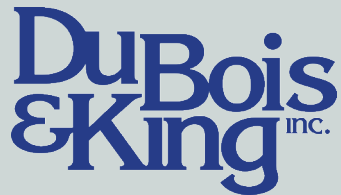


Marlboro Street Rehabilitation Project

Public Informational Meeting



Tuesday, January 15, 2019
Blastos Room at Keene Ice
380 Marlboro Street, Keene, NH



Keene Complete Streets



Building streets that are safe, livable, and welcoming to everyone.

Marlboro Street Rehabilitation Project

Project Team

City of Keene

Kurt Blomquist, Public Works Director

Brett Rusnock, Project Manager

Donald Lussier, City Engineer

DuBois & King

Nick Sceggell, Project Manager

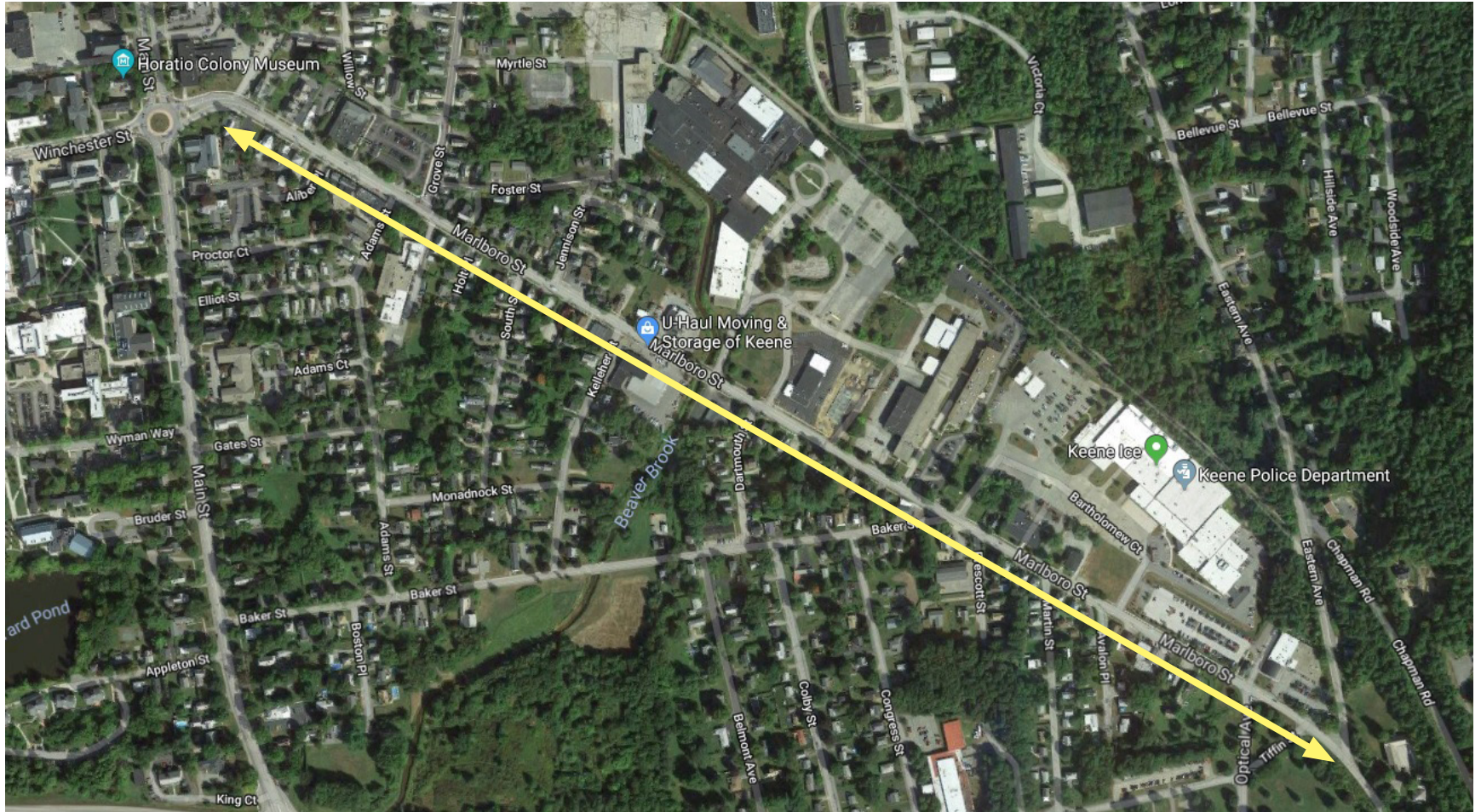
Chuck Goodling, Project Director

Lucy Gibson, Transportation Engineer

Keene Complete Streets



Project Limits



Marlboro Street Rehabilitation Project

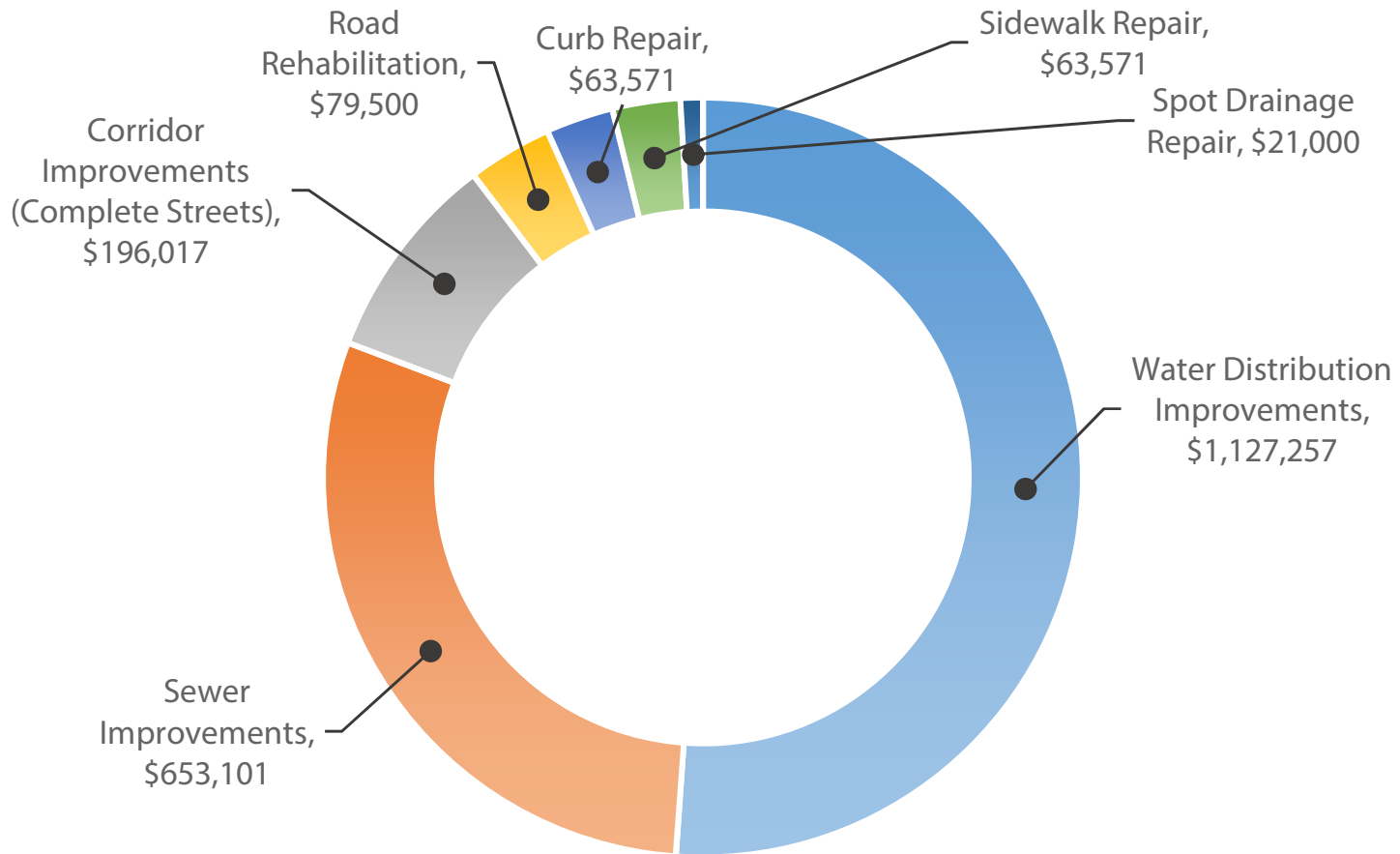
- ◆ **Purpose:** Update utilities under Marlboro Street
- ◆ **Timing:** Construction estimated for May - November 2019
- ◆ **Need:** Utility upgrades, traffic circulation and safety improvements

Keene Complete Streets



Budget = \$2,204,017

Project is entirely funded by the City of Keene



Water Main Lining: Before and After



Sewer Main: Before and After

Grease-blocked sewer pipes



New PVC sewer pipe



Drainage Pipes: Before and After

Fractured drainage pipe



HPDE plastic pipe



Project Background

Keene Complete Streets



Building on Past Work

- ◆ Keene Complete Streets Policy (2015)
- ◆ Wheelock Safe Routes to School (2015)
- ◆ Marlboro Street Zoning and Land Use Regulations Project (2014-2015)
- ◆ Demonstration Project (2015)

WHEELOCK ELEMENTARY SCHOOL SAFE ROUTES TO SCHOOL ACTION PLAN



SafeRoutes
f b i s

September 2015 • Keene, NH

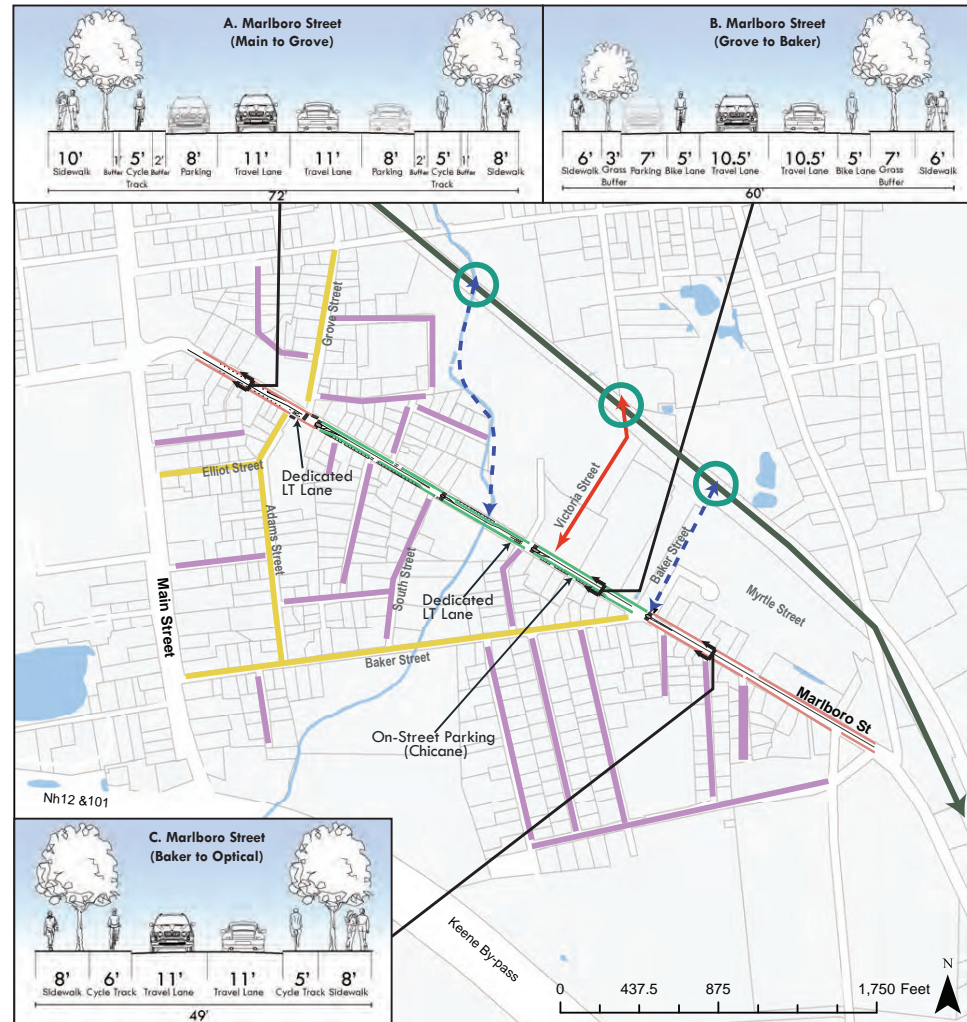


KEENE COMPLETE STREETS
DESIGN GUIDELINES • 2015



Marlboro Street Rehabilitation Project

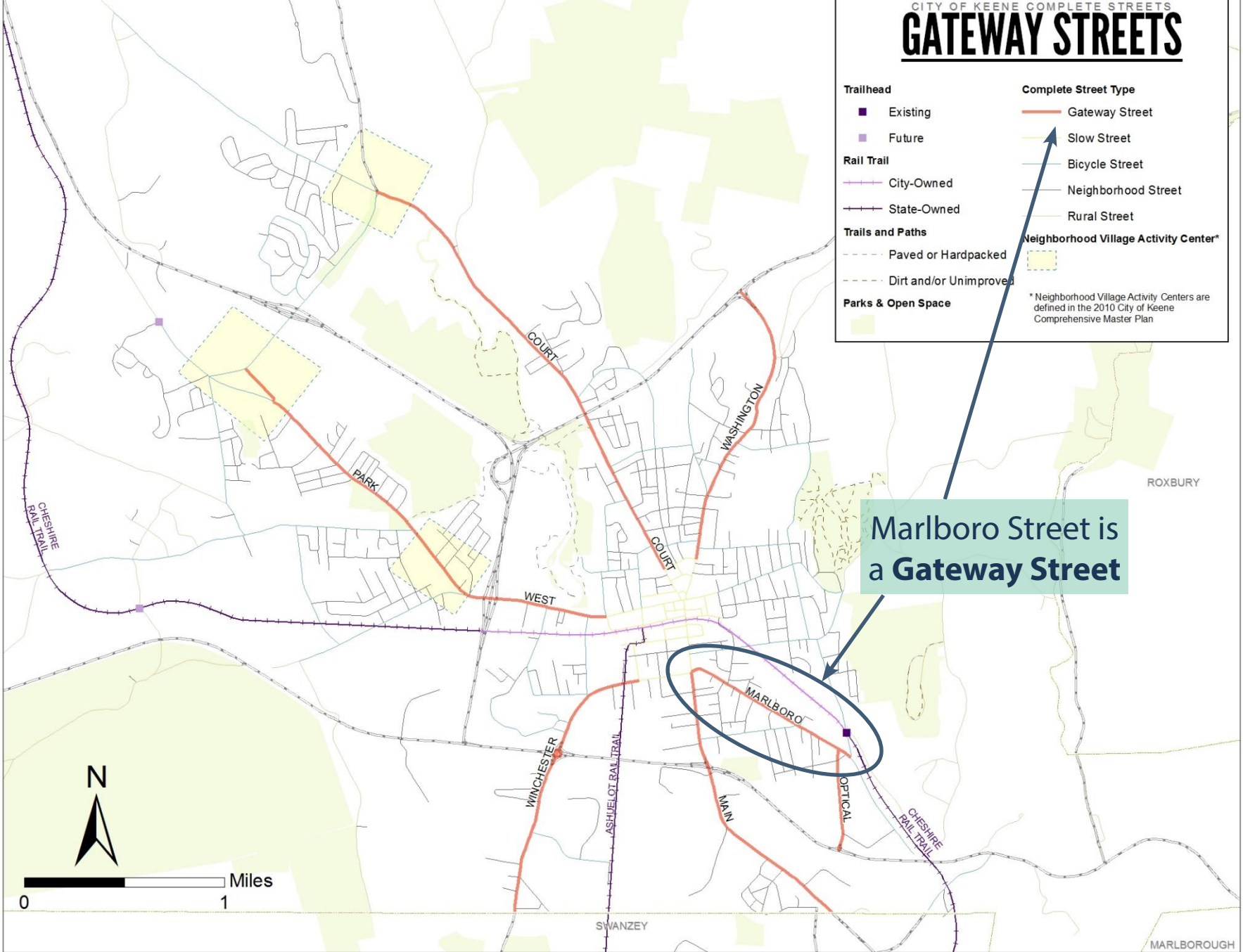
Figure 12 District Transportation Recommendations



CITY OF KEENE COMPLETE STREETS GATEWAY STREETS

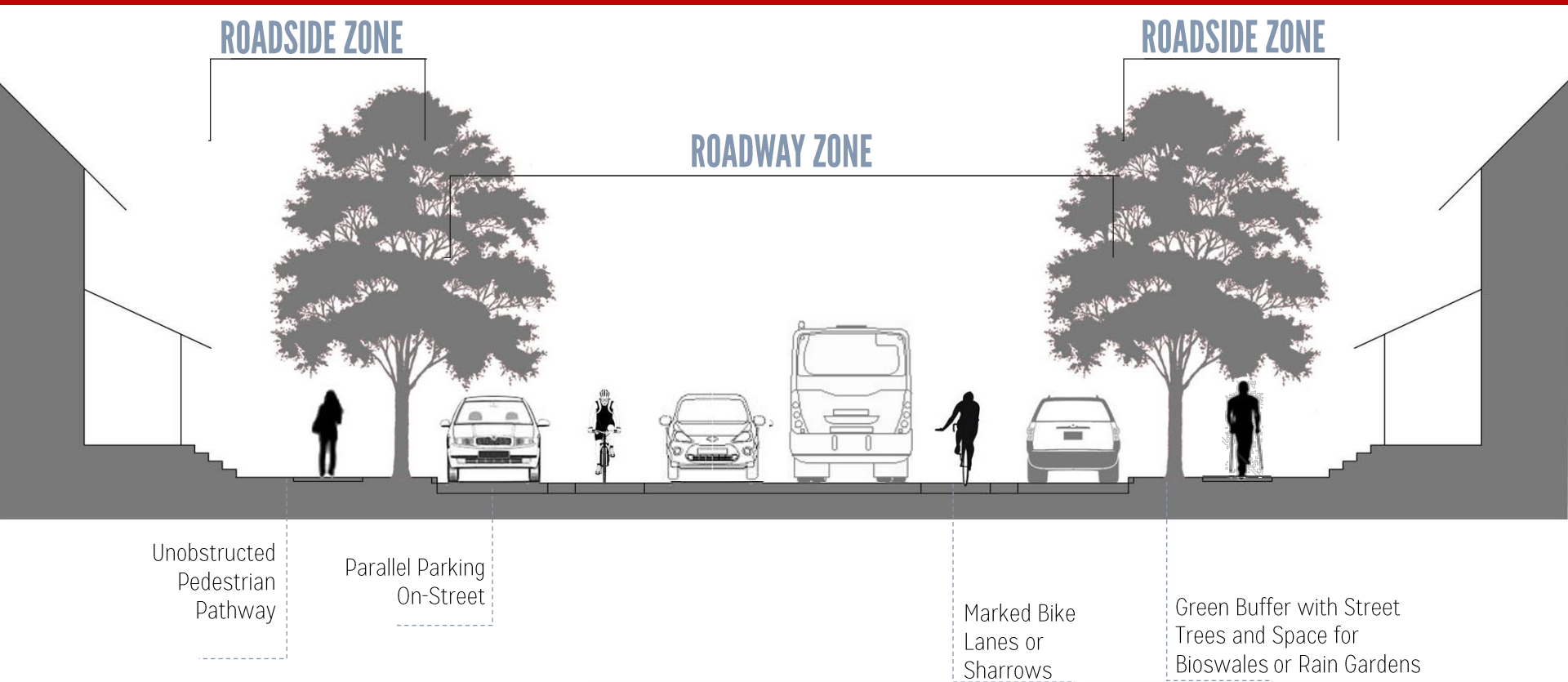
Trailhead	Complete Street Type
■ Existing	— Gateway Street
■ Future	— Slow Street
Rail Trail	— Bicycle Street
— City-Owned	— Neighborhood Street
— State-Owned	— Rural Street
Trails and Paths	Neighborhood Village Activity Center*
--- Paved or Hardpacked	■
--- Dirt and/or Unimproved	
Parks & Open Space	

* Neighborhood Village Activity Centers are defined in the 2010 City of Keene Comprehensive Master Plan



Marlboro Street is a Gateway Street

GATEWAY STREET ELEMENTS

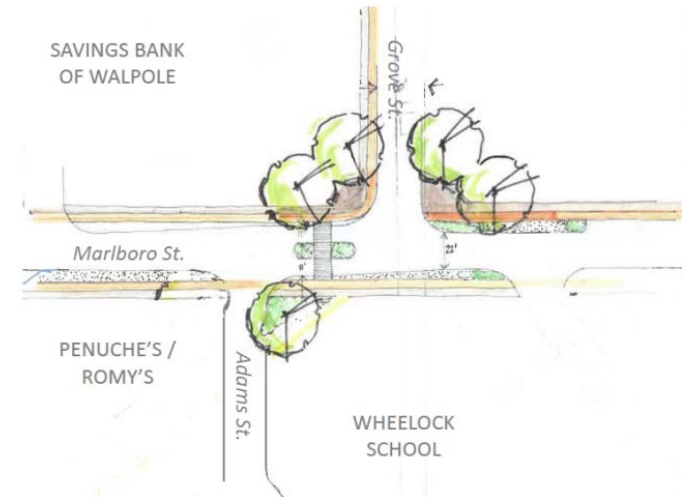


Wheelock Safe Routes to School

- ◆ **Motorists did not stop for pedestrians** unless the crossing guard was present
- ◆ Drivers were observed **speeding and acting impatient**
- ◆ Turning cars often **block the Grove Street crosswalk**

GROVE ST./MARLBORO ST. CONCEPT (DRAFT)

Traffic Counts at Marlboro St. and Grove St.



2015 Marlboro St Complete Streets Demonstration Project

Location: West of Marlboro St/Grove St Intersection



BEFORE



AFTER

2015 Marlboro St Complete Streets Demonstration Project

Example photos



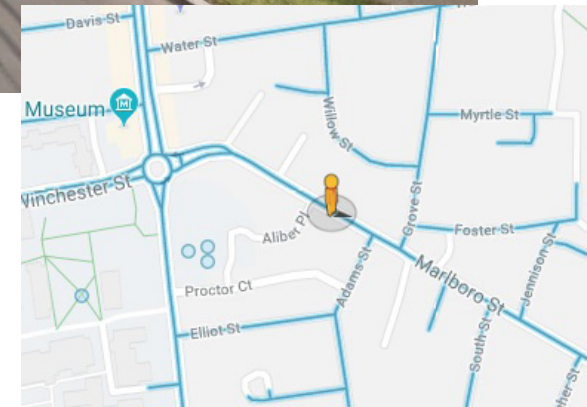
Existing Conditions

Keene Complete Streets

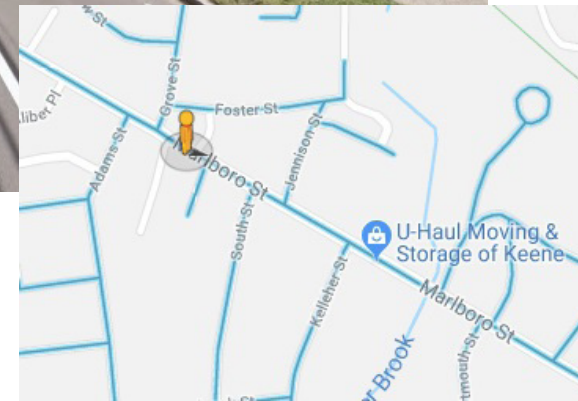
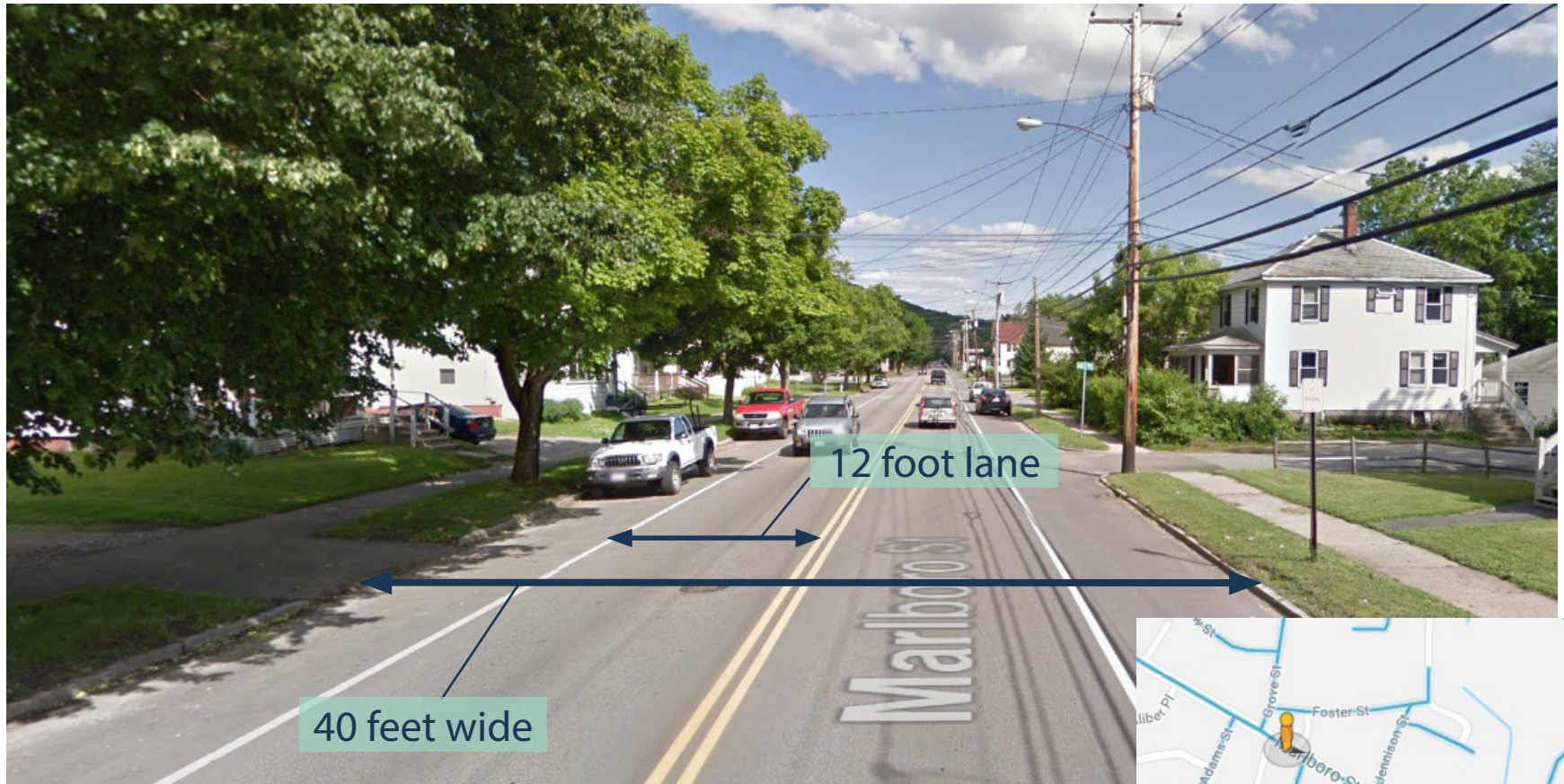


Existing Conditions

Road Width and Configuration



Existing Conditions



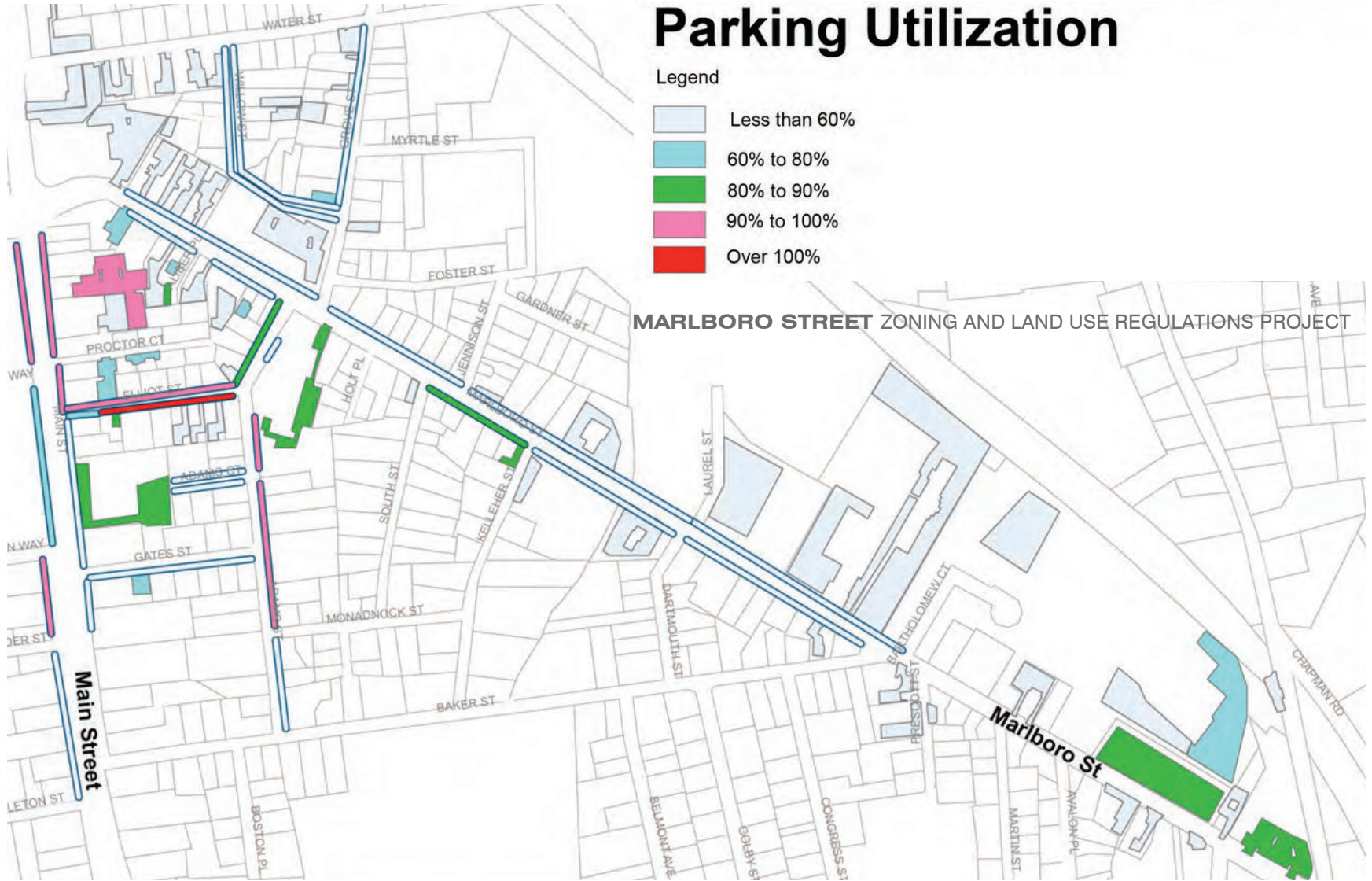
Existing Conditions

Parking Utilization

Legend

- Less than 60%
- 60% to 80%
- 80% to 90%
- 90% to 100%
- Over 100%

MARLBORO STREET ZONING AND LAND USE REGULATIONS PROJECT

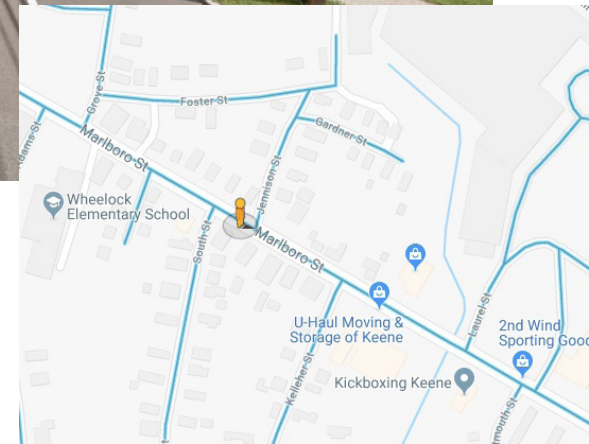


Existing Conditions

Wide curb cuts



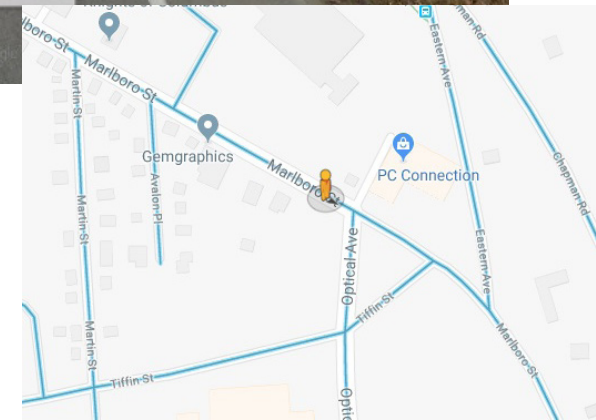
Sidewalk
disappears
across driveway



Existing Conditions



Existing Conditions



Complete Streets Design Goals

Based on past studies of Marlboro Street

- ◆ **Address school crossing safety**
- ◆ **Provide bicycle lanes**
- ◆ **Provide on-street parking** on at least one side where it will support local businesses
- ◆ **Reduce pavement width where possible** and repurpose as green public space
- ◆ **Reduce traffic speeds to increase safety** for vulnerable users

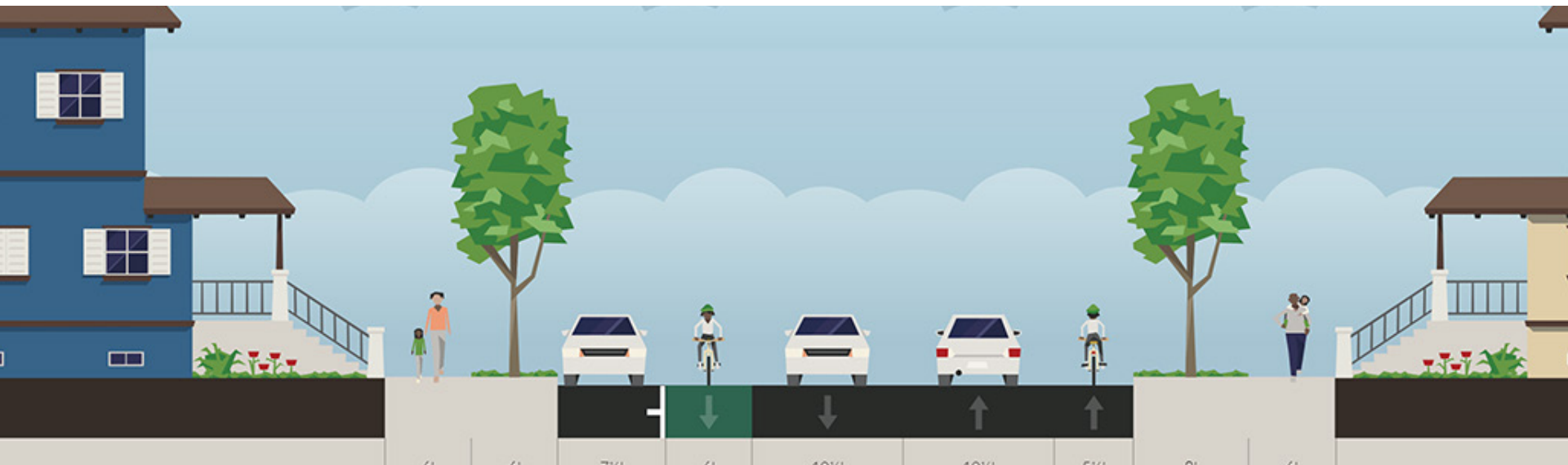
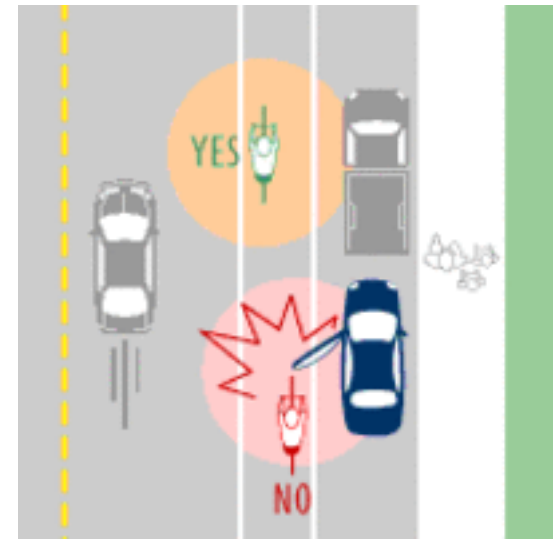
Keene Complete Streets



Typical Cross Section

Main St to Baker St

- ◆ 10 1/2 ft lanes
- ◆ 8 ft parking lane
- ◆ wider bike lane near parked cars



<- 8' ----- 6' ----- 10.5' ---- 10.5' ----- 5' ->

40 feet total pavement width

Post Office

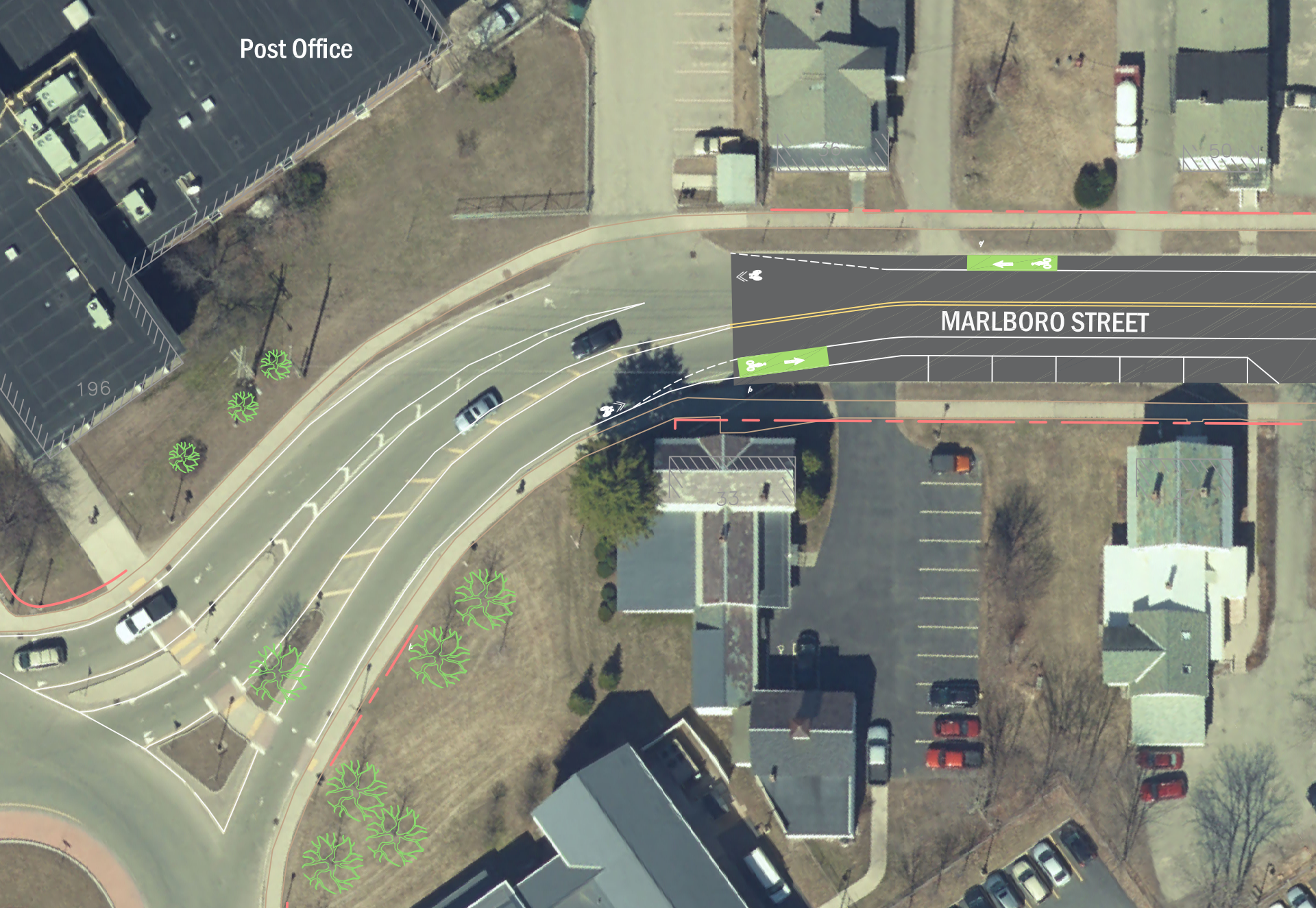
196

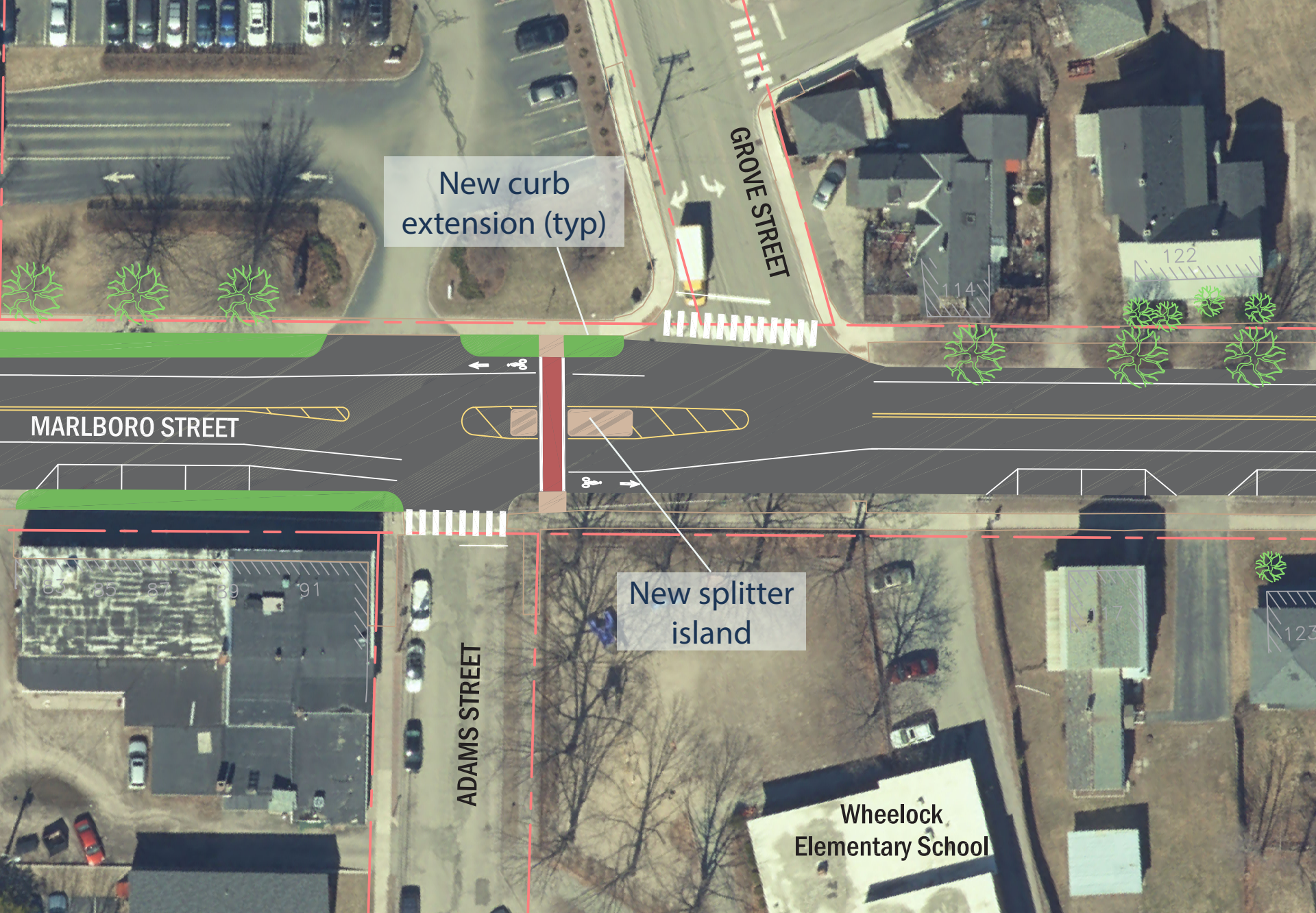
33

50

MARLBORO STREET

Transition from Roundabout to Marlboro St Typical Section





New curb extension (typ)

GROVE STREET

MARLBORO STREET

New splitter island

ADAMS STREET

Wheelock Elementary School

Reconfigured Crosswalk at Marlboro St/Adams St/Grove St



Splitter Island

Example Photos





JENNISON STREET

MARLBORO STREET

KELLEHER STREET

156

170

178

182

186

181

173

175

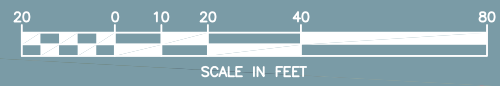
181

167

169

153

New Grass Islands, Sidewalk, Chicanes, and Crosswalk



Chicanes

- ◆ allow for parking to alternate sides
- ◆ reduce traffic speeds
- ◆ provide space for green stormwater infrastructure





BEAVER BROOK

MARLBORO STREET

216

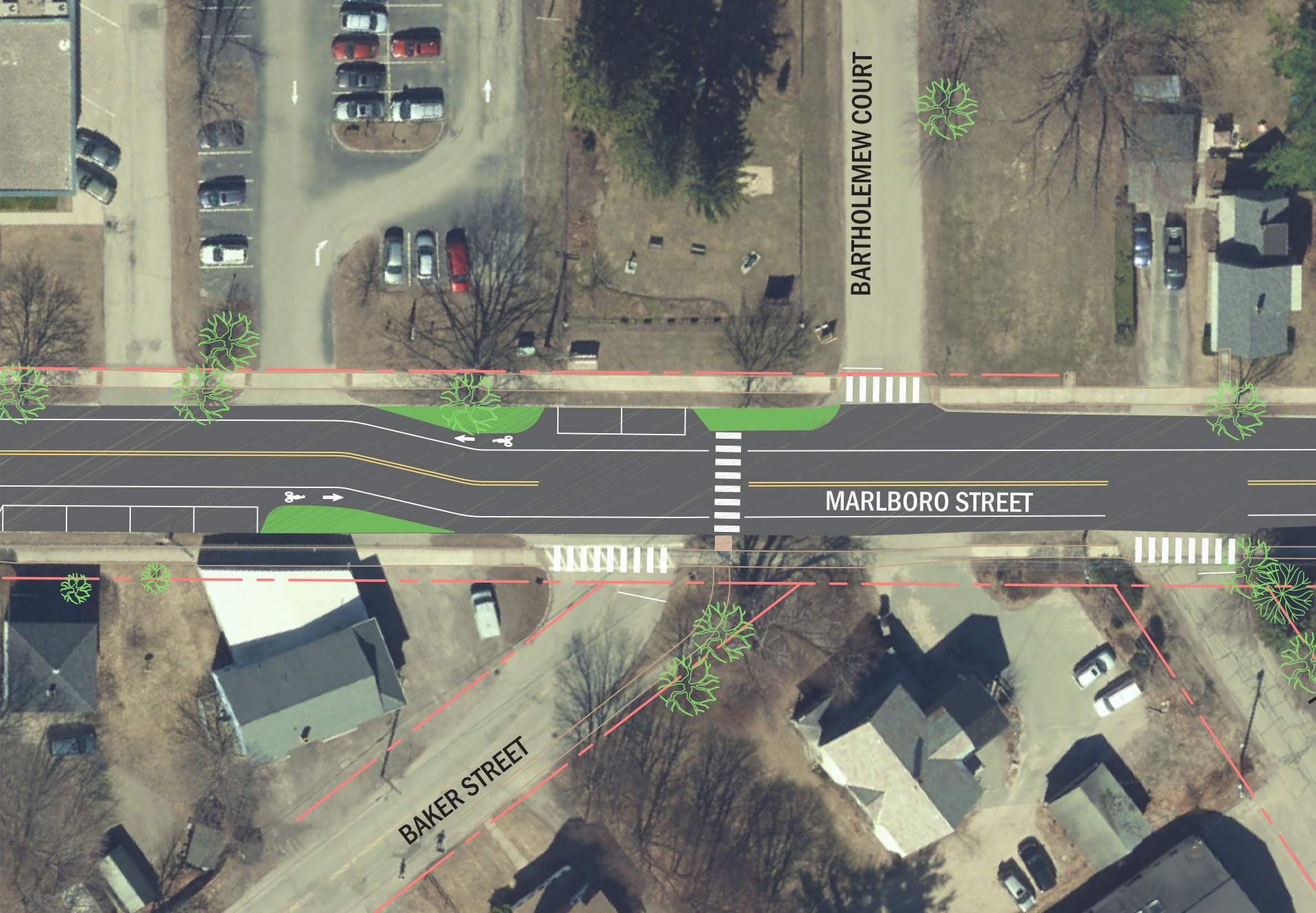
199

U-Haul

233

New Chicane and Grass Islands near Beaver Brook Bridge



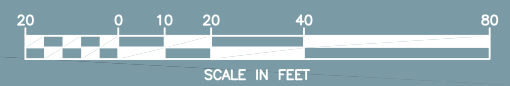


BARTHOLEMW COURT

MARLBORO STREET

BAKER STREET

Baker St Chicane and New Crosswalk



Typical Cross Section

Baker St to Eastern Ave

- ◆ 10 1/2 ft lanes
- ◆ 5 ft bicycle lanes





MARLBORO STREET



OPTICAL AVE

New Crosswalk and Sidewalk at Optical Ave





MARLBORO STREET

EASTERN AVE

TIFFIN STREET

Transition from Bike Lanes to Existing Road



Next Steps

Bid schedule

- ◆ Bidding by February 28, 2019
- ◆ Tentative bid opening April 2, 2019

Construction Schedule

- ◆ May to November, 2019

What to expect during construction

- ◆ During construction residents and businesses should expect one-way alternating traffic.
- ◆ Short term closures may be needed for some utility work.
- ◆ A temporary water main will be provided while work occurs on the existing water line.

Thank You!

Contact for follow-up questions

Brett Rusnock, PE

Civil Engineer, City of Keene Public Works

office: 603-352-6550

brusnock@ci.keene.nh.us

Keene Complete Streets

