)	No	No	Yes
Vehicle Delay Time (seconds)	20 seconds	Greater than 50 seconds	Less than10 seconds
Property Impacts	1 Home (B), 7 Parcel Pieces	1 Home (B), 6 Parcel Pieces	1 Home (S), 6 Parcel Pieces
Intersection Grade	9.0%	9.0%	2.0%

Project Schedule

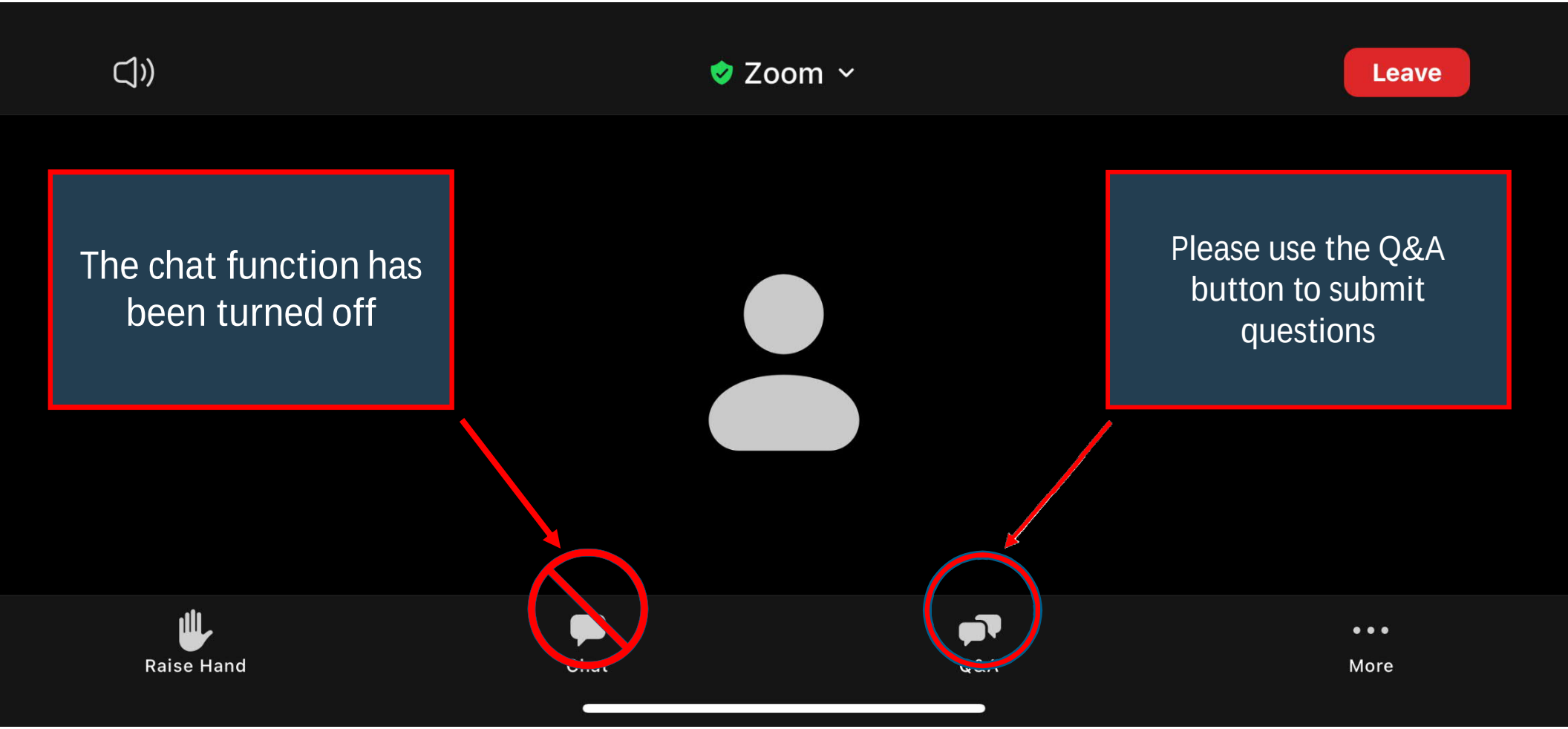
Activity	Date Occurred/Tentative
Scope Approval	February 2020
Design Approval	April 2021
ROW Acquisition	March 2022
Construction Start	October 2022
Construction Complete	June 2023

Questions?

Barton&Loguidice

A recording of the presentation has been live streamed to YouTube

https://youtu.be/eUG_X17dwt8



Questions?

Thank you for Attending!

To provide additional thoughts on the project, please contact:

Paul Sheldon, Director of the Bureau of Engineering

Please reference the “Rosendale Road & Old River Road Intersection Project” or “PIN 1761.86”

Email: paul.sheldon@schenectadycounty.com

Mailing Address:

100 Kellar Avenue

Schenectady, NY 12306

All Questions and Comments must be received by March 12, 2021

Questions?

Thank you for Attending!