

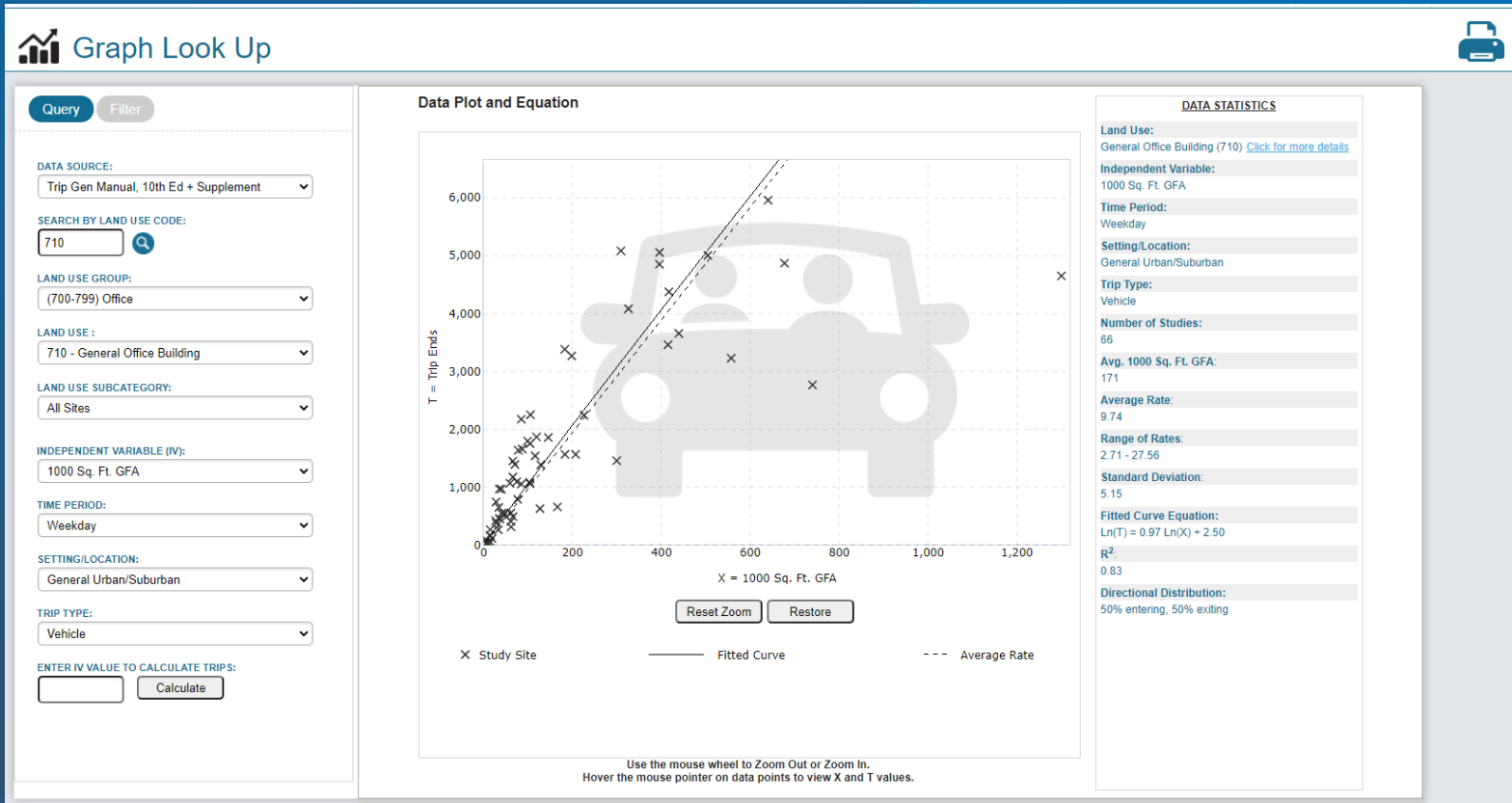
Capital Commerce Center Traffic Impact & Off-site Improvements

Town of Lancaster, MA

May 13, 2021



Estimating Traffic & Distribution



Institute of Transportation
Engineers (ITE) – *Trip
Generation 10th Edition (2017)*

- Professional Office
- General Retail
- Multifamily Housing
- Industrial Park

Estimating Traffic & Distribution

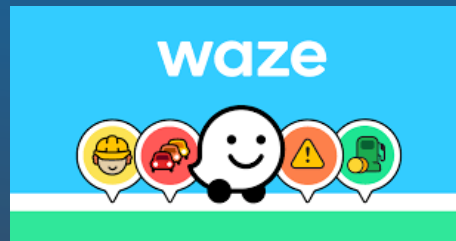


US Census Bureau Journey-to-Work & Journey-to-Home Data for Lancaster, MA

- Professional Office
- Multifamily Housing
- Industrial Park

US Census Bureau Population Data vs. Competing Opportunities

- Retail



Vehicle Trip Summary – All users

Time Period	EXISTING Vehicle Trips (Dunkin, Mobil, J.B. Hunt, FC Stars)	NET PROPOSED Vehicle Trips	Maynard Crossing Vehicle Trips
Weekday Daily	3,022	+ 8,220	10,258
Weekday AM Peak Hour	310	+ 1,008	430
Weekday PM Peak Hour	310	+ 1,022	930
Saturday Daily	3,494	+ 4,626	14,710
Saturday Midday Peak	330	+ 440	1,441

**This is the SUM of all
entering and exiting
traffic in all directions**

Trucks

Currently there are approximately 350 truck trips per day for
J.B. Hunt + Central Mass Sand & Gravel



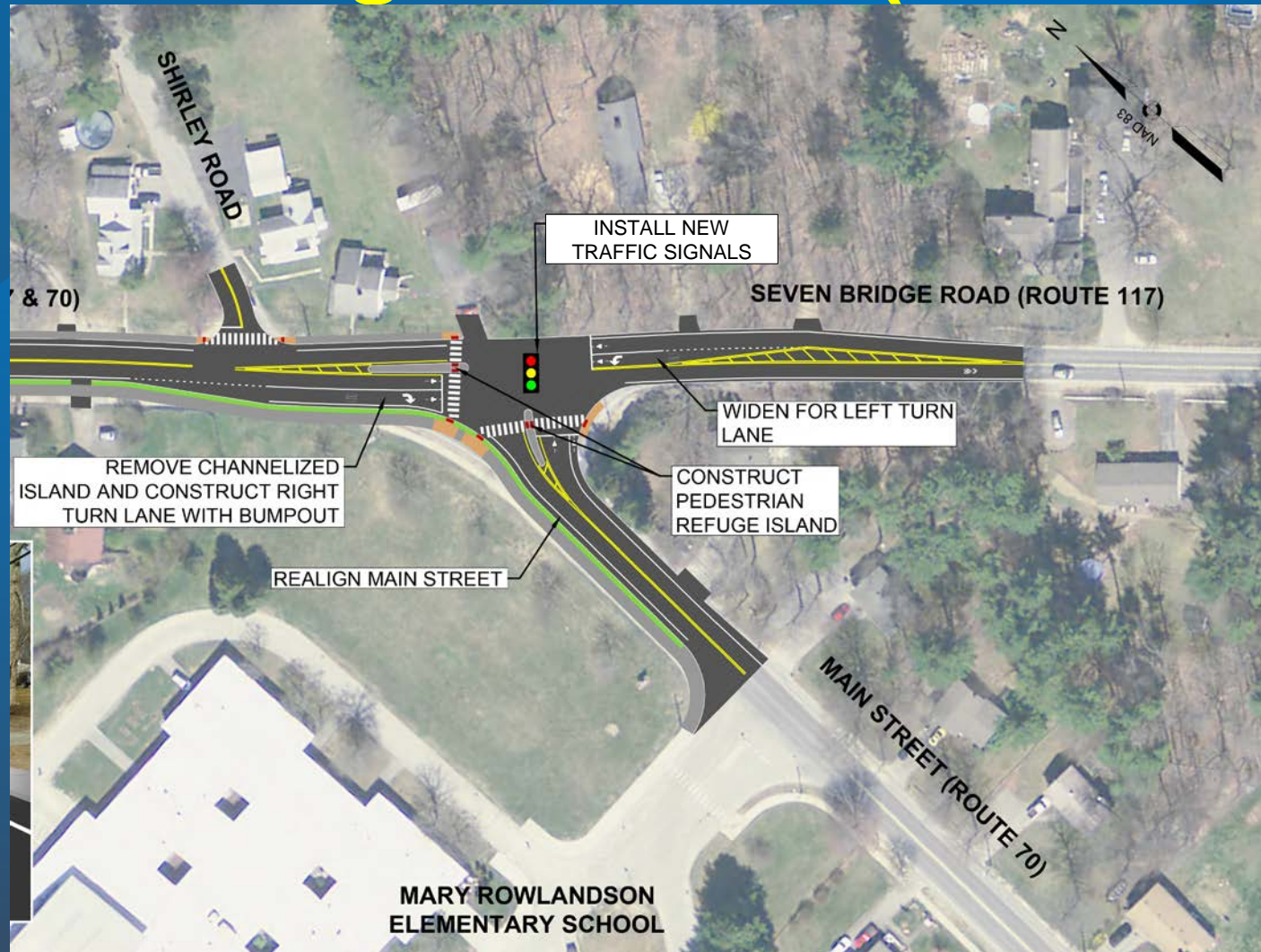
These trucks will be removed from the roadway network

MassDOT / Town Scheduled Transportation Improvements

**Infrastructure Projects Below are Independent of the Capital Group
Off-Site Infrastructure Improvement Program**

- NEW Traffic Signal and Turn Lanes at Lunenburg Road / Main Street (Construction Spring/Summer 2022)
- NEW Traffic Signal and Turn Lanes at Main Street / Seven Bridge Road (Construction Spring/Summer 2022)
- NEW Ramp Realignment w/ Acceleration & Deceleration at Route 2 Interchange 34 (DESIGN – Construction Expected 2022-2025)
- NEW Ramp Realignment w/ Acceleration & Deceleration at Route 2 Interchange 35 & 36 (MassDOT Planning Stage)

Route 70 / 117 Signalization (MassDOT) - 2022



Route 70 / 117 Signalization (MassDOT) - 2022



Route 2 Exit 34 Reconstruction (MassDOT) – ‘22/’25 Currently Under Design by Jacobs Engineering



D'Ambrosio Eye Care

Bouchard
Kia/Nissan/Honda

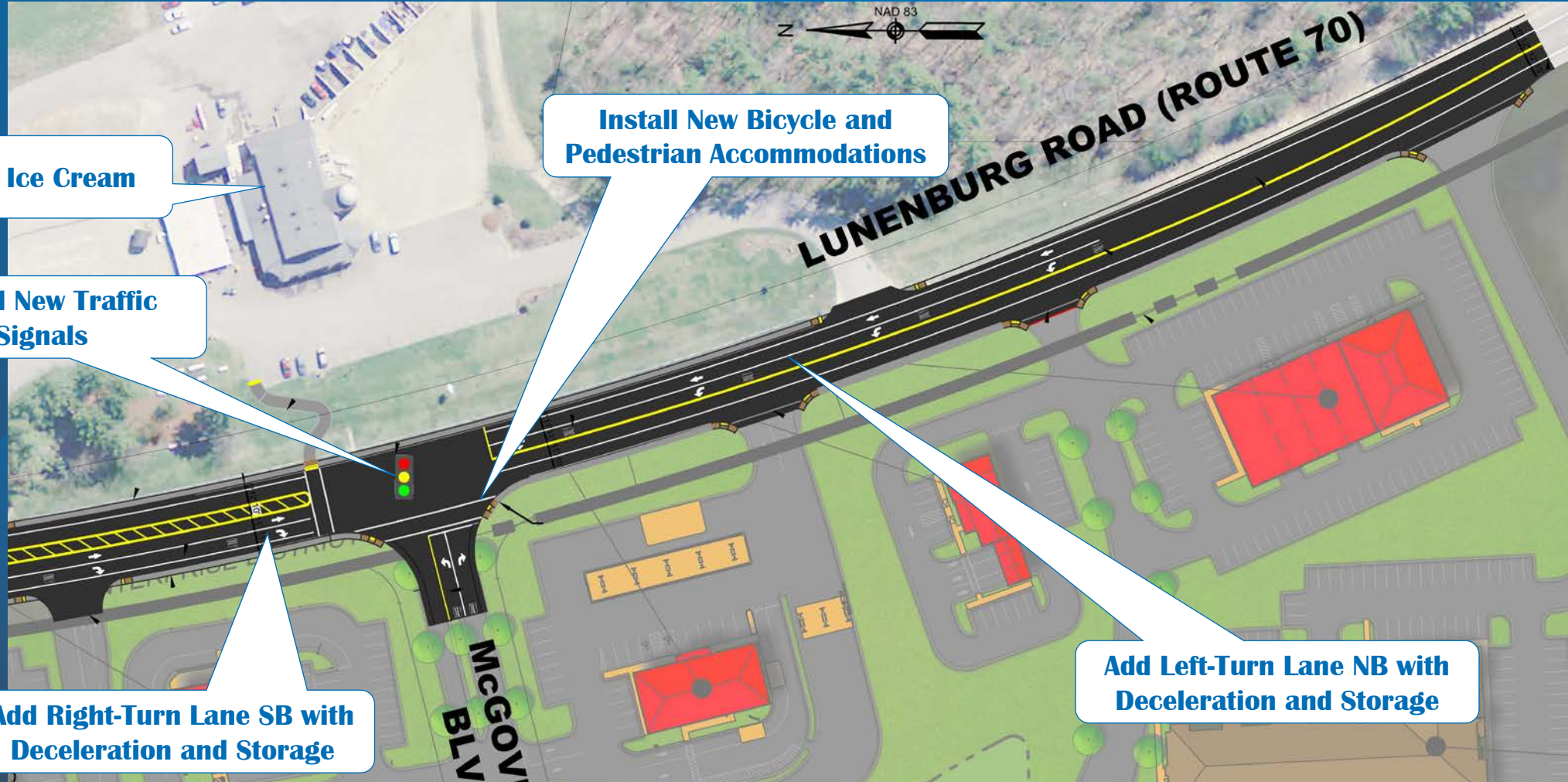
Route 2 Exit 35 Reconstruction (MassDOT) Currently in MassDOT Planning



Capital Group Off-Site Infrastructure Improvement Program

- NEW Traffic Signal and Turn Lanes at McGovern Boulevard / Lunenburg Road (Route 70)
- Interim Acceleration and Deceleration Lane Extension at Route 2 Exit 35 Westbound Ramps
- Interim Traffic Signal at Lunenburg Road (Route 70) / Fort Pond Road (Prior to MassDOT Future Interchange Reconstruction)
- Evaluation of Left-Turn Only for Site Trucks

Lunenburg Rd / McGovern Blvd (CGP) - 2022



Kimball's Ice Cream

**Install New Traffic
Signals**

**Install New Bicycle and
Pedestrian Accommodations**

**Add Right-Turn Lane SB with
Deceleration and Storage**

**Add Left-Turn Lane NB with
Deceleration and Storage**

Route 2 WB Exit 35 Off-Ramp (Interim)



Route 2 WB Exit 35 On-Ramp (Interim)



Lunenburg Road at Fort Pond Road (Interim)



- Construct interim traffic signal at intersection within same geometry.
- Interim traffic signal will be in place until MassDOT improvements at Exit 35 are completed.

Lunenburg Road at Old Union Turnpike Roundabout



Roundabout vs. Traffic Signal?

- Signal has 32 vehicle conflict points
- Roundabout has 8 vehicle conflict points

Space Constraints:

- Signal with turn lane storage requires more space away from intersection

Lunenburg Road at Old Union Turnpike Roundabout



- Designed for trucks to drive over the center brick inlay to navigate the roundabout.
- Traffic patterns in roundabout will significantly change with MassDOT Exit 34, 35 & 36 Projects.
- When designed, the roundabout design anticipated future development in the area.

Interstate 190 Ramp Discussion

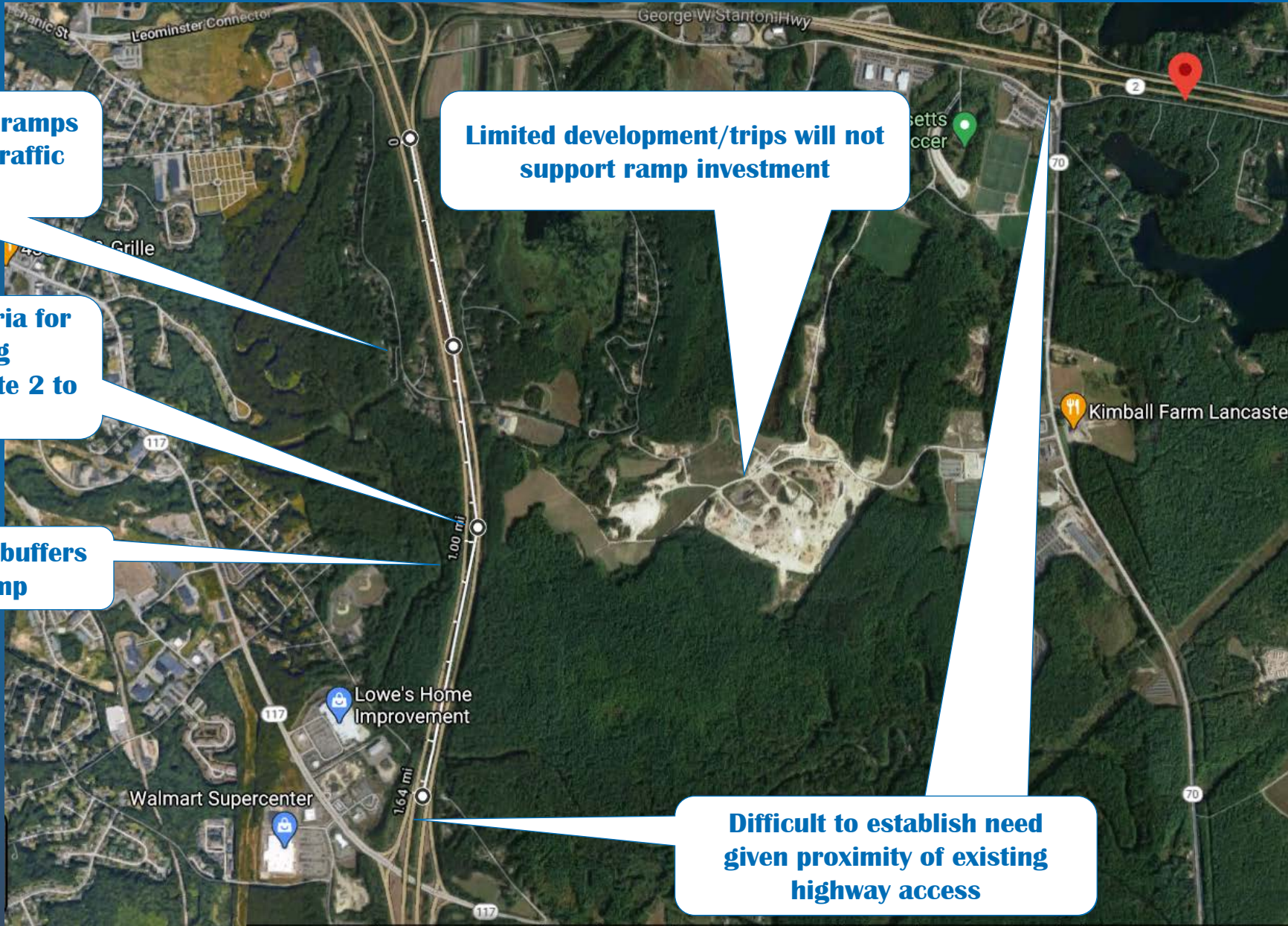
**FHWA prefers full-access ramps
– this will add cut-thru traffic
on local streets**

**Cannot meet FHWA criteria for
1-mile ramp spacing
(1.64 mi today from Route 2 to
Route 117)**

**Impacts to Nashua River buffers
even with partial ramp**

**Limited development/trips will not
support ramp investment**

**Difficult to establish need
given proximity of existing
highway access**



Improvement Summary

MASSDOT & Town Transportation Improvements [Independent of the Capital Group Infrastructure Improvement Project]

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- NEW Ramp Realignment w/ Acceleration & Deceleration at Route 2 Interchange 34 (DESIGN – Construction Expected 2022-2025)
- NEW Ramp Realignment w/ Acceleration & Deceleration at Route 2 Interchange 35 & 36 (MassDOT Planning Stage – Expected to be Completed Before Full Build-Out)

Capital Group Off-Site Infrastructure Improvement Project

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