



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

Barney S. Heath
Director

PUBLIC HEARING VIII MEMORANDUM

DATE: September 6, 2023
MEETING DATE: September 13, 2023
TO: Zoning Board of Appeals
FROM: Barney Heath, Director of Planning and Development
Jennifer Caira, Deputy Director for Planning and Development
Katie Whewell, Chief Planner for Current Planning
Michael Gleba, Senior Planner
COPIED: Mayor Ruthanne Fuller
City Council

In response to questions raised at the Zoning Board of Appeals public hearing on October 26, 2022, December 21, 2022, January 25, 2023, February 22, 2023, April 26, 2023, June 22, 2023, and July 31, 2023, the Planning Department is providing the following information for the upcoming continued public hearing/working session. This information is supplemental to staff analysis previously provided at the public hearing.

PETITION #09-22

60 Charlemont Street and 56 Christina Street

Northland 160 Charlemont, LLC, requesting a Comprehensive Permit, pursuant to M.G.L. Chapter 40B, to construct a nine-story mixed-use development with 410 residential units and approximately 10,689 square feet of ground floor commercial space on 6.98 acres of land located at 160 Charlemont Street and 56 Christina Street in the Mixed Use 1 Zoning District. The proposal includes 103 affordable units and 486 parking stalls. The petitioner has since filing the original application proposed changes to the original submission noted later in this memorandum.

The Zoning Board of Appeals (Board) opened the public hearing on this petition on October 26, 2022, which was held open for the petitioner to respond to questions and concerns raised in the Planning Department's Memorandum and at the public hearing by the Board as well as by members of the public. The Board continued the public hearing on December 21, 2022, January 25, 2023, February 22, 2023, April 26, 2023, June 22, 2023, and July 31, 2023.

EXECUTIVE SUMMARY

The subject site is comprised of two parcels known as 160 Charlemont Street and 56 Christina Street located in a Mixed Use 1 (MU1) zoning district and is improved with two structures.

The applicant, Northland Charlemont, LLC, intends to demolish the existing structures and combine the lots into a single 304,308 square foot through-lot with frontage on Charlemont and Christina streets.

Following feedback from the community, City staff, the City's design reviewer and members of the Zoning Board, the design of the development was further refined to comprise two separate buildings connected via an underground garage and a courtyard above the garage and in between the buildings with an overall reduction in massing. The current iteration of the project consists of two seven story buildings with below grade parking. In the revised proposal the total number of units is decreased from 410 to 370, with the number of affordable units reduced from 103 to 93.

A large area of recreational open space on the eastern portion of the site remains. The current iteration provides two connector driveways from Charlemont to Christina Street with the western one providing access to the development's underground parking and loading areas. The site plan has also been modified to include a traffic roundabout partially located on the site's northeastern corner that would accommodate the proposed public passenger shuttle's routing, the stop for which would be sheltered.

Also, the applicant committed to advancing the project's affordability thresholds by changing 20% of its affordable units from 80% of the area median income (AMI) to 50% of AMI, resulting in 19 units being offered at 50% of AMI and the remaining 74 units at 80% of AMI.

Project materials submitted for review can be found on the City's website at: <https://newtonma.viewpointcloud.com/locations/117660>.

I. UPDATES

In response to various comments and concerns expressed at previous public hearings and in Planning Department and peer reviewer memoranda, the applicant submitted additional materials on August 25, 2023, with the intent to present them at the upcoming September 13, 2023, ZBA hearing. These documents are related to transportation/traffic, stormwater management, design, and also include a revised waiver list.

II. ANALYSIS

A. Transportation

The BETA Group, Inc. (BETA) submitted comments **dated August 29, 2023 (Attachment A)** reviewing VHB's Neighborhood Traffic Review Memorandum dated August 17, 2023

(Attachment B). The latter provided additional information on potential traffic impacts of the proposed development would be expected have on the residential neighborhood east of the project. Comments are provided below.

Regarding the trips the project would add to local roads, BETA found that the applicant's estimates that (a) the project would add approximately 14 vehicle trips in the AM peak hour and 13 vehicle trips in the PM peak hour to Christina Street to the east of the project, and (b) that very little traffic would use Charlemont Street and Roland Street to the east of the project, appear reasonable as the new traffic generation would not significantly increase traffic volumes.

Also, as some concern has been raised regarding the speed of vehicles on Christina, Goddard, and Wallace streets east of the project, the Applicant has agreed to monitor traffic volume and speed on those streets before and after occupancy and work with the City to identify traffic measures to mitigate impacts as needed. The Planning Department suggests the possibility of this being a condition of a comprehensive permit decision be considered.

Also, BETA commented that the estimated "Travel Time Runs" the applicant submitted indicating that (a) Needham Street would provide a faster route to reach Winchester Street to the north than Christina Street, Roland Street, Charlemont Street, and Goddard Street and that (b) vehicles traveling to and from the southeast would be expected to use Goddard and Wallace streets to Christina Street as they provide a more direct route than Charlemont and Roland streets, appear reasonable.

The Planning Department notes that it continues to work with the applicant regarding proposed improvements to Charlemont Street, including the placement of sidewalks, parking stalls and the shared use path. As previously noted, such efforts may also involve other nearby property owners. Planning requests that the applicant provide an update on issues related to the shared use path and provide an update on its progress in conceptually siting the path.

The Planning Department notes that it also continues to work with, and urge, the applicant to provide a more robust transportation demand management (TDM) plan that most likely includes a wider, and longer distribution of T passes and discounts beyond its previous proposal that for the first two years of the building's occupancy it would reimburse 50% of the cost of a MBTA Link Pass for up to two residents per each unit that does not have a vehicle during that tenancy's initial least term (with the cost of such, as an alternative, applied toward car share or bike share costs). In addition to other Comprehensive Permit TDM plans provided to the applicant, the Planning Department provided language to the applicant that was on another project in the City that requires a commitment to fund transit passes at a certain amount and if those funds are not expended after a certain period of time (i.e. five years), the money would revert back to

the city to be used for transportation related measures. This plan would also require annual reports to the Planning Department on the utilization of the funds for transit. This could potentially allow a more flexible distribution of the funds for transit passes and Planning would be supportive of extending to employees of the building (i.e., cleaning, maintenance, leasing staff) as well as allow flexibility for a higher subsidy for transit passes for lower income residents. The Planning Department looks forward to working with the applicant on further developing this alternative plan and any corresponding tiers and parameters, if the applicant chooses to pursue this alternative plan.

B. Stormwater Management Peer Review

The applicant has submitted a memo from its consultant VHB dated August 2, 2023 (**Attachment C**), responding to comments the City's peer review consultant, Horsley Witten made in a memorandum dated July 18, 2023 (the latter of which was discussed in the Planning Department's previous memorandum and indicated that all but a few of its previous comments had been adequately addressed).

In its memo VHB indicates that that it has made the requested changes related to adding some details to the Plan Set and that per an H&W concern there are no pipe conflicts.

C. Urban Design

The applicant included in the material it submitted on August 25th several documents related to the urban design aspects of the proposed development, including updated signage plans and renderings of the proposed stair and bike tunnel and balcony details.

It is expected that the applicant will discuss these plans at the upcoming hearing.

D. Sustainability

The materials submitted by applicant August 25th includes a graphic showing the various sustainability initiatives that would be implemented in the development.

It is expected that the applicant will discuss these plans at the upcoming hearing.

III. MITIGATION

As discussed in previous Planning memos, it has been recommended that \$2,703,153 (75%) of be abated to be applied toward other mitigation purposes. The Planning Department has previously suggested the following mitigation allowances for the proposed project:

- \$1 million- Christina Street bike/pedestrian bridge
- \$750,000- Bobby Braceland Playground
- \$750,000- Countryside School renovation
- \$203,153 - Alternative transportation management

Per previous conversations, the applicant should identify if/how the above might be altered as related to expenses that might be incurred related in turn to the Charlemont Street shared use path discussed above.

IV. ADDITIONAL INFORMATION AND MATERIALS

The applicant should be prepared to respond to all questions and requests for more information raised at the upcoming public hearing and/or at subsequent meetings.

V. CONCLUSION AND NEXT STEPS

The Planning Department will continue to review the proposal and, where appropriate and authorized, coordinate reviews of the project by City agencies and consultant peer reviewers and provide updated and expanded memoranda in advance of future ZBA hearings.

ATTACHMENTS

- Attachment A:** BETA Group transportation peer review memorandum, dated August 29, 2023, of VHB “Neighborhood Traffic Review” memorandum dated August 17, 2023
- Attachment B:** VHB “Neighborhood Traffic Review” memorandum dated August 17, 2023
- Attachment C:** VHB memorandum, dated August 2, 2023, responding to Horsley Witten memorandum dated July 18, 2023



MEMORANDUM

Date: August 29, 2023 Job No.: 10707
Katie Whewell, Chief Planner for Current Planning
To: Michael Gleba, Planning Department
City of Newton
Cc:
From: Jeff Maxtutis, BETA Group, Inc.
Subject: **The Northland Charlemont Street Development
Transportation Peer Review of VHB Memorandum August 17, 2023**

The BETA Group, Inc. (BETA) has received and reviewed the Neighborhood Traffic Review Memorandum from VHB dated August 17, 2023. The VHB Memorandum provides additional information on potential traffic impacts of the proposed Northland Charlemont Street development on the residential neighborhood east of the project. Comments are provided below.

Project Trips Added to Local Roadway Network

The Memo states that the project will add approximately 14 vehicle trips in the AM peak hour and 13 vehicle trips in the PM peak hour to Christina Street east of the project. These trips would continue to Goddard Street and Wallace Street to connect with Winchester Street.

BETA Comment 1: *The estimated vehicle generation on Christina Street to the east appears reasonable and would not significantly increase traffic volumes. Very little traffic would use Charlemont Street and Roland Street to the east of the project. It is noted that if there is an incident, crash or construction on Needham Street, traffic volumes may be temporarily higher on local roadways to the east.*

BETA Comment 2: *As noted in previous review comments for this project, the speed of vehicles on Christina Street, Goddard Street, and Wallace Street east of the project may be a concern. The Applicant has agreed to monitor traffic volume and speed on these roadways before and after occupancy and work with the City to identify traffic measures to mitigate impacts as needed.*

Travel Time Runs

The vehicle travel time runs show that Needham Street provides a faster route to reach Winchester Street to the north than the Christina Street, Roland Street, Charlemont Street, and Goddard Street. Vehicles traveling to and from the southeast would be expected to use Goddard and Wallace Streets to Christina Street as they provide a more direct route than Charlemont and Roland Streets.

BETA Comment 3: *The travel time results appear reasonable. As noted in Comment 1 above, more traffic may temporarily use local roadways if there is an incident, crash, or construction on Needham Street,*

Ref: O:\10700s\10707 - Newton Northland Charlemont\Reference\New VHB Memo August 2023\BETA Memo resposne 8-18-23 to VHB memo 8-17-23.docx

ATTACHMENT B



To: City of Newton Planning Department

Date: 8/17/2023

Memorandum

Project #: 12239.02

From: Randall Hart, Principal
Matthew Duranleau, PE

Re: Neighborhood Traffic Review
The Northland Charlemont Street Development
Newton, Massachusetts

This memorandum has been developed to provide additional information on the potential traffic impacts of the proposed Charlemont Street development (the "Project") on the residential neighborhood to the east of the Project. As outlined in the Transportation Impact and Access Study (TIAS)¹ and the supplemental transportation overview memorandum² developed by VHB, the Project is expected to have minimal impacts on the transportation network. In addition, the minimal Project impacts are expected to be focused on the Needham Street corridor as the residential streets through the neighborhood east of the Site will not be a major access route to/from the Site. This memorandum highlights how most Site-generated traffic will use Needham Street to access the Site to/from the north and that the amount of traffic added to Christina Street east of the Site will be minimal.

The Project is proposed to replace the existing buildings on Site with two new buildings that will contain approximately 370 residential units. The existing buildings that will be removed currently contain approximately 170,000 square feet (sf) of industrial and research and development (R&D) space. The proposed Project will be accessed via Charlemont Street to the north and Christina Street to the south and two north-south roadways will be constructed on-Site linking Charlemont Street and Christina Street. There will be no direct access to the eastern portion of Charlemont Street east of the Site.

Project Trips Added to Local Roadway Network

The TIAS and the supplemental transportation overview memorandum provide a detailed summary of the proposed Project trip-generation and the total vehicle trips that will be added to the roadway network. In addition, the previous studies also documented the vehicle trips that are currently on the roadway generated by the existing industrial and R&D uses on-Site. From those materials, the total vehicle trips to be added to Christina Street and the residential neighborhood east of the Site have been identified.

Table 1 below summarizes the total Project-generated vehicle trips that are anticipated to be added to Christina Street and the residential neighborhood east of the Site.

¹ Transportation Impact and Access Study; The Northland Charlemont Street Development; Newton, Massachusetts; prepared by VHB; revised February 2023.

² Revised Site Plan Transportation Overview Memorandum; The Northland Charlemont Street Development; Newton, Massachusetts; prepared by VHB; May 18, 2023.

Table 1 Peak Hour Project Vehicle Trips Added to Christina Street

Christina Street (east of the Project Site)	AM Peak Hour		PM Peak Hour	
	Eastbound	Westbound	Eastbound	Westbound
Project Trips to/from Site ^a	+15 vehicles	+5 vehicles	+7 vehicles	+ 11 vehicles
Existing Vehicle Trips to/from Site ^b	-1 vehicle	-5 vehicles	-4 vehicles	-1 vehicle
Change in Vehicle Trips	+14 vehicles	+0 vehicles	+3 vehicles	+10 vehicles

a Project-generated trips based on trip generation and trip distribution presented in previous TIAS and supplemental memo.
 b Existing trips generated by the uses on Site estimated based on ITE projections presented in previous TIAS and supplemental memo and trip distribution developed for the project adjusted to account for existing site driveway locations and land uses.

As shown in Table 1, between 0 and 14 vehicle trips will be added to Christina Street east of the Site during the peak hours when taking into account the new trips to be generated by the Project as well as the existing trips to the Site that will be eliminated. In the peak period and direction (eastbound in the morning), this translates to one new vehicle trip on Christina Street every 4-to-5 minutes. Of these new vehicle trips in the neighborhood, most will travel via Christina Street and Goddard Street and will not impact the Roland Street and Charlemont Street neighborhoods.

Travel Time Runs

In the TIAS, it was assumed that most traffic accessing the Site to/from the north would travel on Needham Street as opposed to Winchester Street and the residential streets between Winchester Street and the Site. To confirm this assumption, travel time runs were conducted between the area of the Site and Winchester Street north of Needham Street to determine which route would provide the quickest path of travel to/from points north. Three route alternatives connecting the proposed development and Winchester Street north of Needham Street were analyzed:

- › **Route 1:** Between Christina Street and Winchester Street north of Needham Street via Christina Street, Roland Street, Charlemont Street, and Winchester Street
- › **Route 2:** Between Christina Street and Winchester Street north of Needham Street via Christina Street, Goddard Street, and Winchester Street
- › **Route 3:** Between Charlemont Street and Winchester Street north of Needham Street via Charlemont Street, Needham Street, and Winchester Street

Travel time runs were conducted on Wednesday August 9, 2023, using the behavior of a typical driver, including going 5 to 10 mph over the speed limit on Winchester Street and Needham Street when possible. Travel time runs were conducted in both the northbound and southbound directions during the typical commuter peak times of 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM. Two-to-three runs for each route in each direction were conducted during each peak period to represent an average drive time.

Figure 1 illustrates the routing of each travel path and the averages of the travel time runs for each route in each direction and Table 2 presents the averages of the travel time runs.

Figure 1 Map of Routes with Average Travel Times

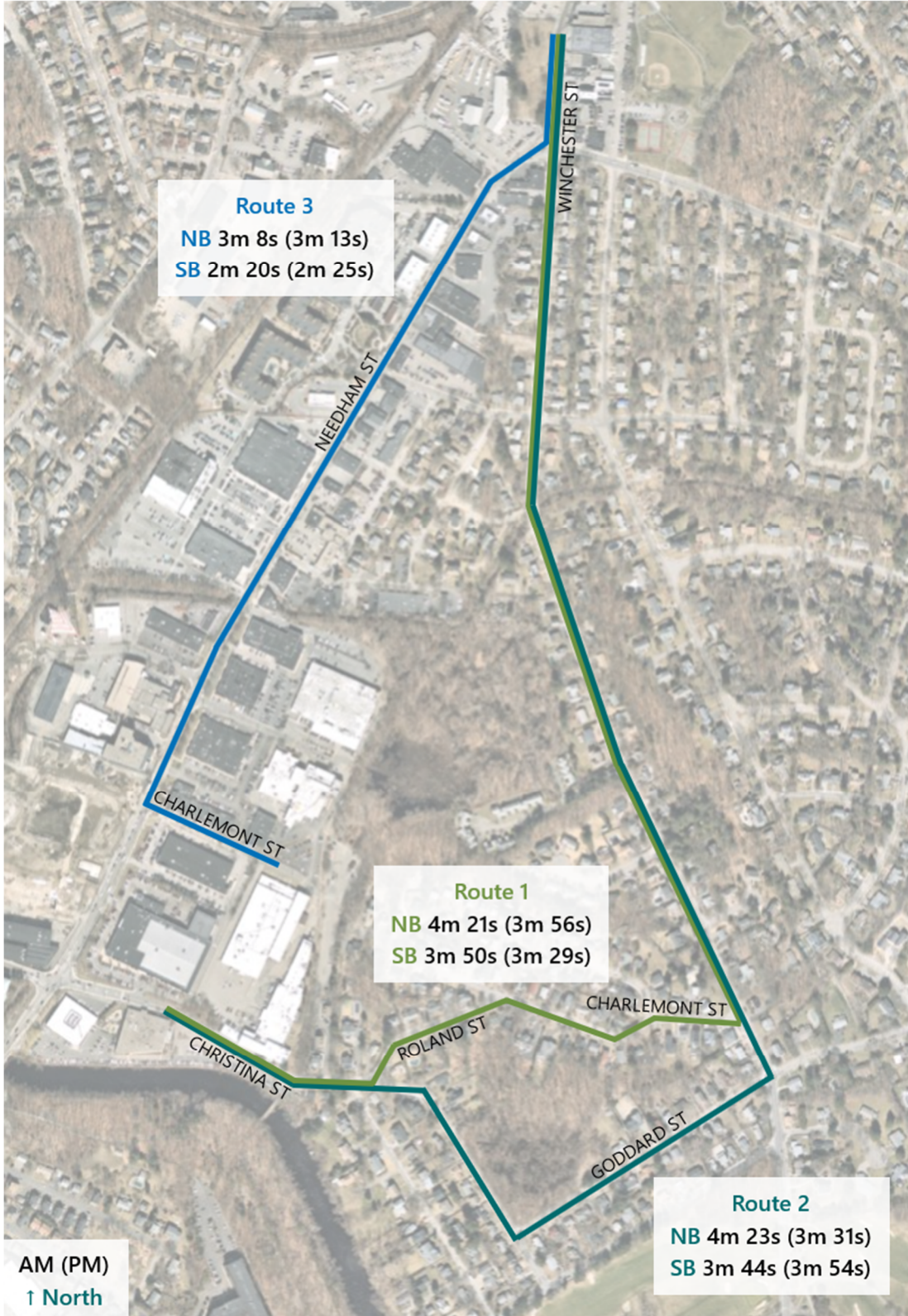


Table 2 Average Travel Times

Travel Path	AM Peak (7-9AM)		PM Peak (4-6PM)	
	Northbound	Southbound	Northbound	Southbound
Route 1 (via Charlemont St and Winchester St)	4m 21s	3m 50s	3m 56s	3m 29s
Route 2 (via Goddard St and Winchester St)	4m 23s	3m 44s	3m 31s	3m 54s
Route 3 (via Needham St)	3m 8s	2m 20s	3m 13s	2m 25s

Based on average of 2-3 travel time runs by vehicle in each direction on Wednesday, August 9, 2023. Specific routing of each travel path illustrated in Figure 1.

As shown in Figure 1 and Table 2, the quickest travel route between the Site and points north on Winchester Street is via Needham Street. Traveling between points north on Winchester Street and the future Site driveway on Charlemont Street via Needham Street is over one minute faster in the morning and over 15 seconds faster in the evening than traveling between points north on Winchester Street and the future Site driveway on Christina Street via Winchester Street and the residential neighborhood streets. Therefore, it is expected that most traffic to/from points north will avoid the residential neighborhood and will travel on Needham Street instead.

In addition, it should be noted that traveling northbound through the residential neighborhood is frequently quicker via Goddard Street than via Roland Street and Charlemont Street. For traffic traveling to/from the south and east through the residential neighborhood, it is expected the preferred route will be via Goddard Street as that provides a shorter travel path than via Roland Street and Charlemont Street.

Attachments

- › Christina Street Project Trip Calculations
- › Travel Time Run Details

Change in Vehicle Trips on Christina Street due to Project

**New Project Trips
BASED ON MAY 2023 SITE PLAN**

**Christina Street - west of Site
WEEKDAY MORNING**

	Existing	No Build	Project Trips	Build
EB	210	220	15	235
WB	335	350	5	355
Total	545	570	20	590

**Existing Site Trips
BASED ON ITE**

**Christina Street - west of Site
WEEKDAY MORNING**

	Total Existing Site Trips	% to Christina	Site Trips on Christina
Exit/EB	25	4%	1
Enter/WB	129	4%	5
Total	154		6

**Change in Vehicle Trips on
Christina Street**

Net Change	New Trip Added Every X
14	4.3
0	n/a

**Christina Street - west of Site
WEEKDAY EVENING**

	Existing	No Build	Project Trips	Build
EB	245	265	7	272
WB	285	305	11	316
Total	530	570	18	588

**Christina Street - west of Site
WEEKDAY EVENING**

	Total Ex. Site Trips	% to Christina	Site Trips on Christina
Exit/EB	110	4%	4
Enter/WB	21	4%	1
Total	131		5

Net Change	New Trip Added Every X
3	20.0
10	6.0

**Christina Street - west of Site
SATURDAY MIDDAY**

	Existing	No Build	Project Trips	Build
EB	110	125	10	135
WB	210	230	10	240
Total	320	355	20	375

**Christina Street - west of Site
SATURDAY MIDDAY**

	Total Ex. Site Trips	% to Christina	Site Trips on Christina
Exit/EB	13	4%	1
Enter/WB	13	4%	1
Total	26		2

Net Change	New Trip Added Every X
9	6.7
9	6.7

Note: Based on May 2023 Traffic Memo

Note: Existing site trips based on ITE for the existing uses on site (Table 8 in the TIA)
Note: Existing TD estimated based on Project trip TD and adjusted for location of existing driveways and to present a conservative analysis.

Charlemont Street Development Neighborhood Traffic Review

Travel Time Runs

Conducted on Wednesday, August 9, 2023.

AM (7:00-9:00 AM):

	Route 1		Route 2		Route 3	
	NB	SB	NB	SB	NB	SB
Run 1	4:09	3:41	4:27	3:42	3:06	2:04
Run 2	4:32	3:58	4:18	3:45	3:10	2:35
Average	4:21	3:50	4:23	3:44	3:08	2:20

PM (4:00-6:00 PM):

	Route 1		Route 2		Route 3	
	NB	SB	NB	SB	NB	SB
Run 1	3:57	3:20	2:56	4:20	3:18	2:17
Run 2	3:42	3:49	3:23	3:55	3:00	2:32
Run 3	4:10	3:19	4:15	3:27	3:23	2:28
Average	3:56	3:29	3:31	3:54	3:13	2:25

Notes:

Does not include the time that it took to enter and exit the driveways.

Observer alternated between routes rather than running the same route multiple times in a row.

Observer acted like a typical driver, going 5-10 mph over the speed limit when possible and running some yellows.

Time recorded in minutes : seconds

Route Details:

Route 1 between EZ Storage driveway on Christina Street west of site and 56 Winchester Street north of Needham Street via the following roadways: Christina Street, Roland Street, Charlemont Street, and Winchester Street.

Route 2 between EZ Storage driveway on Christina Street west of site and 56 Winchester Street north of Needham Street via the following roadways: Christina Street, Goddard Street, and Winchester Street.

Route 3 between the driveway across from the site on Charlemont Street and 56 Winchester Street north of Needham Street via the following roadways: Charlemont Street, Needham Street, and Winchester Street.

ATTACHMENT C



To: Ms. Katie Wewell
Planning and Development Dept.
City of Newton

Date: August 2, 2023

Memorandum

Project #: 12239.02

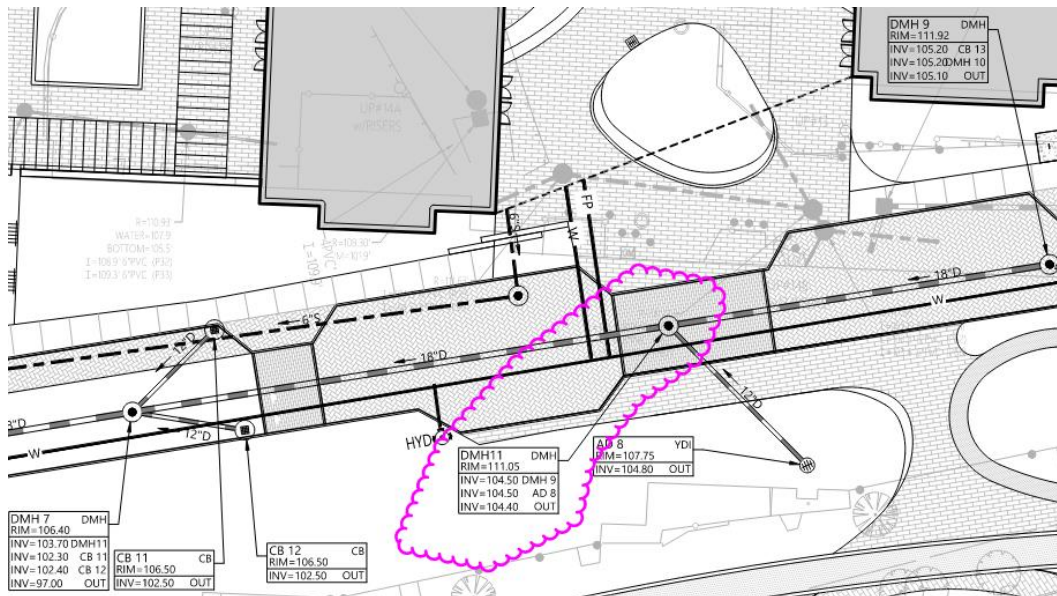
From: Curtis Quitzau, P.E.

Re: The Northland Charlemont Development

We are very pleased that we have closed all but a few minor stormwater design review comments on the site plans as noted by your peer review consultant in their July 18, 2023 memo, and to that end this memo addresses those few remaining comments:

Page 5 Comment i. – This comment “recommends” providing information on the plans not required by DEP’s nor the City’s regulations, and certainly are not details normally required on preliminary design plans (and for that matter, are not typically necessary on final design documents either). We previously noted that we verified no pipe conflicts in our previous responses to comments, and since pipe conflicts was HW’s stated concern we expect our response alone should be sufficient.

Page 6 comment I. – We have a small difference of opinion about whether a drain manhole is needed/required at the area drain connection, but we added the manhole for expediency to close out the comments. Please see a screen capture from the re-plotted site plan below.



Page 9 comment 9 – We have corrected the plotting/drafting issue and the plan title is now readable. Please see a screen capture from the re-plotted site plan below.



Page 9 comment 9.c. – Drawing edits are not required, but we updated the LTPPP to remove the references to mulch. A copy of the corrected pages are attached.

We trust that we have satisfactorily addressed the peer review comments and we are grateful to HW for their very thorough review of the site plans and stormwater design, and confirmation that the stormwater design complies with State and local requirements.

- › Manufacturer's specifications and instructions for cleaning the sediment removal row is provided as an attachment to this section.
- › Emergency overflow pipes will be examined at least once each year and verified that no blockage has occurred.
- › System will be observed after rainfalls to see if it is properly draining.

D.2.4 Roof Drain Leader

Roof runoff from the directed to subsurface sand filters or biofiltration basins.

- › Perform routine roof inspections quarterly.
- › Keep roofs clean and free of debris.
- › Keep roof drainage systems clear.
- › Keep roof access limited to authorized personnel.
- › Clean inlets twice per year or as necessary.

D.3 Vegetated Stormwater Management Devices

D.3.1 Biofiltration Basins

The biofiltration basins are excavated shallow surface depressions planted with specially-selected native vegetation to treat and capture runoff. Each biofiltration basin is underlain by a gravel infiltration bed with four-inch perforated pipe underdrains to ensure adequate drainage. Each biofiltration basin also has an overflow structure to handle larger storm volumes. A location map for the biofiltration basins can be found in Section E.5 Maintenance Checklists and Device Location Maps.

The vegetation in the biofiltration basins serves to filter runoff — improving water quality and reducing runoff quantity — and the root systems can enhance infiltration. The soil medium filters out pollutants and allows storage and infiltration of stormwater runoff; and the infiltration bed provides additional volume control. Properly designed biofiltration basins may mimic natural forest ecosystems through species diversity, density and distribution of vegetation, and the use of native species, resulting in a system that is resistant to insects, disease, pollution, and climatic stresses.

Biofiltration basins require routine maintenance (similar to conventional landscaping maintenance) to ensure that the system both functions well as a stormwater management practice while also maintaining an aesthetic quality compatible with the surrounding land uses.

Initial Post-Construction Inspection

- › During the initial period of vegetation establishment pruning and weeding are required twice in first year by contractor.
- › Any dead vegetation found after the first year must be replaced.
- › Regular watering may be required initially to ensure proper establishment of new vegetation.

Long-Term Maintenance

- › Weeds and invasive plant species shall be removed by hand.
- › Leaf litter and other detritus shall be removed twice per year.
- › If needed to maintain aesthetic appearance, perennial plantings may be trimmed at the end of the growing season.
- › Trees and shrubs should be inspected twice per year to evaluate health and attended to as necessary.
- › Fertilizers should not be used in the biofiltration basin as excessive nutrients in the biofiltration basin may migrate to the underdrain and be discharged to adjacent surface waters.
- › Test pH of the soils in the planting bed annually. If the pH is below 5.2, limestone should be applied to increase it. If the pH is above 8.0, iron sulfate plus sulfur should be added to reduce it.
- › Biofiltration basins may require watering during periods of extended drought.

Inspections and Cleaning

- › Biofiltration basins shall be inspected twice during for the first year and annually thereafter for sediment buildup, erosion, vegetative conditions, etc. If sediment build-up is found, sediment removal and core aeration or cultivating of un-vegetated areas may be required to ensure adequate filtration.
- › The inflow location should be inspected annually for clogging. Sediment build up is a common problem where runoff leaves an impervious surface and enters a vegetative or earthen surface. Any built-up sediment should be removed to prevent runoff from bypassing the facility. Sources of sediment should be prevented.
- › The overflow structure should be inspected annually to ensure that they are functioning.
- › Inspect biofiltration basins after a large storm event to ensure that proper drainage is occurring. Water that remains ponded on the surface of the biofiltration basin after 48 hours of dry weather could indicate a problem with the subsurface drainage system or clogging of the underdrain. While the plants selected for the biofiltration basin are tolerant of wet soils, they are not wetland