



# CITY OF NEWTON, MASSACHUSETTS

City Hall

1000 Commonwealth Avenue, Newton, MA 02459-1449

Telephone: (617) 796-1120 TDD/TTY: (617) 796-1089 Fax: (617) 796-1086

[www.newtonma.gov](http://www.newtonma.gov)

Ruthanne Fuller  
Mayor

## ZONING BOARD OF APPEALS

**To:** Zoning Board of Appeals Members  
**From:** Brenda Belsanti, ZBA Clerk  
**Date:** December 07, 2022  
**Subject:** Materials for **December 21, 2022** Public Hearing

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### Packet 1

Hello,

Please see the following supplemental materials for the upcoming hearing on December 21, 2022 Public Hearing. The following board members are scheduled to sit: *Brooke Lipsitt (Chair), William McLaughlin, Betsy Sweet, Michael Rossi, and Stuart Snyder. Denise Chicoine will be present sitting as an alternate.*

1. December 21, 2022 Agenda
2. ZBA Memo dated December 16, 2022.
3. UDC Memo dated October 24, 2022.
4. Department of Engineering Memo dated November 15, 2022
5. Zoning Review Memo dated November 17, 2022.
6. Letter for Schlesinger & Buchbinder dated November 22, 2022.
7. Revised waivers dated November 18, 2022.
8. Email to Chair Lipsitt from Marcia Johnson dated November 2, 2022.

Thank you,

Brenda Belsanti

**[bbelsanti@newtonma.gov](mailto:bbelsanti@newtonma.gov)** |



# CITY OF NEWTON, MASSACHUSETTS

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Ruthanne Fuller  
Mayor

## ZONING BOARD OF APPEALS

Brenda Belsanti, Zoning Board Clerk

**The Zoning Board of Appeals will hold a public hearing on Wednesday, December 21, 2022 at 7:00 pm. This is a hybrid meeting that will take place in the City Council Chamber (Room 207) and virtually via ZOOM. To view and participate in this meeting using Zoom, click this link:**

**<https://us02web.zoom.us/j/85620612720> or +13017158592,,85620612720#**

### AGENDA

12/21/22

**A public hearing of the Newton Zoning Board of Appeals will be held in person and virtually via Zoom on Wednesday, December 21, 2022 at 7:00 p.m. on the following petitions:**

1. **#09-22** 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 comprehensive permit application and associated plans and documents are on file with the Zoning Board of Appeals' office in Newton City Hall at 1000 Commonwealth Avenue, and are available for review online at <https://www.newtonma.gov/government/planning/zoning-board-of-appeals/-fsiteid-1#!/>

The location of this meeting/event is wheelchair accessible and Reasonable Accommodations will be provided to persons with disabilities who require assistance. If you need a Reasonable Accommodation, please contact the city of Newton's ADA/Section 504 Coordinator, Jini Fairley, at least two business days in advance (2 weeks for ASL or CART) of the meeting/event: [jfairley@newtonma.gov](mailto:jfairley@newtonma.gov) or (617) 796-1253. The city's TTY/TDD direct line is: 617-796-1089. For the Telecommunications Relay Service (TRS), please dial 711.



Ruthanne Fuller  
Mayor

**City of Newton, Massachusetts**  
Department of Planning and Development  
Urban Design Commission

Telephone  
(617) 796-1120  
Telefax  
(617) 796-1142  
TDD/TTY  
(617) 796-1089  
www.newtonma.gov

**Barney Heath**  
Director

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**DATE:** October 24, 2022  
**TO:** Zoning Board of Appeals  
**FROM:** Urban Design Commission  
**RE:** 160 Charlemont Street / 56 Christina Street  
**CC:** Barney Heath, Director of Planning and Community Development  
Jennifer Caira, Deputy Director  
Katie Whewell, Chief Planner  
Petitioner

Section 22-80 of the Newton City Ordinances authorizes the Urban Design Commission to act in an advisory capacity on matters of urban design and beautification. At their regular meeting on October 19, 2022, the Newton Urban Design Commission (UDC) reviewed the proposed project at 160 Charlemont Street / 56 Christina Street for design. The Urban Design Commission had the following comments and recommendations:

The UDC commented that the project looks good overall and looks forward to seeing more of the architecture as the project progresses.

### **Development Program**

- The UDC asked about the reason for retail on Charlemont Street. The applicant responded that it is to draw daytime activity, it will most likely be destination kind of retail, idea is to create activation. The applicant also commented that the retail on Christina Street is conceived as a Bike Café for people passing through on a cycle.

### **Site Plan, Circulation and Connectivity**

- The UDC commented that the overall pedestrian connectivity is well done, including the proposal to connect to Christina Street. UDC asked what is going to happen when you cross Christina Street. The UDC was very interested in and supportive of the relationship of the development with the Charles River, and specifically asked about how it will provide a pedestrian connection to the river? The applicant responded on the other side of the river is Blue Herring Trail, and it connects to Kendrick Street and runs across under Needham Street bridge, then there is a continued (rough) pathway that connects to the bottom of the Greenway. There have been discussions of creating stair connection to the Greenway. City is exploring ways

to improve the connectivity from the Greenway to Newton Highlands by using the mitigation funds provided by NND project. The applicant also indicated that the larger concept was based upon the rebuilding of the existing bridge so it can be operational at some point in the future.

- The UDC asked if the bridge will be rebuilt and how will it be funded? The applicant responded that the City started an initiative to get it rebuilt, has also done a feasibility study. The City has been working to get public funding for the bridge and there are some grant opportunities that the City has been trying to take advantage of, it's a work in progress, and there's a lot of local neighborhood support as well.
- Open space and pedestrian connections diagrams are very compelling with respect to Charlemont, the river and so forth. The UDC appreciates that this plan will help with future off-site connections as there are other Land Use transitions in the area.
- The UDC asked if the applicant had any concerns that Entrance Drive might be used as a cut through. The applicant responded that they are not concerned about it, there are cut throughs that are available on Charlemont St before you get to this location. A driver can cut behind 260 Needham St and 300 Needham St to get from Christina St to Charlemont St. This will be controlled configuration, there will be speed barriers to control speed, they don't envision this to be an issue. It's also the reason why some of the drive is under the building, so there are cues that you are in a neighborhood and shouldn't be speeding. Also, pedestrian improvements along some sections of the driveway as you get to the end of Charlemont will help.

### **Building Massing, Height, and Architecture**

- The UDC commented that the proposed setback and stepping down of the building height toward residential neighborhood is important. The UDC appreciated the concept of a toned-down color palette for the building façade but would like to see a more comprehensive presentation and detail on the façade design as the project progresses.

### **Landscape, Streetscape, and Open Space**

- The UDC commented that it is terrific that there is a lot of focus on providing useable open space and a green landscape. Appreciate the blurring of public and private open space. The retail would benefit from access to open space.
- The UDC asked how much of the landscape is over structure? The applicant responded that a good portion of the northern courtyard has garage below, they will explore to see if they are able to provide 3 to 4 feet of soil above the garage structure, otherwise plants will need to be in planters.

### **Parking**


- The UDC asked about the bicycle storage. The applicant responded there are number of rooms inside the building on two floors, and there will be bike storage outside. The UDC recommended the bike storage should be provided in spaces that are easy to get to, so you don't need to take an elevator or stairs to encourage people to use their bikes. The applicant agreed and mentioned that they will show bike parking locations at the next discussion.
- While supportive, the UDC asked about the proposed parking ratio and why its significantly lower than some other projects. The applicant responded that this project is different in that it has better access to a variety of public transportation services including the shuttle systems

that are being put in place for NND (providing access to Newton Highlands), and bus service on Needham Street.

City of Newton

**DEPARTMENT OF PUBLIC WORKS  
ENGINEERING DIVISION  
OFFICE OF THE CITY ENGINEER  
1000 Commonwealth Avenue  
Newton Centre, MA 02459-1449**

Ruthanne Fuller  
Mayor

**DATE:** November 15, 2022  
**TO:** Barney Heath, Director of Planning  
**FROM:** Louis M. Taverna, P.E., City Engineer   
**RE:** Sewer Inflow and Infiltration Mitigation Fee  
160 Charlemont St, 40B Development Project  
Ordinance No. B-45

The City Engineer has calculated the sewer infiltration/inflow mitigation cost for this 40B project. See calculations below. The total mitigation cost for the assumption of low flow fixtures throughout the project is \$4,133,794. The existing sewer flow at this site is 1,810 gal/day (at 56 Christina St). This calculation of proposed sewer flow (in gallons per bedroom per day) is consistent with recent previous sewer flow calculations for other developments in Newton, using the 65 gal/bedroom/day rate.

Sewer Ordinance No. B-45 states the following: For projects subject to a special permit, the City Council, for good cause shown, may abate in whole or in part the infiltration/inflow mitigation fee for a particular dwelling, building, or project.

Waiver request:

- a) *The expected impact of the development on sewer infiltration/inflow.* The development will propose to add an average of 50,420 gallons per day to the existing city sewer system. The existing sewer flow from the site is estimated to be 1,810 gallons per day. The city's sewer system in this area flows westerly downstream to the sewer interceptor system along the Charles River, where it discharges into the MWRA's interceptor sewer via the Quinobequin Road sewer pump station.
- b) *Whether infiltration/inflow mitigation has previously been conducted in the general area and to what extent.* This project lies in sewer area 9. Sewer area 9 and the surrounding sewer areas will undergo substantial work related to sewer infiltration/inflow removal, as part of the city's sewer capital improvement program. The estimated cost of the sewer infiltration/inflow project is \$5 million to \$10 million.
- c) *Whether the abatement will benefit the health and well-being of the public and is reasonably in the best interest of the city.* At the request of the Planning Department, an abatement of 75% of the infiltration/inflow mitigation fee, based on low flow fixtures, is recommended by the City Engineer. This would allow the remaining 25% of the fee, or \$1,033,448 to be used toward the design and construction of sewer improvements in upcoming sewer project areas. The developer should consider dedicating the abated amount of the fee, or \$3,100,346, towards other mitigation purposes, as recommended by the Planning Department.

Telephone: (617) 796-1020 • Fax: (617) 796-1051 • [Ltaverna@newtonma.gov](mailto:Ltaverna@newtonma.gov)

Calculation of sewer infiltration/inflow mitigation:

Proposed Sewer Flow:

700 total bedrooms x 65 gal/bedroom/day = 45,500 gal/day

Restaurant, 132 seats x 35 gal/seat = 4,620 gal/day

Retail, 6,000 sq ft. x 50 gal/1000 sq ft = 300 gal/day

Total = 50,420 gal/day

Existing Sewer Flow:

Existing property flow at 160 Charlemont St = 0, water meter removed in year 2000.

Existing property flow at 56 Christina St = 1,810 gal/day

Net flow =  $(50,420 - 1,810)$  gpd x 4:1 x \$21.26 (as of 1/1/2022) = \$4,133,794

cc: Jen Caira  
Katie Whewell  
Cat Kemmett  
Michael Gleba  
John Daghlian  
Jonah Temple

City of Newton  
 1000 Commonwealth Avenue  
 Newton Centre, MA 02459

# UB Consumption History Report

Account Number: 1032608200001  
 Customer # Name: 50017053 H C STARCK INC  
 Service: Water  
 Mfr Meter Number: 830300000900  
 Cd Read Date Time: 09/28/2022  
 Location: 56 CHRISTINA ST  
 Status: Active

Account Number	Customer # Name	Usage	Repl	Usage Charge	Amt Billed	Amt
1WATR - 1 MET.	AMCO09112756	A 09/28/2022	437	5,160.06	13,489.28	
1WATR - 1 MET.	AMCO09112756	A 06/26/2022	215	2,354.75	6,829.20	
1WATR - 1 MET.	AMCO09112756	A 03/30/2022	91	891.55	3,398.12	
1WATR - 1 MET.	AMCO09112756	A 12/20/2021	130	1,351.75	4,477.25	
1WATR - 1 MET.	AMCO09112756	A 09/27/2021	333	3,747.15	10,094.26	
1WATR - 1 MET.	AMCO09112756	A 06/28/2021	214	2,342.95	6,801.53	
1WATR - 1 MET.	AMCO09112756	A 03/29/2021	125	1,292.75	4,338.90	
1WATR - 1 MET.	AMCO09112756	A 12/21/2020	116	1,186.55	4,089.87	
1WATR - 1 MET.	AMCO09112756	A 09/25/2020	288	3,207.77	8,835.84	
1WATR - 1 MET.	AMCO09112756	A 06/26/2020	152	1,516.15	4,933.99	
1WATR - 1 MET.	AMCO09112756	A 03/24/2020	92	850.15	3,339.76	
1WATR - 1 MET.	AMCO09112756	V 12/18/2019	79	705.85	2,994.35	
1WATR - 1 MET.	AMCO09112756	A 09/25/2019	259	2,701.20	7,770.65	
1WATR - 1 MET.	AMCO09112756	A 06/26/2019	81	714.80	2,411.00	
1WATR - 1 MET.	AMCO09112756	A 03/27/2019	80	703.90	2,384.90	
1WATR - 1 MET.	AMCO09112756	A 12/20/2018	66	551.30	2,019.50	
1WATR - 1 MET.	AMCO09112756	A 09/27/2018	191	1,913.80	5,271.95	
1WATR - 1 MET.	AMCO09112756	A 06/26/2018	91	823.80	2,588.20	
1WATR - 1 MET.	AMCO09112756	A 03/29/2018	91	823.80	2,588.20	
1WATR - 1 MET.	AMCO09112756	A 12/21/2017	117	1,107.20	3,239.50	
1WATR - 1 MET.	AMCO09112756	A 09/27/2017	244	2,488.58	6,411.46	
1WATR - 1 MET.	AMCO09112756	A 06/27/2017	120	1,109.00	3,214.00	
1WATR - 1 MET.	AMCO09112756	A 03/29/2017	78	663.80	2,201.80	
1WATR - 1 MET.	AMCO09112756	A 12/21/2016	66	536.60	1,912.60	
1WATR - 1 MET.	AMCO09112756	A 09/28/2016	174	1,674.51	4,504.38	
1WATR - 1 MET.	AMCO09112756	A 06/24/2016	87	766.00	1,881.25	
1WATR - 1 MET.	AMCO09112756	A 03/28/2016	87	766.00	1,881.25	
1WATR - 1 MET.	AMCO09112756	A 12/22/2015	166	1,506.00	3,601.75	
1WATR - 1 MET.	AMCO09112756	A 09/28/2015	344	3,260.61	7,704.87	
1WATR - 1 MET.	AMCO09112756	A 06/25/2015	141	1,105.44	2,772.72	
1WATR - 1 MET.	AMCO09112756	A 03/25/2015	78	554.82	1,410.66	
1WATR - 1 MET.	AMCO09112756	A 12/22/2014	239	1,956.51	4,497.14	
1WATR - 1 MET.	AMCO09112756	A 09/26/2014	82	589.78	1,478.08	
1WATR - 1 MET.	AMCO09112756	A 06/24/2014	93	660.23	1,671.43	
1WATR - 1 MET.	AMCO09112756	A 03/26/2014	181	1,400.31	3,502.71	
1WATR - 1 MET.	AMCO09112756	A 12/19/2013	55	361.80	932.85	
1WATR - 1 MET.	AMCO09112756	A 09/26/2013	106	767.71	1,937.37	
1WATR - 1 MET.	AMCO09112756	A 06/25/2013	83	554.57	1,409.76	
1WATR - 1 MET.	AMCO09112756	A 03/25/2013	60	382.00	982.70	
1WATR - 1 MET.	AMCO09112756	A 12/19/2012	52	328.08	849.26	
1WATR - 1 MET.	AMCO09112756	A 09/26/2012	233	2,036.67	4,403.84	
1WATR - 1 MET.	AMCO09112756	A 06/26/2012	104	698.60	1,762.44	
1WATR - 1 MET.	AMCO09112756	A 03/28/2012	60	368.40	947.10	
1WATR - 1 MET.	AMCO09112756	A 12/12/2011	57	413.90	1,059.45	
1WATR - 1 MET.	AMCO09112756	A 09/15/2011	172	1,223.08	3,051.80	
1WATR - 1 MET.	AMCO09112756	A 06/23/2011	575	4,148.30	10,065.85	
1WATR - 1 MET.	AMCO09112756	A 03/23/2011	3,673	21,538.30	52,107.35	
1WATR - 1 MET.	AMCO09112756	E 12/26/2010	647	4,681.10	11,353.93	
1WATR - 1 MET.	AMCO09112756	I 09/22/2010	101	1,165.57	2,891.95	
1WATR - 1 MET.	AMCO09112756	A 06/25/2010	74	355.14	1,102.96	
1WATR - 1 MET.	AMCO09112756	A 03/27/2010	80	62,655		
1WATR - 1 MET.	AMCO09112756	A 06/25/2010	8026831			

49 QUARTERS x 3 MONTHS / QUARTER x 30 DAYS / MONTH = 4410 DAYS  
 10,673 HCF x 748 GAL / 1 HCF = 1,810 GAL / DAY





Ruthanne Fuller  
Mayor

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

Telephone  
(617) 796-1120  
Telefax  
(617) 796-1142  
TDD/TTY  
(617) 796-1089  
www.newtonma.gov

Barney S. Heath  
Director

## ZONING REVIEW MEMORANDUM

Date: November 17, 2022

To: John Lojek, Commissioner of Inspectional Services

From: Jane Santosuosso, Chief Zoning Code Official  
Katie Whewell, Chief Planner for Current Planning

Cc: Stephen J. Buchbinder, Attorney  
Northland 160 Charlemont LLC  
Barney S. Heath, Director of Planning and Development  
Jonah Temple, Deputy City Solicitor

RE: Request for a Comprehensive Permit to construct a mixed-use development with 410 residential units, 10,689 square feet of commercial space and 486 on-site parking stalls

**Petitioner: Northland 160 Charlemont LLC**

<b>Site:</b> 56 Christina Street and 160 Charlemont	<b>SBL:</b> 83030 0009 and 83030 0010
<b>Zoning:</b> MU1	<b>Lot Area:</b> 304,308 square feet
<b>Current use:</b> Factory, Research and development	<b>Proposed use:</b> Residential and retail/restaurant

### BACKGROUND:

The subject site is comprised of two parcels which are to be combined resulting in a single 304,308 square foot through lot with frontage on Charlemont and Christina Streets. The existing structures on each lot are to be razed. A Comprehensive Permit under MGL Chapter 40B is requested to construct a nine-story mixed use building with 410 residential units, 486 parking stalls and 10,689 square feet of first floor commercial.

The following review is based on plans and materials submitted to date as noted below.

- Zoning Review Application, prepared by Stephen J Buchbinder, attorney, dated 7/15/2022
- Layout and Materials Plan, signed and stamped by Curtis R. Quitzau, Engineer, dated 7/15/2022
- Below Grade and Ground Level Parking plans, signed and stamped by James J. Gray, architect, dated 7/14/2022
- Floor plans and elevations, signed and stamped by James J. Gray, architect, dated 7/14/2022
- Exterior Elevation, prepared by Davis Square Architects, dated 8/3/2022
- Summary of Relief and Waivers Requested, prepared by Stephen J Buchbinder, attorney, submitted 7/15/2022
- Charlemont Parking Calculation, prepared by Stephen J. Buchbinder, attorney, submitted 7/15/2022

## ADMINISTRATIVE DETERMINATIONS:

1. The petitioner proposes to raze two existing structures on two separate lots, combine the lots and construct a nine-story mixed use building with 410 residential units, ground floor retail and restaurant space, a 471-stall parking garage and 15 surface parking stalls. Per section 4.4.1, a Comprehensive permit in lieu of a special permit is required for the following uses:
  - ground floor residential uses with residential units above
  - standalone ATM
  - fast food establishment
  - for-profit education
  - restaurant with more than 50 seats
2. Section 4.2.2.A.2 requires 10,000 square feet of lot area per each dwelling unit in the MU1 zoning district. The petitioner proposes to construct 410 dwelling units, resulting in a lot area per unit of 742 square feet. The petitioner requires a Comprehensive Permit in lieu of a variance for relief from the lot area per unit requirements of section 4.2.2.A.2.
3. The petitioner proposes to construct a nine-story 639,047 square foot mixed use building. Per section 4.2.2.B.1, a special permit is required for any development in the MU1 district of 20,000 square feet or more of new gross floor area. The petitioner seeks relief from the special permit requirements through a Comprehensive Permit.
4. Per sections 4.2.2.B.3 and 4.2.3, the maximum number of stories allowed in the MU1 district is three by right, and four by special permit. The petitioner seeks relief from the special permit requirement through a Comprehensive Permit to allow for construction of a building with nine stories.
5. Per section 4.2.3 the required front setback in the MU1 district for a building with more than two stories is equal to the height of the building, or 108.3 feet in this case. The petitioner proposes front setbacks of 10 feet from Charlemont Street and 39 feet from Christina Street, requiring a Comprehensive Permit in lieu of a variance.
6. Per section 4.2.3 the front setback for parking is 20 feet. The petitioner proposes to construct four parking stalls within 8 feet of Charlemont Street, requiring a Comprehensive Permit in lieu of a variance.
7. The maximum height allowed in the MU1 district is 36 feet by right and 48 feet by special permit per section 4.2.3. The proposed height of the building is 108.3 feet. To exceed the by right height of 24 feet (up to 48 feet by special permit) requires relief from section 4.2.3 through the Comprehensive Permit in lieu of a special permit.
8. The maximum FAR allowed per section 4.2.3 is 2.00 for a building with the maximum allowable four stories in the MU1 zoning district. The petitioner proposes a nine story building with an FAR of 1.85, requiring no relief.
9. Per section 5.1.3.B, whenever there is an extension of gross floor area or change of use which increases the parking requirements, the parking is to be complied with per the formula found in this section of A-

B+C to equal the number of stalls required, where “A” is the proposed number of parking stalls required, “B” is the number of stalls currently required and “C” is the number of stalls that physically exist. The petitioner seeks a Comprehensive Permit in lieu of a special permit to waive this requirement.

- 10. Section 5.1.3.E requires a special permit to allow for assigned parking stalls. To the extent that parking stalls will be assigned to individual unit owners or a particular use, a waiver through the Comprehensive Permit is required in lieu of a special permit.
- 11. The petitioner proposes to construct 471 parking stalls in a basement level garage and 15 surface stalls for a total of 486 available stalls. The following parking calculation is presumed per the requirements found in section 5.4.1:

Use	Parking Regulation	Parking Required
410 Residential units	1.25 stall per unit	513 stalls
Restaurant 132 seats 15 employees	1 stall per 3 seats 1 stall per 3 employees	49 stalls
Retail 6,689 square feet 12 employees	1 stall per 300 square feet 1 stall per 3 employees	27 stalls
<b>TOTAL</b>		<b>589 stalls</b>

The petitioner seeks a special permit per section 5.4.1.A to reduce the residential parking requirement from two stalls per unit to 1.25 stalls per unit, resulting in a requirement of 513 stalls. With a proposed commercial parking requirement of 76 stalls, a total of 589 stalls are required per section 5.4.1.A. The petitioner intends to construct 486 parking stalls, requiring a waiver of 103 stalls is required through the Comprehensive Permit in lieu of a special permit per section 5.1.13.

- 12. Per section 5.1.7.A no parking stall in a facility containing five stalls or less may be located within a front setback or within five feet of a street. The petitioner proposes to construct four stalls along the Charlemont Street frontage, all located within the required front setback, requiring a waiver through the Comprehensive Permit in lieu of a special permit per section 5.1.13.
- 13. Per section 5.1.8.B.1, parking stalls must be at least 9 feet wide in facilities containing more than five stalls. The below grade facility contains 471 parking stalls with a width of 8.5 feet, requiring a waiver through the Comprehensive Permit in lieu of a special permit per section 5.1.13.
- 14. Per section 5.1.8.B.2, parking stalls must have a depth of at least 19 feet in facilities containing more than five stalls. The parking garage’s stalls are all 18 feet deep, requiring a waiver through the Comprehensive Permit in lieu of a special permit per section 5.1.13.
- 15. Section 5.1.8.B.4 requires that accessible stalls have a minimum depth of 19 feet. The accessible stalls are proposed with 18 foot depths, requiring a waiver through the Comprehensive Permit in lieu of a special permit per section 5.1.13. The 18-foot depth meets the minimum requirement of the Building Code.

16. Per section 5.1.8.C.1 and 2, a minimum aisle width of 24 feet for two-way traffic is required providing access to parking stalls. The 11 surface stalls on the eastern side of the building are serviced by a 22-foot wide aisle, requiring a waiver through the Comprehensive Permit in lieu of a special permit per section 5.1.13.
17. Per section 5.1.9.A, outdoor facilities containing more than five stalls must be screened from abutting streets and properties. To the extent that no screening is provided for the 11 surface stalls on the eastern side of the building, a waiver through the Comprehensive Permit in lieu of a special permit is required per section 5.1.13.
18. Per section 5.1.10, outdoor facilities containing more than five stalls used at night must provide security lighting maintaining a minimum intensity of one-foot candle on the entire surface of the parking facility. To the extent the petitioner does not intend to provide lighting at the minimum intensity for the 11 surface stalls on the eastern side of the building, a waiver through the Comprehensive Permit in lieu of a special permit per section 5.1.13 is required.
19. Section 5.1.12.B requires that off-street loading facilities be provided. With the proposed commercial space of 10,689 square feet, one off-street loading bay is required. To the extent necessary, the petitioner seeks a waiver from the off-street loading requirements through the Comprehensive Permit in lieu of a special permit per section 5.1.13.
20. Per section 5.4.2.B, a retaining wall of four feet or more in a setback requires a special permit. The petitioner proposes a retaining wall exceeding four feet along the western side lot line, requiring a special permit.
21. The petitioner seeks to waive the consent of the City Engineer as to drainage of the driveways and loading areas per section 5.1.12.D.3 through the Comprehensive Permit in lieu of a special permit per section 5.1.13.
22. The petitioner seeks a waiver of sign permit procedures and dimensional requirements under section 5.2 through the exceptions provided in special permit provisions of section 5.2.13 through the Comprehensive Permit.
23. Section 5.11 of the Zoning Ordinance provides requirements for providing affordable units for private residential developments. To the extent that Section 5.11 of the Zoning Ordinance is applicable to the project, a comprehensive permit is requested in lieu of a variance or cash payment under Section 5.11 to conform to the affordability elements of the proposed development to the requirements of the Zoning Ordinance.
24. Section 5.13 requires that any development in excess of 20,000 square feet must meet green building standards. To the extent necessary, the petitioner seeks a Comprehensive Permit in lieu of a special permit waiving this requirement per section 5.13.7.
25. The Petitioner seeks a waiver from the site plan approval requirements of section 7.4 in connection with special permits granted under Section 7.3.

26. Revised Ordinances Sections 20-23 to 20-28 provide limitations on installation of light sources which do not conform to the criteria of the Ordinances. Section 20-26 provides for waivers to be granted by the Planning Board to the extent that any light source does not conform to the requirements of Section 20-24. To the extent that any light source may not conform to these requirements, or that these requirements may be inconsistent with Section 5.1.10.A, the Petitioner seeks a waiver.
27. To the extent necessary, the petitioner seeks a Comprehensive Permit in lieu of meeting the provisions of section 5-30, Article III pertaining to fences.
28. The Petitioner seeks a permit to cross the sidewalk under the provisions of Section 26-65 Construction of Sidewalks, Driveways and Driveway Entrances.
29. The petitioner seeks a Comprehensive Permit in lieu of such local approvals as are required under Chapters 23, 26 and 29 or otherwise to open streets, make utility connections for water, sewer, stormwater, gas, electric, cable, or other utilities or to cross sidewalks from time to time.
30. The Applicant seeks a waiver from the provisions of the Tree Preservation Ordinance, sections 21-81 through -89, as amended by Ordinance No. A-38 (#397-13), to allow removal of protected trees from the property without relocation or replacement, or payment to the tree replacement fund. To the extent that any permit or fee payment would otherwise be required under the Revised Ordinances section 21-80, the Applicant seeks a waiver.
31. Revised Ordinances Section 22-50 requires review by the Newton Historic Commission and the possible imposition of a demolition delay for the demolition of historically significant buildings. To the extent that the existing dwellings or other elements of the property are deemed historically significant and fall under the jurisdiction of the Newton Historic Commission under Section 22-50, the Applicant seeks a waiver under the Comprehensive Permit.
32. The petitioner seeks a Comprehensive Permit for such amendments to the relief sought herein as may be required to conform to the relief sought to the plans as filed or to any amendments filed in connection with the actions of the Zoning Board of Appeals or the Housing Appeals Committee.
33. The Petitioner seeks any relief from local rules and regulations, and any additional required local approvals as may be necessary for approval for the Comprehensive Permit plans as may be amended prior to the termination of the public hearing.

<b>Zone MU1</b>	<b>Required</b>	<b>Proposed</b>
Lot Size	40,000 square feet	304,308 square feet
Lot area per unit	10,000 square feet	<b>742 square feet</b>
Setbacks <ul style="list-style-type: none"> <li>• Front (Charlemont St)</li> <li>• Front (Christina St)</li> <li>• Side (east)</li> <li>• Side (west)</li> </ul>	108.3 feet (building height) 108.3 feet (building height) 54.15 feet (½ building height) 7.5 feet	<b>10 feet</b> <b>39 feet</b> 108 feet 40 feet
Building Height	24 feet/48 feet by SP	<b>108.3 feet</b>
Max number of stories	2/4 by SP	<b>9</b>
FAR	2.00	1.85

34. See “Zoning Relief Summary” below:

<b>Zoning Relief Required</b>		
Ordinance		Action Required
§4.4.1 §7.3	To allow ground floor residential use with residential use above, standalone ATM, fast food establishment, for-profit education and restaurant with more than 50 seats	C.P. per MGL c 40B
§4.2.2.A.2 §7.6	Waive required minimum lot area per unit	C.P. per MGL c 40B
§4.2.2.B.1 §7.3	To allow for a development with more than 20,000 square feet	C.P. per MGL c 40B
§4.2.2.B.3 §4.2.3 §7.6	Waive maximum stories to allow 9 stories	C.P. per MGL c 40B
§4.2.3 §7.6	Waive minimum front setback	C.P. per MGL c 40B
§4.2.3 §7.6	Waive minimum front setback for parking	C.P. per MGL c 40B
§4.2.3 §7.6	To allow up to 108.3 feet in height	C.P. per MGL c 40B
§5.1.3.B §5.1.13 §7.3	Waive requirement to apply the A-B+C parking formula	C.P. per MGL c 40B
§5.1.3.E §5.1.13 §7.3	To allow assigned parking	C.P. per MGL c 40B

§5.1.4.A §7.3	To reduce the residential parking requirement to 1.25 stalls per unit	C.P. per MGL c 40B
§5.1.4.A §5.1.13 §7.3	To allow a waiver of 103 parking stalls	C.P. per MGL c 40B
§5.1.7.A.1 §5.1.13 §7.3	To allow parking in the front setback	C.P. per MGL c 40B
§5.1.8.B.1 and 2 §5.1.13 §7.3	Waive minimum parking stall dimensions for a parking facility with more than five stalls	C.P. per MGL c 40B
§5.1.8.B.4 §5.1.13 §7.3	To waive stall depth for accessible stalls	C.P. per MGL c 40B
§5.1.8.C.1 and 2 §5.1.13 §7.3	To waive minimum maneuvering aisle dimensions	C.P. per MGL c 40B
§5.1.9.A §5.1.13 §7.3	To waive the perimeter screening requirements for outdoor parking facilities containing more than five stalls	C.P. per MGL c 40B
§5.1.10 §5.1.13 §7.3	To waive the security lighting requirement for outdoor parking facilities containing more than five stalls	C.P. per MGL c 40B
§5.1.12.B §5.1.13 §7.3	Waive off-street loading facilities requirement	C.P. per MGL c 40B
§5.4.2.B §7.3	To allow a retaining wall of four feet or more in a setback	C.P. per MGL c 40B
§5.1.12.D.3 §5.1.13 §7.3	Waive consent of the City Engineer as to drainage of driveways and loading areas	C.P. per MGL c 40B
§5.2 §5.2.13 §7.3	Waive all sign regulations and procedures	C.P. per MGL c 40B
§5.11 §7.6	Waive the Inclusionary Zoning requirements	C.P. per MGL c 40B
§5.13 §7.3	Waive the sustainable development design standards	C.P. per MGL c 40B
§7.4 §7.3	Waive site plan approval procedures	C.P. per MGL c 40B
§20-23 §20-28	Waive Light Trespass provisions	C.P. per MGL c 40B
§5-30, Article III	Waive Fence Ordinance provisions	C.P. per MGL c 40B

§26-65	Permit to cross the sidewalk and connect to the street	C.P. per MGL c 40B
§29, Article II	Permit to connect to public utilities and water supply	C.P. per MGL c 40B
§29, Article III	Sewer connection permit	C.P. per MGL c 40B
§29, Article IV	Storm drain connection permit	C.P. per MGL c 40B
§21-81 through 89 §21-80	Waive Tree Preservation Ordinance	C.P. per MGL c 40B
§22-50	Waive review and demolition delay by Newton Historical Commission	C.P. per MGL c 40B



STEPHEN J. BUCHBINDER  
ALAN J. SCHLESINGER  
LEONARD M. DAVIDSON  
A. MIRIAM JAFFE  
SHERMAN H. STARR, JR.  
JUDITH L. MELIDEO-PREBLE  
BARBARA D. DALLIS  
KATHRYN K. WINTERS  
JULIE B. ROSS  
KATHERINE BRAUCHER ADAMS  
FRANKLIN J. SCHWARZER  
ADAM M. SCHECTER

1200 WALNUT STREET  
NEWTON, MASSACHUSETTS 02461-1267  
TELEPHONE (617) 965-3500  
FAX (617) 965-6824  
www.sab-law.com

November 22, 2022

**BY EMAIL**

Ms. Brenda Belsanti  
Newton Zoning Board of Appeals  
Newton City Hall  
1000 Commonwealth Avenue  
Newton, MA 02459

Re: #09-22/Comprehensive Permit Application Under M.G.L. Chapter 40B, Sections 20-23  
Northland 160 Charlemont LLC

Dear Ms. Belsanti,

A number of questions were raised at the ZBA's October 26, 2022 hearing, as well as questions raised by the Planning Department in its Memorandum of October 19, 2022. These questions, and the applicant's responses thereto, are set forth below. Also enclosed please find the following exhibits in support of these responses:

1. Memorandum from the applicant, consisting of three pages, and dated November 18, 2022 entitled "Consistency with the Needham Street Vision Plan";
2. Memorandum from the applicant, consisting of two pages, and dated November 18, 2022 entitled "Access to Northland Needham Street Shuttle";
3. Memorandum prepared by Randy Hart of VHB, consisting of three pages, and dated November 14, 2022 ("the Hart memo");
4. Response package prepared by Stantec, consisting of thirteen pages, and dated November 18, 2022 ("the Stantec package");
5. Memorandum prepared by Curt Quitzau of VHB, consisting of two pages, and dated November 17, 2022 ("the Quitzau memo");
6. Email from Marc Welch dated Tuesday, November 8, 2022; and
7. Revised List of Waivers.

Ms. Brenda Belsanti  
November 22, 2022

Page 2

**1. Needham Street Vision Plan.**

*Provide a narrative of how this project fits in with the Needham Street Vision Plan.*

**R1.** Please see Exhibit 1.

**2. Affordability.**

*Consider deeper affordability and more 3 BR units.*

**R2.** The Applicant is considering this request and will be prepared to respond at a subsequent hearing.

**3. Transportation Issues.**

*a. Shuttle. Will there be regular stops at the site? How will that impact the timing and regularity of the overall shuttle system? Transportation review should consider this.*

**R3a.** Please see Exhibit 2.

*b. Study midday Saturday traffic. Mr. McLaughlin stated this was a peak period in his experience, with heavy traffic on Needham Street.*

**R3b.** Please see Exhibit 3.

*c. Christina Street backup. Neighbor Diane Prunte said traffic on Christina Street backs up during weekday afternoon rush hour at 4pm (Chair remarked on the observation).*

**R3c.** Please see Exhibit 3.

**4. Pedestrians and Cyclists.**

*a. What is the experience for someone trying to get to Needham Street on foot? Is there a plan for a sidewalk on the east-west streets? How will pedestrians get in and out? Will there be nice wide sidewalks and bollards?*

**R4a.** Please see the Stantec package page 2, Pedestrian and Bicycle Circulation Diagram.

- The diagram shows bike and pedestrian circulation from Needham Street with sidewalks and crosswalks along Charlemont and Christina Streets, and a shared-use street on Charlemont Street.

Ms. Brenda Belsanti  
November 22, 2022

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- Diagram also shows sidewalks and multi-use paths throughout the site including dimensions. Bollards will be included as necessary to provide separation between cars and pedestrians.

*b. How many bicycle parking spots will there be?*

**R4b.** Please see Stantec package page 3, Exterior Parking and Page 6, Access for Bike, Trash and Loading.

- Short term bike parking is highlighted at the main entry and retail entries.
- There will be 198 interior and 19 exterior bike parking stalls for a total of 217 bike parking stalls sitewide.

*c. How will cyclists enter and exit garage? Provide more details on deliveries, loading & trash.*

**R4c.** Please see Stantec package page 6, Access for Bike, Trash and Loading.

- A separate bike accessible entry will be located next to the garage entry to allow residents enter the bike storages areas in the parking garage without going through the garage entry.
- A bike storage area is added on Christina Street and will be located next to a residential lobby. Residents can access the bike storage area from Christina Street directly and from the Christina Street lobby.

## 5. Parking / Loading.

*a. Are 11 residential surface spots sufficient for all visitors?*

**R5a.** Please see Stantec package page 3, Exterior Parking Diagram.

- We are proposing a revised design which includes twenty (20) surface parking spaces, including two ADA spaces and 2 short term parcel delivery spaces at the front entry.

*b. Provide more details on deliveries, loading, trash, and pick up/drop-off (see 8a, below).*

**R5b.** Please see Stantec package page 6, Access for Bike, Trash and Loading.

- The loading is located at the back of the building; trucks can access the loading from both Christina Street and Charlemont Street through a service drive.
- Trash rooms and elevators are located close to the loading area to allow a smoother trash removal operation and for residents who are moving in/out.

Ms. Brenda Belsanti  
November 22, 2022

Page 4

- A separate bicycle entry will provide access to the rear loading corridor for convenient access to two primary bike storage rooms.

*c. Consider the flow of visitors unable to find a surface parking space.*

**R5c.** We have expanded visitor parking to accommodate more parking. Overnight visitors will be able to get a garage pass for overnight parking.

*d. Will parking spaces be assigned?*

**R5d.** Most parking will be unassigned to maximize shared use of spaces.

## **6. Project / Design.**

*a. Courtyard over the loading dock. How will anyone get there or use it? Will it be in shadow? Provide more details on pick up/drop-off.*

**R6a.** Please see Stantec Package pages 7-8, Central Courtyard Access, and pages 9-12, Shadow Studies.

- The central courtyard will be a well shaded signature exterior space that will act as a green background for the building's entrance lobby. It will function as a flexible space for casual seating, exterior dining, and small functions. Shade loving plant material will be selected to screen the existing buildings beyond to provide privacy and a sense of enclosure. For reference, the south and north courtyards will receive more sun and will be programmed with more active functions. For example, pool, recreational lawns, outdoor kitchens, and outdoor lounge spaces will be provided in these courtyards.
- The central courtyard will be in shade except during summertime (pages 9-12).
- The central courtyard can be accessed off the lobby and is purely for residential uses (pages 7-8).
- Pickup and drop-off takes place at the front of the building lobby, where the main lobby of the building is located. Vehicles can access this area from both Christina Street and Charlemont Street (page 7).
- Loading is at the back of the building with a lower grade and the lobby is at the front with a higher grade. This allows the courtyard to be located over the loading area, see page 8.
- A shadow study shown on pages 9-12 demonstrates the shadow conditions at four times during the year.

Ms. Brenda Belsanti  
November 22, 2022

Page 5

*b. Provide more detail on the play area for children.*

**R6b.** Please see Stantec package page 5, Play Area.

- We are designing an area of the site with sinuous paths, naturalistic elements, and topography that are integrated into a playful, woodland inspired landscape composition. The design incorporates a “hill” and “valley” and play features that emerge from the landscape to foster discovery and play for users of all ages.

*c. Will the project address be Charlemont Street or Christina Street?*

**R6c.** The project address will be Charlemont Street.

**7. Landscaping.**

*a. L300 planting plan – at the next meeting be prepared to take the ZBA through the plan and describe which trees are being removed because they are diseased, and which are being removed because they are inconveniently located.*

**R7a.** We will review the tree removal plan at the next meeting.

*b. Is this too much lawn? Consider replacing grass with pollinators.*

**R7b.** Please see Stantec package page 4, Planting Typologies.

- The lawn currently comprises 20% of total planted area across the site. Lawn areas are specifically designed to facilitate play and relaxation in an open and flexible way. The remaining planting areas account for 80% of the site and will feature native trees, shrubs, and perennials to provide a natural habitat for pollinators.

*c. Is there a possibility of community gardens?*

**R7c.** We do not have a space for community gardens.

*d. Tree caliper – In response to a question from the Chair, Chris Bridle explained that smaller caliper trees can grow faster over 10-15 years. A resident commented that larger caliper trees would be better for carbon sequestration in the short term.*

**R7d.** Please see Exhibit 6.

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November 22, 2022

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**8. Civil/Stormwater/Sustainability.**

*a. Recent UMass Boston GBRAG study looks at predictions for increased flooding – team should look at that.*

**R8a.** Please see Exhibit 5.

*b. EVs – consider moving toward handling 100% EVs over time. Make sure electrical capacity is there.*

**R8b.** The applicant is looking into this question and will provide a response at a future meeting.

**9. Waivers.**

*Do you need relief for the retaining wall which is located in the side setback?*

**R9.** We do need relief for this element of the project and a redlined waiver list is attached as Exhibit 7.

I would ask that you please forward these documents electronically to the members of the Newton Zoning Board of Appeals and staff for review and possible discussion at the Board's next meeting on December 21, 2022. Ten hard copies of this submission will be delivered to you for distribution next week.

Please feel free to contact me if you have any questions or require further information.

Sincerely,



Katherine Braucher Adams

KBA/mer  
Enclosures

cc: (By Email, w/enclosures)  
Ms. Jennifer Caira, Deputy Director of Planning and Development  
Mr. Michael Gleba, Senior Planner  
Mr. Peter Standish

# NORTHLAND CHARLEMONT 40B DEVELOPMENT CONSISTENCY WITH THE NEEDHAM STREET AREA VISION PLAN Adopted 2018

## A Vision for Needham Street

*The Needham Street area will be a prosperous mixed-use district that emulates many of the positive aspects of Newton's villages. The area will continue to reflect its industrial history and current commercial strength while adding diverse residential options and modern innovation industries. It will also be supported by a mix of cultural and recreational opportunities. Future growth will incorporate environmentally sustainable technologies and design.*

The Northland Charlemont 40B project proposes to replace two aging and unremarkable industrial buildings with a new mixed-use development with 410 apartments, including 103 affordable units, and 10,689 square feet of commercial space. In addition to creating new and diverse housing for the Needham Street area, the development will also transform existing asphalt parking lots into new publicly accessible green space with pedestrian/bicycle path, gathering paces and play area for neighborhood recreational use.

## A Vision for Environmental Health

*The Needham Street Area will be designed to facilitate ecological health through restoration of existing open space. The area will support healthy lifestyles with the creation of diverse, multi-use, natural areas that encourage activity and environmental education.*

### *Increase Climate Resiliency -*

*Improve Health of Existing Open Space and Create Diversity in New Open Space –*

*Provide Ready Access -*

*Promote Low Impact Development to Protect Wetlands and Waterways -*

The proposed development will be a model for healthy and sustainable living. Residential building systems will be all-electric, reducing reliance on fossil fuels. The building will be constructed to meet Passive House standards and achieve certification, optimizing energy efficiency. The development will incorporate solar-ready and green roof space and electric vehicle charging stations, and will explore strategies to feasibly reduced embodied carbon.

Two acres of new green space will be created from what currently is asphalt parking lot and building footprint. The space will feature a publicly accessible walking path and areas for gathering and passive recreation, with new and preserved trees for natural screening along the boundary with residential abutters. The new pathway will create neighborhood connectivity and linkage opportunities to the Upper Falls Greenway and local trails (see the attached image from p. 16 of the Vision Plan). The configuration of the development and the new green space will also contribute to a dramatically improved and more sustainable stormwater system that will reduce urban runoff and improve the quality of the water that does drain from the site.

### **A Vision for Transportation**

***The Needham Street area will have safe and convenient transportation connections in and around the local neighborhoods and to regional destinations. Needham Street will be a walkable retail spine, supported by diverse options for getting to the street whether by transit, walking, biking, or driving.***

***Improve Safety and Accessibility –***

***Expand and Enhance Transit Connections along Needham Street –***

***Convert Needham Street from an Isolated to a Connected Roadway –***

***Manage Transportation Demand in New Development -***

The proposed development will create a safe, welcoming and accessible pedestrian experience to and across the site that does not exist today. The development will incorporate effective transportation demand management strategies to encourage multi-modal transit by providing access to the Northland Newton Development transit shuttle to the Newton Highlands MBTA station, providing secure accommodations on-site for 217 bicycles, unbundling parking charges for residents of market rate units, and exploring bike and car-share opportunities. Effective transportation demand management strategies will be implemented to help change behavior and reduce vehicle trips.

The proposed development will provide multiple vehicle access points from both Christina Street and Charlemont, dispersing the vehicles trips entering and exiting the site. This vastly improves the limited access points that currently exist only on Charlemont Street and helps relieve Needham Street traffic flow from the property.

### **A Vision for Land Use**

***The Needham Street area will be a vibrant destination with a distinct identity. The area will have a diversity of homes, businesses and gathering places for community life.***

***Support a Mix of Uses –***

***Provide Diverse Housing Options –***

***Increase Support for Small Local businesses Within the Retail Spine –***

***Create a Range of Community Gathering Spaces -***

The proposed development will contribute to the vibrancy of Needham Street with the addition of both affordable and market rate apartment homes, as well as over 10,000 square feet of commercial and retail space. With Needham Street stores being easily accessible by foot or bicycle from the development, local businesses will benefit from the new residents and from the increased vitality on the street. The new pedestrian pathway through the site and the accompanying gathering spaces will be an amenity for the surrounding neighborhood, and will foster greater connectivity with Needham Street.

### **A Vision for Design**

***The Needham Street area will be an inviting place for people of all ages and abilities. The physical environment will be comfortable and healthy. The area's buildings and public spaces will be designed at a scale to engage people at the ground level and promote an active pedestrian environment.***

***Utilize Design to Encourage Active Community Life –***

***Incentivize Contextual & Human Scale Building Design –***



**Endorse High Quality Architecture and High-Performance Construction –**

The proposed development prioritizes height and density away from abutting residential neighbors and its massing steps down in front toward its front door and adjoining public spaces to create a comfortable scale. By prioritizing its massing in this way, the development significantly reduces the footprint taken up by the existing industrial building and surface parking area on the site and fosters the creation of two acres of new green space and accessible pathways for public enjoyment that engages seamlessly with the new building. The building will be designed with durable and high quality exterior finishes, and will be constructed to achieve Passive House certification.

Attachment: P. 16 from the Vision Plan

**A Vision for Environmental Health**







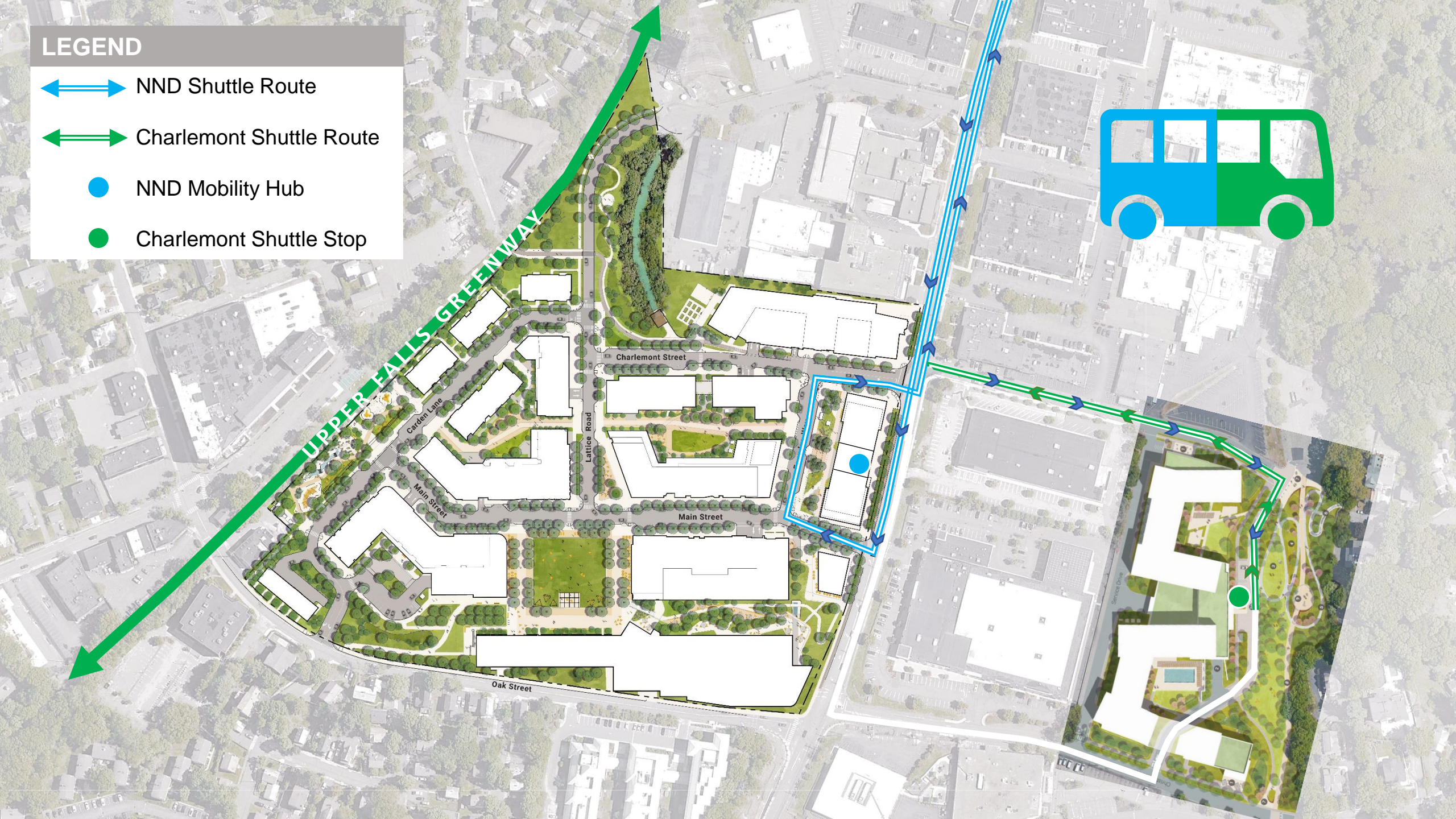
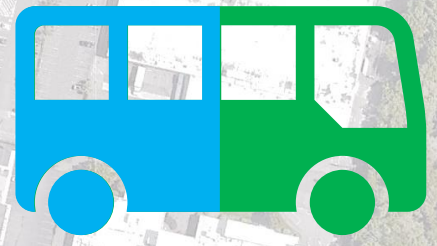
November 18, 2022

## **NORTHLAND CHARLEMONT 40B DEVELOPMENT ACCESS TO NORTHLAND NEEDHAM STREET SHUTTLE**

In accordance with its Transit Demand Management Agreement for the Needham Street Development (NND), Northland will offer free shuttle service from NND's Mobility Hub to the Newton Highlands MBTA station and return trips with 10-minute frequency 16-hours per day and 7 days per week. The Northland Charlemont 40B development will be served by the NND shuttle every 30 minutes, or every 3<sup>rd</sup> shuttle trip. The shuttle will leave NND from its shuttle stop and proceed straight down Charlemont Street to the front door of the Charlemont Building, and will return via Charlemont Street to Needham Street for its trip to the Newton Highlands MBTA Station. Shuttle usage by Charlemont residents will be monitored and the schedule adjusted as necessary. Shuttle access, lounge, and transit information will also be available at the NND Mobility Hub which is less than a 5-minute walk from the front door of the Charlemont building. Please see attached diagram.

# LEGEND

-  NND Shuttle Route
-  Charlemont Shuttle Route
-  NND Mobility Hub
-  Charlemont Shuttle Stop





To: Northland Investment Corporation

Date: 11/14/2022

Memorandum

Project #: 12239.02

From: Randall Hart, Principal  
Mathew Duranleau, P.E.

Re: Saturday Volume Comparison

This memorandum provides the following supplemental information requested by the City of Newton city council regarding the transportation elements of the proposed Northland Charlemont Street development:

- › Review of existing Saturday traffic volumes and Saturday trip generation for the Project
- › Traffic operations for the Christina Street approach to Needham Street

## Saturday Data

### Existing Traffic Volumes

As part of the documentation for the nearby Northland Newton development on Needham Street<sup>1</sup>, peak hour turning movement counts (TMCs) were collected at intersections along Needham Street in 2017 representing pre-COVID conditions. While weekday traffic counts were also conducted on Needham Street in March 2022 indicating that traffic volumes have not yet fully rebounded to pre-COVID conditions, no Saturday data was collected in 2022.

Table 1 below provides a comparison of the weekday and Saturday peak hour total volumes entering the intersection of Needham Street at Oak Street/Christina Street from 2017.

**Table 1 Observed Traffic Volumes**

Location	<u>Peak Hour Total Volumes Entering Intersection</u>		
	Weekday <sup>a</sup>	Saturday <sup>b</sup>	Difference
Needham Street at Oak Street / Christina Street	2,274	2,302	+1%

Source: VHB/Stantec, turning movement counts (TMCs) conducted in April 2017 and October 2017.

a Weekday peak hour of 5:00 – 6:00 PM.

b Saturday peak hour of 11:00 AM – 12:00 PM.

As shown, the peak hour volumes entering the intersection of Needham Street at Oak Street / Christina Street are nearly identical on a Saturday as they are during a typical weekday.

### Trip Generation Comparison

Table 2 presents the adjusted project-generated vehicle trips by use for a typical weekday and Saturday based on the trip generation methodology presented in the Transportation Impact and Access Study (TIAS) for this project<sup>2</sup>.

<sup>1</sup> Draft Environmental Impact Report EEA No. 15757; The Northland Newton Development; Newton, Massachusetts; VHB; August 2020.

<sup>2</sup> Transportation Impact and Access Study, The Northland Charlemont Street Development; Newton, Massachusetts; VHB; September 2022.

**Table 2 Project-Generated Vehicle Trips by Use**

	Residential <sup>a</sup>	Retail <sup>b</sup>	Total Vehicle Trips <sup>c</sup>	Pass-By <sup>d</sup>	Total New Vehicle Trips <sup>e</sup>
<b>Weekday Daily</b>					
Enter	731	227	958	-56	902
Exit	<u>738</u>	<u>222</u>	<u>960</u>	<u>-56</u>	<u>904</u>
Total	1,469	449	1,918	-112	1,806
<b>Weekday Morning</b>					
Enter	31	12	43	-2	41
Exit	<u>104</u>	<u>8</u>	<u>112</u>	<u>-2</u>	<u>110</u>
Total	135	20	155	-4	151
<b>Weekday Evening</b>					
Enter	72	32	104	-12	92
Exit	<u>49</u>	<u>26</u>	<u>75</u>	<u>-12</u>	<u>63</u>
Total	121	58	179	-24	155
<b>Saturday Daily</b>					
Enter	692	196	888	-49	839
Exit	<u>698</u>	<u>192</u>	<u>890</u>	<u>-49</u>	<u>841</u>
Total	1,390	388	1,778	-98	1,680
<b>Saturday Midday</b>					
Enter	57	28	85	-8	77
Exit	<u>61</u>	<u>22</u>	<u>83</u>	<u>-8</u>	<u>75</u>
Total	118	50	168	-16	152

- a Residential vehicle trips with internal capture and mode share credits applied.
- b Retail vehicle trips with internal capture and mode share credits applied.
- c Sum of columns a and b.
- d Pass-by Credits of 25% applied to daily and weekday AM peak hour, 40% applied to weekday PM peak hour, and 31% applied to Saturday midday retail trip generation, respectively, based on ITE rates for Land Use Code 821 (Shopping Plaza).
- e Sum of columns c and d.

Table 3 compares the difference between the weekday and Saturday trip generation estimates for the Project Site.

**Table 3 Comparison of Total Net New Project Vehicle Trips**

	Daily <sup>a</sup>			Peak Hour <sup>b</sup>		
	Weekday	Saturday	Difference	Weekday	Saturday	Difference
Total Net New Vehicle Trips	1,806	1,680	-7%	155	152	-2%

- Note: Based on volumes presented in Table 2 and based on ITE methodology
- a Daily volume expressed in vehicles per day.
  - b Peak period traffic volumes expressed in vehicles per hour. Highest peak hour volume is the evening on a weekday and midday on Saturday.

As shown in Table 2 and Table 3, the total daily net new vehicle trips to be generated by the Site are approximately seven percent lower on a typical weekday compared to a typical Saturday and the total peak hour net new vehicle trips to be generated by the Site are approximately two percent lower on a typical weekday compared to a typical Saturday.

Since the Saturday trip generation for the Project is expected to be less than on a typical weekday, the TIAS for the Project focused on the weekday transportation impacts of the Project. As the peak hour total volumes entering the intersection of Needham Street at Oak Street/Christina Street are nearly identical during the Saturday peak hour as during the weekday peak hour, the intersection operations are expected to be similar during both time periods and the analyses presented in the TIAS provide an accurate representation of peak hour operations within the study area with the Project in place.

### TIAS Methodology

The TIAS for this Project was developed based on MassDOT TIA Guidelines<sup>3</sup>. As stated in the guidelines: *"In general, most retail studies include the weekday p.m. and Saturday midday peak (11:00 a.m.-1:00 p.m.), while most office / Industrial / residential studies include the weekday a.m. and p.m. peak hours."* As this Project is primarily a residential project and will only contain a small portion of ground floor retail (411 residential units and 10,429 square feet of retail), it is appropriate that the study followed the MassDOT guidelines and focused analyses on the weekday morning and weekday evening peak hours.

### Christina Street Operations

The intersection of Christina Street and Needham Street has recently been improved. However, the intersection is expected to operate at LOS E under future No-build and Build conditions. Comparison of the future No-Build conditions to Build conditions suggests that LOS of the intersection overall, and the Christina approach will not change based on the project. Queues along the Christina approach are expected to only be marginally impacted by the project as noted in Table 11 of the TIA.

One thing to note, if the queue along Christina Street extends back to the site driveway and beyond, the traffic egressing the site can then redirect to Charlemont to gain access to Needham Street. In addition, the signals along Needham Street will be integrated into an adaptive traffic signal system when the Needham Street reconstruction is completed. According to the Functional Design Report (FDR) for the ongoing Needham/Newton Corridor Roadway Improvement Project, *"The potential for signal coordination along the corridor was investigated and was determined that it would be beneficial to coordinate the signals along the Needham Street/Winchester Street corridor for all Alternatives. In addition, Adaptive Traffic Signal System is proposed to provide efficient operation."* With fully integrated adaptive system in place, there should be some efficiency benefits that may help the queues at this intersection and beyond. Adaptive control will provide additional benefits that cannot be modeled in Synchro, as the signal timings change in real-time based on the volumes at the intersection to provide the most efficient operations. The full impact of the adaptive control at this intersection will be realized when the Needham Street reconstruction project is completed in 2024.

<sup>3</sup> Transportation Impact Assessment (TIA) Guidelines; MassDOT; March 13, 2014.

An architectural rendering of a park or urban development. The scene features a wide, paved walkway with a brick pattern in the foreground. Several large, dark grey boulders are placed along the edge of the path. In the background, there are lush green trees, some with autumn-colored foliage, and a few people walking or cycling. A car is visible on the right side of the image. The sky is blue with scattered white clouds.

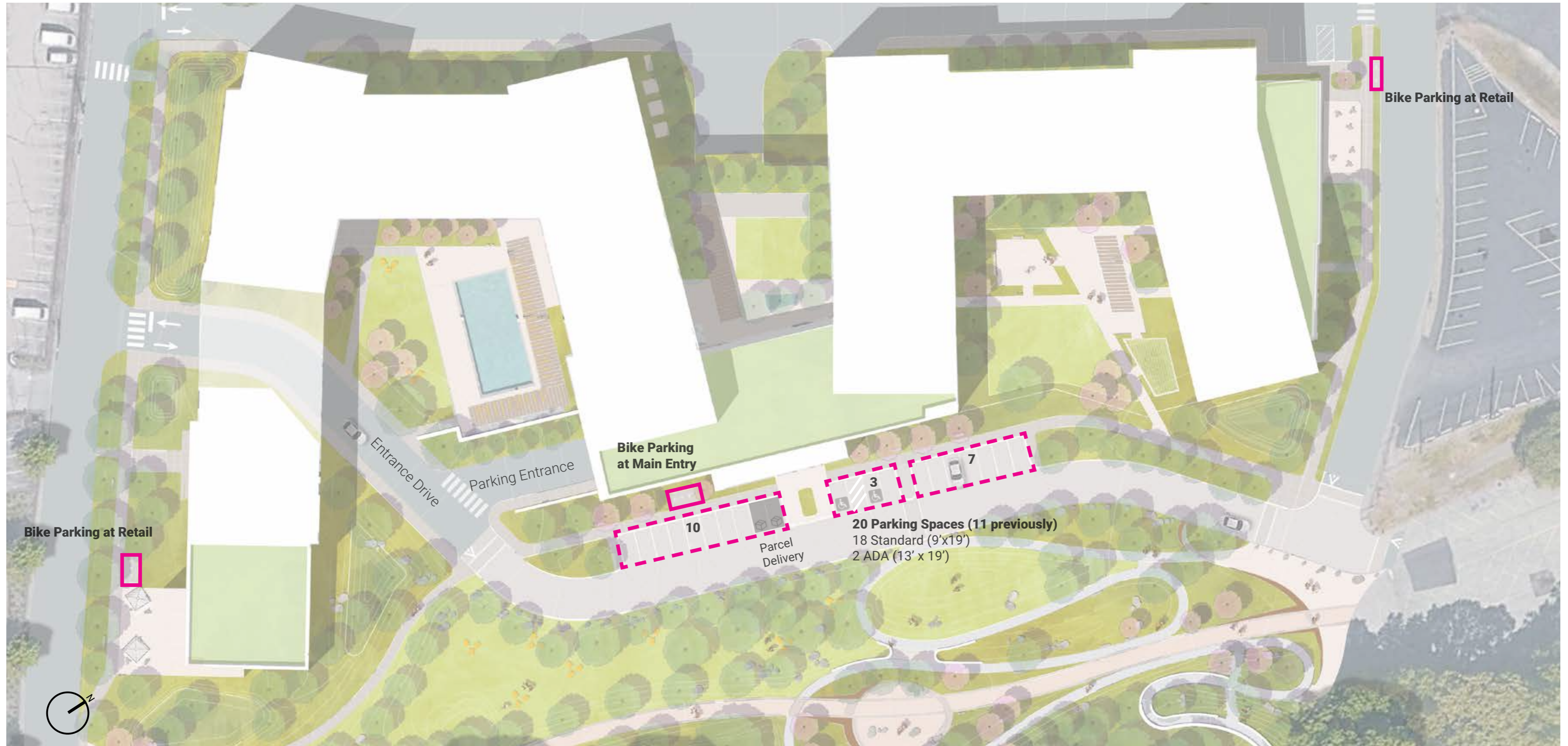
**NORTHLAND CHARLEMONT  
PROPOSED 40B DEVELOPMENT  
ZBA HEARING RESPONSES**

DECEMBER 21, 2022





# CHARLEMONT 40B EXTERIOR PARKING



# CHARLEMONT 40B

## SHRUB, GRASSES & GROUNDCOVER PLANTING



### Native Pollinator Landscape Planting | 80%

- Perennial Mixes**  
*vibrant, seasonal, sensory*
- Meadow Planting**  
*soft, ribbon-like, undulating*
- Shrub Buffer**  
*slope-stabilizing low shrubs*
- Wetland Planting**  
*lush, textural, intriguing*
- Woodland Planting**  
*wild, screening edge*



### Lawn | 20%

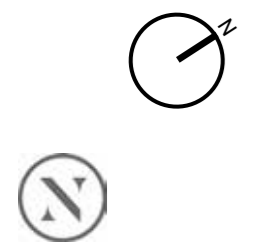
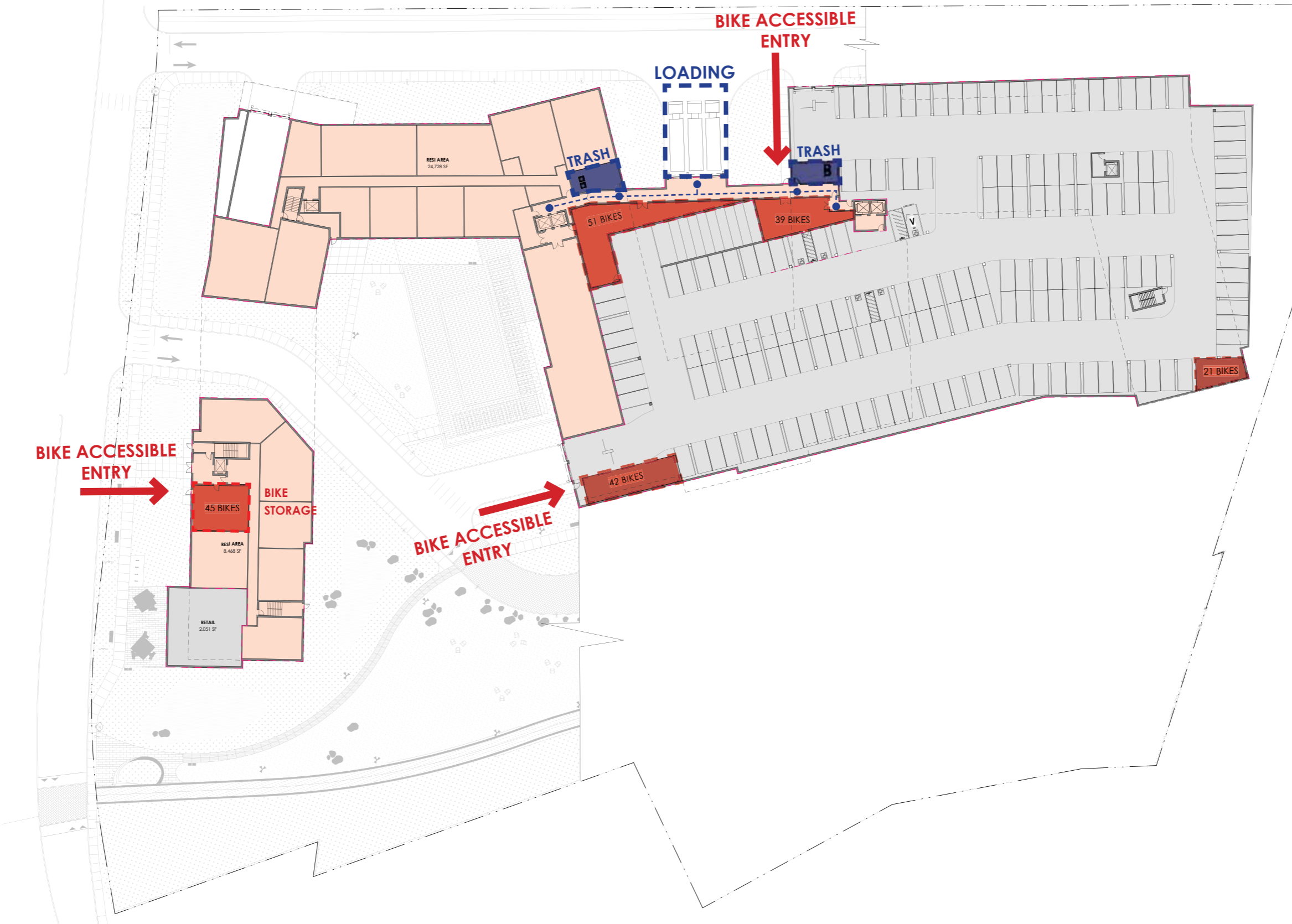
- Seeded or Sodded Lawn**  
*soft, flexible play and relaxation space*



# CHARLEMONT 40B PLAY LANDSCAPE



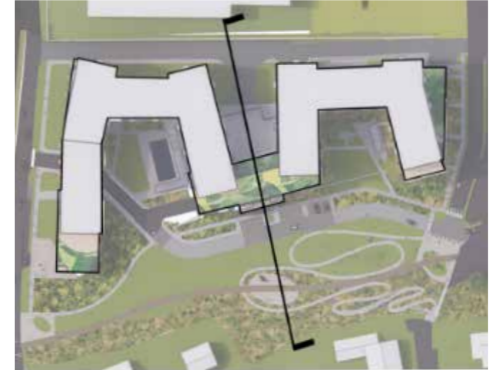
# CHARLEMONT 40B ACCESS FOR BIKE, TRASH AND LOADING





# CHARLEMONT 40B

## CENTRAL COURTYARD ACCESS



# CHARLEMONT 40B

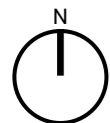
## SHADOW STUDIES : MARCH 21<sup>ST</sup>



### LEGEND

- PROPOSED BUILDING
- SHADOWS FROM EXISTING BUILDINGS
- PROPOSED BUILDING'S SHADOW
- PROPERTY LINE

sunset 6:58 pm



# CHARLEMONT 40B

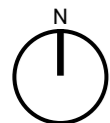
## SHADOW STUDIES : JUNE 21<sup>ST</sup>



sunset 8:25 pm

### LEGEND

- PROPOSED BUILDING
- SHADOWS FROM EXISTING BUILDINGS
- PROPOSED BUILDING'S SHADOW
- PROPERTY LINE





# CHARLEMONT 40B

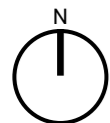
## SHADOW STUDIES : SEPTEMBER 21<sup>ST</sup>



### LEGEND

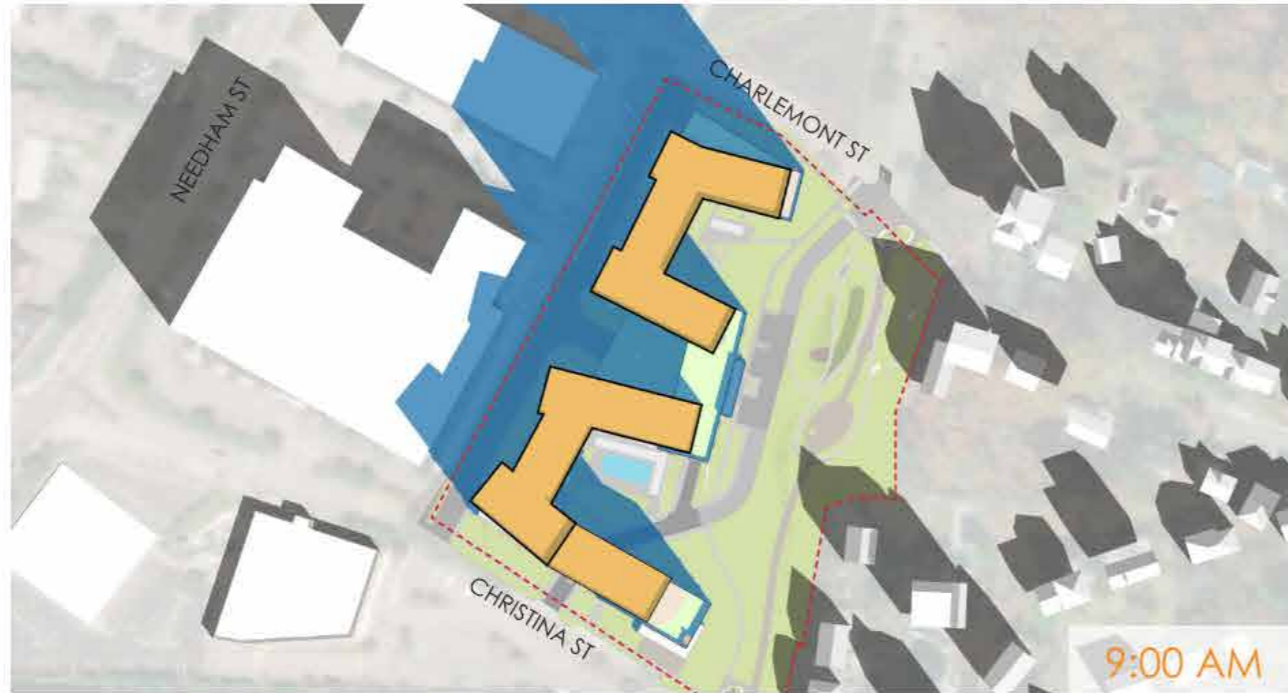
- PROPOSED BUILDING
- SHADOWS FROM EXISTING BUILDINGS
- PROPOSED BUILDING'S SHADOW
- PROPERTY LINE

sunset 6:44 pm



# CHARLEMONT 40B

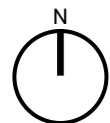
## SHADOW STUDIES : DECEMBER 21<sup>ST</sup>



### LEGEND

- PROPOSED BUILDING
- SHADOWS FROM EXISTING BUILDINGS
- PROPOSED BUILDING'S SHADOW
- PROPERTY LINE

sunset 4:15 pm





To: Zoning Board of Appeals  
City of Newton, MA

Date: Nov. 17, 2022

Memorandum

Project #: 12239.02

From: Curtis Quitzau, P.E.

Re: The Northland Charlemont Development  
Response to Public Hearing Comments

During the October 26th public hearing a question was raised about resiliency and the Project team was asked to consider the effects of anticipated climate change relative to stormwater management design and flood elevation concerns due to proximity of the building next to the Charles River.

The Greater Boston Research Advisory Group (GBRAG) recently published the 'Climate Change Impacts and Projection for the Greater Boston Area' report. The report speaks to climate change impacts on future storms, precipitation, flooding, temperature, and sea level rise based upon numerous climate impact studies, papers and reports published by others. On the collective and inter-related topic of storms, precipitation, flooding and groundwater the broad conclusions are generally:

- Extreme precipitation events have become more frequent and intense in recent decades.
- River floods are expected to be larger and more frequent, although there is considerable uncertainty about the magnitude of the increases.
- Stormwater runoff is expected to increase in volume with the greater intensity and frequency of heavy precipitation.

This aligns with regional and state projections and incorporating resiliency techniques into our built environment helps to reduce the vulnerability of structures to certain events such as flooding. The GBRAG report, like most climate assessments are intended to provide data to inform decisions. There is not a prescribed set of resiliency measures that will work for all scenarios, and in addition to the level of risk, resiliency measures should also take into account a cost-benefit analysis.

Fortunately, the Northland parcels at 160 Charlemont St. and 56 Christina St. are not influenced by tidal waters or coastal flooding and are already located outside of the Federal Emergency Management Agency (FEMA) regulatory 1% annual chance flood (also known as the 100-year flood) hazard area. Both properties are also entirely outside of the 0.2% annual chance flood (also known as the 500-year flood) hazard area, reducing their vulnerability to even more severe flood events. Although the properties and proposed building are located adjacent to the Charles River, the elevation of the surrounding land limits the extent of the flood hazard areas.

As climate conditions continue to change and more extreme precipitation events effect the region, it is likely that the Charles River will see more frequent flooding - the severity and frequency of which is absolutely uncertain. Elevating the lowest habitable space in the building and essential building systems above potential or future floodwaters can help improve building resiliency in the long term, and we have set the lowest floor elevation of the proposed building at 95 feet, about 5 feet higher than the current FEMA base flood elevation for adjacent flood zones.

The local stormwater collection and management system is designed based on the best available rainfall precipitation data published by Cornell University's Northeast Regional Climate Center Extreme Precipitations Tables and in compliance with City and State standards that require collection and conveyance of the 25-yr storm event. Additionally, our assessment of peak rates of runoff for the 2,10, 25 and 100-yr storms demonstrate that the proposed site improvements will not negatively impact flood elevations on downstream properties. While the site may

experience more frequent and increasingly intense storms, the site itself will not be a contributing factor to downstream flooding with or without the effects of climate change.



Adams, Katherine &lt;kadams@sab-law.com&gt;

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**Charlemont 40B Proposed Tree Planting**

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**Bridle, Christopher** <Christopher.Bridle@stantec.com>  
To: "Adams, Katherine" <kadams@sab-law.com>

Tue, Nov 22, 2022 at 8:24 AM

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**From:** Marc R. Welch <newtonforestrymw@gmail.com>  
**Sent:** Tuesday, November 8, 2022 1:57 PM  
**To:** Bridle, Christopher <Christopher.Bridle@stantec.com>  
**Cc:** Buchbinder, Stephen <sjbuchbinder@sab-law.com>; Adams, Katherine <kadams@sab-law.com>; Grossman, Leah <Leah.Grossman@stantec.com>; Kim, Eunjee <Eunjee.Kim@stantec.com>  
**Subject:** Re: Charlemont 40B Proposed Tree Planting

Hi Chris,

I 100% agree with you. Larger plant material is not the best choice in most cases from my perspective.

Thank you,  
Marc

Marc R. Welch  
Deputy Commissioner  
City Forester  
Newton Parks, Recreation & Culture

On Tue, Nov 8, 2022 at 1:54 PM Bridle, Christopher <Christopher.Bridle@stantec.com> wrote:

Hi Marc,

I hope all is well with you. We recently met at City Hall for a ZBA hearing for our Charlemont 40B project. We received a comment relating to caliper size for our proposed tree planting. The zba board was of the opinion that larger caliper tree sizes at install would be preferrable and would lead to larger trees in the short and longer term.

My response clarified that, while larger trees at install would provide a more mature canopy in the short term, smaller trees will be less stressed, will establish more quickly and will, in all likelihood (given good soil conditions), grow at a faster rate and outgrow larger trees within 10-15 years. I am assuming also trees growing at a faster rate with larger canopies would provide more carbon sequestration – which would be an added benefit of planting smaller trees.

Your thoughts on this subject would be much appreciated.

Kind Regards,

Chris

Chris Bridle PLA/ASLA

**SUMMARY OF RELIEF AND WAIVERS REQUESTED**

The Applicant requests that the Zoning Board of Appeals grant a comprehensive permit in lieu of the following special permits, variances, licenses, and/or approvals in accordance with the provisions of M.G.L. Chapter 40B §20 et seq. Ordinance references herein are to the Newton Revised Ordinances of 2017, as amended, of which Chapter 30 is the Zoning Ordinance.

**ZONING ORDINANCE**

- A. **Use:** The Applicant seeks a comprehensive permit in lieu of special permits, variances, licenses, and/or approvals to allow the property to be used for the project, including without limitation waivers from the following sections of the Zoning Ordinance:
  - 1. Section 4.2.2.B.1 to permit a development of over 20,000 square feet.
  - 2. Section 4.2.2.B.3 to allow a nine story building.
  - 3. Section 4.4.1 to allow a multi-level accessory parking facility, standalone ATM, fast food establishments, for-profit educational uses, and restaurants with over 50 seats.
  - 4. Section 5.11 to conform the provisions for affordable housing to the terms of the application, if and to the extent necessary.
  - 5. Section 4.4.1 for residential use at ground floor.
  
- B. **Density and Dimensional Controls:** The Applicant seeks a comprehensive permit in lieu of such special permits, variances, licenses, and/or approvals as may be required from or under Sections 4.1.2 and 4.1.3 for construction of the Project in the MU-1 District including without limitation:
  - 1. Deviations from the dimensional requirements of Section 4.1.2, 4.1.2.A.2, 4.1.2.B.3, and 4.1.3 as follows (**in bold**):

<u>Dimension</u>	<u>Required/Allowed</u>	<u>Provided</u>
Lot Area	40,000 sf minimum	304,308 sf
Lot Area Per Unit:	10,000 sf minimum	<b>742 sf (410 units)</b>
Frontage:	N/A	N/A
Front Setback:	108.3 ft minimum <sup>1</sup>	<b>10 ft</b>
Side Setback:	7.5 ft minimum <sup>2</sup>	40 ft

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<sup>1</sup> Building height.

<sup>2</sup> Not abutting residential.

Side Setback:	54.35 minimum <sup>3</sup>	108 feet
Rear Setback:	7.5 ft minimum <sup>4</sup>	N/A <sup>5</sup>
Front Pkg Setback:	20 ft	<b>8 ft</b>
Side Pkg Setback:	5 ft	29 ft
Rear Pkg Setback:	5 ft	N/A <sup>6</sup>
FAR:	2.0 maximum	1.85
Stories:	2 by right, 4 by special permit	<b>9</b>
Building Height:	36 ft by right, 48 ft by special permit	<b>108.3 ft</b>

C. Parking/Loading Requirements:

The Applicant seeks a comprehensive permit in lieu of a special permit pursuant to Section 5.1.13 to permit a parking facility in accordance with the submitted plans and to deviate, *inter alia*, from the following requirements under Section 5.1:

1. To the extent that Section 5.1.3.E prevents assignment of parking spaces to tenants, a waiver is sought from that provision.
2. To reduce the number of parking stalls under 5.1.4.A from 589 stalls to 471 parking stalls (i.e. waiver of 103 parking stalls).
3. To the extent the plans provided do not comply, a waiver from the obligation to provide an off-street parking or loading plan under Section 5.1.5.
4. To allow parking within the front setback pursuant to Section 5.1.7.A.
5. To reduce the width and depth of parking stalls pursuant to Sections 5.1.7.B.1 and B.2.
6. To reduce the depth of accessible parking stalls pursuant to Section 5.1.8.B.1.

<sup>3</sup> Abutting residential district = ½ building height

<sup>4</sup> Not abutting residential.

<sup>5</sup> There is no rear lot line as this project has two front lines and two side lot lines.

<sup>6</sup> There is no rear lot line as this project has two front lines and two side lot lines.

7. To permit a driveway width of less than 24 feet for two way traffic pursuant to Section 5.1.8.C1 and 2.
  8. Waive the one-foot candle lighting requirement pursuant to Section 5.1.10.
  9. Waive the requirement for a plan for off-street loading facilities pursuant to Section 5.1.12.B
  - ~~10.~~ Any consent of the City Engineer as to drainage of the parking facility pursuant to Section 5.1.12.D.3
  - ~~10-11.~~ To permit a retaining wall of greater than 4 feet to be located within a setback pursuant to Section 5.4.2.B.
  - ~~11-12.~~ Any other relief which may be necessary or appropriate and may be granted by the City Council under Section 5.1.13 in order to conform the waivers sought to the plan submitted.
- D. Signage: The Applicant seeks a waiver of the requirements of Section 5.2.4 for the number, size, location, and types of signs, the sign permit procedures and, insofar as applicable, any hearing or procedure before the Urban Design and Beautification Commission.
- E. Site Plan Approval: The Applicant requests a comprehensive permit in lieu of site plan approval required under Section 7.4 in connection with special permits granted under Section 7.3.

NON-ZONING ORDINANCES

- F. Consent of the Planning Board  
 To the extent any consent or review of the Planning Board is required under the Planning Board rules, including for the definitive subdivision of land, an ANR plan, the construction of ways, and/or the installation of municipal services therein, a comprehensive permit in lieu of such approval is sought.
- G. Curb Cut Permit (Chapter 26)  
 The Applicant requests a comprehensive permit in lieu of any sidewalk crossing permits or consent of the Commissioner of Public Works to the extent necessary to comply with the requirements of Revised Ordinances §26-65.
- H. Utility Connection Permits (Chapters 23, 26, and 29)  
 The Applicant seeks a comprehensive permit in lieu of such local approvals as are required under Chapters 23, 26, and 29 of the Revised Ordinances or otherwise to (i) open streets, (ii) make utility connections for water, sewer,

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stormwater, gas, electric, cable, or other utilities, or (iii) cross sidewalks from time to time.

I. Outdoor Lighting (Chapter 20)

§20-23 through §20-28 provide limitations on certain light sources which do not conform to the stated criteria. §20-26 provides for a waiver from the Planning and Development Board. To the extent that any light source does not conform to the requirements of these sections, the Applicant seeks a comprehensive permit in lieu of any waiver under §20-26.

J. Fences (Chapter 5)

To the extent needed, the Applicant seeks a comprehensive permit in lieu of obtaining a fence permit from the Commissioner of Inspectional Services under §5-30.

K. Demolition Delay (Chapter 22)

§22-50 provides for a review by the Newton Historical Commission and the possible imposition of a demolition delay for demolition of historically significant buildings. To the extent any elements of the property are deemed to fall within the jurisdiction of the Newton Historical Commission under §22-50 and such elements will be demolished, the Applicant seeks a comprehensive permit in lieu of demolition review.

L. Public Tree Ordinance (Chapter 21 and M.G.L. Chapter 87)

§21-72, §§21-80 through 21-90, and M.G.L. Chapter 87 require a permit and payment of fees for the removal of certain trees, and in some instances, a contribution to the tree replacement fund. To the extent that any permit, fee payment, or contribution would otherwise be required under §21-72, §§21-80 through 21-90, or M.G.L. Chapter 87, the Applicant requests a comprehensive permit in lieu of such permit, fee payment, or contribution.

M. Amended Relief

The Applicant seeks a comprehensive permit for such amendments to the relief sought herein as may be required to conform the relief sought to the plans as filed or to any amendments thereof filed in connection with the actions of the Zoning Board of Appeals or the Housing Appeals Committee.

N. Additional Relief

The Applicant seeks a comprehensive permit in lieu of all other permits, variances, licenses, or approvals as may be issued by the City of Newton as necessary to conform the relief sought to the plans filed with the application, as the same may be amended from time to time. Included within the relief sought are all ancillary, subsidiary, usual, customary, or necessary local permits, variances, licenses, or approvals in lieu of which the Board may grant a Comprehensive Permit to the extent necessary to conform to the relief required for construction of the plans submitted herewith, as amended from time to time.



**SUMMARY OF RELIEF AND WAIVERS REQUESTED**

The Applicant requests that the Zoning Board of Appeals grant a comprehensive permit in lieu of the following special permits, variances, licenses, and/or approvals in accordance with the provisions of M.G.L. Chapter 40B §20 et seq. Ordinance references herein are to the Newton Revised Ordinances of 2017, as amended, of which Chapter 30 is the Zoning Ordinance.

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<sup>1</sup> Building height.

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Side Setback:	54.35 minimum <sup>3</sup>	108 feet
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**From:** Marcia Johnson, LWVN President <league@lwwnewton.org>  
**Sent:** Wednesday, November 2, 2022 4:06 PM  
**To:** Brenda Belsanti <bbelsanti@newtonma.gov>  
**Subject:** Message for Chairman Lipsitt

**[DO NOT OPEN links/attachments unless you are sure the content is safe. ]**

Dear Chairman Lipsitt,

As the LWVN Observer, though the League is very interested and will be following how the Northland Charlemont project is addressing climate, transportation, and greenspace, a main focus for my observation at the October 26th meeting was to understand what the developer was proposing in the way of affordable housing. I learned the following:

- There will be 410 apartments, 25% will be affordable which equates to 103 units. I did not hear anything about the level of affordability or the mix of 1, 2, and 3 bedrooms amongst these units.
- It was about one hour into the meeting when Chair Lipsitt asked her question. I believe that I heard her ask about increasing the number of affordable units and decreasing the level of affordability, so that more low-income families could live there
- I Associated myself with another member of the public about the need for 3-bedroom units to be affordable so that families could live there
- I made the comment/observation of the need to have retail amenities that are walkable, e.g. drug store, grocery store, post office etc. as this will be better for low-income families and will reduce the need for having a car. This can be done between the two Northland developments in the Needham Street area.

I look forward to observing future public meetings about this project.

--

Kind regards,

Marcia Johnson





Ruthanne Fuller  
Mayor

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

Telephone  
(617) 796-1120  
Telefax  
(617) 796-1142  
TDD/TTY  
(617) 796-1089  
[www.newtonma.gov](http://www.newtonma.gov)

Barney S. Heath  
Director

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## **PUBLIC HEARING II MEMORANDUM**

**DATE:** December 16, 2022  
**MEETING DATE:** December 21, 2022  
**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, 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.

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### **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 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. At that meeting the Board authorized peer reviews of the project.

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## **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 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 and is seeking a Comprehensive Permit under M.G.L. Chapter 40B to construct a nine-story, 639,047 square foot, mixed use building with 410 residential units, 486 parking stalls (471 garage stalls and 15 surface stalls) and 10,689 square feet of first floor commercial space. One hundred and three (103) of the units (25%) would deed restricted to remain permanently affordable to households at up to 80 percent (80%) of Area Median Income (AMI). The proposed development would result in a net decrease in impervious cover by approximately 1.7 acres.

Per Section 4.4.1, a Comprehensive Permit in lieu of a special permit is being sought for the proposed development including the following uses: ground floor residential uses with residential units above, standalone ATM, fast food establishment, for-profit education, and a restaurant with more than 50 seats.

Reflected in this memo are initial comments from the BETA Group, and the Horsley Witten Group, respectively the transportation and site design/open space peer reviewers, engaged by the City to review and analyze relevant aspects of the proposed development. Also referenced is a memorandum provided by the Engineering Division of Public Works on the proposal.

### **I. UPDATES**

On November 22, 2022, the applicant submitted additional materials regarding the proposed development. The cover letter for that submission also included responses to several questions and/or issues raised by the Planning Department's previous memo dated October 19, 2022, and/or at the October 26, 2022, public hearing. The submission includes a revised waiver list, a short analysis on the proposed project against the Needham Street Vision, information relative to traffic, shuttle access, guidance from the City Forester on the preference to avoid larger plant material, and a set of slides to serve as a response to the prior hearing on October 26, 2022. The applicant's analysis against the Needham Street Vision focuses on environmental health, transportation, land use, and design. The Planning Department will provide a further analysis on how the proposed project can be analyzed in accordance with the goals of the Needham Street Vision Plan at a future hearing. The applicants cover letter and each of the attachment can be found here: <https://newtonma.viewpointcloud.com/locations/117660>.

Procedurally, per the applicant's letter of November 22 and a revised list of request waivers attached to that letter, the applicant is now also seeking relief from Section 5.4.2.B of the Newton Zoning Ordinance (NZO) to permit a retaining wall of greater than four feet in

height to be located within a setback. The wall requiring this additional relief is located along the western boundary of the project site and would be constructed in conjunction with the access drives located on that side of the site.

## II. ANALYSIS

### A. *Transportation Peer Review*

The BETA Group (BETA), the City's transportation peer review for this application, submitted an initial memorandum on December 13, 2022 (**Attachment A**).

As discussed in the memorandum, the review identified some issues and information for the applicant to clarify, include and/or correct. As summary of the BETA memorandum follows.

- **Future Conditions**

Regarding projected future conditions, BETA found the applicant's use of a 0.5% growth rate to be reasonable but requested the applicant indicate whether the 2022 data was from data or increased from the "base year" of 2019 annually by the 0.5% growth rate.

BETA noted that the applicant's trip generation estimates for the project are reasonable but asked for clarifications, among others, of certain calculations; internal capture rates and expected uses of the site's retail space. It also asks if the projection of 10% of trips to the retail space being by biking/walk is reasonable, especially as the projection for residential trips is projected to be lower at 8%.

- **Traffic Operations**

BETA requests that the applicant confirm certain identified capacity analysis issues.

The peer reviewer also notes that with build-out of the project the Christina Street westbound left-turn of the Needham Street/Oak Street/Christina Street intersection would see an increased delay of 50 seconds in the PM peak hour. While this movement is already at Level of Service (LOS) F, the added project trips would increase the volume to capacity ratio from 0.86 to 1.06, rendering it "over-capacity." BETA states that "this is a significant increase in delay that should be addressed as well as addressing the capacity of the movement."

- **Transportation Mitigation**

The peer reviewer stated that all of the transportation demand management (TDM) measures proposed by the applicant should be implemented. These include using the shuttle service to the MBTA's Newton Highland Station to be operated by the applicant in conjunction with the nearby Newton Northland development; providing

bicycle and bike share facilities, onsite car share; electric vehicle charging stations; limited and “unbundled” parking supply; and financial incentives for residents without cars and full-time employees to use alternative transportation modes (i.e., discounted MBTA passes). BETA recommends the applicant also make 10% of the parking stalls electric vehicle (EV) spaces, and 50% EV ready.

The City will continue to work with the Applicant and Beta around the proposed TDM measures.

- **Site Plans**

BETA also provided comments regarding certain transportation-relevant aspects of the proposed site plan. These include questions about the adequacy of the proposed visitor and retail parking; whether stalls will be designated for those uses and residents; how small deliveries will be handled; and whether snow-storage areas will be provided onsite.

The peer reviewer is expected to be present at the upcoming public hearing and will be available to comment on, and answer questions regarding, the project and its review. The applicant should be prepared to respond to all of the issues raised by BETA’s transportation peer review at the upcoming public hearing and/or subsequently.

## ***B. Site Design & Open Space Peer Review***

The City’s peer reviewer for this topic, the Horsley Witten Group (“HW”), submitted an initial memorandum on December 13, 2022 (**Attachment B**) addressing issues related to the project’s site design and open space. The peer review provides extensive commentary on the project’s Building Placement; Massing and Site Design; Open space, Trees, and Landscaping; Landscaping Details; Transportation; Energy and Sustainability; Hazardous Materials; Utilities; Resilience; Lighting; Wetlands; Rare Species; and Cultural Resources. The Planning Department provides the following distillation of the review’s comments as a guide to the issues raised and discussed in the memorandum.

- **Building Placement, Massing and Site Design**

HW recommends that the applicant discuss, per previous requests by others, as to why/how massing the development in a series of smaller buildings was not the chosen approach.

HW noted that the submitted shadow studies indicate that that shadow impacts do not appear to be significant, but recommend the applicant provide additional information as to how the created shadows might affect the open space and residential neighborhood to the east.

The review expressed some concern regarding the site’s western boundary as a

service-focused “backdoor,” especially in the context of future possible redevelopment of the parcels located to the west of the site.

HW also noted requests for a photometric plan for the site, a sign plan, and a three-dimensional model of the development for review.

- **Open Space, Trees, and Landscaping/Landscaping Details**

The peer reviewer notes the proposed pedestrian and bicycle paths and their connection to existing and proposed network links within Newton. HW requests the applicant provide additional information about links with regional networks and how the development’s path might connect with potential new sections to the south, especially that which could be created using an existing, nearby unused rail bridge across the Charles (to the south across Christina Street but accessible only via private property owned by others).

The review requests additional information regarding clarifying relationships between some sections of the paths and open space, as well as better identifying distinctions between public and private open space on the site.

Also, as the applicant is seeking a waiver of requirements under the City’s Tree Preservation Ordinance the review recommends the applicant provide additional justification for this sought waiver. It also recommends the applicant submit information about trees that would be removed, and that the applicant consider the impact of the proposed removal of several large trees onsite, including a 52-inch caliper tree that is the largest on the site.

- **Transportation**

As transportation aspects of the proposal are the subject by another peer reviewer (see above), HW defers to that review while providing some comments in several issues related to the site plan. HW’s review noted requests for additional information about the project’s relation to the shuttle servicing the Green Line that the applicant will be operating in conjunction with its larger Newton Northland development across Needham Street and the connectivity of the project’s bicycle and pedestrian paths with public transit, Newton Northland, and the residential neighborhood to the east. HW also noted concerns about the projected queues at the Needham Street/Christina Street intersection (see also transportation peer review above).

- **Energy and Sustainability**

HW notes that the applicant should confirm whether LEED and/or Passive House standards would be pursued and better identify approaches that will be taken to achieve such standards.

- **Hazardous Materials**

The peer reviewer echoes the City's request the applicant provide further information regarding potential contamination concerns and the applicant's proposed approach to evaluate the same.

- **Utilities**

HW suggests that the applicant provide additional information about the planned utilities for the development as the submitted utility plan includes only stormwater information, and not that related to other utilities (e.g., sewer, cable, electric, etc.).

- **Resilience**

While acknowledging flood risks are minimal at the site, HW suggests the applicant provide information about possible localized flooding that could result from area drainage, precipitation, etc.

- **Lighting**

Noting concerns about appropriate lighting levels on the east and west sides of the site, HW suggests the applicant provide a lighting plan and indicate how sufficient security lighting would be provided while limiting impacts on adjacent properties (including residences to the east).

- **Wetlands**

As portions of the site are within a 200-foot Riverfront Area and the property is subject to a Newton Conservation Commission Order of Conditions, the applicant should discuss the status of the review of the project by the Conservation Commission, including its recent meeting in November 2022.

- **Rare Species**

The review states that no state-listed rare species is known to exist on the site. That said, a federally recognized endangered bat species might be affected by activity on the site which might involve a process under the federal Endangered Species Act.

- **Cultural Resources**

HW observes that it appears that no state-recognized historic properties are on the site, but demolition of the existing structures is subject to review by the Newton Historic Commission.

The peer reviewer is expected to be present at the upcoming public hearing and will be available to comment on, and answer questions regarding, the project and its review.

The applicant should be prepared to respond to all of the issues raised by HW's peer review at the upcoming public hearing and/or subsequently.

### ***C. Engineering Division Review***

The City's Engineering Division of Public Works submitted a memorandum on the proposal (**Attachment C**) among other comments, the memo states that the designed stormwater collection system, which includes "underground sand filters, bio-swales, permeable open space that promotes infiltration and groundwater recharge" would "greatly enhance water quality coming off the site while reducing runoff, phosphorus, and total suspended solids in accordance with DEP & City Stormwater Ordinance." It further found that the "proposed Operations and Maintenance ("O&M") plan is very robust for the design intent and long term maintenance."

Per the memo, the applicant will need to prepare a construction management plan (CMP).

The memo noted a concern whether the site has "any contaminated soils as the existing facilities processes precious metals and several chemicals are used in the processing." As such, the applicant should provide the "21E report," if one has been performed, and all other information related to potential onsite soil contaminants and/or underground oil or fuel tanks. Further, prior to applying for a Building Permit the petitioner would be required to perform on site test pits and percolation testing "to confirm design assumptions, soil types, establish seasonal high groundwater elevations and to verify suitable soils for infiltration."

In addition to the Engineering Division of Public Works, HW will be reviewing the stormwater management of the site and will work with the Engineering Division. Stormwater is expected to be discussed in further detail at a future hearing pending HW's review.

### **III. ADDITIONAL INFORMATION AND MATERIALS**

The applicant should respond to all questions and requests for more information raised in this memo and the peer reviews by BETA and Horsley Witten in advance of future meetings.

### **IV. 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. It is anticipated that future meetings will focus on additional discussions regarding transportation and site design issues, as well as the proposed development's sustainability, urban design, and consistency with the Needham Street Vision Plan.

**ATTACHMENTS**

**Attachment A:** BETA transportation peer review, dated December 13, 2022

**Attachment B:** Horsley Witten site design and open space peer review, dated December 13, 2022

**Attachment C:** Engineering Division Memo, dated November 16, 2022





December 13, 2022

Katie Whewell  
Chief Planner for Current Planning  
Department of Planning & Development  
1000 Commonwealth Avenue  
Newton Centre, Massachusetts 02459

**Re: The Northland Charlemont Street Development Transportation Peer Review**

Dear Ms. Whewell:

BETA Group, Inc. (BETA), in accordance with our scope of services, has conducted a transportation engineering peer review for the proposed Northland Charlemont Street Development located between Charlemont Street and Christina Street in Newton, Massachusetts on the site of two existing buildings at 160 Charlemont Street and 56 Christina Street. The proposed project includes 411 residential units, 10,429 square feet of ground floor commercial/retail, and 486 parking spaces.

This letter has been prepared by BETA to outline our findings, comments, and recommendations in the review of the materials provided.

## **BASIS OF REVIEW**

The following documents were received by BETA and formed the basis of the review:

- ***Transportation Impact and Access Study (TIAS) The Northland Charlemont Steet Development, Newton, Massachusetts, dated September 2022, prepared by Vanasse Hangen Brustlin, Inc. (VHB)***
- ***Saturday Volume Comparison Memorandum, dated November 14, 2022, prepared by VHB***
- ***Northland Charlemont 40B Development, Access to Northland Needham Street Shuttle, dated November 18, 2022, prepared by Northland***
- ***Northland Charlemont 40B Development, Consistency with the Needham Street Area Vision Plan, dated November 18, 2022, prepared by Northland***
- ***Northland Charlemont Proposed 40B Development, ZBA Hearing Responses, dated December 21, 2022, prepared by Northland***
- ***Summary of Relief and Waivers Requested, dated November 23, 2022, prepared by Northland***
- ***Applicant's Responses to ZBA and Planning Department Questions, November 22, 2022, prepared by Schlesinger and Buchbinder, LLP***
- ***Charlemont Site Plans, Massachusetts, dated October 7, 2022, prepared by VHB***

## **TRANSPORTATION IMPACT AND ACCESS STUDY**

The proposed development project consists of 411 residential units, 10,429 square feet of ground floor commercial/retail, and 486 parking spaces (471 below ground and 15 surface). The project is located between Charlemont Street and Christina Street in Newton, Massachusetts on the site of two existing

buildings at 160 Charlemont Street and 56 Christina Street. The existing building at 160 Charlemont Street is approximately 100,769 square feet of R&D space and 56 Christina Street is approximately 69,030 square feet of industrial space. Both buildings will be demolished. Vehicle access to the site will be provided by four unsignalized driveways, with two on Christina Street and two on Charlemont Street. A new west connector road will provide internal access between western Christina Street and Charlemont Street. The connection will provide access the loading dock as well as two access/egress points to the underground parking garage. Th west connector road will include four parking spaces in front of the proposed retail spaces south of Charlemont Street. A new east connector road will provide access to the Christina Street and Charlemont Street driveways. It will provide access/egress to the parking garage and the main lobby. The east connector road will include 11 parking spaces in front of the main lobby. All four site driveways will operate as two-way roadways. A service and loading dock will be provided on the west side of the building and access via the west connector road. Three loading docks will be provided. Small delivery vehicles can use the surface parking spaces on the east connector road. Pick—up and drop-off activity can also occur at these surface spaces.

A free shuttle for residents and employees will be provided.

A multi-use trail will be provided on the east side of the project between the termini of Charlemont Street and Christina Street. The project will include a network of sidewalk, path, crosswalks, and connections. A raised crosswalk will be located across the east connector road north of the garage entrance. Raised intersections will be provided at the intersection of the east connector road and Charlemont Street and across Christina Street at the east send of the project site.

The study area includes the following 13 intersections in Newton and Needham:

Newton:

- Winchester Street at Route 9 Eastbound Service Road (unsignalized)
- Winchester Street at Route 9 Westbound Service Road (unsignalized)
- Winchester Street at Needham Street/Dedham Street (signalized)
- Winchester Street at Goddard Street/Rachel Road (unsignalized)
- Needham Street at Columbia Avenue/Avalon Driveway (signalized)
- Needham Street at Tower Road/Industrial Place (unsignalized)
- Needham Street at Charlemont Street (unsignalized)
- Needham Street at Oak Street/Christina Street (signalized)

Needham:

- Highland Avenue at 2<sup>nd</sup> Avenue (signalized)
- Highland Avenue at 1<sup>st</sup> Avenue (signalized)
- Highland Avenue at I-95 Northbound Ramps (unsignalized)
- Highland Avenue at I-95 Southbound Ramps (unsignalized)
- Christina Street at Rachel Road (unsignalized)

## **INTRODUCTION AND PROJECT DESCRIPTION**

- 1. The Introduction in the Transportation Impact and Access Study (TIAS) states 304,308 square feet of existing buildings will be demolished. The Project Description notes a total of 169,799 square feet of existing buildings. Please clarify.**

2. The residential vehicle parking ratio on page 7 should be 1.15 and not 1.16.
3. On the top of page 9 the TIAS lists the intersection of Christina Street at Rachel Road in Needham. It should be changed to Christina Street at Goddard Street in Newton.

## EXISTING CONDITIONS

### STUDY AREA

4. Please include the following intersections for analysis in the TIAS:
  - a. Winchester Street at Wallace Street/Stephen Place (unsignalized)
  - b. Christina Street at Wallace Street (unsignalized)
  - c. Oak Street at Chestnut Street (signalized)
  - d. Chestnut Street at Elliot Street (signalized)
  - e. Route 9 Ramps at Chestnut Street

*It is noted that BETA corresponded with VHB and they have agreed to include these locations.*

5. There are two intersections listed for #4 and #5 shown on Figure 1.
6. The eastbound off-ramp from I-95 northbound is signalized, not unsignalized as shown in the TIAS.

### ROADWAY NETWORK

Study area roadways and intersections were described in detail for key characteristics.

7. The 1<sup>st</sup> Avenue approach is listed in Figure 2 as a shared left/through/right lane. The approach has been coded correctly in the analysis but should be updated in Figure 2.
8. Left-turn lanes have been shown for the intersections of Needham Street with Charlemont Street and Industrial Place, yet these turn lanes exist as Two-Way Left-Turn Lanes and not specifically for the 125' dedicated left turn lanes at the intersection, as coded in the analysis.
9. The southbound right-turn from Winchester Street to Needham Street is shown under Yield control in Figure 2 and in the intersection description but was modeled as a "free" movement in the analysis. Please explain why it was not modeled as a "Yield"?
10. Under Highland Avenue at 2<sup>nd</sup> Avenue on page 16 the TIAS stated there is not a crosswalk on the eastbound Highland Avenue approach. There is currently a crosswalk there.

### PEDESTRIAN AND BICYCLE FACILITIES

11. There is a mid-block crosswalk across Needham Street south of Jaconnet Street that should be noted.

### EXISTING TRAFFIC VOLUMES

Existing traffic volumes were gathered from several sources due to the recent COVID-19 pandemic. Turning Movement Counts (TMC) were obtained/collected for the study intersections in April and October 2017, January 2018, February 2019 and March and April 2022 from 7:00AM to 9:00AM and 4:00PM to 6:00PM on a weekday and 11:00AM to 2:00PM on a Saturday. Daily Traffic volumes were also obtained/collected using automatic traffic recorders (ATR) in April and May 2017 and March 2022 for 48 hours. Traffic volumes were adjusted based upon seasonality and annual growth based upon factors provided by MassDOT and recently completed studies.

12. Consider providing a figure or table that shows the historical count date for each intersection. There are multiple count dates included in the Appendix for several intersections.

13. Historic traffic volumes were grown to a base year of 2019 which follows the MassDOT guidance documentation dated April 2020. Based on updated guidelines as of May 31, 2022, this adjustment is no longer needed for traffic volumes collected after March 1, 2022, as traffic volumes have returned to pre-pandemic levels. The exception to these guidelines is surrounding areas of predominantly office space as this land use has not rebounded completely. Given that the surrounding area is a mix of office, retail and residential, we feel collecting new counts would be warranted for this study; however, given construction activity, this may impact the accuracy of new counts. We feel that these counts would confirm similar trends in the analysis data, and given the timeframe of the current construction project, the use of historical count data is acceptable.
14. Traffic counts used at the two I-95 ramp intersections were collected in January 2018. Based upon roadway classification, this would result in a seasonal adjustment of these volumes as January was found to be 3% lower than an average month. No adjustment was listed in the report or Appendix for these two intersections. Please verify whether these counts were seasonally adjusted.
15. Table 1 in the Saturday Volume Comparison Memo shows that Saturday peak hour volumes are slightly higher (1%) than those during weekday evening peak hour volumes. This comparison is based upon data from 2017. BETA recommends that volumes be recollected using updated counts at select locations to complete this comparison.
16. Saturday peak hour volumes may not have the same typical work commuting patterns similar to the weekday evening peak hour as used for comparison in Table 1. BETA recommends conducting a Saturday peak hour analysis at all study intersections to ensure that travel patterns and movement splits do not result in negative impacts to movements that were not noted as concerns during the weekday peak hours.

#### *PUBLIC TRANSPORTATION*

17. Figure 5 should show the MBTA stops in the vicinity of the project site. It is noted that some bus stop signs may be missing on the west side of Needham Street due to construction.

#### *CRASH HISTORY*

Crash data were obtained from the MassDOT database for the most recent five-year period available from 2015 to 2019. The highest crash rate, quantified as crashes per million entering vehicles, occurred at the intersection of Needham Street and Charlemont Street with a crash rate of 0.89, which is higher than the MassDOT average crash rate for unsignalized intersections in District 6 of 0.52. Of the thirteen examined intersections, three intersections had a crash rate above the average crash rate for MassDOT. The unsignalized intersection of Needham Street at Tower Road/Industrial Place (crash rate: 0.65) and the unsignalized intersection of Winchester Street at Goddard Street (crash rate: 0.83) both also fell above the 0.52 MassDOT average crash rate for unsignalized intersections. It is noted that roadway and/or intersection improvements are being implemented at each of these three locations.

No study area intersections were identified as MassDOT Highway Safety Improvement Program (HSIP) crash cluster between 2017 and 2019.

18. The crash summary calculations and results are accurate.

#### **FUTURE CONDITIONS**

The TIAS evaluated impacts over a seven-year period to 2029 from the initial traffic data collection in 2022, for both the No-Build and Build conditions.

*BACKGROUND GROWTH*

An annual growth rate of 0.5% was applied to the raw volumes at study intersections based on the growth rate used in other studies within the City.

- 19. BETA finds this growth rate to be reasonable.**
- 20. Please verify whether “base year” 2019 counts were grown to present year 2022 based on the 0.5% per year rate prior to the seven-year growth to 2029. This would result in a 10-year growth as opposed to seven.**

In addition to utilizing a historical growth rate, traffic generated by other planned developments near the site was considered in developing the 2029 No-Build traffic volumes. The TIAS identified seven other developments that were considered to add traffic to the project study roadways and intersections. The developments are located at Northland Needham Street, 1149-1151 Walnut Street, 1114 Beacon Street, 1158 Beacon Street, 333 Nahanton Street, 557 Highland Avenue and Boston Children’s Hospital.

- 21. The other developments assumed for the 2029 No-Build scenario are reasonable.**
- 22. Please provide a figure showing the peak hour background trips that have been applied to the study area intersections.**

*BUILD CONDITIONS*

The TIAS indicates that the existing site uses would generate approximately 151 vehicle trips, 31 transit trips and 21 walk/bike trips during the weekday morning peak hour and 155 vehicle trips, 29 transit trips and 26 walk/bike trips during the weekday evening peak hour.

Trip generation for the project was estimated using the Institute of Transportation Engineers, *Trip Generation, 11<sup>th</sup> Edition* Land Use Code 221 (Mid-Rise Residential) and Land Use Code 822 (Strip Retail Plaza). Mode share of site trips was stated to be 77% vehicle, 15% transit and 8% walk/bike for residential with 88% vehicle, 2% transit and 10% walk/bike for retail. This also included a 25% pass-by reduction for retail trips and an internal capture rate for both land uses. While the project does not intend to take a credit for the existing land uses on site, this net total trips when factoring in existing site trips results in a reduction of three total trips in the morning peak hour and an addition of 24 trips in the evening peak hour. To present a conservatively high trip generation estimate, the TIAS assumed no credit for the existing trips on site.

- 23. The project trip generation estimates are reasonable.**
- 24. Trip Generation for LUC 221 results in 1,914 (957 enter, 957 exit) weekday daily trips. Table 3 lists 1,916 trips. Please provide explanation to the difference in calculated trips.**
- 25. Trip Generation for LUC 221 results in 161 (98 enter, 63 exit) weekday evening trips. Table 3 lists 172 trips. Please provide explanation to the difference in calculated trips.**
- 26. Trip Generation for LUC 822 results in 670 (335 enter, 335 exit) weekday daily trips as the average rate equation should be used due to the lower R<sup>2</sup> value. Table 3 lists 568 trips.**
- 27. Trip Generation for LUC 822 results in 69 (34 enter, 35 exit) weekday evening trips as the average rate equation should be used due to the lower R<sup>2</sup> value. Table 3 lists 80 trips.**
- 28. Footnote 4 in the Trip Generation table in the Appendix states that the regression equation was used for the weekday PM peak and the average rate for the weekday Daily and AM peak. Please verify this should be regression equation for the weekday only and average rate for the AM and PM peaks.**

29. Provide information on expected uses for the retail components of the project.
30. All subsequent calculations for trip generation numbers should be updated to reflect these changes in total trips.
31. Is it reasonable that the walk/bike trips would be higher (10%) for retail uses as opposed to residential (8%)?
32. Please provide internal capture rates used.
33. The Gross Trips listed in the Appendix table for the existing Research and Development land use in the weekday daily and morning peak hour do not total correctly. The daily entering trips should be 612 instead of 613 and the morning peak hour entering trips should be 93 instead of 94.
34. Provide trip generation calculation tables for Saturday daily and peak hour for values shown in Table 2 in the Saturday Volume Comparison Memorandum.

Trip distribution of traffic was based U.S. Census Bureau Journey-to-Work data for the City of Newton 2010. This seems appropriate for employees and visitors.

35. In Table 9 and the Appendix table please verify whether trips will be distributed to Dedham Street or Rachel Road. Figures 8 and 9 show this as Rachel Road.
36. Please provide discussion/clarification of how the retail trip distribution in Table 9 was calculated. It does not appear to match the trip distribution in the Appendix.
37. In Figure 9, the two trip volumes at the intersection of Centre Street at Route 9 WB Access Road should have the 9 trips shown in the through movement, not the right turn. Similarly, the 25 exiting trips should be shown in the through movement, not the left turn. Also, there is a missing trip value at the intersection of Goddard Street and Christina Street. It appears there should be an 8 in the right turn from Goddard Street. Please verify and correct this figure.
38. In Figure 10, the parenthesis are missing from both the exiting volumes from the East Site Driveway intersection. Please verify and correct this figure.
39. Is the Saturday peak hour expected to have the same trip distribution as weekday peak hours? Given that there are not typical commuting patterns occurring on a Saturday like there are during the weekday, the distributions listed may not be identical and could have varying impacts to study area intersections.

## **TRAFFIC OPERATIONS**

### *INTERSECTION CAPACITY ANALYSIS*

Capacity analyses were performed for the study intersections using the Synchro 10 software, based on the 6<sup>th</sup> Edition of the Highway Capacity Manual methodologies for the 2022 Existing, 2029 No-Build, and 2029 Build traffic volumes, during the weekday AM and weekday PM peak periods. Several study intersections have individual movements or the overall intersection that operate at Level of Service (LOS) E or F during the No-Build conditions and will remain at LOS E and F with the addition of projected trip from this project. It was stated that these intersections will not be impacted significantly as a result of the added site trips. All other study area intersections are expected to operate with LOS D or better.

40. Under the Traffic Analysis section, it appears the traffic analysis was conducted using Synchro operations output instead of the 6<sup>th</sup> Edition output of the Highway Capacity Manual output as stated in the report. This is an acceptable practice but BETA notes that Synchro output generally results in more favorable conditions than that of the Highway Capacity Manual output.
41. Please check the following capacity analysis issues:

- a. Winchester Street southbound right-turn operates as a yield but has been analyzed as a free movement.
- b. The left-turns at the intersections of Needham Street with Industrial Place and Charlemont Street are listed as dedicated left-turn lanes yet are two-way left-turn lanes currently.
- c. The intersections of Needham Street with Industrial Place and Charlemont Street are listed as four-way intersections yet are slightly offset in the field.
- d. I-95 NB and SB intersections with Highland Avenue were analyzed as four-way intersections when they are ramp junctions.
- e. I-95 NB intersection with Highland Avenue (signalized) lane designation does not match existing geometry. Highland Avenue at the intersection does not have a right-turn lane. Is this signal coordinated/part of the 1<sup>st</sup> Avenue signalized intersection?
- f. The Synchro output files are listed as Existing 2020 yet referred to in the report as Existing 2022.
- g. The Synchro output files are listed as No-Build 2022 yet referred to in the report as No-Build 2029.
- h. The Synchro output files are listed as Build 2022 yet referred to in the report as Build 2029.

**42. While many intersections operate at LOS E or F in the No-Build and do not significantly degrade with the proposed project build out, the Needham Street/Oak Street/Christina Street intersection shows the Christina Street westbound left-turn increasing in delay by 50 seconds in the PM peak hour. In addition, the volume to capacity increases from 0.86 to 1.06 (over-capacity) with the added project trips. While it remains at LOS F, this is a significant increase in delay that should be addressed as well as addressing the capacity of the movement.**

#### *SIGHT DISTANCE*

Sight distance analyses were performed at both proposed site driveways on both Charlemont Street and Christina Street. Both Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD) were evaluated. These analyses were based on a 25-mph posted speed limit on Charlemont Street and a 30-mph estimated speed on Christina Street.

The results show that required SSD lengths are exceeded in both directions at the proposed site driveways, while the desired ISD are not met for some directions. It was stated that these desirable ISDs that were not met, the minimum ISD (equal to the SSD) is exceeded for all directions.

**43. BETA finds these calculations to be acceptable.**

## **TRANSPORTATION MITIGATION**

### *TRANSPORTATION DEMAND MANAGEMENT*

The Proponent proposes to implement several Transportation Demand Management (TDM) measures on site in an effort to minimize the project's impact on the surrounding roadways. The measures include:

- Provide a small-scale shuttle van for residents and employees between site and MBTA Newton Highland Station;
- Indoor/secure bicycle parking for residents and outdoor parking for customers and visitors;

- Bicycle repair station and air pump;
- Access to bike share location provided on-site or nearby;
- Fleet of shared Zip Cars with parking provided on-site or nearby;
- Provide electric vehicle charging stations and preferential electric car/low emission car parking within garage;
- Limited parking supply;
- Separate (unbundled) charges for parking spaces for residents, except for affordable units;
- Disseminate information on alternate modes and developing transportation;
- Display transit maps on site in a central location;
- Hold promotional events for transit riders, cyclists, and pedestrians;
- Provide financial incentives for alternative modes such as discounted MBTA passes for residents without cars and full-time employees.

**44. BETA agrees that these measures should be implemented, and has the following comments:**

- **Make 10% of the parking stalls electric vehicle (EV) spaces, and 50% EV ready.**
- **Provide weatherproof and secure bike outdoor bike parking in front of the building and at the retail locations (see #48 below).**
- **The applicant should consider providing discounted MBTA passes to all residents regardless of whether they own a car or not, and to all full-time and part-time employees. Would this benefit be provided for a limited time or in perpetuity?**
- **The proposed transit subsidy to residents and employees should also apply to alternate modes of transportation including car share and bike share programs.**
- **Incorporate electric vehicles for shuttle van service for residents.**
- **In addition to electric vehicle charging stations, provide station for electric bicycle charging.**
- **Will the free shuttle be available to the public?**
- **How many car-share (Zip Car) vehicles will be provided?**

*ROADWAY NETWORK IMPROVEMENTS*

**45. On page 61 of the TIAS stated the applicant will coordinate with the City of Newton to implement signage to slow vehicle speeds on Christina Street due to limited intersection sight distance. We also suggest the applicant monitor traffic speeds post-project occupancy on Christina Street, as well as on Goddard Street and Wallace Street and identify appropriate measures to reduce speeds as necessary.**

*PEDESTRIAN AND BICYCLE ACCOMMODATIONS*

- 46. The ZBA Hearing Response presentation shows the proposed multi-use trail will be 8 feet wide. An 8-10-foot-wide trail is acceptable.**
- 47. The ZBA Hearing Response presentation shows all sidewalks will be a minimum of five feet wide. Please confirm.**
- 48. The ZBA Hearing Response presentation shows three proposed locations for outdoor bicycle parking (see #44 above). Provide number of spaces at each location.**
- 49. Will public have access to the proposed park on-site?**
- 50. Provide dimensions of proposed raised intersections and raised crosswalk.**



*CONSISTENCY WITH NEEDHAM STREET AREA VISION PLAN*

The following elements of the Needham Street Area Vision Plan are included in the project:

- › Increased green space.
- › Additional connections to local trails and paths.
- › Supporting a variety of land uses, including residential and small retail to help create a vibrant destination with a distinct identity.
- › Creating a better connection with the existing Upper Falls neighborhood.
- › Designing human-scale buildings that promote an active pedestrian environment and help to create a sense of place.
- › Expanded transit connections, including an increased shuttle bus service; and
- › Managing transportation demand in new development.

**51. The project is consistent with many elements of the Needham Street Area Vision Plan.**

## **SITE PLANS**

The applicant proposes to construct 471 underground parking spaces on-site. We understand the number of surface spaces has been increased from 15 to 20 spaces as shown in the ZBA Hearing Response presentation.

- 52. Confirm number of parking spaces and provide updated site plan that shows location of parking spaces.**
- 53. The previous site plan does not show parking for the retail space along Christina Street. Will parking be provided there?**
- 54. Please provide discussion of adequacy of proposed visitor and retail parking spaces to meet projected demand. Will visitors be allowed to park in garage?**
- 55. A plan of the parking garage has not been provided. Please provide.**
- 56. There are three access driveways shown for the parking garage. Please provide width of each driveway and will they be 24 feet wide to meet City requirements. Explain how access to garage will operate for residents and visitors, e.g., gates, access cards.**
- 57. Provide length of proposed loading area and show turning radius for large trucks maneuvering in and out of loading docks.**
- 58. Is the sidewalk on the south side Charlemont Street a public sidewalk or a private sidewalk?**
- 59. There is no sidewalk on the north side of Christina Street west of the project site. A crosswalk across Christina Street at the site's west connector road is shown in the ZBA Hearing Response presentation but not on the site plans. Confirm and include on the revised site plan.**
- 60. The ZBA Hearing Response presentation shows three bike accessible entry points into the site and 198 indoor bike parking spaces. Explain how residents and visitors will access the spaces, card key, elevator, stairs, etc.**
- 61. The Parking Summary Chart on the site plan indicates that the garage parking spaces will be 18 feet long by 8.5 feet wide. Per the Newton Zoning Ordinance, section 5.1.8.B.1 the City requires a 9'-0"**

wide parking space. Per the Newton Zoning Ordinance, section 5.1.8.B.2, spaces shall be 19 feet long.

62. The Parking Summary Chart on the site plan indicated that the accessible spaces in the garage do not meet the 19-foot length minimum dimension requirements in the Newton Zoning Ordinance, section 5.1.8.B.4.
63. Will parking spaces in the garage be designated for resident, employees, and visitors? If so, how many spaces will be provided for each?
64. Explain how small deliveries by UPS and Amazon vans, etc., passenger pick-up/drop-off activity will be handled in the surface parking spaces on the east and west connector roadways, including a shuttle stop on the east connector road at the lobby. Will pick-ups and drop-offs also occur at the retail space along Christina Street? (see comment #53).
65. Are there areas on-site for snow storage?
66. Coordinate with the Newton Fire Department regarding access and circulation of firetrucks at this site.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,  
**BETA Group, Inc.**



Jeffrey Maxtutis  
Senior Associate

Project No: 10707

## ATTACHMENT B

# Horsley Witten Group

*Sustainable Environmental Solutions*

112 Water Street • 6<sup>th</sup> Floor • Boston, MA 02109  
857-263-8193 • horsleywitten.com



December 13, 2022

Katie Whewell  
Chief Planner for City of Newton  
Planning and Development Department  
1000 Commonwealth Avenue  
Newton, MA 02459-1449

Re: Peer Review Site Design & Open Space  
Northland Charlemont Comprehensive Permit Project  
160 Charlemont Street, Newton, MA

Dear Ms. Whewell:

The Horsley Witten Group, Inc. (HW) is pleased to submit this initial peer review regarding the site plan and open space concept presented for the Northland Newton Development located at 160 Charlemont Street and 56 Christina Street, off Needham Street in Newton, MA. We understand that the Comprehensive Permit Application, pursuant to M.G.L. Chapter 40B, includes the construction of a nine-story, mixed-use building with 410 residential units within approximately 563,064 square feet (sf) of residential use, approximately 16,633 sf of amenity space, and approximately 10,680 sf of commercial space in one building on 6.98 acres of land. HW understands that this development will encompass 486 parking stalls, including 471 located in a 2-level below grade parking garage and 15 surface stalls, as well as 3 loading spaces and 211 bicycle parking spaces. HW also understands that 25 percent of the apartment units, made up of various types, will be deed restricted for households making up to 80 percent of Area Median Income (103 units). The proposed development also includes approximately 2-acres of new publically-accessible open space and bicycle and pedestrian paths to connect with Newton's existing and proposed network.

The existing site is mostly impervious and is occupied by two, one-story industrial buildings, one approximately 1,000 square feet and the other approximately 70,000 square feet. These buildings are located on two separate parcels of land within a Mixed Use 1 (MU1) district. The site contains wooded buffers along its eastern edge and along Christina Street and generally slopes down (by approximately 12 feet) from the northwest corner on Charlemont Street to the southeast corner on Christina Street. Presently, stormwater is collected by closed drainage systems onsite that discharge to the municipal systems within Charlemont and/or Christina Street and eventually to the Charles River untreated.

Portions of the site are located within the 200 foot Riverfront Area of the Charles River.

The Applicant proposes to demolish the two existing buildings and build the development described above, resulting in a net decrease in impervious cover by approximately 1.7 acres. The project therefore qualifies as a redevelopment under the Massachusetts Stormwater Management Standards as detailed in the Massachusetts Stormwater Handbook (MSH). The Applicant proposes to install a new drainage network including deep-sump hooded catch basins, sediment chambers, structured sand filters, and biofiltration basins in accordance with

the Massachusetts Stormwater Handbook. A peer review of the proposed stormwater management system will be provided to the City of Newton in a separate letter.

As part of the site plan review process, HW reviewed the following documents and plans:

- City of Newton Department of Planning and Development Public Hearing Memorandum, dated October 19, 2022, with attachments and exhibits:
  - Exhibit A: Summary of Relief and Waivers Requested
  - Attachment A: City of Newton Department of Planning and Development Zoning Review Memorandum
  - Attachment B: Land Use Map
  - Attachment C: Zoning Map
  - Attachment D: MassHousing Project Eligibility ("Site Approval") Letter, dated August 8, 2022
  - Attachment E: City of Newton Project Eligibility Application/Site Approval Letter to MassHousing, dated April 21, 2022
    - Attachment A: Comment received from member of the Commission on Disability
- Northland Charlemont Proposed 40B Development ZBA Hearing Responses (slides), dated December 21, 2022 (file date November 11, 2022; uploaded November 23, 2022)
- Northland Charlemont plan set, dated October 15, 2021 unless noted otherwise:
  - Conceptual As of Right Plan, dated October 26, 2021
  - Layout and Materials Plan, dated December 21, 2021
  - Grading and Drainage Plan, dated December 21, 2021
  - Utility Plan, dated December 21, 2021
  - Cover (G-000)
  - Context Plan (LA-001)
  - Context Plan Enlargement (LA-002)
  - Existing Site Conditions (LA-003)
  - Existing Site Conditions (LA-004)
  - Illustrative Site Concept Plan (LA-006)
  - Illustrative Site Concept Plan and Precedents (LA-007)
  - Existing Condition – Charlemont Street Looking East (LA-009)
  - Existing Condition – Parking Lot Looking South (LA-011)
  - Unit Calcs (A-001)
  - Affordable Unit Mixes (A-002)
  - Unit Location Plans (A-003)
  - Unit Location Plans (A-004)
  - Unit Location Plans (A-005)
  - Below Grade Parking (A-100)
  - Ground Level – Christina (A-101)
  - Level 1 (A-102)
  - Level 2 (A-103)
  - Level 3 (A-104)

- Level 4 (A-105)
- Level 5 (A-106)
- Level 6 (A-107)
- Level 7 (A-108)
- Level 8 (A-109)
- Elevations (A-201)
- Elevations and Sections (A-202)
- Typical Unit Plans (A-401)
- Comprehensive Permit Site Approval Application Rental to MassHousing, signed March 11, 2022
- Access to Northland Needham Street Shuttle document, dated November 18, 2022
- Consistency with the Needham Street Area Vision Plan Adopted 2018 document, dated November 18, 2022
- Emails between Chris Bridle and March Welch, dated November 8, 2022 and forwarded to Katherine Adams, dated November 22, 2022
- Redlined Summary of Relief and Waivers Requested (uploaded November 23, 2022)
- Letter from Katherine Braucher Adams to Brenda Belsanti, Newton Zoning Board of Appeals, dated November 22, 2022.
- Opening Hearing 10/26/22 BKL Issues document
- Newton Urban Design Commission memorandum to Zoning Board of Appeals, dated October 24, 2022
- Architectural Plans, dated September 15, 2022
  - Area Summary (AZ-001)
  - Below Grade Parking – P2 (AZ-100)
  - Ground Level – Christina (AZ-101)
  - Level 1 (AZ-102)
  - Level 2 (AZ-103)
  - Level 3 (AZ-104)
  - Level 4 (AZ-105)
  - Level 5 (AZ-106)
  - Level 6 (AZ-107)
  - Level 7 (AZ-108)
  - Level 8 (AZ-109)
  - Roof Level (AZ-110)
  - Elevations (AZ-201)
  - Elevations (AZ-202)
  - Conceptual Renderings (AZ-301)
  - Conceptual Renderings (AZ-302)
  - Conceptual Renderings (AZ-303)
- Site Plans, dated September 15, 2020
  - Legend and General Notes (C-1.0)
  - Soil Erosion and Sediment Control – Notes and Details (C-2.0)
  - Soil Erosion and Sediment Control – Site Plan (C-2.1)
  - Layout and Materials Plan (C-3.0)

- Grading and Drainage Plan (C-4.0)
- Utility Plan (C-5.0)
- Site Details (C-6.0)
- Existing Conditions Plan of Land (Sv-5)
- Existing Conditions Plan of Land (Sv-6)
- Rendered Plan (L-900)
- Landscape Plan Set (L-100, L-300, L-310, L-901, L-902)
- Tabular Zoning Analysis
- 40B Design Narrative, dated October 6, 2022
- Stormwater Report, dated September 15, 2022
- Resilience Response to Public Hearing Comments, dated November 17, 2022
- Sustainability Narrative, dated September 15, 2022

HW also participated in a conference call with the Applicant and representatives of its design team to review the design on December 1, 2022. HW has the following comments and recommendations:

### General

1. HW has reviewed the Needham Street Vision Plan and notes that the City of Newton has indicated that the proposed development is consistent with the plan in terms of housing, mixed uses, and pedestrian-oriented designs. The City of Newton writes: “The proposed project fulfills many goals of the Vision Plan, such as locating parking below the building, locating the mass of the building closer to Needham Street and away from the adjacent residential neighborhood and by incorporating public open space. Planning staff recommend the Applicant explore ways to break up the mass of the building, such as creating multiple buildings, instead of one long façade. The Applicant should also provide information on the sustainable aspects of the project, including the ability to achieve Passive House certification.” The Applicant has provided a document about such consistency. HW generally concurs with the City of Newton’s recommendations in the above statement and recommends that the Applicant continue to incorporate and evaluate consistency with the Needham Street Vision Plan. HW also includes additional recommendations for improved consistency and/or documentation of relevance to the Needham Street Vision Plan under specific topic headings below.
2. Area calculations are not always consistent in the materials HW reviewed. HW suggests that the Applicant clarify the site’s area, buildable area, proposed building area, proposed commercial space area, proposed amenity space area, proposed parking area, proposed lot coverage area, proposed open space area, and associated calculations, such as Floor Area Ratio (FAR) and residential units per acre density.
3. HW notes that the Applicant has another proposed project across Needham Street, known as the Northland Newton Development. The Applicant has shown how these two sites would be linked by the proposed shuttle. HW suggests that the Applicant demonstrate any additional connections or interactions between the two sites, especially in the event that the commercial properties on Needham Street between the two sites

get redeveloped, which would have important implications for transportation, open space access, and other site features. HW acknowledges that in reference to the east side of Charlemont Street, the Applicant writes in the 40B Design Narrative: “There is no intention or desire on behalf of the community to reconnect Charlemont as a through street.”

## Uses

4. The Applicant has noted anticipated commercial uses of fast food, for-profit education, and restaurant. Given the current fluctuations in commercial space utilization, especially in light of the COVID-19 Pandemic, delivery services, and e-commerce, HW suggests that the Applicant demonstrate how these commercial spaces could be utilized, should anticipated commercial uses not come to fruition. HW recommends that the Applicant build flexibility into such spaces.
5. The Applicant has proposed a mix of housing types, with 25 percent units reserved for those households making 80 percent of Area Median Income. HW notes that the City of Newton has requested further affordability measures. HW suggests that the Applicant review the location of income-restricted units to avoid clustering (i.e., segregating) such units (see for example, Affordable Unit Mixes A-002).

## Building Placement, Massing, and Site Design

6. The Applicant has described how the site layout design was driven by a desire to create a buffer between the proposed development and the residential neighborhood to the east. HW recommends that the Applicant provide additional drawings (e.g., axonometric, perspective) and narrative descriptions to explain the relationship and interface between the site and the adjacent residential neighborhoods.
7. The Applicant has also described how the site layout design was driven by a desire to not have the largest portion of the proposed building abut the residential neighborhood to the east. HW recommends that the Applicant provide additional drawings and narrative showing how other site design alternatives were not as successful as the current design in breaking-up the massing and creating a transition between the site and residential neighborhood to the east. For example, HW recommends the Applicant show how a series of smaller separate buildings along the eastern edge of the site were not feasible in creating a transition between the residential neighborhood to the east and a larger proposed building on the western edge of the site. HW notes that similar requests have been made by the City of Newton and MassHousing. HW recommends that the Applicant coordinate this information with any other input requested at the October 19, 2022 Urban Design Commission meeting.
8. HW has reviewed the shadow studies requested by the City of Newton provided in the December 21, 2022 presentation for various dates throughout the year (March 21<sup>st</sup>, June 21<sup>st</sup>, September 21<sup>st</sup>, and December 21<sup>st</sup>). HW notes that the primary shadow impacts would be on the following area(s):

- The adjacent commercial properties to the west on March 21<sup>st</sup> at 9:00 am, June 21<sup>st</sup> at 9:00 am, September 21<sup>st</sup> at 9:00 am, and December 21<sup>st</sup> at 9:00 am.
- Charlemont Street on March 21<sup>st</sup> at 3:00 pm, September 21<sup>st</sup> at 3:00 pm and 6:00 pm, and December 21<sup>st</sup> at 9:00 am, 12:00 pm, and 3:00 pm.
- The proposed site open space on June 21<sup>st</sup> at 6:00 pm, September 21<sup>st</sup> at 6:00 pm, and December 21<sup>st</sup> at 3:00 pm.
- The adjacent residential neighborhood to the east on September 21<sup>st</sup> at 6:00 pm.

These shadow impacts do not appear to be significant, but the Applicant should provide additional confirmation that such shadow impacts would not cause adverse effects, particularly on the open space plantings and residential neighborhood to the east. In addition, some of the shadow studies graphics appear to cut-off the full extent of the shadows, so HW recommends showing those graphics at wider scales, where needed (e.g., December 21<sup>st</sup> all times, September 21<sup>st</sup> at 6:00 pm).

9. HW notes that the City of Newton has also requested a photometric study/plan, a three-dimensional model, and a sign plan for the project.
10. The Applicant has described the west side of the site as the “backdoor” with the service entrance on that side. HW suggests that the Applicant explore opportunities to activate this side of the development, especially for people arriving to the site from the west. HW notes that there are similar backdoors, loading docks, and service entrances on the facing east side of the adjacent commercial properties to the west on Needham Street. However, HW suggests that the Applicant consider how the proposed site might interface with these properties, especially in the event that they are redeveloped, particularly in the context of the Needham Street Vision Plan that proposed a more integrated street network and bicycle and pedestrian friendly environment. HW suggests that the Applicant explore and/or show alternative site configurations to demonstrate how the current configuration was developed and selected, with the backdoor facing Needham Street and the publicly accessible open space shielded from Needham Street by the proposed building.
11. HW notes that the Needham Street Vision Plan has discussions of recommended height, width, and dimension designs (page 38). HW suggests that the Applicant review these discussions and consider the degree to which the proposed project meets these recommendations.
12. In the 40B Design Narrative, the Applicant writes: “The buildings that occupy the site and abut the site to the immediate west and north are one story industrial, retail or manufacturing buildings. With the current redevelopment projects and plans for Needham Street, they are quickly becoming an out-of-place typology in the emerging mixed-use residential fabric and patterns of mid-rise development in the area. In addition, their arrangement of large surface parking area fronting the street are at odds with a walkable active pedestrian experience.” HW does not dispute this finding, but



notes that the proposed 9-story building with its backdoor facing Needham Street could also be considered an “out-of-place typology” at this time. HW recommends that the Applicant provide documentation or discussion of how the proposed development will fit into the current and future context of Needham Street, including potential future build-out of the Needham Street corridor and the Applicant’s proposed development across Needham Street.

### **Open Space, Trees, and Landscaping**

13. The Applicant has requested a waiver of Newton’s Tree Preservation Ordinance. HW echoes the City of Newton’s comments and recommends that the Applicant provide additional justification for this requested waiver. HW has reviewed communications between the Applicant and the City of Newton City Forester about tree caliper size. HW recommends that the Applicant provide additional support for these decisions and the waiver request, building on the Landscape Plans (L-300, L-310).
14. HW notes that the Applicant has provided a network of pedestrian and bicycle paths connecting to Newton’s existing and proposed network. HW recommends that the Applicant provide additional context on how this network connects with regional bicycle and pedestrian networks, including those along the Charles River. HW also recommends that the Applicant show additional details on how the proposed path network might connect with the railroad bridge across the Charles River and the property across Christina Street to the south, should additional open space connections to the Charles River be made in those areas in the future, outside the scope of this project. HW suggests that the Applicant coordinate with the property owners of the sites across Christina Street to the south. HW notes that those sites appear to be currently occupied by a day-care center and social services provider for individuals with intellectual and development differences. HW recommends that the Applicant explore opportunities to design the publically accessible open space in a way that can benefit users of these adjacent sites.
15. HW notes that the proposed multi-use path crosses south-north along the eastern edge of the site. HW suggests that the Applicant show additional details to avoid conflicts between users of the path and parkgoers in the adjacent passive recreation areas, especially children (see for example, Rendering C and D on L-901 in the Landscape Plans). HW notes that in one version of the open space plan the path appears farther east than in an earlier version of the plan. HW believes that the farther east orientation is preferable to avoid potential conflicts.
16. HW recommends that the Applicant explicitly clarify which areas of open space are public (e.g., green space east of Entrance Drive) and which areas of open space are private (e.g., courtyards, pool) and associated acreages. HW suggests that the Applicant clarify how these areas will be demarcated (e.g., fencing, signage) and if the site owner or manager will be able to close off publically accessible areas at their discretion. HW recommends that the Applicant and the City of Newton develop an agreement about the use and accessibility of the site’s open space. HW notes that similar requests were made by the City of Newton.

17. According to the MassHousing application, there will be approximately 2 acres of open space. HW suggests that the Applicant provide calculations and a diagram for this value and clarify whether that 2-acre total includes the Entrance Driveway, private areas, and/or other areas that are not publically accessible green space.
18. In the 40B Design Narrative, the Applicant describes the open space as a “destination” but has also indicated that the open space is not intended to attract large numbers of external visitors. HW suggests that the Applicant clarify this apparent inconsistency and anticipated visitor levels, as well as associated needs (e.g., parking).
19. HW suggests that the Applicant provide additional information on open space compatibility with *Newton’s Open Space and Recreation Plan 2020-2027*.

### Landscaping Details

20. The Northland Plant Schedule per the landscape plan issued on September 15, 2022 is generally aligned with the Newton Recommended Plant List. The following table identifies species and quantities of each to be planted that are not accounted for in the Newton List but are included in the Northland Plant Schedule. None of these additions are known to be invasive in Massachusetts, and therefore HW does not foresee any issue but recommends that the Applicant consult with the Newton Conservation Commission.

Northland Plantings not on Newton Plant List	Quantity
<b>Deciduous Canopy Trees</b>	
Honey Locust ( <i>Gleditsia triacanthos</i> )	9
Sweet Gum ( <i>Liquidambar styraciflua</i> )	3
Eastern Cottonwood ( <i>Populus deltoides</i> )	5
American Hophornbeam ( <i>Ostrya virginiana</i> )	23
Chestnut Oak ( <i>Quercus montana</i> )	10
Pin Oak ( <i>Quercus paulustris</i> )	3
<b>Smaller Deciduous Trees</b>	
Autumn Brilliance Apple Serviceberry (Amelanchier X Grandiflora)	5
Sweetbay Magnolia ( <i>Magnolia virginiana</i> )* endangered in MA	9

21. The landscape plan does not provide the species of trees to be removed, except for some noted small cedars. HW suggests that the Applicant identify existing species and potentially incorporate this information into the current plant schedule.
22. HW recommends that the Applicant consider the habitat loss associated with the four dead/declining tree removals. Two out of these four trees are significant in size (24 caliper inches) and one, noted as declining, is the largest at the site (52 caliper inches).

### Transportation

23. The Applicant has provided information about a proposed shuttle to and from the MBTA Green Line Newton Highlands station and the site, as well as the Applicant’s Northland

Newton Development (NND) across Needham Street. HW recommends that the Applicant provide additional information about the shuttle, including anticipated vehicle size and type, who will be permitted to utilize the shuttle, cost to riders and/or the City of Newton (if any), and turnaround route within the Charlemont Street development. A memorandum from the City of Newton describes “fee access to the Green Line shuttle that will be provided by the Applicant at their mixed-use project across Needham Street.” HW suggests that the Applicant clarify how this access will work in practice.

24. The Applicant has described transportation connections (e.g., shuttle, MBTA Green Line, MBTA Commuter Rail, MBTA #59 Bus). HW suggests that the Applicant provide an up-to-date map of these connections, including anticipated walking, bicycling, driving, and public transportation distances and times to these connections.
25. The Applicant has proposed a network of bicycle and pedestrian paths connecting to Newton’s existing and proposed network. HW suggests the Applicant also demonstrate bicycle and pedestrian connectivity to the public transportation network (e.g., MBTA bus, commuter rail, Green Line) in a narrative and/or plan.
26. The Applicant has indicated that it will upgrade the existing stairs to and from the Charlemont residential neighborhood to the east, including a bicycle runnel. However, a memorandum from the City of Newton refers to a bicycle “tunnel.” HW suspects that this is a typo, but HW suggests the Applicant confirm the design for this proposed bicycle connection. In addition, HW recommends that the Applicant clarify whether access to and from this staircase will be restricted (i.e., with a gate locked at certain hours) and why a more accessible approach for those with mobility differences (e.g., ramp) was not considered.
27. The Applicant has shown a network of bicycle and pedestrian paths around the site and to and from the surrounding areas. HW recommends that the Applicant provide additional details on pedestrian entrances to the building, beyond what is provided in the December 21, 2022 presentation. HW notes a similar request was made by the City of Newton and MassHousing. Based on the existing plans, it appears that pedestrians and bicyclists arriving from the west (e.g., Needham Street) generally would have to travel to the eastern side of the building to enter it (or enter via the loading area). HW recommends that the Applicant consider opportunities for bicyclists and pedestrians to enter the building on the western side as well, other than through the loading area.
28. HW suggests that the Applicant clarify how parking spaces will be demarcated for various uses and provide designated parking spaces for park visitors.
29. HW notes that a proposed Charlemont Street extension continues across Needham Street in the Applicant’s proposed Northland Newton Development. HW recommends that the Applicant consider opportunities to create a straight Charlemont Street connection through both sites. As currently depicted, it appears that vehicles, bicyclists, and pedestrians exiting Charlemont Street from the Northland Charlemont Street who wish to continue onto Charlemont Street in the Northland Newton Development would have to make a left turn onto Needham Street and then a right turn onto Charlemont Street in the Northland Newton Development. A straight Charlemont Street connection

through both sites could simplify this maneuver. HW suggests that the Applicant document pros and cons of alternative designs for this connection (e.g., traffic, speed, safety).

30. The Applicant proposes a restricted Service Drive on the west side and an Entrance Drive on the east side of the building. The Applicant has described the intent for these drives is to not encourage cut-through traffic to and from Needham Street. HW suggests that the Applicant provide additional details on how these drives will be restricted with signage or physical means (e.g., gates, bollards, speed bumps) to avoid such cut-throughs. HW notes that there is already an existing cut-through drive immediately to the west behind the adjacent commercial properties on Needham Street. HW suggests that the Applicant review the relationship between this existing cut-through and the proposed, including but not limited to, in the case that those adjacent properties are redeveloped and in the context of the integrated street network recommendations of the Needham Street Vision Plan. More broadly, HW suggests that the Applicant provide additional details on the degree to which the project addresses the Needham Street Vision Plan's street network connectivity goals and account for the experiences of automobile users, bicyclists, and pedestrians.
31. The Applicant has mentioned concerns about queues on Christina Street and Needham Street. HW suggests that the Applicant provide information on how the proposed project would impact these queues, including potential use of Charlemont Street, per the Saturday Volumes Memo.
32. The Needham Street Vision Plan referred to crash issues on Needham Street. HW recommends that the Applicant present the proposed project's relevance to these issues (if any) and the degree to which the development will address these issues.
33. The Applicant has provided circulation diagrams for bicyclists and pedestrians and plans to show parking and loading access. HW suggests that the Applicant add additional details to these plans to demonstrate how conflicts will be avoided between bicyclists and vehicles exiting and entering the building on the east (front) and west (back) of the building. HW also suggests that the Applicant show how conflicts will be avoided between the various users of the west (back) of the building loading area, which based on discussions with the Applicant, could include residents in vehicles or on bicycles, commercial deliveries, residents moving in or out, and other users.
34. HW recognizes that a separate peer review of transportation issues will be provided to the City by others. We defer further transportation comments to the traffic reviewer.

## **Energy and Sustainability**

35. The Applicant's MassHousing application describes "the use of renewable energy sources and achieving low energy standards through LEED and/or Passive House design measures." HW notes that while these standards may overlap, they are not the same. Based on the details in the Sustainability Narrative, it appears that the Applicant will seek Passive House certification, but HW recommends that the Applicant confirm the approach and intent.

36. The Applicant has provided information about anticipated Passive House certification and energy use (e.g., all electric appliances). HW recommends that the Applicant provide additional information about source(s) of energy, onsite renewable energy deployment potential, embodied carbon, and use of Passive House design principles *specific* to the site and development, beyond those general details provided in the Sustainability Narrative document and MassHousing application.
37. The Applicant has noted that the site will be “solar ready” and “green roof ready” as well as accommodate electrical vehicle charging stations. HW suggests that the Applicant indicate what accommodations the Applicant intends to make for these “ready” designations and how much detail the Applicant intends to provide in this phase.
38. In the Sustainability Narrative, the Applicant writes: “Northland Charlemont’ s commitments to Passive House will help ensure a substantially lower annual energy consumption compared to conventional construction thus helping minimize the building’s impact to the regional electric grid.” However, the Applicant also notes that all appliances will be electric. HW suggests that the Applicant clarify these statements and show high level energy assumptions to confirm these statements.

### **Hazardous Materials**

39. The City of Newton has indicated potential contamination concerns in its memorandum and requested additional information. HW concurs and suggests that the Applicant provide additional contamination information and its potential relevance for other site features (e.g., stormwater site designs, excavation). HW suggests that the Applicant provide its intended approach to evaluate potential contamination concerns, if any.

### **Utilities**

40. The Applicant has provided a Utility Plan (C-3), but that plan does not show proposed sewer, electric, cable, and other utilities, other than stormwater. HW suggests that the Applicant provide a plan with those details, including whether there will be a gas connection (e.g., for commercial spaces), despite noting that all appliances will be electric.

### **Resilience**

41. The Applicant has indicated that flood risks are minimal, based on FEMA flood maps and because floors will be elevated. HW suggests that the Applicant provide section drawings with flood elevations to confirm that floors will be sufficiently elevated and provide any modeling documentation to confirm. HW also notes that FEMA flood maps are generally for flood insurance purposes and do not necessarily account for localized flooding conditions. HW suggests that the Applicant provide documentation about potential flooding issues under current conditions and under proposed conditions for the site and adjacent areas (e.g., from onsite drainage, urban flooding), including in the context of climate change projections (e.g., increased intensity of precipitation).

## Lighting

42. HW recommends the Applicant provide a lighting plan for the site and notes a similar request was made by the City of Newton and MassHousing. Specifically, HW suggests that the Applicant show how the eastern and western sides of the proposed development would be lighted for security purposes, while not interfering with adjacent residential uses, especially for those arriving to the site from the west, including in the context of the requested waiver(s).

## Wetlands

43. HW notes that the site contains portions of 200-foot Riverfront Area onsite, and there are previous City of Newton Conservation Commission Orders of Conditions for this property. The City of Newton memorandum describes that the Applicant and Conservation Commission held an informal review meeting in early November 2022. HW recommends that the Applicant share the results of that meeting and any input from that meeting that has shaped the subsequent design(s) or process.
44. The MassHousing documentation indicates that there are 0.06 acres of wetland area on site, but HW could not verify the presence of wetlands based on MassDEP layers on MassMapper. HW suggests that the Applicant provide documentation of the presence of any onsite wetlands.
45. Due to work within Riverfront Area, a Notice of Intent (NOI) must be filed with the City of Newton Conservation Commission in accordance with the Wetlands Protection Act (M.G.L. 131 Section 40 A) and its regulations (310 CMR 10.00). If alteration of any wetland or associated buffer zone will occur, this must also be stated in the Notice of Intent. The Applicant must follow the guidelines outlined in the Order of Conditions issued by the Commission in response to the NOI. No other jurisdictional wetland resource areas appear to be present at the site.
46. The City of Newton does not have a local wetlands ordinance; however, Newton's Floodplain Ordinance (Sec. 22-22 Floodplain/Watershed Protection Provisions) should be reviewed for applicable compliance measures if this has not already been discussed with the Conservation Commission. The City also lists several policies (e.g., 25-ft Naturally Vegetated Buffer Policy, Recommended Native Plants, etc.) that should be incorporated into design plans (see Landscaping comments above), particularly if there are any wetlands on the site.
47. HW reviewed MassMapper the Natural Heritage & Endangered Species Program (NHESP) layers and found no presence of certified or potential vernal pools at the site. HW suggests conducting a field survey, focusing on the vegetated eastern portion of the site, to confirm.
48. Given that the Applicant has demonstrated that there are no practicable and substantially equivalent alternatives per 310 CMR 10.58(3)(c) and that the work must have no significant adverse impact on the riverfront area per 310 CMR 10.58(3)(d), redevelopment of a previously developed riverfront area may be allowed if the proposed work improves existing conditions per 310 CMR 10.58(5). The Applicant may wish to

consult with the Massachusetts Environmental Policy Act (MEPA) office to confirm whether filing an Environmental Notification Form (ENF) for review in accordance with 301 CMR 11.00, as the project meets review thresholds for land per 301 CMR 11.03(1)(b)6. Other MEPA review may be required if the Secretary of Energy and Environmental Affairs deems necessary after ENF submittal. Since the project is located within an Environmental Justice (EJ) community, MEPA review will include new EJ policy regulations.

### Rare Species

49. No NHESP Priority Habitats of Rare Species or Estimated Habitats of Rare Species exist at the site, therefore consultation regarding state-listed rare species should not be necessary.
50. The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation tool indicates that the endangered northern long-eared bat (*myotis septentrionalis*) may potentially be affected by activities at this location. The Applicant may need to complete an Endangered Species Act (ESA) Section 7 consultation with USFWS if any federal agency is involved with the project.

### Cultural Resources

51. HW reviewed the Massachusetts Cultural Resource Information System Maps and found no presence of historic properties within the project area, however, Massachusetts Historical Commission (MHC) review is triggered by federal or state agency involvement, not listing in the National or State Registers of Historic Places. Section 106 review of the National Historic Preservation Act and/or MHC review is required for any projects that require funding, licenses, or permits from federal and/or state agencies. The Applicant may wish to submit a Project Notification Form with MHC to initiate their review.
52. This review will be in addition to submittal of an application to the Newton Historical Commission for demolition review, as noted by the City of Newton in Application #09-22. The City of Newton writes in its memorandum: "The demolition of the two existing buildings, will also be subject to review by the Newton Historical Commission (NHC)."

Please contact Janet Bernardo at 857-263-8193 or at [jbernardo@horsleywitten.com](mailto:jbernardo@horsleywitten.com) if you have any questions regarding these comments.

Sincerely,

**Horsley Witten Group, Inc.**



Janet Carter Bernardo, P.E.  
Associate Principal



Nicholas Cohen, AICP, ENV SP  
Senior Environmental Planner

# ATTACHMENT C

## CITY OF NEWTON Department of Public Works ENGINEERING DIVISION

### MEMORANDUM

To: Barney Heath, Director of Planning & Development

From: John Daghlian, Associate City Engineer

Re: Comprehensive Permit – The Northland Charlemont Development

Date: November 16, 2022

CC: Jennifer Caira, Deputy Director  
Lou Taverna, PE City Engineer  
Cassidy Flynn, Deputy City Clerk  
Katie Whewell, Chief Planner  
Michael Gleba, Sr. Planner

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In reference to the above site, I have the following comments for a plan entitled:

The Northland  
Charlemont Development  
Prepared by: VHB  
Dated: September 15, 2022

Executive Summary:

This application entails the demolition of two manufacturing buildings located on two separate lots having a combined area of over seven acres. If the Comprehensive Permit is approved an Approval Not Required [ANR] plan will be required in accordance with Massachusetts General Laws Chapter 41 Section 81P requiring the two separate lots to be combined into one lot.

The proposal is to construct a mixed-use redevelopment consisting of a multi-family residential building with a portion of the first floor dedicated to commercial retail and/or restaurant space with a 2-level below grade parking garage.

The property has frontage along Charlemont Street (a private way) to the north, commercial/retail properties to the west, Christina Street along the south, and residential



homes to the east. There is a high point elevation of 110-feet along Charlemont Street and site slopes down towards Christina Street at elevation 94-feet. Currently stormwater runoff from the site is collected and untreated in a closed pipe network that discharges to Christina Street drainage system and eventually discharges to the River Charles.

The engineer of record has designed a stormwater collection system that includes underground sand filters, bio-swales, permeable open space that promotes infiltration and groundwater recharge. The proposed system will greatly enhance water quality coming off the site while reducing runoff, phosphorus, and total suspended solids in accordance with DEP & City Stormwater Ordinance. Prior to applying for a Building Permit DPW will require on site test pits and percolation testing to confirm design assumptions, soil types, establish seasonal high groundwater elevations and to verify suitable soils for infiltration. My concern is if there are any contaminated soils as the existing facilities processes precious metals and several chemicals are used in the processing. Also, confirmation is needed regarding any underground storage tanks and removal status.

The proposed Operations and Maintenance plan is very robust for the design intent and long-term maintenance. If the project is approved the O&M plan must be recorded at the Middlesex Registry of Deeds, a copy of the recording instrument will be required prior to the issuance of a Building Permit.

Construction Management:

1. A construction management plan is needed for this project. At a minimum, it must address the following: staging site for construction materials and equipment, parking for construction workers vehicles, phasing of the project with anticipated completion dates and milestones, safety precautions, emergency contact personnel of the general contractor. It shall also address anticipated dewatering during construction, site safety & stability, siltation & dust control, and noise impact to abutters. Additionally any abatement processes that will be anticipated.
2. Stabilized driveway construction entrance(s) will be required for the duration of the construction which will provide a truck wash to prevent tracking of mud and silt onto City streets.
3. Catch basins within and downstream of the construction zone will be required to have siltation control installed for the duration of the project and must be identified on the site plan.

Drainage:

1. On site soil testing that will include test pit(s) within 25 -feet of each proposed system and percolation test(s) must be schedule and witnessed by a representative of the Engineering Division. Soil logs shall be submitted on the site plan or drainage report and shall be certified by a Massachusetts Licensed Soil Evaluator and/or Professional Civil Engineer.
2. It is imperative to note that the ownership, operation, and maintenance of the proposed drainage system and all appurtenances including but not limited to the drywells, catch basins, trench drains, and pipe(s) are the sole responsibility of the property owner(s).
3. As the site disturbance will be over one-acre, a National Pollution Discharge elimination System (NPDES) permit and General Construction permit will be required per the Environmental Protection Agency.

Environmental:

1. Has a 21E Investigation and report been performed on the site, if so, copies of the report should be submitted to the Newton Board of Health and Engineering Division.
2. Are there any existing underground oil or fuel tanks? Have they been removed, if they have been, evidence of the proper removal should be submitted to the Newton Fire Department and the Board of Health.

Sanitary Sewer & Domestic Water Service(s):

1. Existing water and sewer services to building(s) shall cut and capped at the respective mains and completely removed from the main(s) and its entire length and properly backfilled. The Engineering Division must inspect and approve this work, failure to having this work inspected will result in delay of issuance of the new Utility Connection or issuance of a Certificate of Occupancy.
2. All new sewer service(s) shall be pressure tested in accordance with the City Construction Specifications & Standards and inspected via Closed Circuit Television CCTV inspection after installation is completed. A copy of the video inspection and written report shall be submitted to the City Engineer or his representative. The sewer service will NOT be accepted until the two methods of inspection are completed AND witnessed

by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until these tests are completed to the satisfaction of the City Engineer.

3. All sanitary sewer manhole(s) shall be vacuum tested in accordance to the City's Construction Standards & Specifications, the sewer service and manhole will NOT be accepted until the manhole(s) pass the testing requirements. All testing MUST be witnessed by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until this test is completed to the satisfaction of the City Engineer and a written report of the test results is submitted to the City Engineer.
4. With the exception of natural gas service(s), all utility trenches within the right of way shall be backfilled with Control Density Fill (CDF) Excavatable Type I-E up to within 18-inches of the asphalt binder level, after which Dense Grade Gravel compacted to 95 % Proctor Testing shall be placed over the CDF. Details of this requirement is the Engineering Division website "Standard Construction Details".
5. Fire Flow testing is required for the proposed fire suppression system. The applicant must coordinate the fire flow test with both the Newton Fire Department and the Utilities Division, representative of each department shall witness the testing. Test results shall be submitted in a written report along with hydraulic calculations that demonstrate the required size of the fire suppression system, these calculations shall be submitted to the Newton Fire Department for approval, and copies give to the Engineering Division.
6. All water services shall be chlorinated, and pressure tested in accordance to the AWWA and the City Construction Standards & Specifications prior to coming online. These tests MUST be witnessed by a representative of the Engineering Division.
7. Approval of the final configurations of the water service(s) shall be determined by the Utilities Division, the engineer of record shall submit a plan to the Director of Utilities for approval.

Infiltration & Inflow:

- Will be addressed via a separate memo.

Sewer:

Sanitary Sewer service will be provided from Charlemont Street.

Water Distribution:

- A water service for the development will looped from Charlemont Street through the property and connect to the main in Christina Street, this will enhance water pressure and water quality for the neighborhood. Triple gates will be required at the two connection points.
- Fire protection and domestic services will be provided from the existing main in Charlemont Street.

General:

1. All trench excavation shall comply with Massachusetts General Law Chapter 82A, Trench Excavation Safety Requirements, and OSHA Standards to protect the general public from unauthorized access to unattended trenches or excavations. Trench Excavation Permit is required prior to any construction. This applies to all trenches on public and private property. *This note shall be incorporated onto the final plans.*
2. All tree removal shall comply with the City's Tree Ordinance.
3. The contractor of record is responsible for contacting the Engineering Division and scheduling an appointment 48-hours prior to the date when the utilities will be made available for an inspection of water services, sewer services and drainage system installation. The utility in question shall be fully exposed for the Inspector to view, backfilling shall only take place when the City Engineer's Inspector has given their approval. *This note shall be incorporated onto the final plans.*
4. The applicant shall apply for a Building Permit with the Inspectional Services Department prior to ANY construction.
5. Before requesting a Certificate of Occupancy, an As Built plan shall be submitted to the Engineering Division in both digital and paper format. The plan shall show all utilities and final grades, any easements and improvements and limits of restoration. The plan shall include profiles of the various new utilities including but not limited to rim & invert elevations (City of Newton Datum), slopes of pipes, pipe materials, and swing ties from permanent building corners. The as built shall be stamped by both a Massachusetts Registered Professional Engineer and Registered Professional Land Surveyor. Once the As built plan is received the Engineering Division shall perform a final site inspection and then make a determination to issue a Certificate of Occupancy. *This note shall be incorporated onto the final plans.*

6. All site work including trench restoration, sidewalk, curb ,apron and loam border (where applicable) shall be completed before a Certificate of Occupancy is issued. *This note shall be incorporated onto the final plans.*
7. The contractor of record shall contact the Newton Police Department 48-hours in advanced and arrange for Police Detail to help residents and commuters navigate around the construction zone.
8. If any changes from the final approved design plan that are required due to unforeseen site conditions, the contractor of record shall contact the design engineer of record and submit revised design and stamped full scale plans for review and approval prior to continuing with construction.

Note: If the plans are updated it is the responsibility of the applicant to provide all City Departments [ ISD, Conservation Commission, Planning and Engineering] involved in the permitting and approval process with complete and consistent plans.

If you have any questions or concerns, please feel free to contact me at 617-796-1023.