

### Winter Street/Concord Avenue/Mill Street— Conceptual Intersection Improvements



Presented by

Tim McIntosh Laura Castelli Erin Thompson



# Winter Street/Concord Avenue/Mill Street Status

- Traffic Advisory Committee meeting on October 12, 2017
  - Kicked off the discussion of potential intersection improvements
  - Residents had an opportunity to share their comments / concerns
  - Town and VHB listened
- Conceptual Design Development
  - Completed traffic data collection
  - Developed several conceptual design alternatives
- Traffic Advisory Committee meeting on December 14, 2017
  - Conceptual designs presented tonight



# **General Summary of Resident Concerns**

- High Speed on Concord Avenue WB approaching Mill Street
- Severe intersection angle at Concord Avenue and Mill Street
- Sight line at Concord Avenue and Mill Street
- High Speed on Concord Avenue WB approaching Winter Street
- Difficult to make a left turn from Winter Street to Concord Avenue EB
- Cut-through traffic a concern at Partridge Lane
- Traffic queuing in general
- High speeds in general
- Lack of sidewalks
- Safety





### **Goals for Conceptual Design**

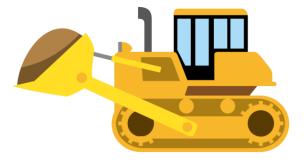
- Address Safety Issues
- Reduce High Vehicle Speeds
- Alleviate Traffic Back-ups





### Challenges

- Available Right-of-Way
- Adjacent Conservation Land
- Achieving consensus on proposed solution
- Construction funding





### **Conceptual Design Alternatives**

T-Intersection concept



- Roundabout concept
- Combination of T-Intersection and Roundabout concept







#### Winter Street **Pros**

- Speed issue is addressed for Concord Avenue EB to Winter Street
- Traffic queuing improved on Winter Street SB to Concord Avenue

#### Cons

- Lengthy traffic queue on Concord Avenue EB in AM
- Speed issue not addressed from Concord Avenue
   WB to Winter Street
- Potential driveway impact to #981 Concord Avenue



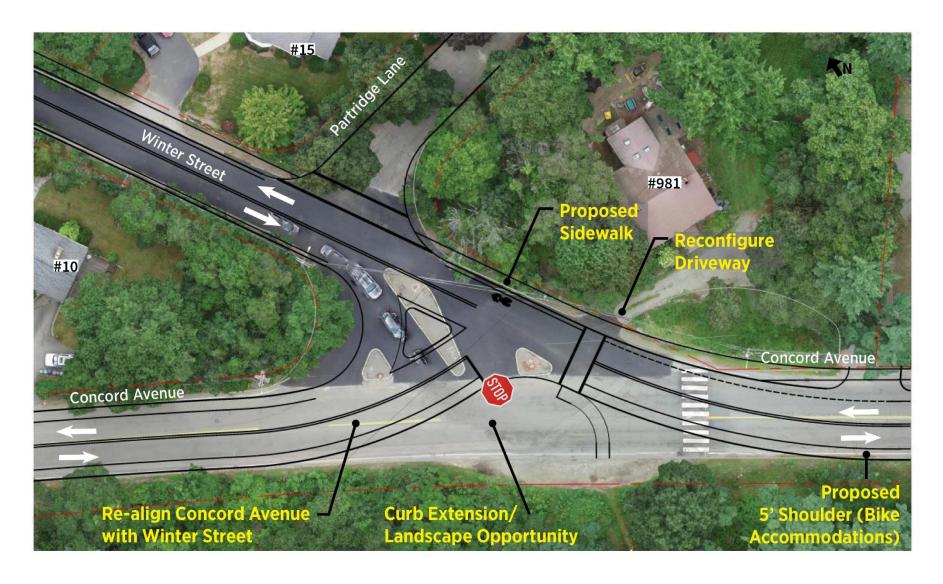


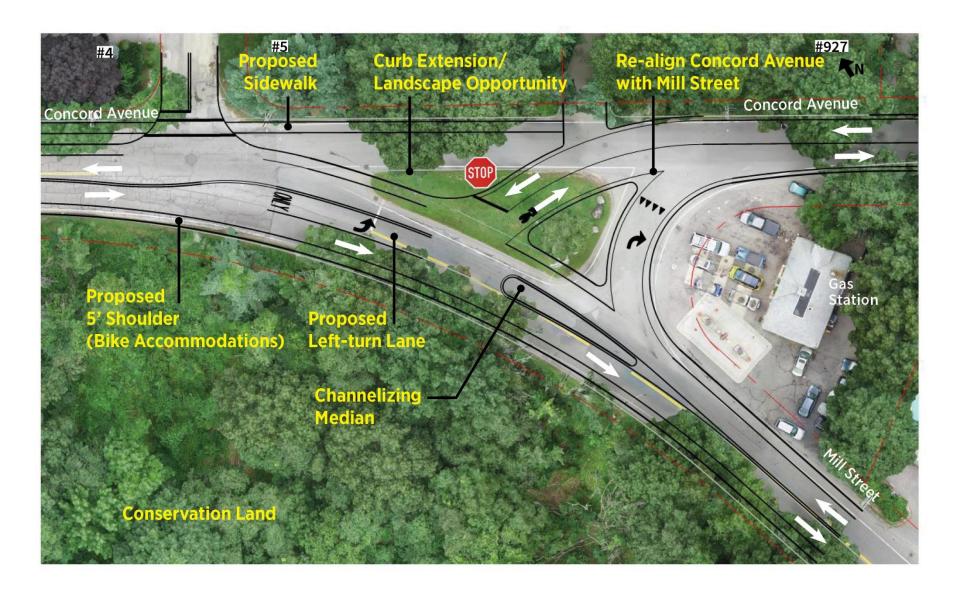
#### Mill Street Pros

- Clear sense of who has the right-of-way
- Eliminates lengthy traffic queue on Mill Street
- No impacts to Gas Station access
- Addresses speed concern for Concord Avenue WB approach to Mill Street

#### Cons

- Reconfiguration of existing grass island area needed
- Potential for increased speed on Mill Street









#### Winter Street **Pros**

- Addresses speed issue on all approaches
- Operates well in AM & PM

#### Cons

Potential for minor right-of-way impacts to #10
 Winter Street and #981 Concord Avenue



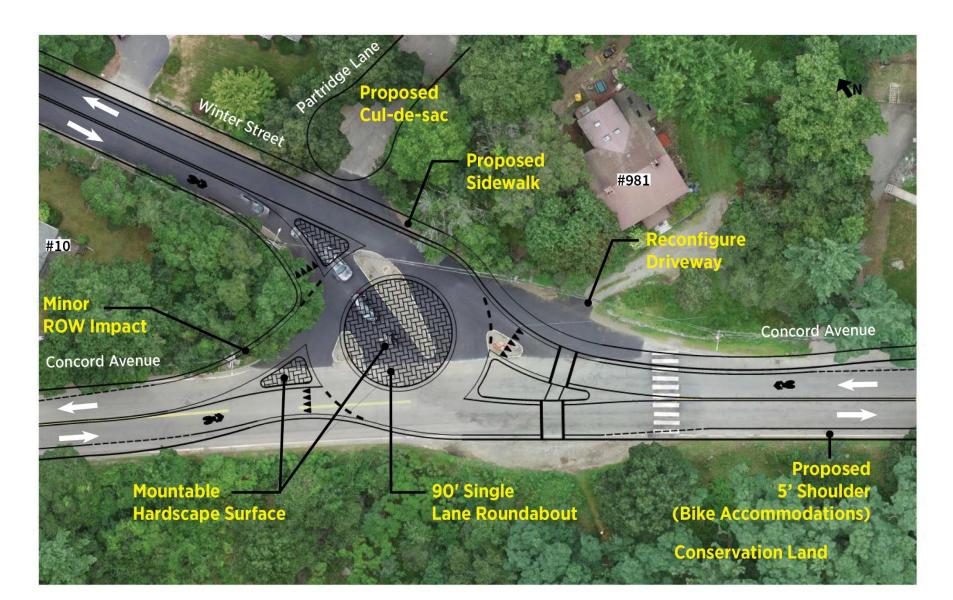


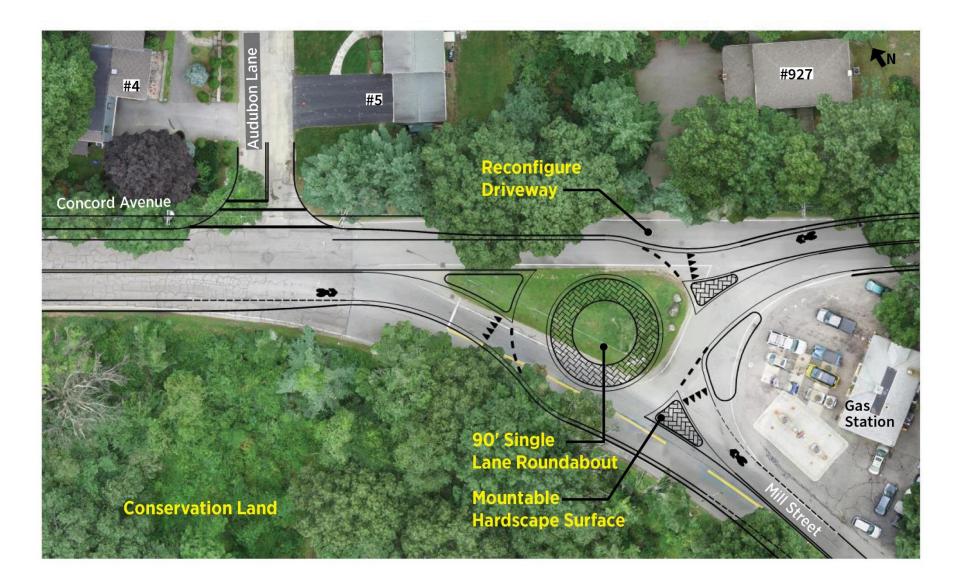
#### Mill Street Pros

- Addresses speed issue on all approaches
- Operates well in PM
- Clear sense of who has the right-of-way

#### Cons

- Impacts driveway access to #927 Concord Avenue
- Lengthy traffic queue on Concord Avenue EB approach to Mill Street in AM







# Conceptual Design Alternative—Preferred



Operates well in AM & PM

- Potential for minor right-of-way impacts to #10 Winter Street and #981 Concord Avenue
- Potential for increased speed on Mill Street



# Conceptual Design Alternative—Preferred



- Eliminates lengthy traffic queue on Mill Street
- No impacts to Gas Station access
- Addresses speed concern for Concord Avenue WB approach to Mill Street

island area needed



# Questions

