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

Ruthanne Fuller
Mayor

Barney S. Heath
Director

PUBLIC HEARING MEMORANDUM

DATE:	March 12, 2020
MEETING DATE:	March 17, 2020
TO:	Zoning Board of Appeals
FROM:	Barney Heath, Director of Planning and Development Jennifer Caira, Deputy Director of Planning and Development Michael Gleba, Senior Planner
COPIED:	Mayor Ruthanne Fuller City Council

In response to questions raised at the Zoning Board of Appeals public hearing on January 22, 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.

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.

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. This memo reflects the peer review of the sustainability, stormwater, civil engineering, and site design issues related to the project. The transportation aspects of the project including traffic, parking,

circulation, loading, bicycling facilities, and transportation demand management will be discussed at a future meeting.

EXECUTIVE SUMMARY

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 south side 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").

This memo reflects an analysis of the building massing and placement, open space and landscaping, stormwater, civil engineering, and sustainability of the proposed project. Reflected in this memo are comments from Horsley Witten, the peer reviewer hired by the City **(Attachment A)**, the Urban Design Commission **(Attachment B)**, the Chief Environmental Planner **(Attachment C)**, and the Engineering Division of Public Works **(Attachment D)**, as well as the Planning Department. In addition to these comments, this memo includes an analysis of how the project compares to the principles included in the Washington Street Vision Plan, adopted by the City Council in December 2019.

The project is locating new housing near existing transit and a village center in a location identified in the Vision Plan as appropriate for height and density. The project will improve an underutilized existing site with pedestrian oriented buildings, public open spaces, and new access to Cheesecake Brook. The site is currently identified as a heat island and the reduction in paved surfaces and increase in landscaping as well as new stormwater treatment systems will be an improvement. The project application does not discuss sustainability proposals; however, the project and site represent an important opportunity to further the City's climate action goals. While the project is generally consistent with the Vision Plan, the Dunstan Street and Kempton Place facades of the building would benefit from additional articulation and/or step downs in height to break up the massing. Additional information is still needed to fully assess the project including shadow studies, lighting plans, sustainability plans, and further details regarding stormwater, landscaping, grading, and utilities.

I. ANALYSIS

A. Sustainability

The proposed project locates housing near a walkable village center and transit while also reducing the amount of impervious area and increasing landscaping on a site that is currently a heat island. The project will also improve a stretch of the Cheesecake Brook

and improve water quality treatment on site. The project is subject to the Sustainable Development Design ordinance, adopted in December 2019, which requires projects of this size to be designed in accordance with a green rating system. The project would be required to show it would be LEED Gold certifiable, Passive House certified, or Enterprise Green Communities certifiable. The applicant has requested a waiver from this provision; however, the Planning Department recommends that project meet these requirements and additionally provide an energy narrative describing how the project will further the City's goals from the Climate Action Plan of carbon neutrality. The ordinance also requires 10% of parking stalls include electric vehicle (EV) charging stations and an additional 10% of stalls be EV ready. The applicant should also meet this requirement and indicate as much on the plans. Given the proximity of the site to transit, the applicant should also provide a more detailed transportation demand management plan, including how they plan to provide incentives for transit.

B. Stormwater

The project site is located adjacent to Cheesecake Brook and portions of the site are within 100 feet of the Brook, which is classified as a Riverine Wetland System according to the US Fish and Wildlife Service National Wetlands Inventory. The project is also partially located within the 100-year flood plain. The project is subject to review and approval by the Conservation Commission, which has not yet reviewed the project, however comments from the Chief Environmental Planner are attached **(Attachment C)**. The project includes plans to improve Cheesecake Brook with new grading, landscaping, water quality treatment, and a boardwalk. The applicant is also proposing a landscaped open space/flood storage area at the northeast corner of the site, adjacent to Cheesecake Brook. The existing site is almost entirely paved, and the proposed project will reduce the amount of impervious area by approximately 8,900 square feet. The applicant is also proposing a new drainage network consisting of catch basins and manholes along Kempton Place and Brook Street with roof drains directly tying into the system. A new sand filter system will filter runoff prior to discharging into the municipal system in Dunstan Street, which discharges into Cheesecake Brook. As the sand filter is only sized for a one-inch storm, it is recommended that the applicant add additional filtration, such as green roofs and tree box filters throughout the site.

While the project will reduce overall impervious area and increase water quality treatment, Horsley Witten and City staff have identified more information which is needed to adequately assess the stormwater and effects on Cheesecake Brook. The Charles River Watershed Association (CRWA) is working on a project to restore and naturalize Cheesecake Brook and this project presents an opportunity to remove the wall containing the brook on the project side. The applicant should explore with the CRWA how to naturalize this section of the brook. Horsley Witten also notes that the boardwalk maximizes flood storage and restoration planting area. The Chief Environmental Planner

has requested additional details for the boardwalk. Horsley Witten also recommends that a similarly beneficial alternative should be identified in the event the boardwalk is value engineered out of the design due to cost. The Site Materials Plan does not include representative species for the "naturalized planting bed at brook edge and northeast open space" and it is recommended that native species be identified for this area.

A stormwater analysis and calculations are necessary to verify the performance of the proposed system and more information is needed to verify the flood storage volumes of the landscaped open space. More information is also needed regarding the proposed sand filter, the water quality structure, calculations for sizing of the drainage system, and the phosphorous removal calculation. Horsley Witten Horsley Witten recommends exploring other opportunities for green infrastructure practices and notes that the Hazard Mitigation Plan recommends incorporating more stringent stormwater standards and future precipitation projections. Additional comments include noting the diameter for all drainpipes on the plans, including the erosion controls on the plans, increasing maintenance of the system, and including permeable paver details in the plans.

The inflow and infiltration requirements as well as comments on the waiver request will be provided by Engineering at a later date.

C. Civil Engineering

The applicant has submitted grading and utility plans which were reviewed by Horsley Witten and the Engineering Division of Public Works. Engineering raised concerns regarding the alignments of the proposed municipal water main and sewer service given the 60-inch drainpipe and 4-foot by 5-foot box culvert that transverse the site. To avoid potential conflicts with the shallow depth of the culvert, Engineering recommends test pits be performed to verify the elevation of the culverts. Additionally, a closed-circuit television inspection of the culverts should be performed. Horsley Witten has requested additional contours and spot grades within the courtyard as well as for proposed high and low points on the road and site features, such as walls and additional grading details along Dunstan Street to ensure the regrading of the street will still match existing grades on the west side of the street. On the utility plan, Horsley Witten recommends the separation between the water and sewer lines be increased to 10 feet and that a water connection detail be provided. Engineering's memo also includes additional requirements and requests regarding the utility design.

In addition to the utility lines, the applicant will need to prepare a construction management plan and should provide the 21E, if one has been performed, and all other information related to potential onsite soil contaminants and/or underground oil or fuel tanks.

D. Site and Building Design

The building is generally consistent with the Washington Street Vision Plan (see analysis

below) and is located in an area identified as appropriate for height and density in the Vision. Horsley Witten reviewed the design, focusing on open space, building placement and massing and found many positive aspects of the project including the new street connections, providing smaller blocks, village-scale buildings fronting Washington Street and stepping down in height towards Cheesecake Brook and the residential neighborhood beyond, and the publicly accessible internal block courtyard. The addition of Brook Drive helps provide better public access to Cheesecake Brook while also adding street connections to break down blocks. While Brook Drive would present an opportunity for future extension, the location of the landscaped area providing compensatory flood storage could prohibit this extension to the east in the future. Horsley Witten recommends that the petitioner consider possibilities for this future extension and at a minimum provide a connection for bicyclists and pedestrians.

The project includes three buildings, Buildings 1 and 2 are located between Dunstan Street and Kempton Place and Building 3 is located along the east side of Kempton Place to the rear of an existing auto glass store and an office building, both of which will remain. Buildings 1 and 2 appear as separate buildings from the street even though they are connected underground and the heights are varied along Washington Street, ranging from three stories to six stories and giving the appearance of three buildings. The entrance to the courtyard provides a further break in the massing along Washington Street. Due to the change in grade from Washington Street to Cheesecake Brook, Building 1 appears as seven stories on a portion of Dunstan Street. Building 1 is six stories on Washington Street and steps down at the rear from seven stories to four stories, however the transition appears somewhat abrupt and could benefit from a more gradual transition and additional treatment along the Dunstan Street elevation to break up the massing. Building 2 steps down from six stories to four stories at the rear of the building and also presents a very long façade along Kempton Place, which could also benefit from additional treatment to break up the massing. Building 3 is six stories along all elevations, except the portion of the building along Kempton Place closest to Washington Street is five stories due to the grade change. The Planning Department has requested a shadow study and lighting plan, which the applicant has not yet provided.

The Urban Design Commission (UDC) also reviewed the project and submitted a memo on January 16, 2020 (Attachment B). The UDC had similar comments, stating that the Washington Street elevation was well addressed however, the elevations along Dunstan Street were overwhelming and recommended more variation in the buildings on the side streets as well as additional step downs in height. The UDC also noted that the two levels of parking were partially driving the form of the buildings and asked if parking could be further reduced. The UDC also expressed concerns regarding the length of Building 2 and the height of Building 1 from Brook Drive. However, the UDC did note that the applicant has done a lot of great things with a tough, sloping site and they liked the townhouse units at the rear, which are an improvement over a blank wall screening parking.

The existing site is almost entirely paved with little landscaping and few trees. The proposed project will reduce the amount of overall paving and increase landscaping while providing new public open spaces and improvements to Cheesecake Brook. The proposed courtyard, landscaped area next to Cheesecake Brook, and open space adjacent to Building 3 provide both public and private open spaces with a variety of plantings and trees. The applicant has stated that the courtyard will be fully accessible with public elevator access from the courtyard to Brook Drive; this should be clearly shown and labeled on the plans. The applicant should also show seating areas within the open spaces. Sheet L1.1 of the submitted plans includes a tot lot play area in the legend, however it is unclear where this is located. Horsley Witten also had recommendations for street trees with larger heights and canopies, additional street trees along Kempton Place and Brook Drive, and native plantings along the edge of Cheesecake Brook.

Horsley Witten also had additional recommendations and requests for more information related to circulation, garage entries, pick up/drop off locations, street design for Brook Drive, bicyclist mobility through the site, and the long-term operation and maintenance of open spaces. Additional analysis of circulation, parking, bicycle facilities, and loading will also be done as part of the transportation peer review.

II. CONSISTENCY WITH THE WASHINGTON STREET VISION PLAN

The Washington Street Vision Plan was adopted by the City Council on December 16, 2019. The Vision Plan discusses priorities for a portion of Washington Street that parallels the Massachusetts Turnpike from West Newton through Newtonville to the Crafts Street intersection before Newton Corner. The plan is intended to inform discussions about public investments and to guide private development to align with Newton's priorities. The plan contains guiding principles for Unique and Vital Village Centers, Safe Multimodal Transportation, Housing Diversity, Global Climate and Local Environment, and Excellence in Placemaking and Design. An analysis of how the project fits the relevant principles is below and the Vision Plan is available here:

http://www.newtonma.gov/civicax/filebank/documents/100643.

Unique and Vital Village Centers

Design for Engaging Walks

- *Use buildings and trees to make a more comfortable environment*
- *Activate the Pike edge*
- *Promote narrow and transparent shopfronts*
- *Incorporate opportunities for outdoor dining*
- *Design Streets and plazas as places to linger*

The proposed project creates a defined street wall along a section of Washington Street that currently contains a mix of building types and uses without a consistent form or setback. The existing uses mostly lack vitality and pedestrian orientation. The proposed project will include buildings set closer to the street, with active ground floor retail uses and with new street trees lining 15-foot wide sidewalks. Additionally, the plans show six small retail tenant spaces lining Washington Street. It will be important that these retail spaces maintain as much transparency as possible. The project also includes new, publicly accessible open spaces within the courtyard between Buildings 1 and 2 and along Cheesecake Brook. The courtyard in particular provides places to congregate and linger as well as the potential opportunity for outdoor dining.

Invest in Public Art & Programming

- *Promote West Newton and Newtonville artists*
- *Allow for arts production, presentation, and artist housing*
- *Design for music and community events in public spaces*

The petitioner should respond as to whether there is an opportunity on site to showcase local artists and if there is a plan to program the courtyard and/or private roads for occasional community events.

Housing Diversity

Attract All Ages, All People

- *Ensure availability of accessible units*
- *Promote diverse building and unit sizes*
- *Allow communal living models*

As new construction, the proposed project will be required to meet state standards requiring all units be visitable and 20% of units be fully accessible. Accessible units in buildings with elevators are in great demand in Newton. The project also contributes to housing diversity by providing 244 rental units (including studio, one-, two-, and three-bedroom units) with 61 of the units permanently deed restricted. The Planning Department recommends the applicant explore options to provide units at lower income levels to further the diversity of housing, in lieu of restricting all affordable units to households at 80% of area median income (AMI).

Seek Affordable Housing Opportunities

- *Invest directly in affordable housing*
- *Leverage public land for affordable housing development*

The proposed project will provide 61 permanently affordable residential units in an area of Washington Street identified by the Vision Plan as lacking low-moderate income households, without the need for City funding or public land.

Link Housing and Transportation

- *Focus housing where residents have transportation options*
- *Pair housing near transit with new commercial retail space*

The project provides 244 units of housing (with 61 affordable units) in a walkable area near multiple transit options, including the express bus and West Newton Commuter Rail. The project also provides a mix of uses on site, pairing new housing with new retail space.

Global Climate and Local Environment

Provide Options for Low-Carbon Living

- *Allow for smaller unit residences*
- *Build in features to make low-carbon living easy*
- *Create incentives and mandates for an energy-efficient future*

The project includes a mix of studio, one-, two-, and three-bedroom units at a range of sizes. The project's location at the edge of West Newton Square and within walking distance to transit also allows for low-carbon living. The petitioner has provided a transportation demand management (TDM) plan, which is currently being reviewed by staff and the transportation peer reviewer. Given the site's proximity to transit however, any TDM plan should include strong incentives for residents to utilize transit, as well as onsite bicycle facilities. The petitioner should also provide additional information regarding the sustainable design proposals for the project, including compliance with the Sustainable Development Design ordinance and any additional efforts to further the City's goal of carbon neutrality.

Improve Climate Resilience

- *Improve Cheesecake Brook to reduce downstream flooding*
- *Reduce heat island effect through building and site design standards*

The project proposes improvements to Cheesecake Brook and as recommended in the peer review by Horsley Witten, the petitioner should explore the opportunity to naturalize this section of the Brook, consistent with efforts by the Charles River Watershed Association. The project also provides some reduction in the heat island by reducing the amount of overall paving onsite and increasing the landscaping and trees. As recommended by Horsley

Witten, the petitioner should also provide more detailed design to show how green infrastructure and resilient building design will be utilized to further reduce heat island effects.

Expand Access to Open Green Spaces and Recreation

- *Facilitate the creation of a network of pocket parks, tot lots, and community plazas*
- *Activate existing and new public spaces*
- *Expand tree canopy and add layers of vegetation*

The project creates a new public plaza as well as access to an improved section of Cheesecake Brook. There will also be increased landscaping and trees onsite, however the petitioner should consider adding additional street trees along Kempton Place and between the boardwalk and the Brook as recommended by Horsley Witten. Additionally, representative species for plantings along the edge of Cheesecake Brook should be provided and should generally include native species.

<u>Excellence in Placemaking and Design</u>

Area-wide Planning Principles

- *Ensure Newtonville and West Newton remain distinct and vital*
- *Protect iconic buildings*
- *Foster moments of arrival*
- *Require gentle transitions to adjacent neighborhoods*
- *Develop standards and guidelines for human-scale design*
- *Encourage variety in building size and shape*
- *Implement planning principles through project review*

As part of the Vision Plan's goal of ensuring Newtonville and West Newton remain distinct and vital, the plan calls out the "Cheesecake Brook lots" east of Chestnut Street and extending as far as Trader Joes as an area where density and height are recommended on the underutilized land just outside of the village cores and well within the walkable and transit served area of the village. The height proposed as part of the project, located at the edge of the village core, would mark the arrival to the village, and heights would be kept lower within the village core. While the proposed buildings step down from Washington Street to Cheesecake Brook, the transition could be more gradual, resulting in a gentler transition to the neighborhood to the rear. The buildings are all located further from existing residences than the buildings on site today, however the height transition is somewhat abrupt at the rear of the buildings. The height is generally consistent with the height principles diagram, which recommends three to six stories in this area. The overall project includes varying heights and building sizes and the Washington Street frontage is

well-designed with the courtyard breaking up the buildings and multiple building heights. The building façade along Dunstan Street however could use additional articulation to break up the massing.

Site Planning Principles

- *Limit visible parking*
- *Broaden the toolkit to incentivize historic preservation*
- *Break down the scale of larger projects with new streets, paths, and open spaces*

The project successfully screens parking by either locating it underground or generally behind active uses. The project also breaks down the scale with the creation of the courtyard and the creation of Brook Drive, which also helps improve access to Cheesecake Brook and can contribute to future connectivity.

Building Design Principles

- *Allow form to follow function*
- *Encourage traditional New England roof diversity*
- *Promote energy-efficient, human-scaled, and durable construction*

The proposed project is designed as a mixed-use building with ground floor retail spaces tall enough (16 feet) to accommodate a variety of uses, including restaurants. The project is predominantly designed to a human-scale, however as discussed above additional articulation may benefit the Dunstan Street and Kempton Place façades and more information is needed regarding energy efficiency and the durability of materials.

III. ADDITIONAL INFORMATION AND MATERIALS

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

IV. 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 ZBA hearings. It is anticipated that the next meeting will focus on the transportation aspects of the project.

ATTACHMENTS

Attachment A: Horsley Witten Peer Review, March 10, 2020
Attachment B: Urban Design Commission Memo, January 16, 2020
Attachment C: Memo from Chief Environmental Planner, March 12, 2020
Attachment D: Engineering Division Memo, March 12, 2020

ATTACHMENT A

Horsley Witten Group
Sustainable Environmental Solutions
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MEMORANDUM

To: Michael Gleba, Jennifer Caira – City of Newton

From: Janet Carter Bernardo, PE, Hannah Carlson, RLA, and Jon Ford, PE

Date: March 10, 2020

Re: Dunstan East 40B Peer Review

The intent of this memorandum is to provide the City of Newton with a 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 ½ inch of runoff prior to discharging into the municipal system on Dunstan Street which discharges into Cheesecake Brook.

HW has received the following documents:

- Application for a Comprehensive Permit, Dunstan East, Newton, MA, submitted to Mass Housing Finance Agency in July 2019;
- Transportation Impact and Access Study, The Dunstan Residences West Newton Development, Newton, MA, prepared by VHB in November 2019;
- Stormwater Report, Dunstan East Mixed-Use Redevelopment, Washington Street, Newton, MA, prepared by VHB on November 26, 2019;

- Presentation to Newton Zoning Board of Appeals, Dunstan East, prepared by Mark Development, presented on January 22, 2020;
- Application to Newton Zoning Board of Appeals for Comprehensive Permit, Dunstan East, Newton, MA;
- Existing Conditions Plan, Dunstan East, Newton, MA, prepared by Mark Investment, Inc. and Control Point Associates, Inc. on June 19, 2017; and
- Civil and Architectural Plans, Dunstan East, Washington Street, West Newton, MA, prepared by VHB and Elkus Manfredi Architects on November 25, 2019, which includes:
    - Legend and General Notes — Sheet C-1.0
    - Site Plan — Sheet C-2.0
    - Grading and Drainage Plan — Sheet C-3.0
    - Utility Plan — Sheet C-4.0
    - Site Details 1 — Sheet C-5.1
    - Site Details 2 — Sheet C-5.2
    - Site Details 3 — Sheet C-5.3
    - Site Materials — L-1.1
    - 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
    - Existing Conditions — Sheet 1 of 5
    - Existing Conditions — Sheet 2 of 5
    - Existing Conditions — Sheet 3 of 5
    - Existing Conditions — Sheet 4 of 5
    - Existing Conditions — Sheet 5 of 5

HW also met with the Applicant and representatives of their design team to review the design on March 2, 2020. HW has the following comments and recommendations:

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.

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.
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.
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.

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.
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.
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.

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

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

Lighting

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

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.

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.

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

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.

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.

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

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.

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

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.

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.

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.

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.

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.

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).

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.

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.

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.

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.

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.

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.
    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.
    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.
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.
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.
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.
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.

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.
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).
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.
    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.
    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%.

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.

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.
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.
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.

Ruthanne Fuller
Mayor

ATTACHMENT B

City of Newton, Massachusetts

Department of Planning and Development

Urban Design Commission

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Barney Heath
Director

DATE: January 16, 2020

TO: Zoning Board of Appeals

FROM: Urban Design Commission

RE: Dunstan East - 1149, 1151, 1169, 1171-1173, 1179, and 1185 Washington Street, 32-34 Dunstan Street, 12, 18, 24, and 25 Kempton Place

CC: Jennifer Caira, Deputy Director

Michael Gleba, Senior Planner

Petitioner

Section 22-80 of the Newton City Ordinances authorizes the Urban Design Commission to act in an advisory capacity on matters of urban design and beautification.

At their regular meeting on December 11, 2019, the Newton Urban Design Commission reviewed the proposed Dunstan East project at 1149, 1151, 1169, 1171-1173, and 1185 Washington Street, 32-34 Dunstan Street, 12, 18, 24, AND 25 Kempton Place. The Urban Design Commission had the following recommendations:

1. The UDC commented that the applicant has done a lot of great things with a tough/sloping site.
2. The UDC commented that Washington Street has been addressed very well in the proposal but the height and bulk along both side streets is overwhelming (which will set a precedent for adjoining properties). The UDC commented that building elevations along Washington Street are very strong. The UDC recommended to have more variation in building elevations on side streets as well, maybe step down the buildings along side streets.
3. The UDC was concerned about building 2, it is a very large, long building. The UDC recommended to break building 2 into 2 buildings. There will be a lot of walking required (from the elevator to the last units in the building). The UDC recommended that an option is to have 2 elevator lobbies (one elevator in each building) so there is less walking required to go to the units. The corridors are very long and have no natural light.
4. Some of the UDC members commented that the buildings are too long and tall, they need reduction/ variation in height and breaks in building. The buildings as they face Dunstan Street and Kempton Place are too big. There are 7 levels of construction (including the parking levels) facing Cheesecake Brook and the side streets.

5. The UDC commented that the parking is driving a lot of form, two levels of parking is the challenge point in this project. There's a lot of parking that is required for the project. The UDC asked the applicant if parking can be reduced.
6. It will be very helpful to see the street sections for all the streets. It's difficult to understand the relationship between the buildings and the street without a street section. Massing and three-dimensional sketches will be very helpful to see in order to understand the bulk and massing of the project.
7. The UDC commented about comparing this plan with the Washington Place since it is already built, especially to compare three-dimensional, bulk and massing of both the projects. The UDC requested plan comparison drawings from the developer.
8. The UDC also recommended to setback the buildings to create some more open/green space in front of the stores to encourage walking. The applicant mentioned that the sidewalks are planned to be 15 feet wide which will encourage walking.
9. There was concern about so much retail, the retail stores in West Newton Square are already struggling. Dunstan East is separate from West Newton Square and retail in Dunstan East lacks a connection to West Newton Square. In the near future, retail will be on shaky grounds, especially in locations where it is isolated from Village Centers. The UDC recommends considering other uses along Washington Street, like non-retail uses, temporary-retail concepts, and/or civic uses.
10. The UDC recommended to have residential lobby along Washington Street (maybe building 1 lobby could be along Washington Street). There was also discussion about drop-off areas close to the residential lobby and have live parking close to that.
11. The UDC commented that the use of flats type units facing the brook is good (vs. blank wall hiding parking).
12. There was discussion about the landscape amenity space between building 3 and Cheesecake Brook. The UDC had questions about how that space will be used. The applicant mentioned that it will be used for compensatory flood storage area, it is a very sustainable stormwater management technique. The applicant may use this area to teach about how to manage stormwater. It's an opportunity to bring school children to teach and have signage to inform/teach the community about stormwater management.
13. The UDC would like to review the project further.

ATTACHMENT C

Ruthanne Fuller
Mayor

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Barney S. Heath
Director

M E M O R A N D U M

DATE: March 12, 2020

TO: Jennifer Caira, Deputy Director of Planning

FROM: Jennifer Steel, Chief Environmental Planner

SUBJECT: Dunstan East 40B – Comments from the Conservation Office

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The Conservation Commission has not yet received a state Wetlands Protection Act filing for this project. Once the Commission receives an application, it will review the plans in great detail and comment on and ultimately condition: stormwater (quantity and quality), fill in flood zone and compensatory flood storage, Riverfront Area plantings, and streambank and stream bottom alterations. The project will have to comply with all aspects of the state Wetland Regulations for Stormwater Standards, Bordering Land Subject to Flooding, Riverfront Area, and, if applicable, Bank and Land Under Wetlands and Waterbodies.

The comments below are merely preliminary observations, comments, and concerns based on the November 25, 2019 plan set.

Stormwater

- Only one water quality unit and one sand filter are proposed. More water quality mitigation should be provided.
- Rainfall capture and stormwater infiltration and should be maximized with the installation of green roofs, tree box filters, or other similar technologies throughout the site.
- The capture of stormwater seems to be highly centralized and mostly “end of pipe” with only only 4 roof drains for all three buildings and no apparent capture for the large plaza. A more distributed collection system (and distribution system) could function better (particularly in large storm events) and be more readily managed and maintained.

Flood Zone

- This site falls within the 100-year FEMA flood zone. The applicant will need to provide detailed plans and calculations clearly illustrating:
    - cut and fill
    - foot-for-foot compensation
    - unrestricted hydraulic connectivity

Riverfront Area

- The minimum standards set forth in the applicable Riverfront Regulations (310 CMR 10.58(5)) must be met, but the applicant should be aware permitting work in Riverfront Area is at the discretion of the Conservation Commission, and meeting only the minimum standards may not be sufficient. Restorative grading and landscaping may be required.
- Since the site falls within a hot spot (defined by the Metropolitan Area Planning Council as an area that falls within the hottest 5% of the land area within the MAPC region), trees should be a priority and more should be incorporated in the landscape plan.
- Details for the boardwalk will have to be provided and will have to ensure unrestricted hydraulic connectivity for compensatory flood storage purposes.

Bank and Land Under Wetlands and Waterbodies

- If alterations are proposed to these resource areas, the applicant will have to show clear compliance with the state performance standards.

ATTACHMENT D

CITY OF NEWTON
Department of Public Works
ENGINEERING DIVISION

MEMORANDUM

To: Barney Heath, Director of Planning & Development

From: John Daghlian, Associate City Engineer

Re: Comprehensive Permit – Dunstan East

Date: March 12, 2020

CC: Jennifer Caira, Deputy Director
James McGonagle, Commissioner
Shawn Sullivan, COS DPW
Lou Taverna, PE City Engineer
Ted Jerdee, Utilities Director
Doug Deputy Director Utilities
Douglas R. Valovcin, Deputy Director Utilities
Nadia Khan, Committee Clerk
Neil Cronin, Chief Planner
Michael Gleba, Sr. Planner

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

Dunstan East
Prepared by: VHB
Dated: December 6, 2019

Executive Summary:

This application entails a mixed -use residential & retail development of approximately 244 residential units, 12,442 square feet of retail/restaurant & 286 structured parking spaces sited on 3.3 acres of land. The site is located along the north side of Washington Street (between Kempton Place and Dunstan Street, both are private ways); bound to the north by the Cheesecake Brook; and commercial properties to the east & west. The topography varies from a high point of 53-feet near Washington Street and slope down towards Cheesecake Brook at elevation 34-feet, the property is essentially all impervious with roofs and asphalt parking lots.

The project proposes an increase of 8,900 square feet of pervious area in concert with a stormwater collection with deep sump- hooded catch basins. As part of the proposed improvements and reduction of pavement areas and new landscape features that will be constructed resulting in reducing the overall impervious area on site. The only infiltration being provided is by the sand filter system which is sized for a 1" storm, all other events are by pass the unit, DPW would encourage the developer to add some in line infiltration tree box filters to enhance overall water quality.

If the comprehensive permit is approved an Approval Not Required [ANR] plan will be required in accordance to Massachusetts General Laws Chapter 41 Section 81P requiring the multiple separate lots to be combined into one lot.

New municipal utilities are proposed for the development which include an 8" (cement lined ductile iron) water pipe that will be connected to a 12" water main in Washington Street, and extended through the property along Kempton Place and the new access road "*Brook Drive*" and looped to Dunstan Street. This looped water main shall be installed by the applicant, once inspected, tested and approved the main shall be granted to the City as part of the municipal distribution system; the property owner will have to grant to the City a permeant 20-foot wide easement for access and future maintenance of the new main. The extension of the water main & easement will require approval from the Public Facilities and entire City Council.

Sanitary sewer service connection will be extended from the existing 8” sewer main within Dunstan Street through *Brook Drive* and terminating at the base of Kempton Place this service connection will be responsibility of the developer to maintain. Capacity analysis of the existing 8” sewer main is needed for the additional flow from the development.

I am concerned about the alignments of proposed municipal water main & sewer service, this is based on the fact that a 60” reinforced concrete drain pipe and 4’x 5’ box culvert transverses the site from Washington Street to Cheesecake Brook, [see photo below]. The shallow depth of the culvert may conflict with the proposed utilities, I would suggest a few test pits should be performed to verify the elevation of the top of the culvert(s) and profiles and detailed designs be formulated to ensure no conflicts between any of the utilities and the culvert before final approval. Additionally, a Closed-Circuit Television (CCTV) with a tracer signal should be performed to verify the exact location of the culvert(s) in relation to the Kempton Place and the proposed footprint of the new buildings to avoid any conflicts. This CCTV inspection and tracer process must be witnessed by the Engineering Division.

Existing 4‘ x 5’ box culvert outlet at Cheesecake Brook

Several monitoring wells are scattered throughout the 3.3-acre site, have contaminated soils and/or contaminated groundwater been encountered if so, what are the DEP reporting levels.

What is the long-term requirement to maintain these well points?

Soil testing and borings will be required to determine if dewatering during construction is anticipated.

Underground power and telecommunications are also proposed from existing underground electric & telecommunications manholes in Washington Street that will require Grants of Location for the two extension off the public street.

Construction Management:

1. A construction management plan is needed for this project. At a minimum, it must address the following: staging site for construction materials and equipment, parking for construction workers vehicles, phasing of the project with anticipated completion dates and milestones, safety precautions, emergency contact personnel of the general contractor. It shall also address anticipated dewatering during construction, site safety & stability, siltation & dust control and noise impact to abutters.

2. Stabilized driveway construction entrance(s) will be required for the duration of the construction which will provide a truck wash to prevent tracking of mud and silt onto City streets.

3. Catch basins within and downstream of the construction zone will be required to have siltation control installed for the duration of the project and must be identified on the site plan.

4. Siltation control along the frontage of Cheesecake Brook shall be installed prior to any construction activity on the site.

Drainage:

1. Although impervious surfaces will be reduced, Pre & Post Construction drainage analysis is required. All stormwater runoff from the site shall be captured on-site and infiltrated in accordance with the Massachusetts Department of Environmental Protection standards and the City of Newton Department of Public Works policy. This policy states that stormwater runoff shall be retained from the 100-year storm event of 8.78-iches over a 24-hour period and shall be infiltrated to the maximum practicable extent. Pre & Post watershed maps (at a proper scale that is legible) are required that delineate control points and limits of the sub-basins. On-site soil evaluation is required to determine the seasonal high groundwater elevation, soil types and to identify any and all unsuitable soils (such as ledge, clay, peat, fill and others). On site soil testing that will

include test pit(s) within 25 -feet of each proposed system and percolation test(s) must be schedule and witnessed by a representative of the Engineering Division. Soil logs shall be submitted on the site plan or drainage report and shall be certified by a Massachusetts Licensed Soil Evaluator and/or Professional Civil Engineer. As with any overflow connection to a City drain, Pre & Post Closed Circuit Television (CCTV) inspection shall be required. The Inspection shall be scheduled 48 hours in advanced and notification shall be given to the Utilities & Engineering Divisions. Digital copies of the CCTV inspection shall be provided to each Division.

2. The proposed Operations and Maintenance (O&M) plan for the long-term maintenance of the proposed stormwater management facilities is not acceptable, the narrative does not include mechanical sweeping of Kempton Place, Brook Drive, Dunstan Place and the common plaza, once the O&M is updated it will be approved.

3. It is imperative to note that the ownership, operation, and maintenance of the proposed drainage system and all appurtenances including but not limited to the drywells, catch basins, trench drains, and pipe(s) are the sole responsibility of the property owner(s).

Environmental:

1. Has a 21E Investigation and report been performed on the site, if so, copies of the report should be submitted to the Newton Board of Health and Engineering Division.

2. Are there any existing underground oil or fuel tanks? Have they been removed, if they have been, evidence of the proper removal should be submitted to the Newton Fire Department and the Board of Health.

Sanitary Sewer & Domestic Water Service(s):

1. Existing water and sewer services to building(s) shall cut and capped at the respective mains and completely removed from the main(s) and its entire length and properly backfilled. The Engineering Division must inspect and approve this work, failure to having this work inspected will result in delay of issuance of the new Utility Connection or issuance of a Certificate of Occupancy.

2. All new sewer service(s) shall be pressure tested in accordance to the City Construction Specifications & Standards and inspected via Closed Circuit Television CCTV inspection

after installation is completed. A copy of the video inspection and written report shall be submitted to the City Engineer or his representative. The sewer service will NOT be accepted until the two methods of inspection are completed AND witnessed by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until these tests are completed to the satisfaction of the City Engineer.

3. All sanitary sewer manhole(s) shall be vacuum tested in accordance to the City's Construction Standards & Specifications, the sewer service and manhole will NOT be accepted until the manhole(s) pass the testing requirements. All testing MUST be witnessed by a representative of the Engineering Division. A Certificate of Occupancy will not be recommended until this test is completed to the satisfaction of the City Engineer and a written report of the test results is submitted to the City Engineer.

4. With the exception of natural gas service(s), all utility trenches within the right of way shall be backfilled with Control Density Fill (CDF) Excavatable Type I-E up to within 18-inches of the asphalt binder level, after which Dense Grade Gravel compacted to 95 % Proctor Testing shall be placed over the CDF. Details of this requirement is the Engineering Division website "Standard Construction Details".

5. Fire Flow testing is required for the proposed fire suppression system. The applicant must coordinate the fire flow test with both the Newton Fire Department and the Utilities Division, representative of each department shall witness the testing. Test results shall be submitted in a written report along with hydraulic calculations that demonstrate the required size of the fire suppression system, these calculations shall be submitted to the Newton Fire Department for approval, and copies give to the Engineering Division.

6. For water quality issues a fire hydrant will be required at the end of the proposed water main/service. This hydrant will be utilized for flushing out the main as required.

7. All water services shall be chlorinated, and pressure tested in accordance to the AWWA and the City Construction Standards & Specifications prior to coming online. These tests MUST be witnessed by a representative of the Engineering Division.

8. Approval of the final configurations of the water service(s) shall be determined by the Utilities Division, the engineer of record shall submit a plan to the Director of Utilities for approval.

9. Washington Street is a concrete roadway, restoration of the utility trenches shall be with reinforce concrete as originally designed with two-way epoxy coated rebar, the slab shall be cut back to either 1/3 or half of the slab depending upon the alignment of the utility trench in relations to the slab(s).

10. Floor drains for the underground parking garages must be connected to the sanitary sewer service via an MDC gas trap per state Plumbing Codes.

Infiltration & Inflow:

This will be discussed via a separate memo.

General:

1. All trench excavation shall comply with Massachusetts General Law Chapter 82A, Trench Excavation Safety Requirements, and OSHA Standards to protect the general public from unauthorized access to unattended trenches or excavations. Trench Excavation Permit is required prior to any construction. This applies to all trenches on public and private property. *This note shall be incorporated onto the final plans.*
2. All tree removal shall comply with the City's Tree Ordinance.

3. The contractor of record is responsible for contacting the Engineering Division and scheduling an appointment 48-hours prior to the date when the utilities will be made available for an inspection of water services, sewer services and drainage system installation. The utility in question shall be fully exposed for the Inspector to view, backfilling shall only take place when the City Engineer's Inspector has given their approval. *This note shall be incorporated onto the final plans.*

4. The applicant shall apply for a Building Permit with the Inspectional Services Department prior to ANY construction.

5. Before requesting a Certificate of Occupancy, an As Built plan shall be submitted to the Engineering Division in both digital and paper format. The plan shall show all utilities and final grades, any easements and improvements and limits of restoration. The plan shall include profiles of the various new utilities including but not limited to rim & invert elevations (City of Newton Datum), slopes of pipes, pipe materials, and swing ties from permanent building corners. The as built shall be stamped by both a Massachusetts Registered Professional Engineer and Registered Professional Land Surveyor. Once the As built plan is received the Engineering Division shall perform a final site inspection and

then make a determination to issue a Certificate of Occupancy. *This note shall be incorporated onto the final plans.*

6. All site work including trench restoration, sidewalk, curb ,apron and loam border (where applicable) shall be completed before a Certificate of Occupancy is issued. *This note shall be incorporated onto the final plans.*

7. The contractor of record shall contact the Newton Police Department 48-hours in advanced and arrange for Police Detail to help residents and commuters navigate around the construction zone.

8. If any changes from the final approved design plan that are required due to unforeseen site conditions, the contractor of record shall contact the design engineer of record and submit revised design and stamped full scale plans for review and approval prior to continuing with construction.

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

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