

Ref: 8542

October 13, 2021

Mr. Matt D'Amico
Development Associate
Cabot, Cabot & Forbes
185 Dartmouth Street
Boston, MA 02116

Re: Proposed Project Program Change
200-400 Quannapowitt Parkway Mixed-Use Development
Wakefield, Massachusetts

Dear Matt:

Vanasse & Associates, Inc. (VAI) has conducted an assessment in order to provide trip-generation calculations related to the program unit change for the proposed mixed-use development to be located at 200 Quannapowitt Parkway in Wakefield, Massachusetts (the "Project"). A Transportation Impact Assessment was initially prepared in April 2021 (the "April TIA") to include 485 multifamily residential units and a 1,100± square feet (sf) restaurant. The new program will entail the construction of 440 multifamily residential units and a 2,750 sf restaurant. A summary of the expected vehicle trip generation and a comparison to the April TIA for the Project is Summarized in Table 1..

Table 1
TRIP-GENERATION COMPARISON

Time Period/Direction	Proposed Program			April 2021 TIA	
	Restaurant (2,750 sf) ^a	Multifamily Housing (440 Units) ^b	Total Trips	Total Trips ^c	Decrease
<i>Average Weekday Daily:</i>					
Entering	154	1,197	1,351	1,383	-32
Exiting	<u>154</u>	<u>1,197</u>	<u>1,351</u>	<u>1,383</u>	<u>-32</u>
Total	308	2,394	2,702	2,766	-64
<i>Weekday Morning Peak Hour:</i>					
Entering	15	41	56	51	+5
Exiting	<u>12</u>	<u>117</u>	<u>129</u>	<u>135</u>	<u>-6</u>
Total	27	158	185	186	-1
<i>Weekday Evening Peak Hour:</i>					
Entering	17	118	135	137	-2
Exiting	<u>10</u>	<u>76</u>	<u>86</u>	<u>87</u>	<u>-1</u>
Total	27	194	221	224	-3

NOTE: Based on Institute of Transportation (ITE) 10th Edition.

^aBased on ITE LUC 932, *High-Turnover (Sit-Down) Restaurant*.

^bBased on ITE LUC 221, *Multifamily Housing (Mid-Rise)*.

^cBased on April TIA Table 4.

Mr. Matt D'Amico
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Table 1 indicates that the new program is expected to generate approximately 2,702 vehicle trips on an average weekday (two-way volume, 24-hour volume), with 185 new vehicle trips (56 vehicles entering and 129 exiting) expected during the weekday morning peak-hour, and 221 vehicle trips (135 vehicles entering and 86 exiting) expected during the weekday evening peak-hour.

In comparison to the April TIA, the new program is expected to generate 64 *fewer* trips during the weekday daily time period, with 1 and 3 *fewer* vehicle trips during the weekday morning and weekday evening peak hours, respectively. Therefore, no additional assessment is required than what was previously provided in the April TIA. Overall, minimal impact to the area and satisfactory operations are expected with the proposed recommendations provided in the April TIA.

If you should have any questions or require additional information, please feel free to contact me at sthornton@rdva.com to discuss any aspects of this letter.

Sincerely,

VANASSE & ASSOCIATES, INC.



Scott W. Thornton, P.E.,
Principal

Enclosure: Trip Generation Calculations

Cc: RE, File



Institute of Transportation Engineers (ITE)
Trip Generation, 10th Edition
Land Use Code (LUC) 932 - High-Turnover (Sit-Down) Restaurant

Average Vehicle Trips Ends vs: 1000 Square Feet Gross Floor Area
Independent Variable (X): 2.750

AVERAGE WEEKDAY DAILY

$T = 112.18 * (X)$
 $T = 112.18 * 2.750$
 $T = 308.50$
 $T = 308$ vehicle trips
with 50% (154 vpd) entering and 50% (154 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$T = 9.94 * (X)$
 $T = 9.94 * 2.750$
 $T = 27.34$
 $T = 27$ vehicle trips
with 55% (15 vph) entering and 45% (12 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$T = 9.77 * (X)$
 $T = 9.77 * 2.750$
 $T = 26.87$
 $T = 27$ vehicle trips
with 62% (17 vph) entering and 38% (10 vph) exiting.

Institute of Transportation Engineers (ITE)
Trip Generation, 10th Edition
Land Use Code (LUC) 221 - Multifamily Housing (Mid-Rise)

Average Vehicle Trips Ends vs: Dwelling Units
Independent Variable (X): 440

AVERAGE WEEKDAY DAILY

T = 5.44 * (X)
T = 5.44 * 440
T = 2393.60
T = 2394.00
T = 2,394 vehicle trips
with 50% (1,197 vpd) entering and 50% (1,197 vpd) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 0.36 * (X)
T = 0.36 * 440
T = 158.40
T = 158 vehicle trips
with 26% (41 vph) entering and 74% (117 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

T = 0.44 * (X)
T = 0.44 * 440
T = 193.60
T = 194.00
T = 194 vehicle trips
with 61% (118 vph) entering and 39% (76 vph) exiting.



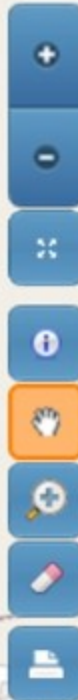
Wakefield Public MapsOnline

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About

Layers

Find



RED LINE INDICATES AREA OF CONCERN

Bear Hill
67 m

Summit
Village

401;402;403;404;405;406;407;408;409;410;411;412;413;414

301;302;303;304;305;306;307;308;309;310;311;312

201;202;203;204;205;206;207;208;209;210;211;212

Richmond
Vista
at Wakefield

Richmond
Vista
at Wakefield

Tarrant Lane

Tarrant
Lane Apartments
(proposed)

South Street

South Street

Hopkins Street

Ion Highway

Yankee Div











Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, MassDOT Secretary & CEO
Steve Poftak, General Manager



MEMORANDUM

TO: Bill Renault, Town Engineer, Town of Wakefield
Wakefield Traffic Advisory Committee (TAC)

FROM: Natasha Vance, Project Manager, MBTA
Sandra Clarey, New England Transit Lead, McMahon Associates

DATE: October 27, 2021

SUBJECT: MBTA Bus Stop Accessibility and Safety Project
Responses to Comments Received at TAC meeting on September 3, 2021

Please find below responses to comments/questions/clarifications sought at the 9/3/21 TAC meeting.

- Stop relocations/improvements will only be made to stops that are currently active. No improvements will be made to stops currently deactivated in response to the pandemic/as part of the Forging Ahead Program. If/when service is restored in the inbound direction on the eastside of the Lake Q, design would resume at that time; subject to design contracts and construction funding being in place.
- Stop eliminations proposed are permanent, regardless of their current status - active or deactivated.
- Abutter notification plan for all stop improvements is in place for the 11/5/21 TAC meeting.
- At the Main @ Grafton stop, two alternate options to our current proposal to relocate the stop to nearside of Morel Circle have been considered as follows. Aerial and streetview concepts are also provided below.
- **Option 2 – Existing stop farside of Grafton St**
 - Landing area and clear zone (~30' edge to edge) just fits between the tree and utility pole (~40' trunk to pole)
 - Tree and or landing area may be compromised by proximity of each other
 - Bus is likely to slightly overhang Grafton St
 - May be constructability issues and or encroachment with abutters walkway at back of landing area
 - If crosswalk location is reconsidered, bus riders will need to cross Grafton St, then Main St

- **Option 3 – Proposed stop nearside of Grafton St**
 - Newly installed and well-maintained landscaping along curb will need to be removed to accommodate both the landing area and clear zone
 - Loss of 4-5 parking spaces (maybe 1 at salon)
- **Both Options**
 - If crosswalk location is reconsidered, the southbound stop design will need to be relocated.
 - At current location bus would block the crosswalk
 - At modified location, bus will block church driveway and would be on top of the crosswalk and create safety concerns for pedestrians that cross in front of the bus
 - Bus stop would likely need to be moved in front of the church, posing more challenges (low curb reveal would need to be raised and with the steps at back of sidewalk, constructability issues for a compliant sidewalk (front to back without grade breaks) without altering step height and or encroaching on church property (requiring a license agreement) would be a significant challenge, if at all possible



Option 2



Option 3



MBTA Bus Stop Accessibility and Safety Improvement Project

Plan for Accessible Transit Infrastructure - Phase 2

Town of Wakefield
Traffic Advisory Committee

November 5, 2021



Project Overview

- Improve customer safety, accessibility and ADA compliance
- High priority bus stops with major access barriers
- Enhance operations – speed and reliability through stop optimization
- Phased approach to design & construction
- Approx. \$600,000 investment in design & construction in Wakefield



Stop Improvements

0. North Ave. @ Winn St./North Ave. opp Winn St.

- New sidewalk
- New and slightly relocated crosswalk
- New curb ramps

1. Main St. @ Grafton St.

- Stop relocation
- Shift crosswalk slightly north
- New curb ramps

2. Main St. @ Forest St.

- Stop shifted 50 feet to the south
- Curb extensions to be evaluated
- Removal of three parking spaces



Stop Improvements

3. Pleasant St. @ Wave Ave.

- New curb ramps
- New painted crosswalks and stop line adjustments

4. Cordis St. @ Court St.

- Stop relocation
- New curb ramps
- New crosswalk

5. Vernon St. @ Lowell St.

- Stop relocation
- Pedestrian signal and curb ramp upgrades



Stop Improvements

6. Lowell St. @ Magnolia Terr.

- New crosswalk
- New curb ramps
- Improved signage and striping

7. Lowell St. opp Pleasant St.

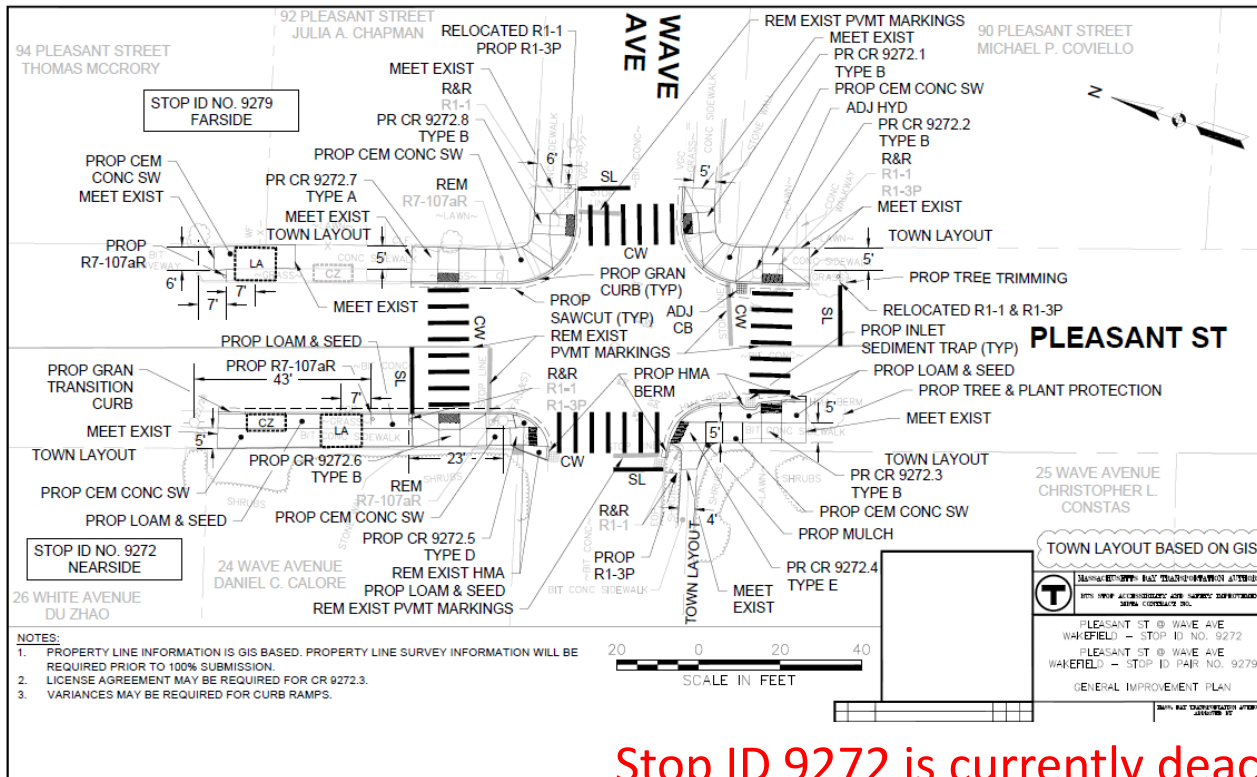
- New sidewalk
- New curb ramps
- New crosswalk

8. Opp 237 Lowell St.

- New sidewalk
- New crosswalk
- New curb ramps



3. G-5, Pleasant St. @ Wave Ave. Stop ID No. 9279



Existing & Proposed Stop



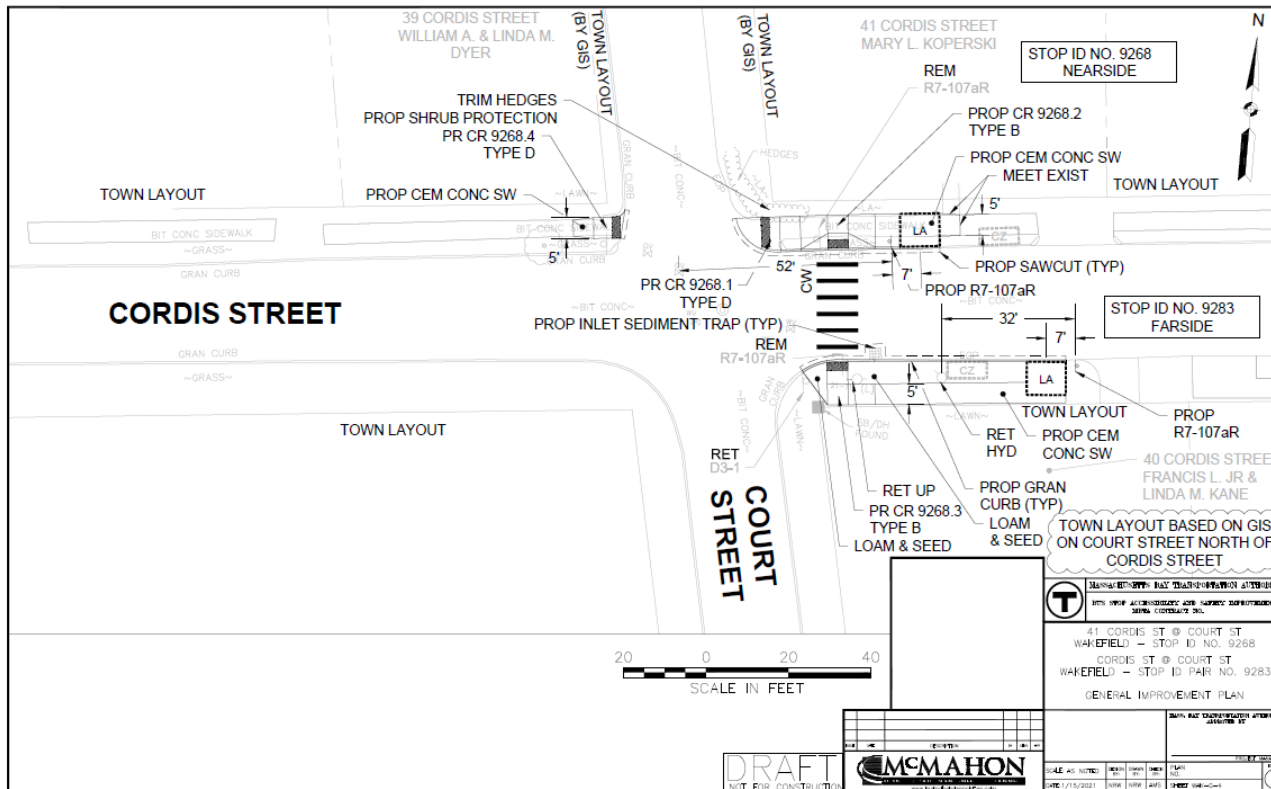
Stop ID 9272 is currently deactivated due to a service adjustment in response to the pandemic. Improvements will be made if/when service is restored.



4. G-4, Cordis St. @ Court St.

Stop ID No. 9283

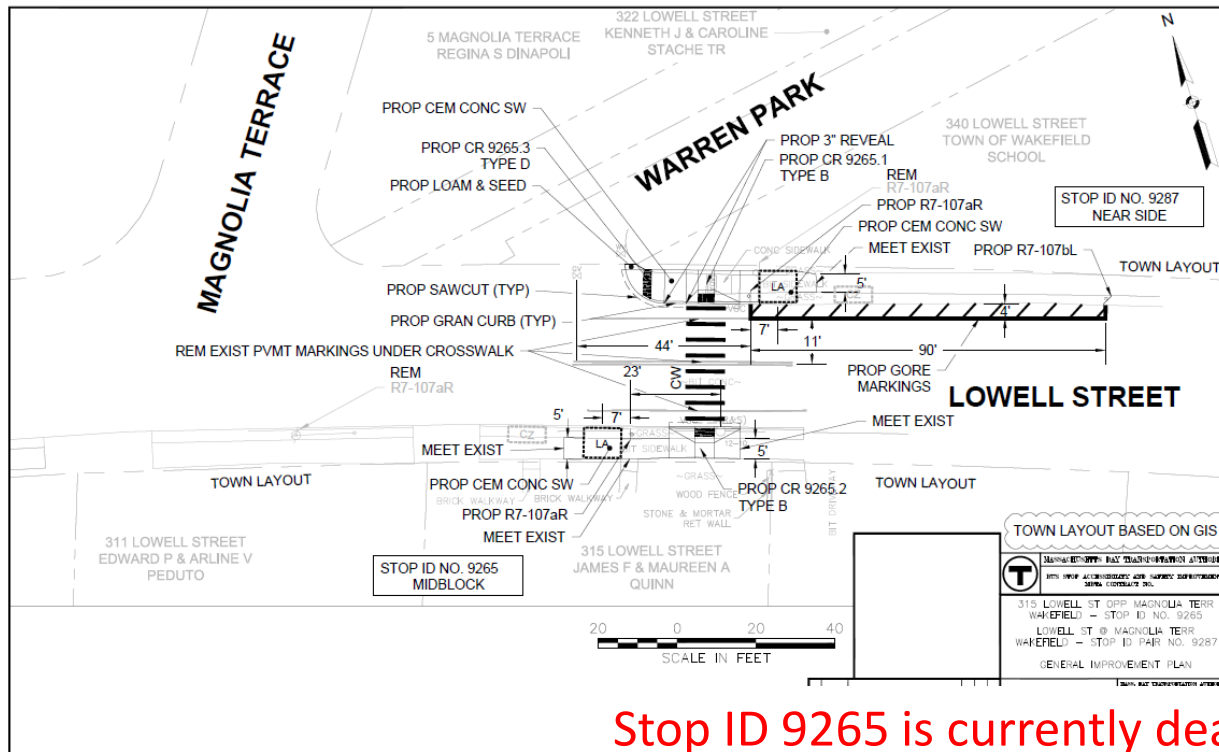
Stop ID 9268 is currently deactivated due to a service adjustment in response to the pandemic. Improvements will be made if/when service is restored.



Existing & Proposed Stop



6. G-3, Lowell St. @ Magnolia Terr. Stop ID No. 9287



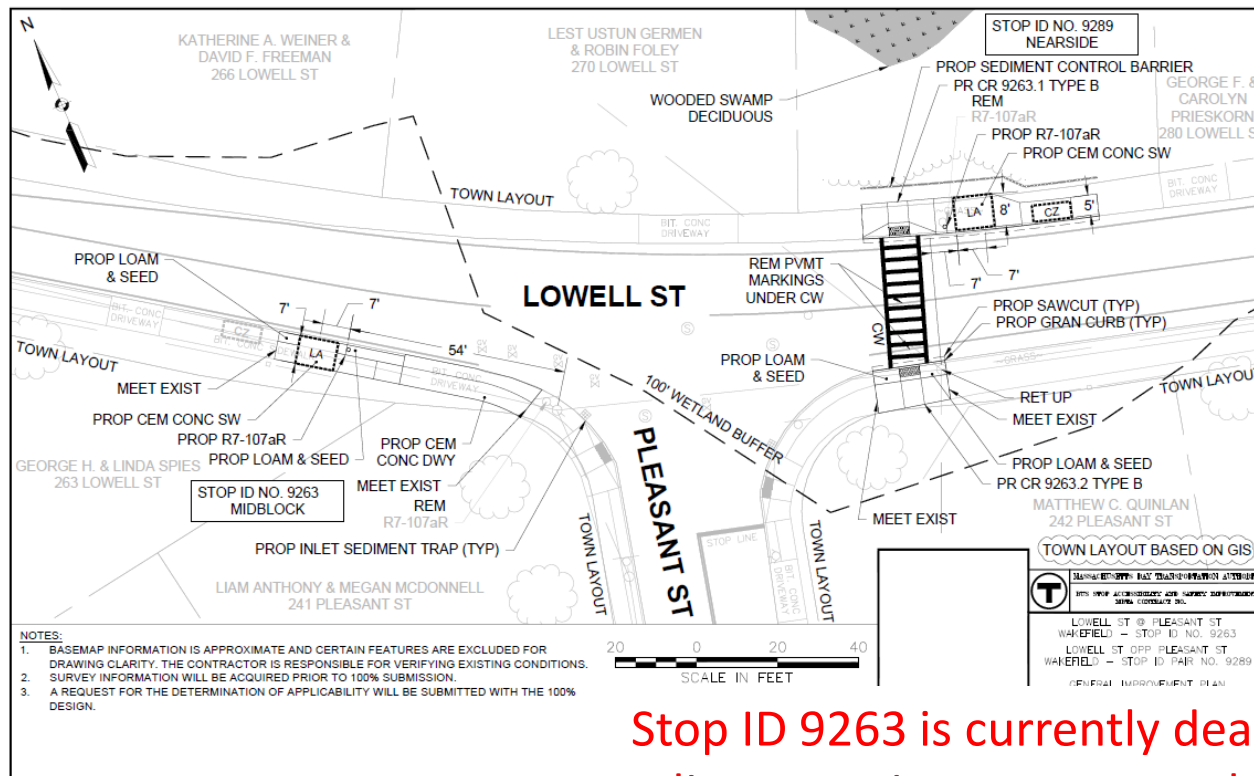
Existing & Proposed Stop



Stop ID 9265 is currently deactivated due to a service adjustment in response to the pandemic. Improvements will be made if/when service is restored.



6. G-10, Lowell St. opp Pleasant St. Stop ID No. 9289



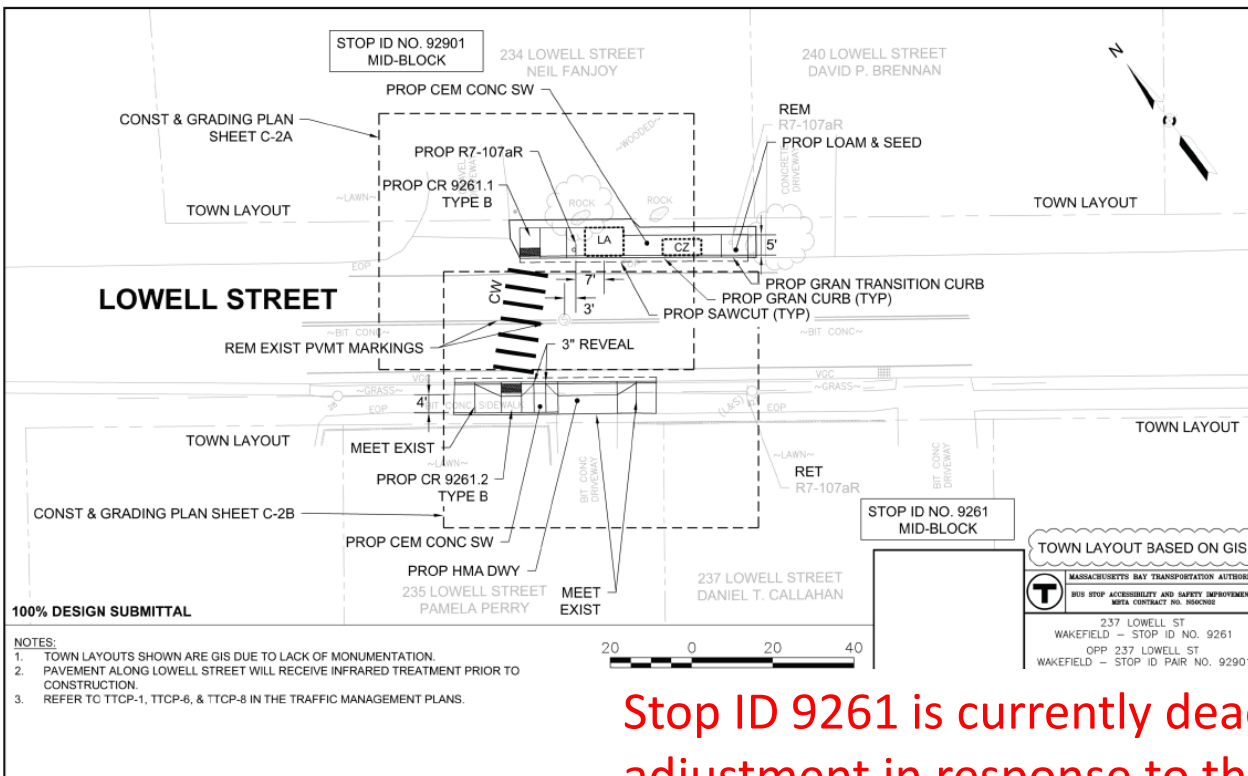
Existing and Proposed Stop



Stop ID 9263 is currently deactivated due to a service adjustment in response to the pandemic. Improvements will be made if/when service is restored.



6. G-2, Opp 237 Lowell St. Stop ID No. 92901



Existing Stop



Stop ID 9261 is currently deactivated due to a service adjustment in response to the pandemic. Improvements will be made if/when service is restored.



Stop Eliminations

1. **Lowell St. opp Walden Rd.**
2. **Lowell St. @ Walton Ln.**
3. **Lowell St. @ Drury Ln.**
4. **Lowell St. opp Drury Ln.**
5. **Pleasant St. @ Aborn Ave.**
6. **Pleasant St. @ Aborn Ave.**
7. **Pleasant St. @ Lawrence St.**
8. **Pleasant St. @ Lawrence St.**
9. **Main St. @ Railroad Ave.**
10. **Main St. @ Franklin St.**



Schedule & Questions

■ Schedule

- Abutter Notifications Sent in April 2021
- 100% Design in Oct/Nov 2021
- Permitting – RDA Approved in September 2021
- Construction 2022
 - No Bid; On-Call Contractor
 - 1-2 weeks per location

■ Questions?



Traffic Advisory Committee Vote

0. North Ave. @ Winn St./North Ave. opp Winn St.

- **New sidewalk**
- **New and slightly relocated crosswalk**
- **New curb ramps**

1. Main St. @ Grafton St.

- **Stop relocation**
- **Shift crosswalk slightly north**
- **New curb ramps**

2. Main St. @ Forest St.

- **Stop shifted 50 feet to the south**
- **Curb extensions to be evaluated**
- **Removal of three parking spaces**



Traffic Advisory Committee Vote

3. Pleasant St. @ Wave Ave.

- New curb ramps
- New painted crosswalks and stop line adjustments

4. Cordis St. @ Court St.

- Stop relocation
- New curb ramps
- New crosswalk

5. Vernon St. @ Lowell St.

- Stop relocation
- Pedestrian signal and curb ramp upgrades



Traffic Advisory Committee Vote

6. Lowell St. @ Magnolia Terr.

- New crosswalk
- New curb ramps
- Improved signage and striping

7. Lowell St. opp Pleasant St.

- New sidewalk
- New curb ramps
- New crosswalk

8. Opp 237 Lowell St.

- New sidewalk
- New crosswalk
- New curb ramps



Traffic Advisory Committee Vote



1. **Lowell St. opp Walden Rd.**
2. **Lowell St. @ Walton Ln.**
3. **Lowell St. @ Drury Ln.**
4. **Lowell St. opp Drury Ln.**
5. **Pleasant St. @ Aborn Ave.**
6. **Pleasant St. @ Aborn Ave.**
7. **Pleasant St. @ Lawrence St.**
8. **Pleasant St. @ Lawrence St.**
9. **Main St. @ Railroad Ave.**
10. **Main St. @ Franklin St.**

