



# CITY OF NEWTON, MASSACHUSETTS

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Ruthanne Fuller  
Mayor

## ZONING BOARD OF APPEALS

**To:** Zoning Board of Appeals Members  
**From:** Adrianna Henriquez, Clerk  
**Date:** June 5, 2020  
**Subject:** Materials for **June 8, 2020** Public Hearing

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### PACKET 2

Hello,

Please see the following materials are for the upcoming hearing on June 8, 2020 Public Hearing. The following board members are scheduled to sit: **Brooke Lipsitt (Chair), William McLaughlin, Barbara Huggins Carboni, Michael Rossi, Michael Quinn, and Timothy Durken (Alternate)**

1. June 4, 2020 Planning Memorandum

Thank you,

Adrianna Henriquez

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Ruthanne Fuller  
Mayor

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Barney S. Heath  
Director

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## PUBLIC HEARING MEMORANDUM

DATE: June 4, 2020

MEETING DATE: June 8, 2020

TO: Zoning Board of Appeals

FROM: Barney Heath, Director of Planning and Development  
Neil Cronin, Chief Planner for Current Planning  
Michael Gleba, Senior Planner

COPIED: Mayor Ruthanne Fuller  
City Council

In response to questions raised at Zoning Board of Appeals public hearings on January 22, March 17, April 22, 2020 and May 20, 2020, 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 #09-19

**Dunstan East**

Mark Development, LLC, applying to the Zoning Board of Appeals of the City of Newton, Massachusetts, pursuant to General Laws, Chapter 40B, Sections 20 through 23, as amended, for the issuance of a Comprehensive Permit authorizing the applicant to construct a mixed-use project with three separate buildings with a total of 244 units of rental housing, approximately 12,141 square feet of retail space, and a total of 291 parking stalls within two subterranean garages at a site encompassing the following properties: 1149, 1151, 1169, 1171-1173, 1179, and 1185 Washington Street; 32-34 Dunstan Street; and 12, 18, 24, and 25 Kempton Place in Newton, Massachusetts ("Dunstan East"). Sixty-one (61) of the units (25%) will be deed restricted to remain permanently affordable to households at up to 80 percent of Area Median Income (AMI). The property is located in a Business 2 (BU2) Zoning District.

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## **I. BACKGROUND**

The Applicant, Dunstan East, LLC, is seeking a Comprehensive Permit pursuant to Massachusetts General Laws Chapter 40B, Sections 20 through 23, for the construction of a mixed-use project consisting of three buildings along the north side of Washington Street in West Newton. The subject property comprises approximately 138,142 square feet on twelve lots in a Business 2 (BU2) zoning district: 1149, 1151, 1169, 1171-1173, 1179, and 1185 Washington Street; 32-34 Dunstan Street; and 12, 18, 24, and 25 Kempton Place in Newton, Massachusetts (“Dunstan East”).

The Zoning Board of Appeals (Board) opened the public hearing on this petition on January 22, 2020, 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.

On March 17, 2020, the public hearing addressed issues related to the proposed development’s site design, civil engineering, stormwater management, and sustainability, including a memorandum drafted by Horsley Witten, the firm hired by the City to peer review those aspects of the project.

On April 22, 2020, the public hearing addressed the project’s transportation issues, including a memorandum drafted by BETA, Inc., the firm hired by the City to peer review the applicant’s November 2019 Transportation Impact and Access Study (TIAS) which was prepared in advance of that meeting in consultation with City staff from several departments. The memo discussed several aspects of the proposed project, including traffic, parking, circulation, loading, bicycling facilities, and transportation demand management.

On May 6, 2020, the applicant submitted a considerable amount of new information regarding the proposed project, including its responses to Horsley Witten’s March 10, 2020 and BETA’s April 2020 peer review memoranda, as well as modified civil engineering plans (dated April 28, 2020), site operations plans, preliminary signage/wayfinding plans (dated April 30, 2020), information regarding proposed street improvements (April 30, 2020), and architectural designs (dated May 4, 2020). This material was subsequently amended by the applicant on the afternoon of Monday May 11, 2020 with material including revised architectural drawings dated May 8, 2020 and a memorandum dated that same day discussing the various changes to the proposed development.

## **II. PROJECT UPDATES**

On June 2, 2020, the applicant submitted additional new information regarding the proposed project, including:

- revised architectural plans and rendered elevations (14 sheets) dated June 1, 2020. The applicant has stated that the plans reflect a reduction of about 5,570 SF from the 6th floor

of Building 1 (located along Dunstan Street) from 12,350 SF to 6,780 SF. That reduction has been offset by an increase in the square footage (and height from three to four stories) of Building Two along Washington Street. The total number of proposed units in the development remains unchanged at 234.

- a comparison of the various iterations of the project plans from the initial submission to the current proposal
- a table outlining what the applicant is offering as project mitigation. The total cited amount of \$3,083,690 includes costs related to:
  - the provision of deeper affordability (at 50% AMI) for eight (8) of the 59 permanently affordable units to made available as part of the project.
  - sustainability features (e.g., electrification of residential heating and cooling, hot water, and cooking), electric vehicle charging stations and an embodied carbon analysis of the project's buildings)
  - upgrades to Cheesecake Brook, including removing a portion of the existing wall, regrading, and creating a new naturalized edge
  - various transportation-related items such as bus shelters, traffic signal improvements, road safety audits, and sidewalk improvements, including ADA ramps)
  - a payment equal to 25% of the Infiltration & Inflow fee as calculated by the City Engineer
- a March 31, 2020 memorandum discussing geotechnical and environmental due diligence issues related to the site.

These materials were circulated to relevant City offices and peer reviewers who are presently in the process of reviewing them.

### III. ANALYSIS

#### a. Site design, civil engineering, stormwater management, and sustainability

The attached memorandum submitted by the Horsley Witten Group (HW), the city's peer reviewer for site design, civil engineering, stormwater management, and sustainability, details its comments on and responses to the applicant's own responses to Horsley Witten's initial peer review issued in March (**Attachment A**).

As the memo details, the applicant has adequately addressed most issues previously raised by HW. Beyond those, HW still has several comments/questions, including those highlighted here:

- As Brook Drive has the potential of flooding up to one foot during severe weather, HW

recommends that the applicant be required to perform regular maintenance of the stormwater system and sweeping of Brook Drive to minimize the possibility of pollutants entering Cheesecake Brook during a 100-year flood event (**Comment 12**).

- While supporting the applicant's proposed "flush" street design for Brook Drive' as it creates "fluidity and connectivity" to the Cheesecake Brook boardwalk, HW recommends that the applicant consider, where possible, using trees rather than bollards to "reinforce the vehicular barrier, increase traffic calming and provide moments of shade along the brook in the summer (**Comment 13**).
- HW reviewed and has no objection to the applicant's proposed division of public and private areas of the interior courtyard between Buildings 1 and 2 as well as the related travel path for the elevator that would connect the courtyard to Brook Drive. That said, as the landscape plan does not seem to indicate public outdoor seating for those not dining at the proposed restaurant, HW recommends the applicant consider providing benches within, and shading of, the public areas (**Comment 15**).
- HW reviewed the shadow study provided by the Applicant. While noting that the project would have much larger shadows than the existing buildings do, it would not greatly increase shadows cast on nearby buildings (an exception being the larger morning shadows that would fall on building to the west on Dunstan Street), since during much of the year the extended shadows would tend to fall on outdoor areas and streets (**Comment 14**).

As detailed in its memorandum, in several areas HW recommends that the applicant provide additional details and information. These include:

- details that help to clarify the planting condition for the proposed street trees (i.e., soil volume, structural soils, etc.)(**Comment 17**).
- information regarding the adequacy of the lighting proposed for the back/North side of Building 3 and confirm that there is enough light for pedestrian safety on the stair connection to Brook Drive between Buildings 1 and 2 (**Comment 24**).
- While the applicant has asserted that under Chapter 40B the project is not required to be in compliance with Section 5.12 of the Zoning Ordinance, HW encourages the applicant to provide a comprehensive sustainability plan and comply with green building rating system requirements to the maximum extent practicable (**Comment 28**).
- Additional information regarding the project's climate resiliency (**Comment 31**).
- Additional detail on proposed improvements to Cheesecake Brook (e.g., removal of the existing stone wall on the south bank, efforts regarding stormwater management, possible enhancements to the existing 48-inch drainage outfall and collaboration with the Charles River Watershed Association (CRWA) and the Massachusetts Department of

### Transportation (**Comments 31 and 37**).

As also detailed in its memorandum, HW noted that several of their initial comments still stand as the applicant has not addressed certain issues and/or provided additional information.

These include:

- the applicant has not revised site details to include a layer of geotextile or filter fabric between the sand and gravel to prevent sand from infiltrating into the gravel or underdrain (**Comment 44**)
- The Applicant has not modified the Stormwater Operation and Maintenance (O&M) Plan to include the inspection and cleaning of catch basins to be four times a year (**Comment 48**).
- HW has not received for review plans indicating grading the interior courtyard between Buildings 1 and 2 (**Comment 52**).

The Planning Department can make some initial observations on the modification of the project's design (discussed above) to reduce the height of Building 1 along Dunstan Street and increase the height of Building Two by adding a 4<sup>th</sup> floor to that building along Washington Street.

As indicated in previous Department memos on this application, the Department was comfortable with the heights that were previously proposed for the development due to the project's consistency with the Washington Street Vision and the 64-foot setback from the northern boundary. Consistent with that, the Planning Department is similarly comfortable with the proposed modification as it maintains varied building heights along Washington Street and additionally addresses concerns about height and massing along the Dunstan Street profile.

HW and the Planning Department will be available to address any issues and questions that might be raised at the forthcoming public hearing.

## **IV. OTHER ISSUES**

### **a. Engineering- Inflow and Infiltration fees**

As referenced in the Planning Department memorandum drafted for the previous hearing on this application, the Engineering Division provided an initial calculation of \$2,022,493 for the expected Infiltration and Inflow ("I&I") fees associated with this project, based on the total number of bedrooms and the area utilized as retail space in the project. As stated in its recently submitted mitigation document, the applicant has stated that it would contribute \$515,510 as the cash equivalent of 25% of the I&I fee as based on the project containing 369 bedrooms and 8,417 square feet of retail, consistent with recent practice.

b. **Conservation Commission**

The applicant made an initial presentation on the project at the May 14, 2020 Conservation Commission meeting. The Commission had several requested revisions on the project and continued the hearing to its June 25, 2020 meeting.

c. **Sustainability**

In regard to sustainability efforts, and as discussed in Planning's previous memorandum, the mitigation information recently provided by the applicant (referenced above) indicates that it will install electric residential cooking, heating and cooling, and hot water systems; 10% of parking spaces would have electric vehicle (EV) charging stations (and infrastructure would be installed to facilitate an additional 10% of the garaged spaces to have charging stations); and that it will conduct an embodied carbon analysis of alternate materials.

d. **Fire Department**

To date the Newton Fire Department has reviewed and approved only the site plans (i.e., access, hydrant locations, etc.).

e. **Transportation Demand Management**

The Planning Department notes that while the applicant provided information regarding the installation of bus shelters and pedestrian improvement in its recently submitted mitigation proposal (see above), the applicant has not provided additional information requested by the Department and its transportation peer reviewer about its transportation demand management (TDM) measures, such as the possibility of offering transit subsidies to residents and on-site employees.

**V. ADDITIONAL INFORMATION AND MATERIALS**

The applicant should be prepared to respond to all of the peer reviewer's comments and questions at the public hearing and subsequently in writing for appropriate review by the peer reviewers, City staff, and the Board in advance of future meetings.

**VI. CONCLUSION AND NEXT STEPS**

The Planning Department will continue to review the proposal and as, 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 Board meetings on this application.

The applicant should continue to work with City staff and the peer reviewers to address all comments and concerns raised by the peer reviewers, City department and the Board.

**ATTACHMENTS**

**Attachment A:** Horsley Witten Group memorandum entitled "Dunstan East 40B Peer Review," dated May 20, 2020





## MEMORANDUM

**To:** Michael Gleba, Jennifer Caira – City of Newton  
**From:** Janet Carter Bernardo, PE, Hannah Carlson, RLA, and Jonathan Ford, PE  
**Date:** May 20, 2020  
**Re:** Dunstan East 40B Peer Review

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The intent of this memorandum is to provide the City of Newton with a follow up peer review of the Dunstan East open space and building massing, sustainability report, and stormwater mitigation. The Applicant is proposing to develop a three-building mixed-use residential and retail area along Washington Street in Newton, Massachusetts.

The existing site is mostly impervious, and is occupied by eleven buildings ranging in footprints from approximately 1,000 square feet (sf) to 16,000 sf. The Project Site is located on 3.4-acres of land with a portion consisting of Bordering Land Subject to Flooding (BLSF). Presently, stormwater is collected by catch basins throughout Kempton Place, Dunstan Street, and Brook Street and is discharged into Cheesecake Brook via a closed drainage system.

The Applicant proposes to demolish all but one existing building, and to construct three mixed-use buildings with footprints of approximately 13,000 sf to 15,000 sf. The proposed development as designed will result in a decrease of roughly 8,900 sf of impervious cover, and 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 of catch basins and manholes along Kempton Place and Brook Street. Roof drains are proposed to discharge directly into the closed drainage network, and a sand filter system is proposed to filter a minimum of ½ inch of runoff prior to discharging into the municipal system on Dunstan Street which discharges into Cheesecake Brook.

HW has received the following additional documents in response to our March 10, 2020 initial peer review memorandum:

- Dunstan East Response to HW Peer Review dated March 10, 2020, including:
  - Exhibit A: Dunstan East Site Plans by VHB dated April 28, 2020 (15 pages);
  - Exhibit B: Site Plan with Future Pedestrian Connection (1 page)
  - Exhibit C: Pedestrian Pick-up and Drop-off plan by Mark Development (2 pages);
  - Exhibit D: Cheese Cake Brook - Section A-A and B-B (2 pages);
  - Exhibit E: Brook Drive Slides (7 pages);

- Exhibit F: Shadow Study dated February 28, 2020 (9 pages);
- Exhibit G: Courtyard Division of Space Plan dated April 16, 2020 (2 pages);
- Exhibit H: Site and Buildings Sections dated February 28, 2020 (7 pages);
- Exhibit I: Dunstan East: Operations Memo dated May 6, 2020 (3 pages);
- Exhibit J: Photometric Plan by Reflex Lighting dated March 3, 2020;
- Exhibit K: Dunstan East Mixed-Use Redevelopment Stormwater Report by VHB, revised April 23<sup>rd</sup>, 2020 (101 pages);
- Exhibit L: Dunstan Street Improvements by Mark Development dated April 30, 2020 (7 pages).
- Memorandum prepared by VHB, Response to Comments, Transportation Engineering Peer Review, BETA Group, dated May 11, 2020;
- Memorandum prepared by VHB, Riverside Redevelopment Program Modification Traffic Generation, dated May 11, 2020;
- Site Plans, Dunstan East, Washington Street, West newton, Massachusetts, prepared by VHB, dated April 28, 2020;
  - Title Sheet
  - Legend and General Notes Sheet C-1.0
  - Site Plan and Erosion & Sediment Control Plan Sheet C-2.0
  - Site Plan Sheet C-3.0
  - Grading and Drainage Plan Sheet C-4.0
  - Utility Plan Sheet C-5.0
  - Site Details 1 Sheet C-6.1
  - Site Details 2 Sheet C-6.2
  - Site Details 3 Sheet C-6.3
  - Site Materials L-1.1
  - Boundary and Topographic Survey Sheet 1 of 5
  - Boundary and Topographic Survey Sheet 2 of 5
  - Boundary and Topographic Survey Sheet 3 of 5
  - Boundary and Topographic Survey Sheet 4 of 5
  - Boundary and Topographic Survey Sheet 5 of 5
- Dunstan East: Operations Memo, dated May 6, 2020;
- Dunstan East - Vehicular Parking by Mark Development;
- Draft Signage Scheme by Mark Development, dated April 30, 2020;
- Dunstan Street Improvements by Mark Development, dated April 30, 2020;
- Dunstan East Architectural Plans Unit Reduction (Rev 1), prepared by VHB and Elkus Manfredi Architects, dated May 6, 2020;
  - Existing Site Layout Plan A001
  - Buildings 1, 2, and 3, Level P2 A120
  - Buildings 1, 2, and 3, Level P1 A-121
  - Buildings 1, 2, and 3, Level 1 A122
  - Buildings 1, 2, and 3, Level 2 A123
  - Buildings 1, 2, and 3, Level 3 A124
  - Buildings 1, 2, and 3, Level 4 A125
  - Buildings 1, 2, and 3, Level 5 A126
  - Buildings 1, 2, and 3, Level 6 A127

- Buildings 1, 2, and 3, Roof Plan A128
- Buildings 1 and 2, Elevations A203
- Buildings 1 and 2, Elevations A204
- Building 3, Elevations A205
- Building Sections A203
- Dunstan East Narrative of Changes, prepared by Mark Development, dated May 8, 2020.

HW met with the Applicant and representatives of their design team to review the design on March 2, 2020. The following comments and recommendations correlate with our March 10, 2020 peer review, additional comments are provided in **bold font**:

### *General*

1. The current neighborhood scale and character varies. The project location is east of the historic West Newton village core, within a quarter-mile (5-minute walk) of the intersection of Washington Street with Watertown Street. The immediate project vicinity generally is comprised of light industrial, retail, and automobile commercial with dispersed urban form. North of the site, there is a change in character across Cheesecake Brook to the adjacent residential neighborhood. The Massachusetts Turnpike is located across Washington Street to the south.

**No further comment needed.**

2. The Washington Street Vision Plan identifies the project location as part of an extension of the West Newton village center. The proposed site framework is generally consistent with the Plan vision, with new street connections providing smaller blocks and increased porosity, village-scale buildings fronting Washington Street, a publicly accessible internal block courtyard, and step down in scale from Washington Street towards Cheesecake Brook.

**No further comment needed.**

3. The Washington Street Vision Plan Height Principles Diagram identifies the project site as “Medium Heights – Village Character (3 to 6 stories).” The proposed plan is generally consistent with the overall building heights. Additional comments are provided on the following pages regarding more detailed review of massing and scale.

**No further comment needed.**

4. Portions of the proposed site are within 100 feet of Cheesecake Brook, which is classified as a Riverine Wetland System according to the US Fish and Wildlife Service National Wetlands Inventory. The Applicant has not indicated the presence of any wetlands. HW recommends that the Applicant clearly document the applicable wetland resource area present including Riverfront Area, bank, and BLSF as well as any buffer zones associated with the resource area.

**The Applicant has indicated the Riverfront Area, Limit of Bank, BLSF, and 100-foot buffer zone on the updated plan set (Exhibit A). The Applicant intends to file a Notice of Intent with the Newton Conservation Commission as well.**

*Open Space, Building Placement and Massing*

5. The proposed site framework, especially adding Brook Drive as an extension of Kempton Place, succeeds in breaking up the existing megablock to increase permeability through the site and provide better public access to Cheesecake Brook. This approach is consistent with the Washington Street Vision Plan principles.

**No further comment needed.**

6. The design of the proposed landscaped area north of Building 3 adjacent to Cheesecake Brook may complicate a future extension of Brook Drive along Cheesecake Brook to the east with an eventual connection to Cross Street as shown in previous drafts of the Vision Plan (for example, 4.22.19 draft, page 111). The proposed design for the Building 3 landscape area provides compensatory flood storage, which may make it difficult to extend Brook Drive in the future (if desired). HW recommends that the future street extension to the east of Brook Drive, or possibly a pedestrian/bicycle trail, be considered. HW recommends traffic/transportation peer review provide input related to the possible Brook Drive extension.

**The Applicant has allowed for a future pedestrian connection to the east in the design (Exhibit B), it does not appear feasible to design for a future road and provide compensatory storage for flood mitigation.**

7. Building 1 and Building 2 massing steps down in scale from Washington Street to Brook Drive. The street grade at Brook Drive is approximately one story lower than the grade at Washington Street, which should help the feeling of scale transition from Washington Street to residential neighborhoods to the north. As proposed, Building 1 appears to transition from 7 stories to 4 stories on Dunstan Street within 20-25 feet of Brook Drive. A more gradual transition in scale from Washington Street to Brook Drive might better meet the City's vision. More information should be provided to demonstrate the proposed condition at pedestrian level on Dunstan Street as well as the calculation of building heights relative to grade.

**The Applicant has provided additional detail regarding massing and scale. HW has no further comment.**

8. Compared to Buildings 1 and 2, the location of Building 3 appears to be better suited to the proposed density/scale and not as sensitive to the transition to the neighborhoods north of Cheesecake Brook that is necessary for Dunstan Street.

**No further comment needed.**

9. The garage entries from Kempton Place to Building 2 and Building 3 are not aligned. Based on preliminary review of the proposed layout HW does not have an objection to the proposed configuration. HW recommends traffic/transportation peer review provide input related to the proposed alignment and garage access.

**No further comment needed.**

10. Pick up/drop off locations are proposed on Washington Street and Kempton Place. More information is required to review the approach to pick up and drop off, especially at Building 3. Pick up and drop off areas should be provided at an intuitive location for each proposed building without blocking vehicular travel lanes.

**The Applicant provided an Operations Memo and pick-up/drop-off plan and has designated pick-up/drop-off areas on Washington Street and Kempton Place. The stated concerns appear to have been adequately addressed. HW has no further comment.**

11. The intent for the Building 3 rear common space and for proposed access to Building 3 from Washington Street east of the existing building to remain (Eastern Insurance) should be clarified.

**The Applicant has clarified that the rear common space will be restricted to residential tenant use only. The main lobby for Building 3 will be located at Kempton Place and Brook Drive with a secondary access at the south end of Building 3. HW has no further comment.**

12. HW recommends that flood plain elevations be added to the building cross sections to clearly review proposed first floor elevations relative to the flood plain elevation for various frequency events.

**The Applicant has provided building cross sections indicating the 100-year flood plain at elevation 38.6 and the first-floor elevation of the closest buildings at 41.5. The lowest point of the proposed Brook Drive is at elevation 37.5 (catch basin 5). While the roadway has the potential of flooding up to 1 foot during a severe weather occurrence the area is not confined. HW recommends that to minimize potential pollutants from entering Cheesecake Brook during a 100-year flood event regular maintenance of the stormwater system and sweeping of the roadway is required.**

13. Brook Drive appears to be proposed as a flush shared street condition. HW supports this approach for traffic calming and also to help knit the proposed development and pedestrian connections to Cheesecake Brook. More information is needed to adequately review the proposed street design in conjunction with proposed sidewalk widths, Cheesecake Brook bank restoration, and a proposed linear park in this location.

**The Applicant has provided landscape plans and sections to better describe the Brook Drive conditions (Exhibit E). The flush street condition of Brook Drive and the pavement design and bollard locations help to create fluidity and connectivity to the boardwalk along the brook. In areas with planting beds instead of bollards, the Applicant should consider adding trees if subsurface conditions allow in order to reinforce the vehicular barrier, increase traffic calming and provide moments of shade along the brook in the summer.**

14. The Applicant has not provided a shadow study. HW recommends that the Applicant provide this for review.

**The Applicant has provided a Shadow Study as Exhibit F. The study shows the project to have much larger shadows than the existing buildings; however, they do not appear to greatly increase shadows cast on nearby buildings due to the spatial relationship of the existing buildings to the proposed buildings. During the mornings, most of the year, the larger shadows will fall on the buildings across Dunstan Street. In general, the shadows mostly fall on outdoor areas and streets. The Applicant has generally provided adequate lighting as needed in outdoor areas to maximize comfort and safety to users as shown on the photometrics plan. See comment response #24 below under lighting.**

15. HW recommends that the Applicant provide additional information to clarify the division of the space and intended users and programs for the interior courtyard between Buildings 1 and 2, including cross sections. Additional information should also be provided regarding the elevator connection between the courtyard and Brook Drive if it is going to serve as part of the publicly accessible path of travel.

**The Applicant has provided an exhibit detailing the courtyard division of space and elevator connections as Exhibit G. The elevator connection plan shows an adequate path of travel. The courtyard has both public and private areas as shown in the exhibit – HW has no objection. The landscape plan does not appear to include seating for public visitors that are not dining at the outdoor restaurant – HW recommends consideration of benches and shade within the public areas.**

16. HW recommends that the Applicant provide cross sections for all streets (showing horizontal and vertical relationship to existing/proposed buildings on both sides) in order to convey the proposed public realm and scale/character fit with the surrounding neighborhoods.

**The Applicant has provided street cross sections as Exhibit H. HW has no further comment.**

17. HW recommends that the Applicant select trees with larger height and canopy at maturity to help soften the building edges, and design the sidewalks and tree systems to provide appropriate soil volume.

**The Applicant has provided a list of representative street/shade trees and stated that street trees will be in raised beds and connected subgrade with structural soil that would address this response. The Landscape Plan calls for permeable pavers along the street which seems amenable to a larger strip of soil. However, there are no landscape details to confirm this and information on soil volume or structural soils are not currently on the plan. The Applicant should provide details that help to clarify the planting condition for the trees.**

18. Building 2 includes ground floor parking on Dunstan Place, opposite the proposed residential space at ground level in Building 3. More information is needed to review this area and impact on the streetscape.

**The Applicant provided more information clarifying proposed sub-surface parking within Building 2 on Kempton Place. The parking will not be visible from Kempton Place, and the Building 2 garage entry is located opposite the ground floor Building 3 amenity and back of house areas. No further comment needed.**

19. The Kempton Place streetscape would be improved by maximizing the number of street trees. HW recommends that the Applicant consider additional trees in front of Building 3 and potentially in front of Building 2.

**The Applicant adequately addressed this comment with their response.**

20. While bike storage and racks are provided, it is not clear how bicyclist mobility and safety is addressed on Brook Street and Kempton Place. HW recommends that the Petitioner provide more detail regarding the approach to bicycle connectivity through the site and connecting to adjacent streets and neighborhoods.

**HW concurs with the Applicant's response and additional design detail provided regarding sharing of Brook Street and Kempton Place.**

21. More information is needed to clarify the intent for service, deliveries, trash/recycling, and loading for all three buildings.

**The Applicant has provided Operations Memo as Exhibit H. HW has no further comment.**

22. HW recommends that the Applicant clarify who will be responsible for maintenance of the open spaces and landscaping. HW recommends that the Applicant communicate with the future maintenance entity to ensure that the materials, furnishings, and landscaping choices fall under the umbrella of their capabilities and potential scope of work.

**The Applicant adequately addressed this comment with their response.**

23. As the design progresses, the proposed Washington Street pedestrian realm should be carefully coordinated with City improvements to Washington Street, including potential for curb bump-outs and green infrastructure.

**No further comment needed.**

### *Lighting*

24. The Applicant has not provided a site lighting or photometrics plan. HW recommends that the Applicant provide these for review.

**The Applicant has provided a Photometrics plan as Exhibit J. The plan shows adequate lighting around the buildings except for the back/North side of Building 3 where there are no fixtures located. The stairs between Buildings 1 and 2 are dimly lit compared to the surrounding outdoor areas adjacent to the building,**

**which may be appropriate. The Applicant should provide more information regarding the intent for photometrics behind Building 3 and confirm that there is enough light for pedestrian safety on the stair connection to Brook Drive.**

*Sustainability*

25. Proposed mixed-use development in this location is consistent with the City's objectives to encourage walkable, mixed-use village redevelopment in close proximity to transit and reduce single occupancy vehicle trips. HW assumes transportation peer review will provide comment regarding parking requirements in this regard.

**No further comment needed.**

26. The project appears to propose a reduction in impervious area, addition of trees and landscaped areas, and an improvement in water quality treatment on the currently highly impervious site. The site has minimal existing tree cover and is currently within a "hot spot" with extreme temperatures as defined by the City Climate Action Plan. Significant opportunity exists to utilize green infrastructure and resilient building design to reduce heat island effect and extreme heat risks. More detailed drainage and landscape design information will be required as design development continues.

**The Applicant has noted a permeable strip/subsurface reservoir with structural soil for street trees along Washington, Kempton, and Dunstan Place will be provided as part of upcoming submissions. No further comment needed at this time.**

27. Additional information is required to review and verify the stormwater design as noted in following comments.

**Please refer to comments below.**

28. Design to meet the standards of an authorized green building rating system is required per Zoning Section 5.12. Additional information is required for review.

**The Applicant stated compliance with Zoning Section 5.12 is not required under Chapter 40B. HW supports the Applicant's commitment to providing a comprehensive sustainability plan as part of a future submission, and encourages documentation and compliance with green building rating system requirements to the maximum extent practicable.**

29. EV stations are required for 10% of the project parking spaces and provision of an additional 10% of parking spaces to be EV ready. Additional information is required for review.

**The Applicant confirmed 10% EV spaces will be provided. The Applicant should confirm whether an additional 10% of parking spaces will be EV ready.**

30. Will buildings have green roofs and/or be solar or solar-ready? Additional information is required for review.

**Applicant has indicated buildings will be "solar-ready". No further comment needed.**



31. The project is partially located within the 100-year floodplain. Additional information is required to review resiliency. More information is required regarding immediate proposed improvements to Cheesecake Brook and collaboration with the Charles River Watershed Association.

**The Applicant noted the design team is continuing to work in conjunction with the CRWA and MassDOT regarding stormwater management. HW recommends additional detail be provided for review when it is available.**

32. Investigation of other opportunities to provide green infrastructure practices consistent with the City's Complete Streets Policy is encouraged.

**See response to comment #26.**

33. HW recommends more information be provided regarding long-term efforts to support neighborhood groups and advocacy organizations regarding environmental improvements as well as EVs, biking, walking, public transit, and shared transportation.

**Applicant has provided a list of potential Traffic Demand Management measures in the Beta Group response. No mention is made regarding long-term efforts to support neighborhood groups and advocacy organizations regarding environmental improvements.**

34. The Hazard Mitigation Plan recommends incorporating more stringent stormwater standards and future precipitation projections. The rainfall depths used in the drainage analysis should be based on NOAA Atlas 14 precipitation depths. Additional information is required for review.

**No further comment needed.**

35. Undergrounding utilities will provide resilience to wind and storms and should be required within the site and encouraged for existing Dunstan Street and Kempton Place utilities. Coordinating infrastructure design with resiliency to flooding will be required. More information will be required as part of future design development.

**No further comment needed.**

36. We encourage a commitment to conducting embodied carbon analyses as part of the design process, and encourage the selection of materials, products, and wall assemblies that minimize the overall embodied carbon and maximize high thermal performance throughout the project.

**No further comment needed.**

#### *Cheesecake Brook*

37. The Charles River Watershed Association (CRWA) is working on a project to restore and naturalize Cheesecake Brook. There is an opportunity for this project to remove or step the wall containing Cheesecake Brook on the side of this development. The proposed landscaping includes a boardwalk and grading to accept flood waters that would work well with a naturalized and restored area brook edge. By bringing the Brook into the site, there are additional educational opportunities to teach about restoration. HW

recommends that the Applicant continue to coordinate with CRWA to remove the wall and integrate the Brook into the landscaped areas, as well as coordinate enhancements to the existing 48-inch drainage outfall.

**The Applicant has proposed to remove the existing stone wall and indicated a naturalized planting area. HW understands that the Applicant is working with the CRWA. HW recommends additional detail be provided for review when it is available.**

38. The boardwalk maximizes the potential flood storage and restoration planting area. Large wooden boardwalks can be expensive. If needed, an alternative but similarly beneficial solution should be considered in the event the wooden boardwalk gets value-engineered out of the design (alternative materials and/or possible stepping/tiers to the Brook).

**HW considers the wood decking an ideal material and does not have a specific cost-saving material alternative, especially since the wood species is not specified. Ideally high quality, sustainable and durable wood decking can be utilized which will reduce the future maintenance needs. If a lower cost material is required due to budget requirements, the sustainability and maintenance benefits of various wood species and composites should be weighed.**

39. The Site Materials Plan does not have representative species for the “Naturalized Planting Bed at Brook Edge and Northeast Open Space”. HW recommends that the species be adaptable to varying water levels and to generally use native species in order to enhance ecological communities and increase value for native birds and other wildlife.

**HW understands that the Applicant is filing a Notice of Intent with the Newton Conservation Commission where additional details and direction will be coordinated. HW recommends additional detail be provided for review when it is available.**

40. HW recommends that the Applicant consider planting occasional trees between the boardwalk and the Brook to increase the number of trees planted and help the City’s efforts to improve climate resiliency by adding trees to improve stormwater quality and sequester carbon.

**No further comment needed. HW recommends additional detail be provided for review when it is available.**

41. For maintenance and longevity, HW recommends that the transition from lawn to naturalized plantings in the northeast corner of the site be indicated or simplified for maintenance and longevity. If the Cheesecake Brook wall is removed or stepped down, then the area could be tiered to make room for lawn versus distinguishable naturalized areas along the water’s edge.

**No further comment needed. HW recommends additional detail be provided for review when it is available.**

*Stormwater Management and Phosphorus Removal*

42. The Applicant has not provided Stormwater Analysis or Calculations to verify the performance of the proposed stormwater management system. Although it is a redevelopment project, analysis is necessary to demonstrate that the Water Quality Volume (WQv) or Water Quality Flow (WQF) can be captured by the proposed sand filter system to provide adequate stormwater treatment. HW recommends that the Applicant provide analysis to verify that the WQv or WQF will be routed through the proposed treatment train without bypassing stormwater practices.

**The Applicant has provided the HydroCAD modeling and the sand filter sizing calculations in the Stormwater Report. No further comment needed.**

43. The Applicant has proposed an open space/flood storage area at the northeast corner of the site (bordering Cheesecake Brook). Based on proposed grading, it appears that the Applicant's design would increase available 100-year flood storage volume by up to 12,000 cubic feet. However, in accordance with 310 CMR 10.57(4)(a)1. "Compensatory storage shall mean a volume not previously used for flood storage and shall be incrementally equal to the theoretical volume of flood water at each elevation up to and including the 100-year flood elevation, which would be displaced by the proposed project." HW recommends that the Applicant provide a table illustrating the existing and proposed volumes available for flood storage for elevations 34-39 within the property boundaries.

**The Applicant has provided the requested comparison between existing and proposed elevations. No further comment needed.**

44. HW has the following comments pertaining to the proposed stormwater sand filter system:

- a. Based on the Sand Filter Sizing Calculations provided by the Applicant, it appears that the sand filter was sized based on a hydraulic conductivity of 20 feet/day. HW recommends that the Applicant revise the sizing of the sand filter using a maximum hydraulic conductivity of 4 feet/day (2 inches/hour) per MSH Volume 2, Chapter 2.

**The sand filter calculation has been revised as recommended. No further comment needed.**

- b. According to the Sand Filter Detail on Site Details 3 (C-5.3), no material is proposed as separation between the sand and gravel layers of the sand filter. HW recommends that the Applicant revise the detail to include a layer of geotextile or filter fabric between the sand and gravel to prevent sand from infiltrating into the gravel or underdrain, per MSH Volume 2, Chapter 2.

**The Applicant has not revised the Sand Filter Detail to include a layer of geotextile or filter fabric as noted. The initial comment stands.**

- c. Note 7 on the Sand Filter Detail specifies that the bottom of the practice "shall be open to allow for infiltration." The detail does not appear to have an opening at the bottom of the sand filter system, and a leader calls out that the system has a

“close bottom chamber.” HW recommends that the Applicant either revise the detail to appear as an open bottom chamber and conduct a test pit to verify that infiltration is feasible based on the estimated seasonal high groundwater (ESHGW) elevation at the sand filter location, or the Applicant remove Note 7 from the detail.

**The Applicant has clarified that the bottom of the sand filter will be closed. No further comment needed.**

45. The Applicant has not provided product information for the proposed proprietary Water Quality Structure (WQS). If a specific product is intended for the stormwater management system, HW recommends that the Applicant provide product information from the WQS manufacturer to verify that 70% Total Suspended Solids (TSS) removal can be achieved by a unit and that the WQF is treatable. If no specific product is intended, HW recommends that the Applicant note on the plans the required WQF capacity and TSS removal rate intended for the WQS.

**The Applicant has proposed standard catch basins and a sand filter with appropriate design calculations. No further comment needed.**

46. The Applicant has specified the pipe diameters for all drainpipes except for the pipe connecting DMH 9 to DMH 7. HW recommends that the Applicant add the diameter of the drainpipe to the Grading and Drainage Plan.

**The Applicant has labeled the diameters of the drainpipes as requested. No further comment needed.**

47. The Applicant has proposed several erosion controls in the Erosion and Sedimentation Control Measures section of the Stormwater Report. However, none of the erosion controls are included in the plans, and only catch basin protection is included in the Site Details. HW recommends that the Applicant include all proposed erosion controls in the Site Details and specifically mark the location of erosion controls on the plans.

**The Applicant has provided an Erosion and Sedimentation Control Plan in the updated Site Plan set. No further comment.**

48. In the Stormwater Operation and Maintenance (O&M) Plan, the Applicant states that catch basins shall be inspected and cleaned on an annual basis. Per MSH Volume 2, Chapter, HW recommends that the Applicant revise the O&M Plan to call for catch basins to be inspected and cleaned four times every year.

**The Applicant has not adjusted the O&M Plan as recommended. The initial comment stands.**

49. In the Long-Term Pollution Prevention Plan (LTPPP), the Applicant includes a section on Permeable Paver maintenance. As permeable pavers are not called out in the Civil Plans, HW recommends that the Applicant verify whether permeable pavers are proposed to be used on this project. If they are, HW recommends that a permeable paver detail be added to the Site Details and that the permeable paver areas be noted on the plans.

**The Applicant has removed the permeable pavers section from the LTPPP.**

50. The Applicant has not provided calculations to demonstrate that the proposed drainage network is adequately sized. HW recommends that the Applicant provide calculations to verify that the proposed drainpipes have the capacity to carry flow based on a design storm of 8.78 inches in 24 hours (per Newton Department of Public Works Requirements for On-Site Drainage).

**The Applicant has provided the closed drainage network calculations for a 10-year storm event in Appendix C of the Stormwater Report. No further comment.**

51. HW has the following comments pertaining to the phosphorus removal calculation:

- a. The Applicant has analyzed the phosphorus loading from High Density Residential land uses as having a phosphorus load export rate (PLER) of 1.78 pounds/acre/year. HW recommends that the Applicant revise the loading analysis to use a PLER of 2.32 pounds/acre/year, per Appendix F of the Massachusetts MS4 General Permit.

**The Applicant has provided revised Phosphorus Removal Calculations; however, it has not adjusted the PLER to 2.32 as recommended. The comment stands.**

- b. The Applicant has analyzed the phosphorus removal of the stormwater management system as having a phosphorus removal rate of 98%. HW recommends that the Applicant revise the removal rate to 58.5%, based on the BMP Performance Curve of a Biofiltration practice capturing half an inch of runoff in Appendix F, Attachment 3 of the Massachusetts MS4 General Permit. If a higher depth of runoff is to be used for the load reduction calculation, stormwater analysis should be provided to demonstrate that a greater volume can be captured by the proposed sand filter without bypass.

**The Applicant has revised the Phosphorus Removal Calculations as requested. The sand filters will provide 65% Phosphorus removal for 0.63-inch of runoff. No further comment needed.**

- c. HW recommends the Applicant revise the Phosphorus Removal Calculations provided in Appendix C of the Stormwater Report. In accordance with the MS4 permit, the City of Newton is required to reduce its phosphorus load to the Charles River by 50%, of which Cheesecake Brook is a tributary. Furthermore, the CRWA prepared a technical report (CN 272.0) for MassDEP, "Total Maximum Daily Load for Nutrients in the Upper/Middle Charles River, Massachusetts", dated May 2011. The document established targeted percent annual phosphorus load reductions for High Density Residential land uses to be 65%.

**The Applicant has revised the Phosphorus Removal Calculations as requested. The sand filters will provide 65% Phosphorus removal for 0.63-inch of runoff. No further comment needed.**

*Grading and Utilities*

52. The Applicant has indicated proposed grading for Kempton Place, Dunstan Street, and Brook Street, as well as the proposed green space/flood storage area. The Grading and Drainage Plan appears to generally follow the existing grading of Kempton Place and Dunstan Street, and roads are proposed at slightly less steep grades. Proposed grading does not extend into the proposed courtyard between Buildings 1 & 2. HW recommends that the Applicant provide proposed contours within the courtyard, including spot grades for high points and low points. Further, HW recommends that the Applicant provide spot grades for proposed high points and low points on the roads and site features such as walls.

**The Applicant has provided proposed contours for the roadways on the Grading and Drainage Plan, however the grading within the courtyard is not shown on the Site Plans. A note on the plans references the Landscape Plans, HW has not received the Landscape Plans including grading for review.**

53. Additional grading detail is required to review the grading approach for Dunstan Street, as any street regrading to adjust longitudinal slope will still require meeting existing grade on the west side of the street.

**The Applicant has provided visuals and a profile of Dunstan Street regrading as Exhibit L. The connection appears manageable, though additional spot grades will be required on the Construction Documents.**

54. Based on the Utility Plan, it appears that the Applicant has proposed water and sewer lines within 5 feet of each other on Kempton Place near the intersection of Kempton and Brook Street. HW recommends that the Applicant revise the Utility Plan to provide a minimum of 10 feet of separation between the water and sewer lines.

**The Applicant has shifted the utilities appropriately. No further comment needed.**

55. The Applicant has proposed a number of connections to existing water lines but has not provided details related to water line connections. HW recommends that the Applicant provide a detail of a connection to an existing water line.

**The requested detail has been provided by the Applicant. No further comment needed.**