

City of Newton, Massachusetts

Ruthanne Fuller
Mayor

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

Barney S. Heath
Director

PUBLIC HEARING VI MEMORANDUM

DATE: June 15, 2023
MEETING DATE: June 22, 2023
TO: Zoning Board of Appeals
FROM: Barney Heath, Director of Planning and Development
Jennifer Caira, Deputy Director for Planning and Development
Katie Whewell, Chief Planner for Current Planning
Michael Gleba, Senior Planner
COPIED: Mayor Ruthanne Fuller
City Council

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

PETITION #09-22

60 Charlemont Street and 56 Christina Street

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

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

EXECUTIVE SUMMARY

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

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

The applicants submitted a preliminary package of revised visuals and floorplans showing two seven story buildings with below grade parking. In the revised proposal the number of units is decreased from 410 to 370.

Reflected in this memo are comments from NBBJ, the City's design on-call consultant who have been engaged by the City to review and analyze relevant aspects of the proposed development.

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

I. Revised Design

In response to various comments and concerns expressed at previous public hearings and in Planning Department memoranda, and as discussed in the Department's previous memorandum on this application dated on April 19, 2023, the applicant presented a revised concept for the proposed development at the Board's April 26, 2023, hearing on this application.

Whereas the applicant previously proposed one large eight story structure with 410 units comprising in the aggregate 551,185 gross square feet of area, 4,290 square feet of retail space, and 477 parking stalls, the modified proposal features 370 residential units comprising 465,654 gross square feet of area (reductions of 40 units and 85,531 square feet), in two seven story structures (separated by a courtyard) and 438 parking stalls (a reduction of 39). The retail space was eliminated. The modified concept also includes approximately 2-acres of new publicly accessible open space (with the green space along the eastern boundary remaining largely the same as previously proposed) and bicycle and pedestrian paths expected to connect with Newton's existing and proposed network.

On May 22, 2023, the Applicant submitted plans further detailing the modified concept plans which were subsequently reviewed by the City's relevant peer reviewers. Their full reviews are attached, and their comments are summarized below.

II. ANALYSIS

A. Transportation Peer Review

On June 8, 2023, the City's transportation peer reviewer, the BETA Group, Inc. (BETA) issued a memorandum responding to both the applicant's revised site plans and other responses to previous comments by BETA (**Attachment A**). BETA notes in this memo that many of its previous comments have been addressed.

Some of the issues that have not been addressed to BETA's satisfaction are related to post-occupancy volume and speed monitoring; whether some on-street spaces will be usable by visitors; garage access control; and employee parking, all as detailed in BETA's most recent memorandum.

Other comments from BETA, including some new ones, are related to the proposed shared use path, the proposed roundabout, the proposed passenger shuttle and trash pick-up, and related turning radii.

For examples, BETA notes that the shuttle bus stop shown on the north side of the roundabout should be relocated outside of the roundabout to conflict with vehicles, pedestrians, and bicycles. BETA also asks whether the roundabout is designed to accommodate large trucks and whether larger moving trucks can be accommodated on-site.

Issues to be further detailed and resolved include the location of the shared use path (i.e., the north or south side of Charlemont Street); the operational details of the proposed shuttle (route, schedule, vehicle, integration with Northland Newton to the west) and, relatedly, the scope and nature of the transportation demand management (TDM) plan.

The Planning Department notes that if the shared use path is to be located on the north side of Charlemont the applicant will need to coordinate with property owners on that side. The Department also urges the applicant to provide a more robust TDM plan, one that speaks more strongly, and specifically, to the subject property, and not merely as an appendage to efforts for the Northland Newton development.

B. Stormwater Management Peer Review

As the Applicant has made significant modifications to the stormwater design and the proposed site plan that affects stormwater since the last submittal, the City's peer reviewer, the Horsley Witten Group (HW) has reviewed previous comments, retained those still applicable, and commented on the new design in its second review of the proposed stormwater management approach, dated June 14, 2023, and which is based on materials submitted as of May 31, 2023 (**Attachment B**).

The memo notes that the proposed development is considered a redevelopment (with a 1.7 acre reduction of impervious area onsite, not inclusive of any green roof areas), and as such is required to meet applicable state stormwater management standards only to the maximum extent practicable. It includes several suggestions for modifications to the plans, many of which stem from some inconsistencies between the plans and the provided calculations. HW suggests that the Applicant will likely be able to address these issues during the development of construction documents, before any building permit is issued pursuant to the sought comprehensive permit.

C. Urban Design Peer Review

On June 14, 2023, the City's urban design peer reviewer, NBBJ, submitted its third review regarding the applicant's proposed project design (**Attachment C**) (the two previous memos were submitted in January and April of this year). The third memo reflects the Applicant's plans submitted April 22, 2023.

Among other comments, NBBJ noted that significant improvements to the site design includes the smaller block size "that will support a more human scaled and walkable environment;" the new 85 foot space between the two buildings which "will provide a valuable public space and east-west public walkway" and create a "more fine-grained urban grid;" and the reduction of the building height from eight to seven stories. The memo also includes some recommendations that the applicant provide and/or confirm some additional information and details.

D. Sustainability

In response to the significant modifications to the stormwater design and the proposed site plan that affects stormwater since the last submittal, on June 14, 2023, HW submitted its second review regarding the applicant's proposed sustainability approach (**Attachment D**) (the first was dated December 12, 2022). This new memo reflects the Applicant's updated sustainability narrative dated May 10, 2023.

The review notes that the Applicant will seek Passive House certification rather LEED certification as a performance goal and has outlined the Passive House elements that will be incorporated in the design, and that the Passive House design will allow for a cost-effective means of electrifying the buildings systems compared to conventional construction.

All in all, HW agrees that the Applicant's various sustainability design strategies, including its stormwater management (see above), the proposed site design with its landscaping, public open space and overall reduction in impervious surface area, and the proposed shuttle service and bike path will improve water quality and create a sustainable residential development.

The City's Climate and Sustainability Team also reviewed the applicant's recently submitted materials in a memorandum dated June 13, 2023 (**Attachment E**). The Team specifically commented that by providing access to electric vehicle charging to 20% of the parking spaces, the project is "on track" to meet the sustainable development design requirements (Sec. 5.13.4.B) of the NZO and encourages the Applicant to install more chargers than the minimum required. It also encourages the installation of solar facilities as early as possible (to maximize the environmental and financial benefits and to conduct a "Life Cycle Analysis" of the proposed building materials.

III. MITIGATION

The Planning Department is reaching out to City staff to confirm the most current proposed mitigation per the Engineering Division's updated sewer infiltration and inflow fee memo, dated May 3, 2023, to provide an update at the upcoming hearing.

IV. ADDITIONAL INFORMATION AND MATERIALS

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

V. CONCLUSION AND NEXT STEPS

The Planning Department will continue to review the proposal and, where appropriate and authorized, coordinate reviews of the project by City agencies and consultant peer reviewers and provide updated and expanded memoranda in advance of future ZBA hearings. Also, the Applicant should ensure it has submitted its most current inclusionary housing plan.

ATTACHMENTS

- Attachment A:** BETA Group, Inc. transportation peer review dated June 8, 2023
- Attachment B:** Horsley Witten Group stormwater management peer review dated June 14, 2023
- Attachment C:** NBBJ urban design peer review dated June 14, 2023
- Attachment D:** Horsley Witten Group sustainability peer review dated June 14, 2023
- Attachment E:** City of Newton Climate and Sustainability Team memorandum dated June 13, 2023

Date: June 8, 2023 Job No.: 10707
To: Katie Whewell, Chief Planner for Current Planning
City of Newton
Cc:
From: Jeff Maxtutis, BETA Group, Inc.
Subject: **The Northland Charlemont Street Development Transportation Peer Review**

The BETA Group, Inc. (BETA) has received and reviewed the transportation response to comments Memorandum from VHB dated May 22, 2023. The VHB Memorandum provides responses to the latest BETA transportation review dated May 1, 2023 and previous BETA comments from December 13, 2022. This Memorandum provides comments to the VHB May 22, 2023 Memorandum, as well as revised site plans.

BASIS OF REVIEW

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

- **Response to Comments, Transportation Engineering Peer Review BETA Group (May 1, 2023), The Northland Charlemont Steet Development, Newton, Massachusetts, May 22, 2023, prepared by Vanasse Hangen Brustlin, Inc. (VHB)**
- **Revised Site Plan Transportation Overview Memorandum, The Northland Charlemont Steet Development, Newton, Massachusetts, May 22, 2023, prepared by Vanasse Hangen Brustlin, Inc. (VHB)**
- **Northland Charlemont and Materials Plan, Revised May 22, 2023, VHB; and Landscape Plans, June 22, 2023, Stantec**

Many of the previous comments have been addressed. The remaining comments requiring a response are shaded, these include comments 45, 52, 54, 56, 57, 58, 63, and new comments A1-A5.

BETA Comment 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"?*

VHB Response: The southbound right-turn from Winchester Street to Needham Street has been re-coded in the analysis to not indicate a "free" movement and the updated analyses are included in the revised version of the document.

BETA Comment: The southbound right-turn has been shown as part of the signal phasing and not as yield control in the existing conditions analysis. This right-turn is channelized and not under traffic signal control. In addition, the Saturday midday signal phasing does not match the weekday morning and afternoon peak analysis for the southbound right-turn.

VHB Response: While the southbound right-turn from Winchester Street to Needham Street operates as a yield control under existing conditions, the movement was modeled as part of the signal phasing with right-turns on red allowed. As Synchro does not explicitly model a channelized right turn, modeling this

movement as part of the signal phasing with right-turns on red allowed provides a conservative analysis and in reality the movement will likely operate better than what is reported.

For the AM and PM signal phasing, the channelized southbound right-turn was modeled as permitted during the southbound through movements and overlapping with the eastbound left-turn movements, as there will be no conflicts during the overlapping eastbound left-turn movements. This analysis indicates that the southbound right-turn movement will operate at LOS A with delays under five seconds and queues of less than three vehicles. The Saturday midday signal phasing was modeled with the channelized southbound right-turn only permitted during the southbound through movements. However, the southbound right-turn movement as reported during the Saturday midday peak hour is still expected to operate at LOS B with a 13 second delay and maximum queues of five vehicle or less. Adding in the additional overlapping permitted phase for the southbound right-turn movement would only result in improved operations over what is reported, indicating that this approach is not over capacity under existing conditions. As the movement actually operates under yield control and Synchro does not explicitly model a channelized right turn, all analyses for the southbound right-turn movement can be considered conservative.

It should be noted that the yield control for the southbound channelized right-turn movement will be removed as part of the currently ongoing MassDOT Needham Street/Winchester Street reconstruction project and instead the right-turn movement will operate under signal control under future conditions. This condition is in place for the No Build and Build Conditions analyses reported in the revised TIA.

BETA Comment: Comment addressed, no further action.

Traffic Operations

Intersection Capacity Analysis

Capacity analyses were performed for the study intersections using the Synchro 10 software, based on the 6th 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.

BETA Comment 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.*

Response: The responses to the individual comments are noted below:

- a. The Winchester Street southbound right-turn has been re-coded to not operate as a free movement in the revised report.

BETA Comment: The responses to the individual comments are noted below:

- a. The southbound right-turn has been shown as part of the signal phasing and not as yield control in the existing conditions analysis. This right-turn is channelized and not under

traffic signal control. In addition, the Saturday midday signal phasing does not match the weekday morning and afternoon peak analysis for the southbound right-turn.

VHB Response: See response to Comment 9 above.

BETA Comment: Comment addressed, no further action.

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.

BETA Comment 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?*

VHB Response: Responses to each TDM measure are provided below:

- *Make 10% of the parking stalls electric vehicle (EV) spaces, and 50% EV ready.*
The applicant will provide 20% EV spaces in accordance with the proposed new stretch code.
- *Provide weatherproof and secure bike outdoor bike parking in front of the building and at the retail locations (see #48 below).*

The proposed project includes significant indoor bicycle parking for residents. The interior car and bike parking spaces are being tweaked by the proponent and final numbers will be provided when complete. However, there are 48 outdoor bike parking spaces in three different locations on-Site that are proposed. The applicant does not feel that these need to be weatherproofed.

- *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?*

For every lease without a car, the Applicant will reimburse 50% of the cost for an MBTA Link Pass for up to 2 persons during the tenant's initial lease term. The program shall run for the first 2 years of the building's occupancy. As an alternative to the MBTA pass, the reimbursement amount may be applied to car share or bike share costs.

- *The proposed transit subsidy to residents and employees should also apply to alternate modes of transportation including car share and bike share programs.*

See response to the comment immediately above.

- *Incorporate electric vehicles for shuttle van service for residents.*

The vehicles will be provided through the Northland Newton Development and will be subject to the requirements of the TDM plan governing that project.

- *In addition to electric vehicle charging stations, provide station for electric bicycle charging.*

Standard outlets for electrical bike charging will be provided in the indoor bike parking areas at the same ratio of standard parking stall to EV.

- *Will the free shuttle be available to the public?*

The shuttle that will serve the project will be available to the general public.

- *How many car-share (Zip Car) vehicles will be provided?*

The proponent will work with Zip Car or similar to determine if a station can be provided and if so how many cars are appropriate for this location. That information is not available currently.

BETA Comments: With removal of the retail space along Christina Street will 16 bike parking spaces still be provided at that location. Will 16 bike parking spaces still be provided at the front entrance and on Charlemont Street near West Connector Road?

The City of Newton will need to evaluate the appropriateness of each of the TDM measures.

VHB Response: *The revised Site plan will now include 24 total outdoor bicycle parking spaces for guests and visitors to the Site; eight spaces located at Christina Street and the East Park Drive, eight spaces located at Charlemont Street and the West Connector Drive, and eight spaces located at the front entry courtyard. As the Project no longer includes retail on-Site, the anticipated bicycle parking demand for guests and visitors is expected to be lower than what shown in the initial design plans and therefore the amount of outdoor bicycle parking spaces for guests and visitors has been reduced from 48 to 24 spaces. In addition, an indoor bicycle parking room will be provided for residents on-Site that includes approximately 200 bicycles. A*

graphic showing the specific locations of all on-site bicycle parking spaces is included in the Attachments to this memorandum.

The final TDM program will be determined based on coordination with the City of Newton.

BETA Comment: Comments addressed pending City's approval of TDM measures.

Roadway Network Improvements

BETA Comment 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.*

VHB Response: The Proponent will work with the City to address the speed issues identified. Signage improvements will be considered if necessary.

BETA Comment: *It is noted that measures in addition to signage may be required to reduce travel speeds.*

VHB Response: The Proponent is proposing to install a raised crosswalk with rectangular rapid-flashing beacons (RRFBs) along Christina Street adjacent to the southeast corner of the site. The raised crosswalk will slow down vehicle speeds while also promoting safe pedestrian and bicycle operations. Refer to the attached site plan that shows the location of the proposed raised crosswalk and RRFB.

BETA Response: Table 7 in the Revised Site Plan Transportation Overview Memorandum, (5/22/23, VHB) shows that vehicle stopping sight distance and pedestrian sight distance to and from the east (less than 100 feet) for the proposed east crosswalk on Christina Street on the north side does not meet AASHTO guidelines. The sight distance is limited by a horizontal curve on Christina Streets and a retaining wall. To mitigate this, the applicant is proposing a Rectangular Rapid Flashing Beacon (RRFB) at the crosswalk itself and an RRFB east of the horizontal curve to alert motorists traveling westbound of the approaching crosswalk. The two RRFBs will be hardwired together so both RRFBs will flash when the pedestrian button is pushed. It is recommended that the RRFB at the crosswalk include beacons for both directions of traffic (eastbound and westbound), resulting in a total of three RRFBs. The advance RRFB east of the crosswalk only needs to be a single beacon for westbound traffic. Will the RRFB's be solar or electric powered?

It is noted that the proposed east (raised) crosswalk on Christina Street currently connects to a driveway on the south side of the roadway providing access to the pedestrian/bicycle bridge (currently closed). The raised crosswalk should be designed so it is not part of the existing driveway and ADA accessible.

It is suggested that vehicle volumes and speeds be monitored post project occupancy on Goddard and Wallace Streets to identify speeding issues and potential mitigation measures. This may include speed feedback radar signs.

Pedestrian and Bicycle Accommodations

BETA Comment 48: *The ZBA Hearing Response presentation shows three proposed locations for outdoor bicycle parking (see #44 above). Provide number of spaces at each location.*

VHB Response: Please refer to Exhibit L6 (attached) for detail on the outdoor bike parking locations. As shown in the exhibit, there will be a total of 48 outdoor bicycle parking spaces provided in three different locations, with 16 spaces per each location.

BETA Comment: The new site plan concepts shown in the presentation dated February 22, 2023 show that the previously proposed retail space in the southwest corner along Christina Street has been removed. Will the 16 bike parking spaces in this area be removed or relocated to another location? The new concepts show four bike racks for eight bicycles on the corner of West Connector Drive and Charlemont Street. Where are the racks for the other eight bikes?

VHB Response: The revised Site plan will now include 24 total outdoor bicycle parking spaces for guests and visitors to the Site; eight spaces located at Christina Street and the East Park Drive, eight spaces located at Charlemont Street and the West Connector Drive, and eight spaces located at the front entry courtyard. As the Project no longer includes retail on-Site, the anticipated bicycle parking demand for guests and visitors is expected to be lower than what shown in the initial design plans and therefore the amount of outdoor bicycle parking spaces for guests and visitors has been reduced from 48 to 24 spaces. In addition, an indoor bicycle parking room will be provided for residents on-Site that includes approximately 200 bicycles. A graphic showing the specific locations of all on-site bicycle parking spaces is included in the Attachments to this memorandum.

BETA Comment: Comment addressed, no further action.

BETA Comment 50: *Provide dimensions of proposed raised intersections and raised crosswalk.*

VHB Response: The plans provided at this point are conceptual and are to scale. The Christina Street crossing will be developed with City of Newton input assuming it is desired as part of the approval.

BETA Comment: Will the redesigned East Park Drive be raised including at the building entrance? The City's Transportation Department will need to review the design of the raised devices.

VHB Response: Yes, the redesigned East Park Drive will be raised as noted on the plan. With the garage entries now entirely from West Connector Drive, we want and expect East Park Drive to be a low intensity, low speed, pedestrian friendly roadway primarily accommodating visitors, short-term pick-up/drop-offs, and activities such as food trucks and resident gathering events that activate the plaza and park. The raised section promotes traffic calming and will remind drivers they are in a pedestrian-centric transition zone between the plaza and the park.

BETA Comment: Comment addressed, no further action.

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.

BETA Comment 52: *Confirm number of parking spaces and provide updated site plan that shows location of parking spaces.*

VHB Response: The parking garage plans were included in the architectural set of plans. The Proponent is currently tweaking the garage plans and adjusting the parking supply. That information will be provided later when it is resolved. However, the outdoor parking spaces are presented on Exhibit L6 attached for reference. There are 24 surface parking spaces and 48 outdoor bicycle parking spaces.

BETA Comment: The Exhibit L6 Plan shows 20 90-degree parking spaces (including two accessible spaces) on East Park Drive. East Park Drive has been redesigned as shown in the Revised Design concepts for the February 22, 2023 presentation including 20 parallel parking spaces. Handicap parking spaces should be designated on East Park Drive and on Charlemont Street. Dimensions of parking spaces should be provided. (Also see Comment 54 below).

VHB Response: Formal site plans are included in the Attachments to this memorandum that show the location of the parking spaces on-Site. As noted previously, the project has been significantly modified since the February documents and now includes 20 parallel parking along East Park Drive and the parking garage will include a total of 436 parking spaces. An additional eight parallel public parking spaces will also be provided along Charlemont Street. As currently proposed, of the 20 parallel parking spaces on East Park Drive, six will be marked for drop-off/package delivery spaces and one will be designed as an accessible space. The final number of accessible on-street parking spaces will be coordinated with the City of Newton. The dimensions of the parking spaces are included in the attached site plan graphics.

BETA Comment: The current site plans shows a total of seven on-street spaces on Charlemont Street – four on the south side along the project frontage and three on the north side. Will the on-street parking spaces be within the project or public right-of-way? The Stantec plan shows that the spaces on the south side may be both within public right-of-way and private property. It appears the spaces on the north side are within the public right-of-way. The on-street spaces on both sides will need to be approved by the City.

The revised Site Plan Memo states that 14 of the 20 on-street parking spaces on East Park Drive will be designated residential spaces with six being designated for drop-off/delivery spaces. Will the 14 on-street spaces also be available for visitor parking to visit residents and the on-site park? When the six drop-off spaces are not in use can they be used by visitors?

BETA Comment 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?*

VHB Response: The visitor parking has been maximized along the front of the site and in proximity of the commercial space. The end user(s) of the commercial space are not known at this time. Residential visitors may access the garage as needed for extended and overnight visits.

BETA Comment: The current site plan shows 20 parallel on-street spaces on East Park Drive and four parallel on-street spaces on Charlemont Street. Will these spaces be adequate to accommodate short-term visitor parking, retail vehicle demand, and visitors to the project park?

How many spaces will be provided in the garage for extended and overnight visitor parking? How will visitors gain access to the garage (see Comment 56).

VHB Response: The revised development proposal is now showing a total parking supply of 456 parking spaces, of which 436 spaces will be in the garage and the remaining 20 will be parallel on-street surface parking spaces on East Park Drive. An additional 8 public on-street spaces will be provided on Charlemont Street. Short-term visitor parking and parking for visitors to the park will be accommodated in the on-street parking spaces and with the latest site plan revisions there will no longer be any retail component on-site eliminating the need for retail parking. Requests for overnight visitor parking will be accommodated in the garage by having residents coordinate with the building management to obtain temporary overnight pass for access into the garage.

BETA Comment. The current site plans show a total of seven on-street spaces on Charlemont Street – four on the south side along the project frontage and three on the north side. The City of Newton will need to approve the public on-street spaces on Charlemont Street.

BETA Comment 55: *A plan of the parking garage has not been provided. Please provide.*

VHB Response: The parking garage plans were included in the architectural set of plans.

BETA Comment: Response 52 notes that the garage plans and parking are being tweaked. The plans will be reviewed when available.

VHB Response: The revised development proposal is now showing a total parking supply of 456 parking spaces, of which 436 spaces will be in the garage and the remaining 20 will be parallel on-street surface parking spaces on East Park Drive. An additional 8 public on-street spaces will be provided on Charlemont Street. Updated parking garage plans are included in the Attachments to this memorandum.

BETA Comment: Refer to Comments 52 and 54 above.

BETA Comment 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.*

VHB Response: The driveways are 22 feet wide on the current plan set. The mechanism for access to the garage has not been specifically determined to date. However, gates with some type of access card or code are anticipated.

BETA Comment: A waiver from the 24-foot-wide requirement will be needed. The Revised Design concepts for the February 22, 2023 presentation now show two garage entrances (one for each building). Explain how visitors will access the garages (see Comment #54).

VHB Response: The need for a waiver from the 24-foot-wide driveway requirement has been noted and will be coordinated with the City of Newton. There will be two garage entrances, both along the West Connector Drive. The parking garage will extend under both buildings and both driveways will provide access to the entire garage. Requests for overnight visitor parking will be accommodated in the garage by having residents coordinate with the building management to obtain temporary overnight pass for access into the garage. Short-term visitors will utilize the on-street parking spaces proposed along the East Park Drive and Charlemont Street.

BETA Comment: Will vehicle access to the parking garage be controlled by gates?

BETA Comment 57: *Provide length of proposed loading area and show turning radius for large trucks maneuvering in and out of loading docks.*

VHB Response: Diagrams illustrating the lengths of the proposed loading area and turning maneuvers are included in the Appendix to the revised TIAS.

BETA Comment: The Revised Design concepts for the February 22, 2023 presentation now shows two loading areas from the West Connector Drive. Turning radius movements should be shown for large moving tractor trailers.

VHB Response: As the revised site plans are developed, turning movements for the proposed loading areas will be provided.

BETA Comment: Comment addressed, provide turning radius when available.

BETA Comment 58: *Is the sidewalk on the south side Charlemont Street a public sidewalk or a private sidewalk?*

VHB Response: Ownership of the sidewalk is intended to be public.

BETA Comment: The Revised Design concepts and view slides for the February 22, 2023 presentation now show a new sidewalk level two-way bike lane on the south side of Charlemont Street between West Connector Drive and East Park Drive. The concepts and views show a two-way striped bike lane, but note #6 states "Created new shared use path on Charlemont". All text should note the new facility is bike lanes. A door zone should be provided between the on-street parking spaces on Charlemont Street and the new bike lanes. Will the new bike lanes be on private property or City property? Who will maintain them?

VHB Response: The project team subsequently completed a study of the Charlemont Street corridor for parking, pedestrian, bicycling, available right-of-way, and aesthetic concerns, which have been reviewed with City of Newton Planning Staff (and soon after with other abutting landowners). Revised plans currently reflect the project team's preferred alternative showing on-street parallel parking, a continuous sidewalk on the south side of the street and a shared use path on the north side within the existing street layout.

BETA Comment: How will the proposed shared-use path on the north side of Charlemont Street impact the existing 90-degree parking spaces located in front of the buildings at 244 Needham Street? Have the property owners been contacted? Will the shared-use path be located entirely within the public right of way?

BETA Comment 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.*

VHB Response: The crosswalk across Christina Street at the site's west connector road will be included on the updated site plan.

BETA Comment: A crosswalk is shown on the Revised Design concepts for the February 22, 2023 presentation. Vehicle Stopping Sight Distance should be provided and enhancements to improve safety at this location, such as a rectangular rapid flashing beacon, should be considered.

VHB Response: Vehicle stopping sight distance and pedestrian sight distance measurements have been prepared for the western proposed crosswalk on Christina Street at the West Connector Drive and for the eastern proposed crosswalk at the multi-use path. At the western crosswalk, vehicular sight distances and pedestrian sight distances are greater than 325 feet for all measurements, which exceeds the minimum sight distances of 200-215 feet required for Christina Street. At the eastern crosswalk, the sight distances are adequate to/from the west but are restricted to/from the east due to a horizontal curve along Christina Street east of the Site. Therefore, the Proponent is proposing to supplement the eastern crosswalk with advanced warning signage with a RRFB east of the crosswalk location and east of the horizontal curve to alert drivers traveling westbound of the approaching crosswalk. This will result in RRFBs installed at the crosswalk location itself as well as in advance of the crosswalk to the east. The

RRFBs will be hard-wired, and both sets of RRFBs will flash when the push button is activated by a pedestrian or bicyclist. Additional sight distance information is provided in the Revised Site Plan Transportation Overview memorandum prepared by VHB ahead of the upcoming Planning Board meeting.

BETA Comment: See Comment #45.

BETA Comment 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.*

VHB Response: Indoor bike parking is for residents only and will be accessed by key card (or similar). Many spaces will be at grade and not require the use of an elevator while some will require elevator use. No bike parking will require stair access.

BETA Comment: Comment addressed, no further action.

BETA Comment 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.*

VHB Response: This comment has been noted. A waiver is being requested to allow deviation from this requirement.

BETA Comment: Comment addressed, no further action.

BETA Comment 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.*

VHB Response: This comment has been noted. A waiver is being requested to allow deviation from this requirement.

BETA Comment: Comment addressed, no further action.

BETA Comment 63: *Will parking spaces in the garage be designated for resident, employees, and visitors? If so, how many spaces will be provided for each?*

VHB Response: The parking in the garage will be exclusive to residents of the building.

BETA Comment: Response #54 states that "Residential visitors may access the garage as needed for extended and overnight visits." Please clarify.

VHB Response: Requests for overnight visitor parking will be accommodated in the garage by having residents coordinate with the building management to obtain temporary overnight pass for access into the garage.

BETA Response: Indicate where employees will park.

BETA Comment 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).*

VHB Response: Small delivery vehicles by UPS and Amazon vans, etc., passenger pick-up/drop-off activity will be handled at the east building entrance at designated parking bays. Please refer to Exhibit L6 (attached). The loading bay at the west connector drive is reserved for large delivery vehicles only.

BETA Comment: The Revised Design concepts for the February 22, 2023 presentation now show 20 parallel parking spaces on the west side of East Park Drive and indicate package delivery signage will be provided. Explain how delivery pick-ups and drop-offs will operate in conjunction with the on-street parking spaces. Will small delivery trucks also use the loading areas on West Connector Drive?

The revised concept plans show a Layby Lane on the east side of East Park Drive. Is the intended use of this area for food trucks? Where will the shuttle bus stop and will it conflict with surface parking and delivery trucks?

The revised concept view of the front entry appears to indicate that East Park Drive will be raised to sidewalk level. Will East Park Drive be raised for its entire length? Dimensions of the roadway width, parking spaces, and Layby Lane should be provided.

VHB Response: Based on the updated plans (attached), there are six designated spaces along East Park Drive exclusively for drop-off/package delivery vehicles. We are not anticipating small delivery trucks (amazon, UPS, Fed-ex) to utilize loading bays off of the West Connector Drive. As the small delivery trucks will only be parked for a short period of time to drop off a package, the six designated drop-off/package delivery spaces should be sufficient to accommodate the anticipated demand.

BETA Comment: Comment addressed, no further action. Also see Comments 52, 54, 55.

BETA Comment 65: *Are there areas on-site for snow storage?*

Response: Storage of snow is expected to occur along the side of the roadways and will be plowed and/or snow-blown off the pavement.

BETA Comment: *Will the applicant remove snow from the bike lanes on Charlemont Street?*

VHB Response: Charlemont Street is, and will remain, a public street and maintenance responsibilities within the street layout including snow removal will be the City's responsibility.

BETA Comment: See Comment 58.

BETA Comment 66: *Coordinate with the Newton Fire Department regarding access and circulation of firetrucks at this site.*

VHB Response: The site plans were reviewed by the Newton Fire Department prior to submission to the ZBA.

BETA Comment: Comment addressed, no further action.

ADDITIONAL COMMENTS ON SITE PLANS AND REVISED SITE PLAN TRANSPORTATION OVERVIEW MEMORANDUM

BETA Comment A1: The shuttle bus stop is shown to be located on the north side of the roundabout. The bus stop should be relocated outside of the roundabout so it will not conflict with vehicles, pedestrians, and bicycles in the roundabout.

BETA Comment A2: Provide a figure showing turning radius for trucks and buses. Will the roundabout include an apron to accommodate large trucks?

BETA Comment A3: The transition of the shared-use path into the proposed roundabout on the south side is an awkward alignment.

BETA Comment A4: Page 3 of the Revised Site Plan Memorandum states that "moving trucks are expected to be limited to trucks no larger than SU-36". Can larger moving trucks be accommodated on-site if needed?

BETA Comment A5: Indicate where garbage trucks will pick up trash on-site.

ATTACHMENT B

Horsley Witten Group

Sustainable Environmental Solutions

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



June 14, 2023

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

Re: 2nd Peer Review regarding Stormwater Management
Northland Charlemont Comprehensive Permit Project
160 Charlemont Street, Newton, MA

Dear Ms. Whewell:

The Horsley Witten Group, Inc. (HW) is pleased to submit this peer review regarding the stormwater management design 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 two multi-story, mixed-use buildings with commercial/retail space, residential units, and a 2-level below grade parking garage on 6.98 acres of land. HW understands that the proposed development also includes approximately 2-acres of new publicly 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 sf and the other approximately 70,000 sf. 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 and eventually discharges untreated to the Charles River. Portions of the site are located within the 200-foot Riverfront Area of the Charles River.

The Applicant proposes to demolish the two buildings and redevelop the entire property resulting in a net decrease in impervious cover by approximately 1.7 acres. The project qualifies as a redevelopment as detailed in the Massachusetts Stormwater Handbook (MSH). The Applicant proposes to install a new stormwater system including deep-sump hooded catch basins, sediment chambers, structured sand filters, and a biofiltration basin in accordance with the MSH.

HW provided the Newton Zoning Board of Appeals (ZBA) with a peer review regarding the Site Design and Open Space, dated December 13, 2022, a letter regarding the landscape design dated January 9, 2023, and a separate letter regarding stormwater design also dated January 9, 2023.

As part of the stormwater management design review process, HW reviewed the following documents and plans:

- Stormwater Report, The Northland Charlemont Development, prepared by VHB, revised May 22, 2023 (143 pages);
- Response to Stormwater Comments letter, The Northland Charlemont Development, prepared by VHB, revised May 31, 2023 (8 pages);

- Filing Letter, The Northland Charlemont Development, prepared by Schlesinger and Buchbinder, LLP, dated June 1, 2023 (1 page); and,
- Site Plans, The Northland Charlemont Development, prepared by VHB, revised May 31, 2023, including:
 - 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
 - Grade Plane Calculation Plan C-3.1
 - Grading and Drainage Plan C-4.0
 - Utility Plan C-5.0
 - Site Details C-6.0
 - Existing Conditions Plan of Land (June 4, 2018) Sv-5
 - Existing Conditions Plan of Land (March 5, 2020) Sv-6

Stormwater Management Review

This review of the submitted materials is based on the Massachusetts Stormwater Management Standards (MASWMS), and the City of Newton Stormwater Management and Erosion Control Rules & Regulations (Stormwater Regulations), dated April 15, 2022, as well as standard engineering practices. As noted previously the proposed development is considered a redevelopment with the reduction of impervious area. A redevelopment project is required to meet the following MASWMS only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Massachusetts Stormwater Handbook (MSH) and improve existing conditions.

In accordance with Section 5.C.2 of the Stormwater Regulations, this project is required to comply at a minimum with the performance standards of the MSH. Therefore, we have used the MSH as the basis for organizing our comments as they pertain to stormwater. However, in instances where the additional criteria established in the Stormwater Regulations require further recommendations, we have referenced these as well.

The Applicant has provided a new stormwater design and significant site design changes as it relates to stormwater since the last submittal. HW has reviewed previous comments and retained those applicable in addition to commenting on the new design. HW offers the following comments:

1. *Standard 1: No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.*
 - a. Under existing conditions, the Applicant has evaluated the stormwater management system with one design point (DP-1) at the Charles River. Stormwater is collected untreated by closed drainage systems onsite that discharge to the municipal systems in Charlemont or Christina Street. The Applicant has stated that approximately 5.2 acres of off-site area from the east also drains to the Charlemont Street drainage system, which then discharges to an on-site swale. The swale discharges to the Christina Street drainage system and then into the Charles River. The Applicant has detailed the closed

drainage system in Charlemont Street north drains to the wetlands north and then into South Meadow Brook and out to the Charles River. No further action required.

- b. Under the Proposed conditions, the Applicant has evaluated the stormwater management system onsite with the same design point (DP-1) at the Charles River. Stormwater is collected onsite through catch-basins, roof-drains, and surface runoff. The stormwater is treated through biofiltration and sand filters onsite. The stormwater then flows by closed drainage systems onsite to the municipal systems in Charlemont or Christina Street. The Applicant has stated that approximately 5.2 acres of off-site area from the east also drains to the Charlemont Street drainage system, which then discharges to an on-site swale. The swale discharges to the Christina Street drainage system and then into the Charles River. The Applicant has detailed the drainage areas on the Proposed Drainage Conditions Figure. The Applicant has detailed that the closed drainage systems drain offsite and out to the Charles River. No further action required.
 - c. The Applicant has included the offsite drainage areas to the east of the project site. This drainage area is shown on the Existing Drainage Conditions Figure but is not shown on the Proposed Drainage Conditions Figure. HW recommends that the Applicant revise the Proposed Drainage Conditions Figure to include the entire drainage area of the site.
 - d. The Applicant has not proposed a method to capture runoff from impervious areas in proposed catchment areas 30A (0.80 acres) and 30B (0.30 acres). HW appreciates that the Applicant has improved existing conditions throughout the site. However, we recommend that the Applicant provide documentation to justify that these two areas are de minimis or develop additional stormwater management for them.
 - e. The Applicant has provided riprap sizing calculations in Appendix A of the Stormwater Report. The Applicant has also provided consistent dimensions of the FES riprap on the plans. No further action required.
2. *Standard 2: Stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.*

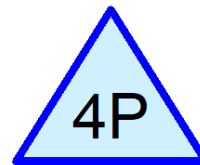
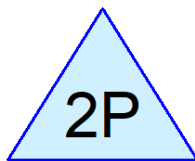
Based on the HydroCAD analysis, it appears that the proposed conditions of the site will result in lower peak runoff rates and volumes relative to existing conditions. The Applicant has provided summary tables that detail the HydroCAD results. HW has the following comments regarding the HydroCAD analysis:

- a. In Appendix A of the Stormwater Report, the Applicant has submitted a Summary for Pond B1: Biofiltration Basin 1 showing the output for the 25-year storm for sizing FES 1. The summary provided is not consistent with the summary provided in the Proposed HydroCAD model provided in Appendix B of the Stormwater Report. Furthermore, the details for the Biofiltration Basin do not include the sediment forebay. HW recommends that the Applicant revise accordingly.
- b. The Applicant has a detailed Summary for the Proposed HydroCAD for the Proposed Site. The Biofiltration Basin (Pond B1) in the proposed HydroCAD is not consistent with the plans. The rim elevation of Device #1, the invert out for Device #2 and Device #3 differs from the plans. HW recommends that the Applicant review and revise accordingly.

- c. The Applicant has a detailed Summary for the Proposed HydroCAD for the Proposed Site. The Biofiltration Basin (Pond B1) has been designed on the plans to include approximately at least two feet of bioretention soil over one foot of 1.5" double washed crushed stone. The HydroCAD model does not show this crushed stone layer. HydroCAD uses the Average end area to calculate storage for each pond. When using varying void space ratios, HydroCAD blends and scales the ratio through the layer depth. This is not representative of the material or the design. HW recommends that the Applicant insert multiple elevations at material changes in the pond to better define the void space ratio and storage spaces for each layer. (See below for example).

Volume	Invert	Avail Storage	Storage Description		
#1	94.00'	11,308 cf	Custom Stage Data (Prismatic) Listed below		
Elevation (feet)	Surf Area (sq-ft)	Voids (%)	Inc. Store (cubic-feet)	Cum. Store (cubic-feet)	
94.00	2,836	0.0	0	0	
95.00	2,836	30.0	851	851	
96.00	2,836	100.0	2,836	3,687	
97.00	3,773	100.0	3,305	6,991	
98.00	4,860	100.0	4,317	11,308	

Volume	Invert	Avail Storage	Storage Description		
#1	94.00'	9,318 cf	Custom Stage Data (Prismatic) Listed below		
Elevation (feet)	Surf Area (sq-ft)	Voids (%)	Inc. Store (cubic-feet)	Cum. Store (cubic-feet)	
94.00	2,836	0.0	0	0	
94.01	2,836	30.0	9	9	
95.00	2,836	30.0	842	851	
96.00	2,836	30.0	851	1,702	
96.01	2,836	100.0	28	1,730	
97.00	3,773	100.0	3,271	5,001	
98.00	4,860	100.0	4,317	9,318	



without average end layering

with average end layering

- d. The Applicant has proposed 3 sand filters for the project. The plans and Proposed HydroCAD model show a weir elevation for filters #1 and #3 that are higher than the inlet pipe to the filter chamber. This design may cause a tailwater issue during high storm events or if the sand filter is clogged and not functioning properly. HW recommends that the Applicant review and revise the design such that the weir does not cause a tailwater effect during large storm event.

The Applicant has provided a set of plans and details. HW provides the following comments:

- e. The Grading and Drainage Plans do not include a rim or invert for any of the Area Drains. HW recommends that the Applicant include this information.
- f. The Applicant lists a drainage connection from RD1 to DMH 10. It is unclear what this pipe is connected to. HW recommends that the Applicant clarify if this pipe is connected to a roof drain and confirm the invert connection at DMH 10.

- g. HW recommends that the Applicant provide a roof drain detail with at grade cleanout to the Plan Set.
- h. HW recommends that the Applicant provide a callout with pipe crossing information (top of pipe, invert of pipe) for any drainage or utility crossings to confirm there are no pipe conflicts.
- i. HW recommends that the Applicant include a pipe crossing detail to the Plan Set.
- j. The Applicant has provided a Bioretention Basin Detail. The Grading and Drainage Plan calls out a biofiltration basin area (Biofiltration Basin 1). The HydroCAD also lists a biofiltration basin. HW recommends that the Applicant rename the details or the plans and the HydroCAD model for consistency.
- k. The Applicant has provided a Bioretention Basin Detail. HW has the following comments:
 - i. HW recommends that the Applicant revise the note regarding side slopes to have a 3:1 maximum side slope instead of a 2:1 maximum side slope.
 - ii. HW recommends that the Applicant revise the detail to show only 2 underdrains as shown on the plan instead of 3.
 - iii. HW recommends that the Applicant include the sediment forebay as part of the profile view.
 - iv. The overflow outlet structure includes the surrounding stone. However, there is no indication of what size or how much stone should be provided. This stone is not shown on the Grading and Drainage Plan Sheet. HW recommends that the Applicant provide additional information regarding the stone on the detail.
 - v. HW recommends that the Applicant add cleanouts at the ends of all underdrains within the Biofiltration Basin for ease of maintenance.
- l. The Applicant has designed a closed stormwater system onsite that connects catch basins directly to each other. Connection of catch basins in this manner allows for resuspension of sediments that have settled in the sumps. Connection of catch basins in this manner does not allow for credit to be taken for any TSS removal and should be offline of a main conveyance line. HW recommends that the Applicant revise the design to include drainage manholes to remove direct connections of Catch Basins or Area drains.
- m. The Applicant has created a shallow depression area across from the courtyard area between the buildings. It is unclear where this water will go or if this is a stormwater management practice. HW recommends that the Applicant clarify whether this depression is meant to be a hill or a depression and confirm where the water would overflow to.
- n. HW recommends that the Applicant add a detail for a double catch basin grate.

3. *Standard 3: The annual recharge from post-development shall approximate annual recharge from pre-development conditions.*
 - a. HW understands that the Applicant is waiting to conduct soil test pits until the site is no longer active and will determine the extent of infiltration practices, once those tests are complete. According to the Stormwater Report, “the [A]pplicant will conduct soils test pits within the footprints of the proposed stormwater management systems once the Site allows to determine if infiltration is feasible in these areas. If so, the proposed stormwater management systems will be re-designed to account for infiltration. If not, the design will remain this same and Standard 3 will still be met.” HW encourages the Applicant to infiltrate as much stormwater on site as possible, within site constraints (e.g., potential contamination, soil drainage characteristics). No immediate action required.
 - b. The Applicant has stated that the site is a redevelopment, and the proposed site design is reducing the impervious cover onsite by 1.7 acres. Based on the reduction of impervious cover it appears that the Applicant meets Standard 3 for redevelopments. No further action required.
4. *Standard 4: The stormwater system shall be designed to remove 80% Total Suspended Solids (TSS), to remove 50% of Total Phosphorus (TP), and to treat 2.0-inch of volume from the impervious area for water quality.*
 - a. Per Stormwater Regulations Section 5.C.4.a, the stormwater management systems at the site are required to retain the volume of runoff equivalent to 2 inches times the total post-construction impervious surface area on the site. The Applicant has provided the required documentation to verify that the total storage volume provided by the proposed stormwater practices is sufficient. No further action required.
 - b. The Applicant has provided a series for TSS removal calculation sheets. The calculations show a 25% removal credit for deep sump catch basins. This applies only when catch basins are not connected in series. Catch basins connected in series allow for resuspension of settled sediments. HW recommends that the Applicant revise the TSS worksheets or redesign the closed drainage systems as required to obtain the TSS removal suggested.
 - c. The Applicant has provided a series for TSS removal calculation sheets. The calculations show a 5% removal credit for quarterly sweeping. The Operations and Maintenance plan states that the site will be using a vacuum or rotary brush sweeps at least 4 times a year. Per the MSH, a rotary or mechanical sweeper would require monthly sweeping to receive this credit. HW recommends that the Applicant clarify in the O&M Plan which type of sweeper and what frequency is required (monthly or quarterly) to receive this credit for TSS removal.
 - d. HW recommends that the Applicant remove the BMP performance curve for gravel wetlands as there are not gravel wetland BMPs proposed on the project.
 - e. The Applicant has provided a summary worksheet for phosphorus loading and removal on the project. HW recommends providing a Total row for Phosphorus Loading Rate Prior to Treatment to clearly show how the 9.30 lbs./year was determined.

5. *Standard 5 is related to projects with a Land Use of Higher Potential Pollutant Loads (LUHPPL).*
 - a. In the Stormwater Report, the Applicant notes that the site is not considered a Land Use with Higher Potential Pollutant Loads (LUHPPL). The Applicant has provided confirmation and documentation in its May 31, 2023 Stormwater comment response letter. HW has no further comment.
6. *Standard 6 is related to projects with stormwater discharging into a critical area, a Zone II or an Interim Wellhead Protection Area of a public water supply.*
 - a. The Project does not appear to be located within or discharge to a critical area, Zone II, or Interim Wellhead Protection Area. Therefore, Standard 6 is not applicable.
7. *Standard 7 is related to projects considered Redevelopment.*
 - a. As noted above, the Applicant has proposed to decrease the total impervious cover at the site. Therefore, the project is considered a Redevelopment. The project is only required to meet the MSH Standards 2, 3, and the pretreatment and BMP requirements of Standards 4, 5, and 6 to the maximum extent practicable. The proposed project is also required to improve existing conditions. HW recommends that the Applicant address the remaining comments in this letter as well as stormwater related comments from the City of Newton.
8. *Standard 8 requires a plan to control construction related impacts including erosion, sedimentation, or other pollutant sources.*
 - a. HW recommends that the Applicant note the total area to be disturbed per Stormwater Regulations § 6.C.4.a. The Applicant noted the area has been added to the Zoning summary chart. However, HW was not able to locate it.
 - b. HW recommends that the Applicant revise the sediment sock location on the south end of the site. Currently, the sediment sock runs through the stabilized construction entrance.
 - c. HW recommends that the Applicant indicate any trees proposed for removal on the Erosion Control Plan per Stormwater Regulations § 5.A.4. and include it on the Sediment and Erosion Control Plan.
 - d. HW recommends providing silt sack sediment traps for all catch basins along Charlemont Lane and Christina Street within 100 feet of the project site.
9. *Standard 9 requires a Long-Term Operation and Maintenance (O & M) Plan to be provided.*
 - a. In the Stormwater Report, the Applicant notes that operations and maintenance budget and responsibilities are still to be determined. HW suggests that the Applicant provide this information in the final O&M Plan (Appendix D-2) when available. In the interim, HW suggests including any general available information about maintenance responsibilities, such as whether maintenance will be the responsibility of the site owner, leasing agent, external contractor, and/or other party. Where this information is duplicated (i.e., Spill Prevention materials in Appendix F), HW recommends that the same information be provided.

- b. In the Section D.2.3 of the O&M Plan, the Applicant recommends inspection of the sand filters once per year. HW recommends that the Applicant revise the inspection and maintenance rate to twice per year per MSH Volume 2, Chapter 2. The same revision should be made to the Long-Term Maintenance/Evaluation Checklist (Section E.3 of the O&M Plan). The Applicant has suggested the inspection should be once a year as the twice a year typically applies to surface features. HW disagrees with this approach as the sediment chamber does fill up as frequently as a surface level basin. HW's comment stands.
- c. The Applicant has noted the use of mulch in the biofiltration basin as part of the maintenance. HW recommends removing the mulch from biofiltration basins as it tends to float and clog downstream outlets.

10. Standard 10 requires an Illicit Discharge Compliance Statement be provided.

- a. The Applicant notes in the Stormwater Report that "the Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges." No Long-Term Pollution Prevention Plan (LTPPP) has been provided in the Stormwater Report. HW recommends that the Applicant provide an LTPPP, including an illicit discharge compliance statement signed by the property owner.

Please contact Janet Bernardo at 857-263-8193 or at jbernarado@horsleywitten.com if you have any questions regarding these comments.

Sincerely,

Horsley Witten Group, Inc.



Janet Carter Bernardo, P.E.
Associate Principal



Steve Stanish, P.E.
Senior Engineer

ATTACHMENT C



www.nbbj.com

June 14, 2023

Ms. Katie Whewell
Chief Planner for Current Planning
1000 Commonwealth Ave.
Newton, MA 02459

Subject: Northland Charlemont Proposed 40B Development

Dear Ms. Whewell,

NBBJ is pleased to submit the following memo on the design review for Northland Charlemont at 160 Charlemont Street in Newton, MA. NBBJ was engaged to provide peer design review in June of 2022 and signed a work order for this review project in November of 2022. We submitted our initial design review analysis in January of 2023 and attended ZBA hearings in January and February of 2023. We submitted our second design review response in April 2023 based on the revised set of plans that we received on April 13, 2023.

The following design review comments are based on a revised set of plans that our team received on May 23, 2023.

Project understanding

The 7-acre project site is in the Newton Upper Falls neighborhood between Christina Street and Charlemont Street. It is proximate to the Charles River to the south, commercial and industrial uses to the north and west, and single-family residential uses to the east. Additionally, the project is near the approved *Northland Newton Development*: a mixed-use project that will include 800 residential units, office, and retail uses to the west of Needham Street. It is also our understanding that Northland owns the existing commercial property at 260 Needham Street between the two projects along Charlemont Street.

The original plans submitted by the applicant included the construction of an eight-story building with 410 residential units, 477 parking spaces, and approximately 4,300 square feet of first floor commercial space. The revised plans submitted by the applicant on April 13th include the construction of two seven story buildings with 370 residential units, 438 parking garage spaces, and no ground level retail.

Recommendations:

Promote Small Blocks - The initial proposal included a single building with a perimeter of 1,810' that exceeded the ¼ mile (1,320') metric outlined in the Washington Street Vision Plan and Needham Street Vision Plan. The revised proposal includes two separate buildings that now comply with the ¼ mile perimeter maximum. The building adjacent to Christina Street has a block perimeter of approximately 1,050' and the block adjacent to Charlemont Street has a block perimeter of approximately 880'. We believe that this is a significant improvement that will support a more human scaled and walkable environment. The revised plans submitted on May 23rd maintain the same block dimensions and we have no further comments.

Convert Needham Street from an Isolated to a Connected Roadway - The grading (elevation) and character of the original design for the west service drive included an excessively high retaining wall that could limit future pedestrian and vehicular connectivity to the west of the property. The revised plans now include a grading approach that significantly reduces the length of this retaining wall and mitigates the height of the wall as it moves to the south. This adjustment will better align with the 260 and 300 Needham Street properties and will provide more opportunities for a seamless and walkable pedestrian environment. We encouraged the applicant to study potential linkages to the west of the site and they presented a future pedestrian linkage diagram at the ZBA hearing on April 26th. We recommend that the applicant submit a copy of this diagram as part of their final submission.

East-West Open Space Connector - The revised scheme includes a generous 85' wide buffer between the two proposed buildings that will provide a valuable public space and east-west public walkway. We believe that this is a significant improvement that breaks up the original "super block," creating a more fine-grained urban grid that supports a walkable environment. We have no additional comments on this issue but request that the applicant confirm in writing that the east-west connector space will be open to the public.

East Park Drive - The applicant has shifted East Park Drive further south with a more direct connection to Christina Street. They have also included a continuous sidewalk and twenty (20) on-street parallel parking spaces on the west side of the road. We believe that

these spaces will help activate the street while providing a buffer between the roadway and the sidewalk. However, we strongly encourage that two or more of these spaces be designated for public use. This will help make the park more physically and psychologically accessible to non-residents. In response to our prior comments regarding the roundabout at the intersection of East Park Drive and Charlemont Street, the applicant has made reasonable adjustments to reduce the scale of the roundabout and the amount of impervious paving. Finally, we continue to recommend that the applicant study the potential for a pedestrian signal or other measures to ensure that pedestrians and bikers can cross Christina Street safely in anticipation of future connections across the river.

Create a stronger connection to the Upper Falls Greenway along Charlemont Street - The Needham Street Vision Plan calls for more connections between Needham Street and the local green/natural spaces including to the Goddard Street neighborhood and Christina Street Bridge that connect to Cutler Park. Charlemont Street is indicated as a prime connection.

The revised submission shifts the multi-use path from the south side of Charlemont Street to the north side. Initially, we had concerns about this shift since a portion of the path would be located on land not under control by the applicant. However, the applicant presented a full plan for this path at the ZBA hearing on April 26th that fully coordinates with other property owners. We support the extended plan on the north side but recommend that the applicant provide additional details on the timing of construction.

Streetscape - The latest plans include an approximate setback along Christina Street that ranges between 15' and 30'. We suggest that the client confirm the width of this setback in their final plans. We also continue to recommend that street trees on Christina Street be located along the curb edge within a continuous planting strip to provide a buffer between pedestrians and vehicles.

Proposed Retail - The revised submission has removed the proposed retail along Christina Street and Charlemont Street. While we understand the limitations along Christina Street, we have encouraged the applicant to include active retail uses or public amenities along Charlemont Street. The latest plans submitted by the applicant include a small lobby at the northwest corner facing Charlemont Street. This lobby /entrance represents an opportunity to create an arrival space that relates to the surrounding neighborhood. We recommend that the applicant provide additional details on this lobby / entrance, including exterior materials, glazing, and landscaping.

Building Height and Massing - The revised submission reduces the building height from eight to seven stories with generous setbacks and terracing facing the residential neighborhood to the east. We believe that this reduction in height and bulk is a significant

improvement and is more consistent with Northland Newton Development (same applicant) on the western side of Needham Street. The revised plans also utilize a base-middle-top approach to the façade design with changes in color, materials and fenestration that help establish a more human scaled building design.

The latest building elevations and renderings do illustrate a stepback of at least two or more feet along the west edge of the building. We recommend that the applicant provide a building section to confirm the exact stepback dimension.

We truly appreciate the opportunity to offer design review service to the City of Newton.

Sincerely

A handwritten signature in black ink, appearing to read "Alan Mountjoy". The signature is fluid and cursive, with the first name "Alan" being more prominent than the last name "Mountjoy".

Alan Mountjoy, Principal, NBBJ

ATTACHMENT D

Horsley Witten Group

Sustainable Environmental Solutions

112 Water Street • 6th Floor • Boston, MA 02109
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June 14, 2023

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

Re: 2nd Peer Review regarding Sustainability
Northland Charlemont Comprehensive Permit Project
160 Charlemont Street, Newton, MA

Dear Ms. Whewell:

The Horsley Witten Group, Inc. (HW) is pleased to submit this 2nd peer review regarding the sustainability proposed 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 two seven-story, mixed-use buildings with commercial/retail space, 370 residential units, and a 2-level below grade parking garage on 6.98 acres of land. HW understands that the proposed development also includes approximately 2-acres of new publicly accessible open space and bicycle and pedestrian paths to connect with Newton's existing and proposed network.

HW provided the Newton Zoning Board of Appeals (ZBA) with a peer review regarding the Site Design and Open Space, dated December 13, 2022, a letter regarding the landscape design dated January 9, 2023, and two separate letters regarding stormwater management dated January 9, 2023 and June 14, 2023.

As part of the site plan review process, HW reviewed the following additional document associated with Sustainability:

- Sustainability Narrative prepared by Steven Winter Associates, Inc., original: September 15, 2022, Updated: May 10, 2023.

The following comments correlate to the Energy and Sustainability recommendations provided in our December 13, 2022 peer review letter. Follow up comments are provided in **bold font**.

1. 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.

June 14, 2023: The Applicant has established a performance goal of Passive House certification and has outlined the Passive House elements that will be incorporated in the design to achieve Passive House certification. LEED certification will not be pursued on this project. HW has no further comment.

2. 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.

June 14, 2023: The Applicant has provided additional information summarizing the design strategies that will be utilized at the Project Site to achieve Passive House certification. The strategies include:

- **Continuous Insulation & Thermal Bridge-Free Construction**
- **Energy Recovery Ventilation**
- **Efficient Domestic Hot Water**
- **High Performance Windows & Doors**
- **Efficient Lights & Appliances**
- **Airtight Envelope**

HW is satisfied that as proposed the Applicant will incorporate appropriate design strategies throughout the residential development to create a sustainable development.

3. The Applicant has noted that the site will be “solar ready” and “green roof ready” as well as accommodate electrical vehicle (EV) 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.

June 14, 2023: The Applicant has noted that the roof and building structure will be designed to accommodate a rooftop PV system, as well as outdoor amenity areas, green roofs, and reflective roofs. The Applicant is also intending to design 20% of the parking spaces to have access to EV charging stations. As technology evolves the design may be revised to better incorporate EV charging stations. HW has no further comment.

4. 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.

June 14, 2023: The Applicant has noted that the Passive House design will allow for a more cost-effective means of electrifying the buildings systems compared to conventional construction. The Applicant has stated that this standard is a goal and a commitment made by the Northland Charlemont Development.

5. **June 14, 2023: The Applicant has noted that the proposed site design, stormwater management and proposed garage parking will reduce stormwater runoff from the site and improve water quality. HW concurs with this statement, we agree that the reduction in impervious cover, fewer surface parking spaces, proposed shuttle service, creation of**

the bike path, and the additional landscaping and public open space will reduce suspended sediment and phosphorous flowing into the Charles River.

Please contact Janet Bernardo at 857-263-8193 or at jbernarado@horsleywitten.com if you have any questions regarding these comments.

Sincerely,

Horsley Witten Group, Inc.



Janet Carter Bernardo, P.E.
Associate Principal



ATTACHMENT E

City of Newton, Massachusetts Climate and Sustainability Team



Date: June 13, 2023

To: Newton Zoning Board of Appeals

CC: Stephen Buchbinder, Attorney; Northland 160 Charlemont LLC, Property Owner; Steven Winter Associates, Inc., Sustainability Consultant; Michael Gleba, Senior Planner

From: Ann Berwick, Co-Director of Climate and Sustainability; Bill Ferguson, Co-Director of Climate and Sustainability; Liora Silkes, Energy Coach

RE: 160 Charlemont St Comprehensive Permit Sustainability Review

The Climate and Sustainability Team has reviewed the materials submitted for 160 Charlemont St and applauds the project team for its commitments to sustainability, aligned with compliance with the Sustainability Requirements as set forth by the Massachusetts Stretch Code and the Newton Zoning Ordinance Chapter 5 Section 13.

By planning to build 160 Charlemont St to Passive House standards, this project is on track to meet the requirements of Section 5.13.4.A of the Newton Zoning Ordinance. We are glad to see a project aligned so well with our efficiency and decarbonization goals, and hope this can serve as a model for future projects.

By planning to provide access to electric vehicle charging to 20% of the parking spaces, the project is on track to meet the requirements of Section 5.13.4.B of the Zoning Ordinance. We are seeing substantial growth in EV adoption and would encourage the project team to install even more chargers than required.

We are also very glad to see mention of optimizing roof design for sustainability features including solar readiness, outdoor amenities, green roofs, and reflective roofs. We encourage the site operator to install solar as early in the process as possible, to begin receiving the environmental and financial benefits of the installation as early as possible as well.

Finally, it is great to see mention of embodied carbon in the sustainability narrative, and commitment to exploring alternatives to high-embodied carbon concrete and steel. We encourage the project team to conduct a Life Cycle Analysis of the building's structural and enclosure materials in line with the language recently adopted into the Zoning Ordinance.