

September 13, 2023

Mr. Travis Ahern Town Administrator Town of Holliston 703 Washington Street Holliston, MA 01746

# **RE: Truck Route and Detour Signage**

Dear Travis:

As part of the investigation of alternatives to restrict heavy commercial vehicle traffic from Lowland Street between Jeffrey Avenue and Woodland Street, McMahon, a Bowman company (McMahon), has completed an inventory of truck route and truck exclusion signs in the portion of the Town bounded by Washington Street (Routes 16/126), Central Street, and the Millis and Sherborn town lines. The following memorandum summarizes our findings.

# **Heavy Commercial Vehicle Exclusions**

Within the study area, Heavy Commercial Vehicle Exclusions (HCVEs) are posted along Woodland Street, Linden Street, Elm Street, Church Street, Granite Street, Bullard Street, and a portion of Lowland Street. In general, older HCVEs are posted with R12-1 Weight Limit signs. Per Section 2B.59 of the 2022 Massachusetts Amendments to the MUTCD, R12 series Weight Limit signs are not permitted to be used to indicate an HCVE. More recently approved HCVEs are typically posted with an R5-2 No Trucks sign and a plaque reading "EXCEPT LOCAL DELIVERIES" per direction from MassDOT. However, based on feedback from the Town, long distance drivers bound for the Lowland Industrial Park and other industrial properties interpret "local" to include all of Holliston and use these streets as through routes to their destination. In general, McMahon recommends removing the "EXCEPT LOCAL DELIVERIES" plaque as the exception is implied by the No Trucks sign, and replacing them with plaques reading "OVER 2½ TONS" to reflect the HCVE regulation. Additionally, R12-1 Weight Limit signs should be removed and replaced with a similar R5-2 No Trucks sign and "OVER 2½ TONS" plaque. A detailed inventory of signs and associated recommendations is provided below.

#### Woodland Street

Woodland Street has a 24-hour HCVE for all trucks 2<sup>1</sup>/<sub>2</sub> tons and over between its intersection with Washington Street and its intersection with Linden Street and Railroad Street. The HCVE continues north onto High Street from Washington Street to Concord Street. At the north end of the corridor at the intersection of Woodland Street at Washington Street, the HCVE is indicated by an R5-2 No Trucks sign and "EXCEPT LOCAL DELIVERIES" plaque located on the center median of Woodland Street approximately 40 feet from the intersection with Washington Street (Photograph 1). Approaching Woodland Street along Washington Street from the south, an advance sign assembly is provided consisting of an R5-2 No Trucks sign, R3-1 No Right Turn sign, R3-2 No Left Turn sign, and W16-8P Advance Street Name plaque



reading "High St Woodland St" to indicate to approaching trucks that turns are not permitted onto either High Street or Woodland Street (Photograph 2). A similar advance sign assembly is provided approaching along Washington Street from the north (Photograph 3).

At the southern end of the corridor, an R5-2 sign supplemented with a W16-8P Advance Street Name plaque reading "Woodland St" and a supplemental plaque reading "EXCEPT LOCAL DELIVERIES" is posted on Railroad Street at its intersection with Central Street (Photograph 4). Railroad Street continues as Woodland Street north of Linden Street, approximately one-quarter mile north of Central Street; however, it is unclear from the signage if the HCVE also applies to Railroad Street. No advance signs are posted along Central Street approaching Railroad Street, and no HCVE signage is posted at the southern end of Woodland Street at its intersection with Linden Street and Railroad Street.



Photograph 1 – Woodland St at Washington St



Photograph 3 – Washington St southbound approaching Woodland St



Photograph 2 –Washington St northbound approaching Woodland St



Photograph 4 – Railroad St at Central St



- Replace the "EXCEPT LOCAL DELIVERIES" plaques at each end of the corridor with "OVER 2<sup>1</sup>/<sub>2</sub> TONS" plaques.
- Relocate the HCVE signs on the median on Woodland Street 40 feet east of the Washington Street intersection to the right side of Woodland Street at the intersection.
- Remove the W16-8P "Woodland Street" plaque at the Central Street and Railroad Street intersection to clarify that the HCVE also applies to Railroad Street.
- Add HCVE signage consisting of an R5-2 No Trucks sign and "OVER 2<sup>1</sup>/<sub>2</sub> TONS" plaque to northbound Woodland Street at Linden Street.

# Linden Street

Based on a review of MassDOT's interactive Trucking Network map, Linden Street does not have an approved HCVE. A "NO THRU TRUCKING" sign is posted on a utility pole on eastbound Linden Street at its intersection with Washington Street (Photograph 5). No truck exclusion signs are posted along westbound Linden Street.



Photograph 5 –Linden St at Washington St

# McMahon Recommendations:

- Verify whether an HCVE has been approved by MassDOT.
- If there is no approved HCVE, remove the existing "NO THRU TRUCKING" sign.
- If there is an approved HCVE, replace the existing "NO THRU TRUCKING" sign at the intersection
  of Linden Street at Washington Street with an R5-2 No Trucks sign with a supplemental "OVER
  2½ TONS" plaque on a standard sign post, and provide equivalent signage at the intersection of
  Linden Street at Woodland Street and Railroad Street.



# Elm Street

Elm Street has a 24-hour HCVE for all trucks 2½ tons and over between its intersection with Washington Street and its intersection with Railroad Street. At the west end of the corridor at the Washington Street intersection, the HCVE is indicated by an R12-1 "WEIGHT LIMIT 2½ TONS" sign (Photograph 6). A similar R12-1 sign is posted at the east end of the corridor at its intersection with Railroad Street, which is faded and obscured by vegetation (Photograph 7). As previously noted, R12-1 Weight Limit signs are not permitted by MassDOT to indicate an HCVE. No advance signage is provided on Washington Street or Central Street.



Photograph 6 – Elm St at Washington St



Photograph 7 – Elm St at Railroad St

# McMahon Recommendations:

- Replace the existing R12-1 signs at each end of the corridor with new R5-2 No Trucks signs with supplemental "OVER 21/2 TONS" plaques.
- Trim vegetation at the east end of the corridor and/or locate the sign so it is more visible.

# Church Street

Church Street has a 24-hour HCVE for all trucks 2½ tons and over between its intersection with Washington Street and its intersection with Central Street. At the west end of the corridor at the Washington Street intersection, the HCVE is indicated by an R12-1 "WEIGHT LIMIT 2½ TONS" sign on the same post as a NO PARKING sign (Photograph 8). At the east end of the corridor at its intersection with Central Street, the HCVE sign is indicated by a non-standard R12-1 style sign reading "LOAD LIMIT 2½ TONS" sign (Photograph 9). As previously noted, R12-1 Weight Limit signs are not permitted by MassDOT to indicate an HCVE. No signs are posted at the intermediate intersection of Church Street at Railroad Street, and no advance signage is provided on Washington Street or Central Street.





Photograph 8 – Church St at Washington St



Photograph 9 – Church St at Central St

- Replace the existing R12-1 signs at each end of the corridor with new R5-2 No Trucks signs with supplemental "OVER 21/2 TONS" plaques. Locate the sign at the west end of the corridor closer to the Washington Street intersection for greater visibility.
- If there is no approved HCVE on Railroad Street, provide R5-2 No Trucks signs with supplemental "OVER 21/2 TONS" plaques along Church Street eastbound and westbound at the intersection with Railroad Street.

# Granite Street

Based on a review of MassDOT's interactive Trucking Network map, Granite Street does not have an approved HCVE. A faded but legible R12-1 "WEIGHT LIMIT 2 TONS" sign is posted on southbound Granite Street at its intersection with Fiske Street at the north end of the corridor (Photograph 10). A similar but illegible sign is posted on the left side of Granite Street at the south end of the corridor at its intersection with Central Street (Photograph 11). No advance signage is provided on Fiske Street or Central Street.



Photograph 10 – Granite St at Fiske St



Photograph 11 – Granite St at Central St



- Verify whether an HCVE has been approved by MassDOT.
- If there is no approved HCVE, remove the existing "WEIGHT LIMIT 2 TONS" signs.
- If there is an approved HCVE, replace the existing "WEIGHT LIMIT 2 TONS" signs at either end of the corridor with R5-2 No Trucks signs on the right side of the roadway, with supplemental plaques indicating the weight restriction.

#### **Bullard Street**

Bullard Street has a 24-hour HCVE for all trucks 2½ tons and over between its intersection with Central Street and its intersection with Fiske Street. At the south end of the corridor at the intersection of Bullard Street at Central Street, the HCVE is indicated by an R5-2 No Trucks sign with no supplemental plaques (Photograph 12). Approaching Bullard Street along Central Street from the west, an advance sign assembly is provided consisting of an R5-2 No Trucks sign, "TRUCKS" plaque, R3-2 No Left Turn Sign, and W16-8P Advance Street Name plaque reading "Bullard St" to indicate to approaching trucks that turns are not permitted onto Bullard Street (Photograph 13). A similar advance sign assembly is provided approaching along Central Street from the east, consisting of an R5-2 No Trucks sign, "NO TRUCKS" plaque, R3-1 No Right Turn Sign, and W16-8P Advance Street Name plaque reading "Bullard St" (Photograph 14).

At the north end of the corridor, an R5-2 sign with no supplemental plaques is posted on the right side of Bullard Street at its intersection with Fiske Street, but is obscured by trees (Photograph 15). A second "NO THRU TRUCK TRAFFIC" sign is posted beneath the Bullard Street street name sign at the southeast corner of the intersection, facing eastbound traffic on Fiske Street (Photograph 16). Approaching Bullard Street along Fiske Street from the west, an advance sign assembly is provided consisting of an R5-2 No Trucks sign, "TRUCKS" plaque, R3-1 No Right Turn Sign, and W16-8P Advance Street Name plaque reading "Bullard St" to indicate to approaching trucks that turns are not permitted onto Bullard Street (Photograph 17). A similar advance sign assembly is provided approaching along Fiske Street from the east, consisting of an R5-2 No Trucks sign, "NO TRUCKS" plaque, R3-2 No Left Turn Sign, and W16-8P Advance Street Name plaque reading "Bullard St" (Photograph 18).





Photograph 12 – Bullard St at Central St



Photograph 13 – Central St eastbound approaching Bullard St



Photograph 14 – Central St westbound approaching Bullard St



Photograph 16 – Bullard St at Fiske St



Photograph 15 –Bullard St at Fiske St



Photograph 17 – Fiske St eastbound approaching Bullard St





Photograph 18 – Fiske St westbound approaching Bullard St

- Trim trees or relocate the R5-2 Trucks sign at the intersection of Bullard Street at Fiske Street.
- Add plaques reading "OVER 2<sup>1</sup>/<sub>2</sub> TONS" beneath the R5-2 No Truck signs at both ends of the corridor to clarify the regulation.

#### Lowland Street

The southern portion of Lowland Street between Bogastow Brook and Fiske Street has an overnight HCVE for all trucks  $2\frac{1}{2}$  tons and over from 7:00 p.m. to 7:00 a.m. Each end of the HCVE is indicated by an R12-1 "WEIGHT LIMIT  $2\frac{1}{2}$  TONS" sign supplemented with a plaque reading "7 PM – 7 AM" (Photographs 19-20). No advance signage is provided on Fiske Street.

In addition, although the northern portion of Lowland Street between the Upper Charles Rail Trail and Woodland Street does not have an approved HCVE, this segment of Lowland Street is only accessible via Woodland Street, which does have an HCVE. An advance sign assembly is posted on Lowland Street at its intersection with Jeffrey Avenue, approximately 1,000 feet south of the Upper Charles Rail Trail crossing, reading "NO COMMERCIAL VEHICLES EXCEPT LOCAL DELIVERIES" (Photograph 21). A second sign assembly is posted at the intersection facing the Jeffrey Avenue approach consisting of an R5-2 No Trucks sign, "EXCEPT LOCAL DELIVERIES" plaque, R3-1 No Right Turn sign, and W16-8P Advance Street Name plaque reading "Lowland Street" (Photograph 22), and a handful of individual commercial properties near the intersection of Lowland Street and Jeffrey Avenue have signs facing driveways to identify truck routes (Photographs 23-25).





Photograph 19 – Lowland St at Fiske St



Photograph 21 – Lowland St northbound at Jeffrey Ave



Photograph 20 – Lowland St southbound at Bogastow Brook



Photograph 22 – Jeffrey Ave southbound at Lowland St



Photograph 23 – Private sign, Lowland St



Photograph 24 – Private sign, Lowland St





Photograph 25 – Private sign, Jeffrey Ave

- Replace the existing R12-1 signs at each end of the corridor with new R5-2 No Trucks signs with supplemental plaques reading "OVER 2<sup>1</sup>/<sub>2</sub> TONS" and "7 PM – 7 AM."
- Replace the existing "NO COMMERCIAL VEHICLES EXCEPT LOCAL DELIVERIES" sign assembly facing northbound Lowland Street at Jeffrey Avenue with an R5-2 No Trucks sign and "OVER 2<sup>1</sup>/<sub>2</sub> TONS" plaque. Provide an additional R5-2 No Trucks sign an "OVER 2<sup>1</sup>/<sub>2</sub> TONS" plaque between the 56 Lowland Street commercial driveway and the Upper Charles Rail Trail crossing.
- Provide R14-1 "TRUCK ROUTE" signs with directional arrow plaques at and in advance of the Lowland Street at Jeffrey Avenue intersection to direct trucks to exit the industrial park via Jeffrey Avenue. Provide additional R14-1 "TRUCK ROUTE" signs and directional arrow plaques in the Town layout at commercial driveways to standardize signage and direct drivers to the proper route to exit the industrial park.
- Stripe a dotted centerline and edge line through the Lowland Street at Jeffrey Avenue intersection emphasize the designated truck route as the through movement (Figure 1).

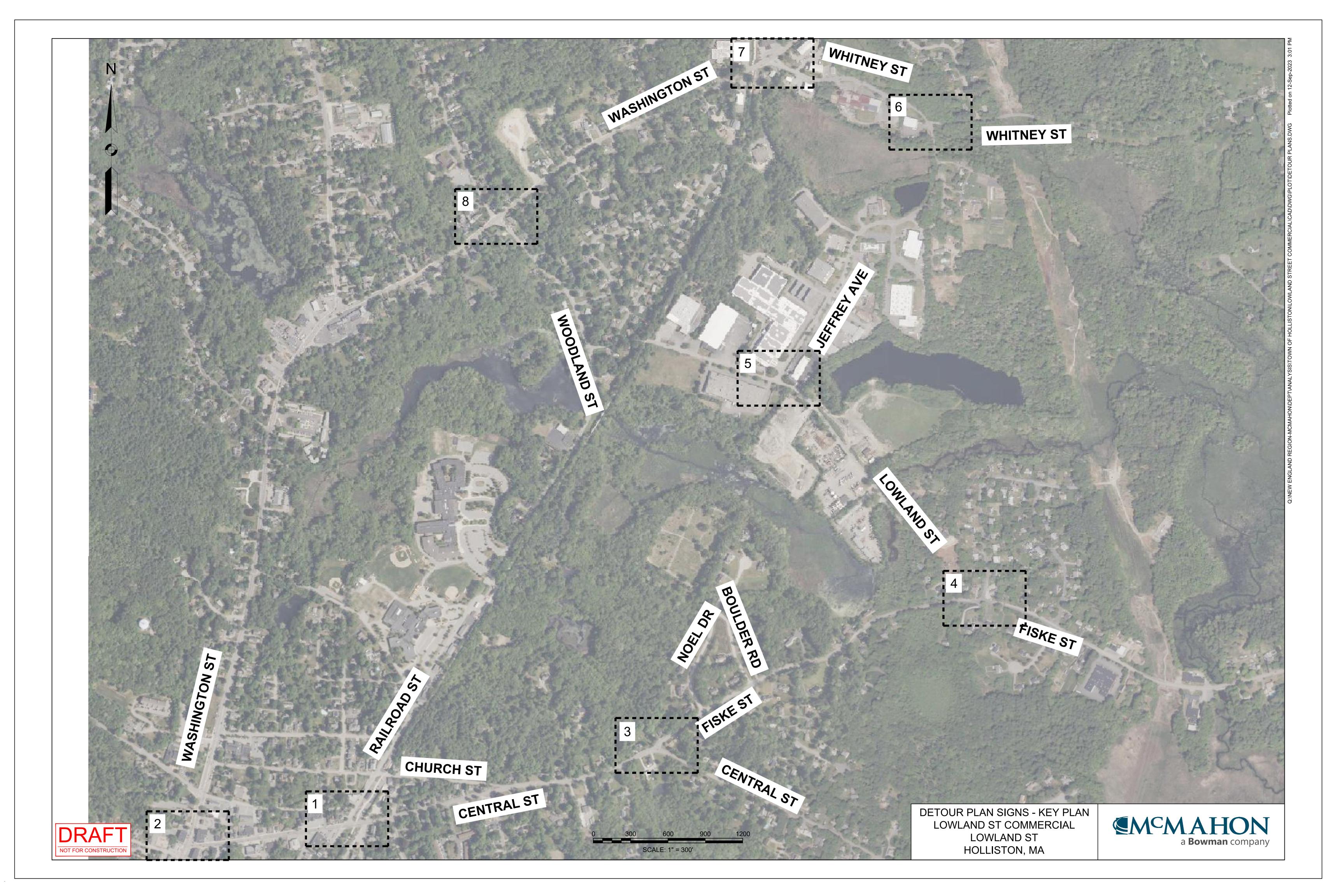
In addition to the above a plan for improved detour signage for the Woodland Street bridge closure to help keep traffic off of Lowland Street is attached.

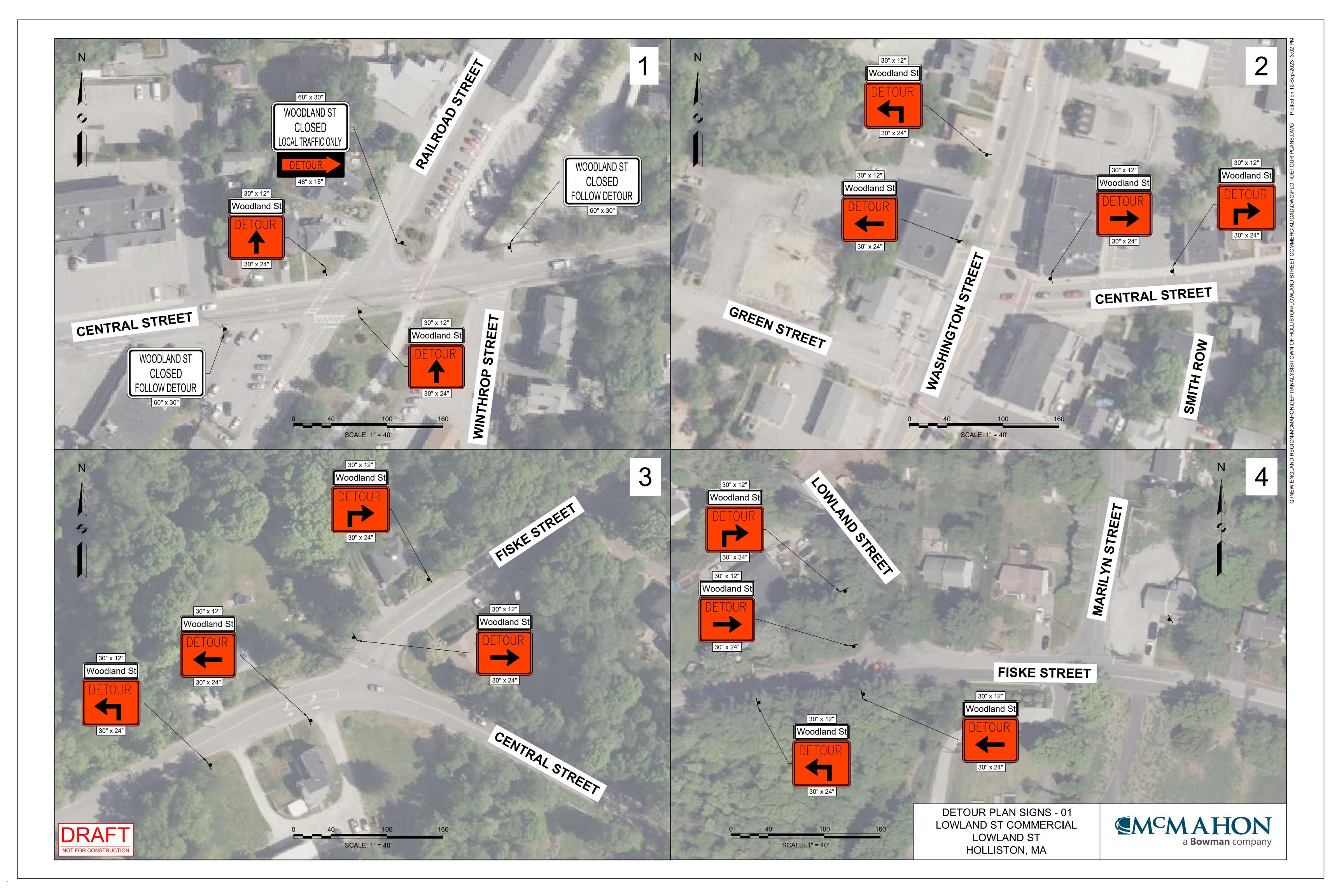
If you should have any questions or require further information, please feel free to contact us.

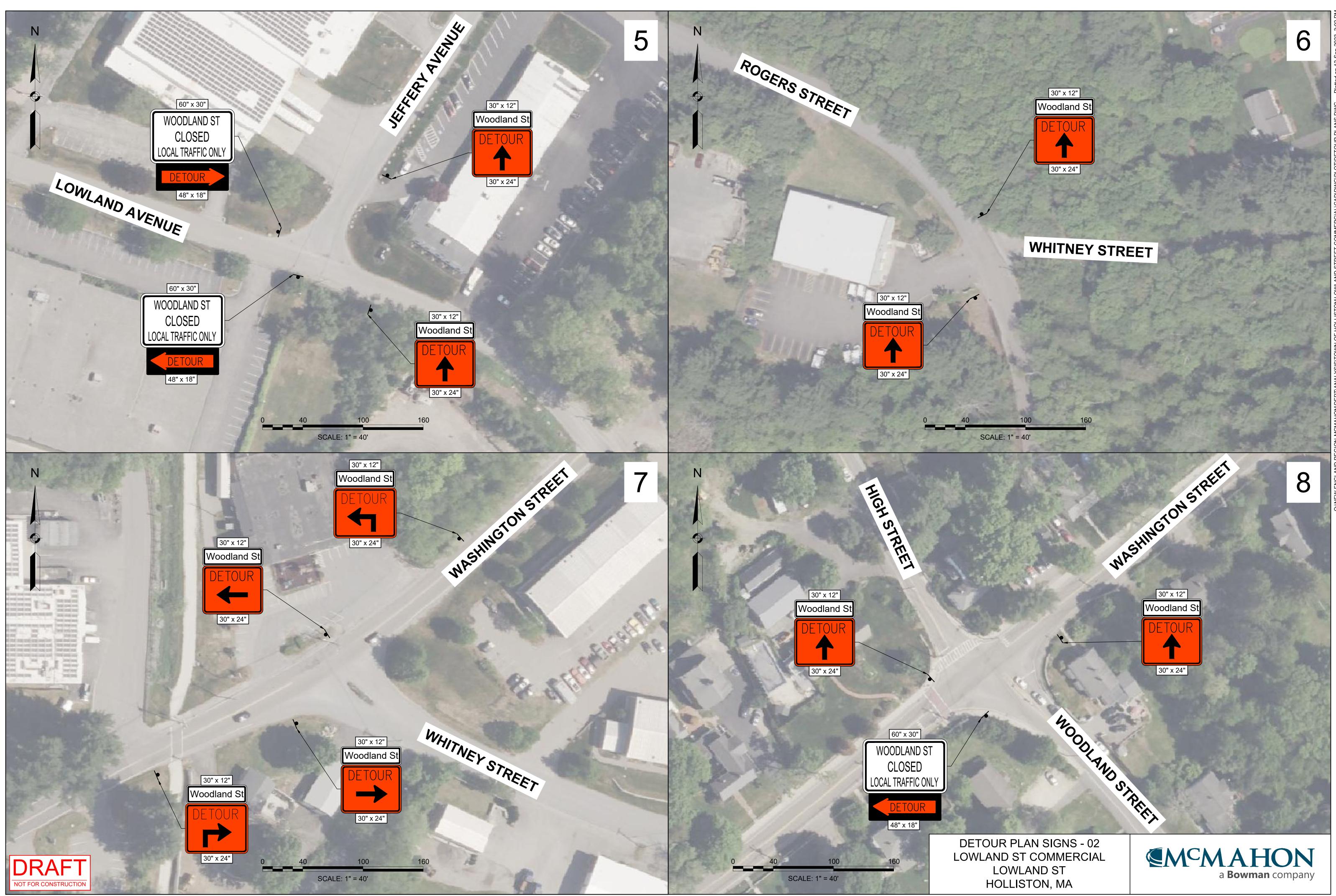
Sincerely,

Robert A. Smith, P.E. Senior Project Manager









Q:\NEW ENGLAND REGION-MCMAHON\DEPT\ANALYSIS\TOWN OF HOLLISTON\LOWLAND STREET COMMERCIAL\CAD\DWG\PLOT\DETOUR PLANS.DWG Plotted on 12-Sep-2023