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PUBLIC HEARING/WORKING SESSION MEMORANDUM

DATE: June 5, 2020

MEETING DATE: June 9, 2020

TO: Land Use Committee of the City Council

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

CC: Petitioner

In response to questions raised at the City Council public hearing, the Planning Department is providing the following information for the upcoming public hearing/working session. This information is supplemental to staff analysis previously provided at the Land Use Committee public hearing.

PETITIONS #26-20 & #27-20 — 355 and 399 Grove Street

Petition #26-20 for a change of zone to Mixed Use 3/Transit Oriented District for portions of land located at 355 Grove Street (currently zoned BU-2) and 399 Grove Street (currently zoned BU-5), also identified as Section 42, Block 11, Lots 3 and 4

Petition #27-20 for a SPECIAL PERMIT/SITE PLAN APPROVAL construct a mixed use, transit-oriented development of residential units, office, retail, personal services, restaurant, hotel, and related commercial uses not to exceed 1,025,000 square feet of gross floor area, with residential uses comprising not less than 60% of the total gross floor area with a residential density of not less than 800 square feet per unit with not less than 560 units nor more than 620 units with special permit relief and/or waivers as follows: a development of more than 20,000 square feet of gross floor area, building height of up to 170 feet, buildings up to 11 stories, Floor Area Ratio of up to 2.5, beneficial open space of not less than 15%, increase of height of certain buildings with the Grove Street Area Corridor (to the extent necessary), and reduction in setback from Grove Street for certain buildings within the Grove Street Corridor Area (to the extent necessary); waiver of the sustainable development design standards and placement of a retaining wall greater than 4 feet in height within a setback; for-profit educational use, retail sales of over 5,000 square feet, restaurant with more than 50 seats, personal service use of over 5,000 square feet, place of amusement, health club on ground floor, animal services, hotel, bank up to and over 5,000 square feet, theatre/hall, laboratory/research facility, parking facility, accessory, multi-level, parking facility, non-accessory, single level; reduction of the residential parking requirement to 1.25 stalls per unit, reduction of the overall parking requirement by 1/3, and waiver of

parking stalls not to exceed 685 stall; and waivers to the requirements of parking facilities containing more than five stalls; waiver of the number, size, type, location, and design requirements, all at 355 and 399 GROVE STREET on land known as Section 42, Block 11, Lots 3, 4 and 4A, containing approximately 13.05 acres of land in districts zoned Mixed Use 3 Transit Oriented (MU3), BU2 (a portion to be rezoned to MU3), BU5 (to be rezoned to MU3). Ref: Sec. 4.2.2.B, 4.2.3, 4.2.4, 4.2.4.A.4, 4.2.4.B.3, 4.2.4.G.2, 4.4.1, 5.1.4, 5.1.4.A, 5.1.4.C, 5.1.8.B.1, 5.1.8.B.2, 5.1.8.B.4, 5.1.8.B.6, 5.1.8.D.1, 5.1.8.D.2, 5.1.9.B, 5.1.10.A.1, 5.1.10.B.3, 5.1.10.B.5, 5.1.12, 5.1.12.B.4, 5.1.13, 5.2, 5.2.13, 5.4.2.B, 5.12, 6.4.29.C.5, 7.3.3, 7.3.5, 7.4 of the City of Newton Revised Zoning Ordinance, 2017. Additionally, as to infiltration and inflow mitigation, an abatement of the infiltration/inflow mitigation fee pursuant to Section 29-170 of the City of Newton Revised Zoning Ordinance, 2017.

The Land Use Committee (the "Committee") opened the public hearings on these petitions on January 28, 2020; both public hearings remain open. A tentative schedule for future Committee public hearings is included as an attachment to this report (**Attachment A)**. This memorandum is focused on the construction management, sustainability, and utilities of the so-called "Riverside Development" proposed for the subject parcels.

Background

The petitioners are requesting a change of zone for a portion of 355 Grove Street, currently the Massachusetts Bay Transportation Authority (the "MBTA") rail yard, and all of 399 Grove Street, currently the Hotel Indigo, to the Mixed Use 3/Transit Oriented Zone (the "MU-3/TOD zone"). The petitioners are also seeking special permits to allow a ten-building development on site. The petitioners filed revised plans which result in a development of 582 dwelling units, 253,827 square feet of office space, of which 7,500 square feet will be dedicated to the MBTA, 150 hotel rooms, and 38,895 square feet of ground floor commercial space (the "Project").

Sustainability

The Sustainable Design Provisions of the Newton Zoning Ordinance (the "Ordinance") require a project of this size to either be Leadership in Energy and Environmental Design ("LEED") Gold Certifiable, Passive House certified, or Enterprise Green Communities certified. The petitioners previously committed to designing and constructing all buildings to be LEED Gold version four ("v.4") certifiable and the residential portions of three buildings to be Passive House certified. Since that commitment, the petitioners have redesigned Building 1 to accommodate a life science use which may lead to difficulty in achieving LEED Gold v.4 certifiability. Additionally, the petitioners have learned that Building 2 contains some challenges to achieving LEED Gold v.4. As such, the petitioners require a waiver from the Ordinance. The petitioners are committed to achieving LEED Silver v.4 for both structures and will commit to investigating LEED Gold v.4 certifiability as the design of both structures advance beyond the conceptual stage. The Planning Department conferred with representatives from Utile Inc., one of the City's consultants on the Project who confirmed the difficulties in attaining LEED Gold v.4 for life science buildings and is supportive of the petitioners' commitments to LEED Silver v.4 and investigating LEED Gold v.4

The Sustainable Design Provisions also require that 10% of all parking stalls have access to electric vehicle ("EV") charging stations and that an additional 10% of all stalls must have the necessary infrastructure to allow for additional EV stations, should demand increase. The petitioners have committed to constructing 101 non-MBTA parking stalls with access to EV stations and an additional

101 non-MBTA stalls with the necessary conduit, for the potential of 202 stalls with access to EV stations. These stalls are not indicated on the submitted plans, as a result, staff suggests a condition be included in the Council Order to require the petitioners to submit a plan(s) indicating compliance prior to the issuance of a building permit.

Construction Management

As required by the MU-3/TOD zone, the petitioners submitted a preliminary construction management plan (the "CMP") and then submitted a revised plan due to comments from the Committee, the Planning Department, Horsley Witten, and by members of the public at the public hearing on April 28, 2020 **(Attachment B)**. Horsley Witten reviewed the revised CMP and finds that most of their comments have been addressed **(Attachment C).** The Planning Department supports the revisions to the CMP, particularly the addition of the liaison committee. However, staff suggests the CMP be revised to state the following:

- The Traffic Management Plan regarding the off-site improvements shall be submitted to the City once it is approved by the Massachusetts Department of Transportation;
- The Stormwater Pollution and Prevention Plan shall be submitted to the City once it is implemented;
- A baseline noise level should be established prior to any site disturbance.

Horsley Witten suggests that the petitioners install a flow measuring device on the Project's connection to the City's 60-inch pipe within Runaway Brooke and that the petitioners consider implementing a sampling program for total suspended sediment and total phosphorus discharging from the City's 60-inch pipe into the Charles River. The flow measuring device will ensure the Project is reducing runoff from the Site into the Charles River, while the sampling program would aid the City's efforts regarding its Multi Separate Storm Sewer System (the "MS-4") permit with the State of Massachusetts regarding improving water quality discharging into the Charles River. The Planning Department will confer with the Department of Public Works who is responsible for monitoring the MS-4 permit and will provide the Committee with an update at the public hearing.

Public Facilities

The MU-3/TOD zone requires the petitioners to submit studies regarding water, sewer, and stormwater management to confirm the Project is served by adequate public facilities. Specifically, the MU-3/TOD zones require the following:

- An evaluation of the hydraulic capacity of the downstream drainage system;
- A calculation of the life cycle cost of the proposed sanitary system;
- A quantitative analysis of the capacity to dispose, verified by the Massachusetts Water Resource Authority;
- A study showing how the developer will comply with the City's cross connection control program relating to sewer and drainpipes; and
- A quantitative analysis that demonstrates that the water demand of the proposed development will not overburden the water supply of existing infrastructure provided by the City.

Staff and Horsley Witten believe that either these items are not applicable or are contained with the petitioners' special permit plans but suggests that the petitioners address these items in a memorandum, that will be reviewed and approved by the Engineering Division and by Horsley Witten.

Regarding the water analysis, the petitioners coordinated fire flow tests with the Utilities Division on four hydrants in the area, while the Engineering Division coordinated a separate test on the water supply as it relates to Newton-Wellesley Hospital **(Attachments D and E)**. Both tests indicate that the water demands of the Project will not overburden the existing infrastructure. The petitioners will conduct further modeling regarding the fire suppression systems of individual buildings which will be reviewed and approved by the Utilities Division as well as by the Fire Department prior to the issuance of a building permit. Lastly, Associate City Engineer, John Daghlian, reviewed the Project for conformance with the City of Newton Engineering Design Standards **(Attachment F)**. The petitioners shall include responses to Mr. Daghlian's comments.

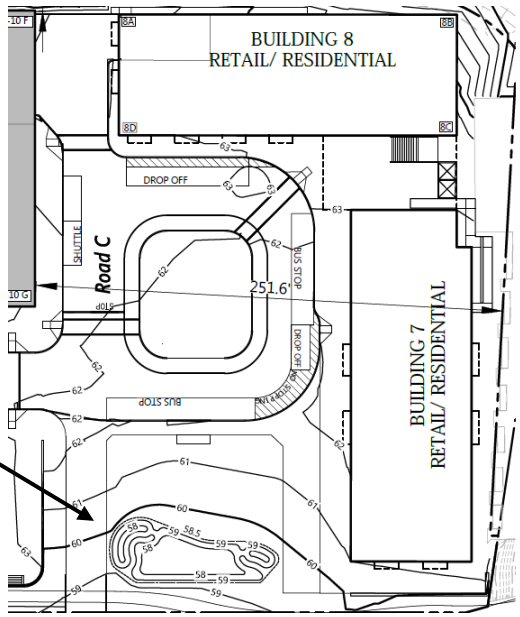
In addition to above reports, the petitioners are required to perform post-construction monitoring studies to certify that post-construction conditions do not exceed projections. However, given the City's adoption of General Ordinance 29-167 through 174 requiring infiltration and inflow mitigation, which the petitioners intend to comply with, and the standard condition requiring a post-occupancy sewer flow measurement, the Law Department is currently reviewing whether further post-construction monitoring of the sewer system is required. The Planning Department is coordinating with the petitioners as well as with the City's Engineering Division and Horsley Witten to determine the structure of the look-back provisions and will provide the Committee with an update at the public hearing.

Stormwater

Currently, there is no stormwater management infrastructure on site which results in all stormwater entering the City's 60-inch pipe untreated and then discharging into the Charles River. The petitioners' stormwater management plan will improve water quality and should reduce the amount of stormwater discharging into the Charles River. As stated in Mr. Daghlian's memorandum, the proposed raingarden within the transit green between Buildings 6 and 7 (see below) is located within the City's easement which would require a license. The Planning Department suggests that this rain garden be removed prevent damage to the City's drainpipe and to allow for increased flexibility for this open space. The petitioners will still be able to accommodate a subsurface infiltration system in this location to achieve the stormwater management and water quality goals of the Project. The petitioners are also proposing several green infrastructure improvements such as permeable pavers and tree pits with structural soils, and a rain garden at the hotel green, but the exact details will not be finalized until the building permit stage. As such, the Planning Department suggests that the petitioners submit a memorandum outlining the stormwater plan for the Project and submit it to the Planning Department for review and approval by both the Engineering Division and by Horsley Witten. Such memorandum will be cited in the Council Order and will be reviewed for consistency at the building permit stage.

Graphic I: Rain Garden

Proposed Rain Garden



Grove Street

ATTACHMENTS

Attachment A: Tentative Land Use Committee Schedule, dated June 5, 2020
Attachment B: Construction Management Plan, dated May 8, 2020
Attachment C: Horsley Witten Memorandum, dated June 5, 2020
Attachment D: WSP Memorandum, dated May 28, 2020
Attachment E: Tata & Howard Memorandum, dated May 8, 2020
Attachment F: Engineering Review Memorandum, dated May 29, 2020

Attachment A

TENTATIVE LAND USE COMMITTEE SCHEDULE

June 5, 2020

355 AND 399 GROVE STREET "RIVERSIDE"

*This schedule is tentative. The Land Use Committee is scheduled to meet on the below dates; however, the topics are subject to change.

Meeting Date	Topic	Description
June 9, 2020	Civil Engineering, Sustainability, and Construction Management Plan	Review of Utilities, Sustainable Design, and Construction Management
June 30, 2020	TBD	

Preliminary Construction Management Plan (CMP) (Updated 5/~~8~~1/20)

This ~~section~~ Preliminary CMP describes the Project schedule and sequencing and identifies steps that will be taken during construction to minimize potential temporary environmental impacts related to the demolition and construction phase of the Project. More specifically, this ~~section~~ CMP identifies the steps that will be taken to minimize impacts related to noise, air quality (dust), wetlands, water quality, and construction related traffic. Careful consideration has been given to developing plans to minimize construction phase impacts – specifically to pedestrian access and safety, potential impacts to the local neighborhoods, and protection of the Charles River Watershed.

Generally, measures to reduce construction period impacts include controlling erosion and sedimentation, controlling dust, machinery air emissions and noise, properly managing construction related truck traffic and protection of pedestrians. Additionally, a final CMP will be developed with input from the City of Newton Inspectional Services, Public Works and Planning Departments as well as the MBTA, MassDOT and other State agencies. Guided by considerable input from the selected general contractor, the CMP will include detailed information on construction activities, specific construction mitigation measures, and construction materials and access and staging plans to minimize impacts to patrons, abutters, and the local community. The CMP will define truck routes that will help in minimizing the impact of trucks on local streets. Barricades, walkways, lighting, and signage will be identified to address public safety throughout the construction period.

Overall, Project construction is expected to be completed in approximately ~~48 months~~5 years. The Proponent estimates that the construction of the replacement parking garage ~~will~~ would commence in Late 2021 and the full project w~~ould~~ould~~ill~~ be completed in 2025. A preliminary timeline of the project is shown below in **Figure 1**.

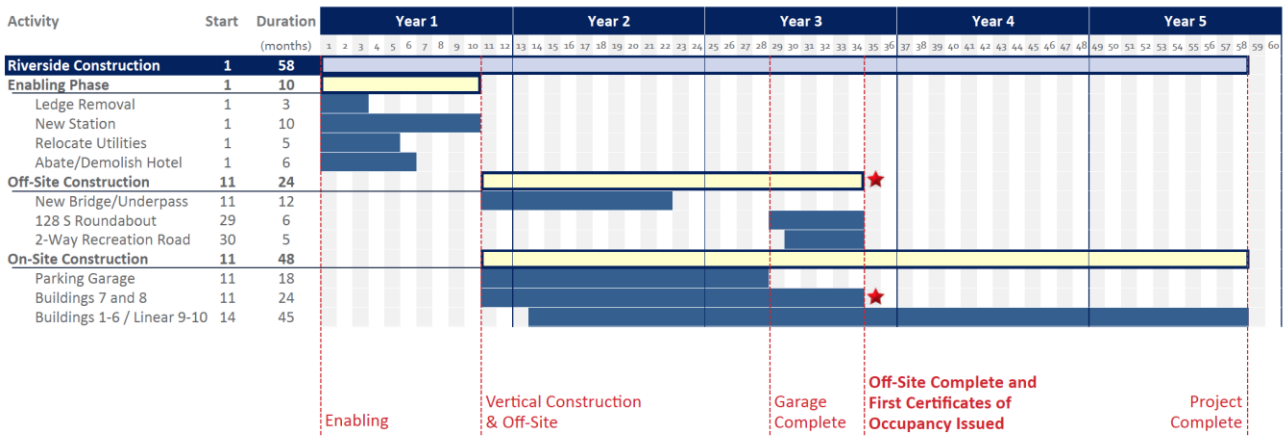


Figure 1 - Preliminary Project Timeline

It should be noted and is explicitly acknowledged by the proponent that the timeline in **Figure 1** above is preliminary and will ultimately vary dependent on factors such as approval timing, seasons/weather conditions and the interdependency or "critical path" of events. This timeline above illustrates the overall intent of the construction progression and illustrates key factors such as the requirement of completion of the offsite highway work prior to the issuance of Certificates of Occupancy by the City.

This CMP~~section~~ also describes the Project's planned compliance with the various environmental regulations including but not limited to the Massachusetts Contingency Plan (MCP) and EPA's National Pollution Discharge Elimination System (NPDES) General Permit Program for Stormwater Discharges from Construction Sites.

1.0 – M~~M~~U-3 (TOD) Zone Requirements

The following section identifies how this Preliminary Construction Management Plan specifically addresses the criteria established in Section 7.3.5.A.9 of the Newton Zoning Ordinance for the MU-3 Zone.

■

1.1 – P~~P~~roposed ~~Site~~ Construction Phasing Schedule

The Project schedule and sequencing plan have been preliminarily planned and coordinated with existing MBTA facilities to minimize construction impacts and efficiently complete the proposed improvements. As noted above, careful attention must be paid to the construction sequencing of the site improvements and individual buildings due to the unique nature of the project site as an active MBTA commuter facility. The construction phase of the Project will proceed in a manner that protects the adjacent resource areas, minimizes site erosion, and provides safe working conditions for the contractor. The construction phases of the Project will likely proceed as follows:

- 1.0 Enabling Phase
  - 1.1 Temporary Parking, Ledge Removal and Abatement (**Figure 2**)
  - Erosion control barriers will be installed prior to the start of construction along the down gradient limit of work line, and site security fencing will be installed, where appropriate, around the Project's working limits. In addition, security fencing and protective measures; lighting, signage, and overhead protection as deemed necessary will be provided along all pedestrian routes to maintain safe and efficient access for patrons and employees to all MBTA facilities.
  - The southern portion of the MBTA Maintenance Yard will be prepared for construction laydown including blasting of existing ledge
  - Adjustments will be made to the West Parking Area Hotel Indigo property to allow vehicular access routes for construction and MBTA service vehicles.

- The Hotel Indigo will be prepared for demolition including the abatement of any hazardous materials

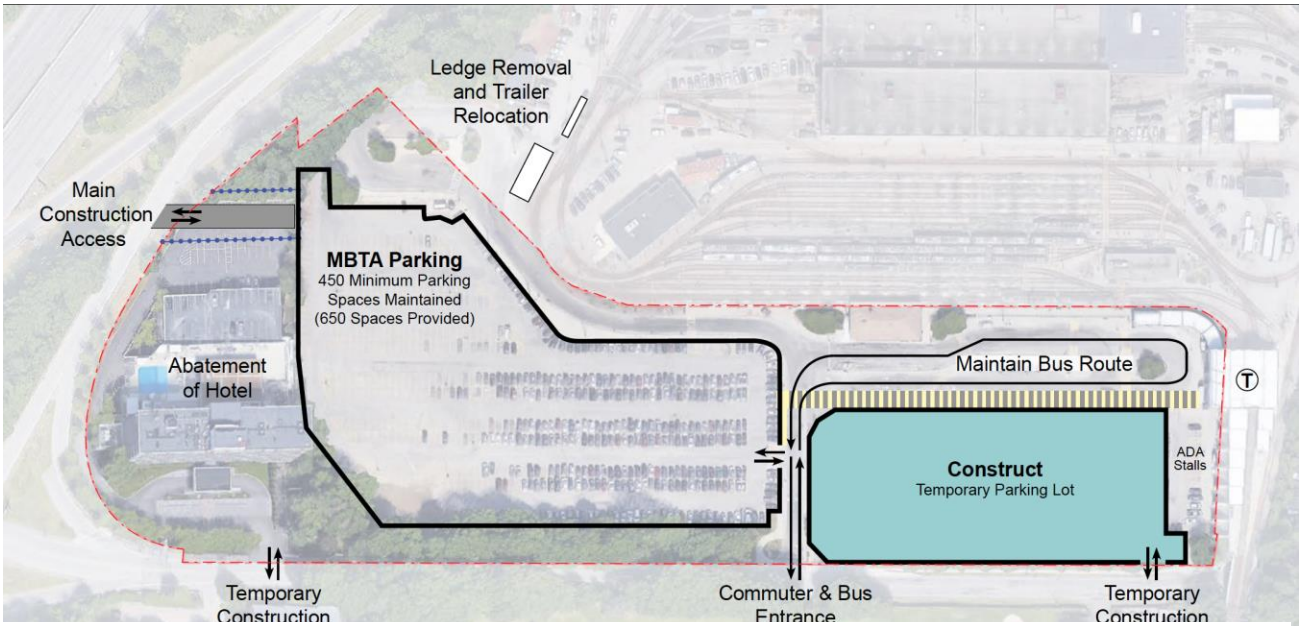


Figure 2 – Site Enabling (Months 0-2)

- 1.2 Utility Relocation, Hotel Demolition and Station Entrance (**Figure 3**)
  - Support posts for the green line catenary power system will be relocated to accommodate the project.
  - Permanent or temporary adjustments will be implemented to accommodate access to the MBTA station.
  - Existing utilities will be ~~relocated~~relocated, and new utilities will be installed in the Main Street corridor in preparation for new building foundations
  - Interim adjustments will be made to the existing parking area to accommodate a minimum of 450 parking spaces as well as maintaining adequate space for bus, shuttle and other station dropoff activities.
  - A carefully planned wayfinding and informational program will be coordinated with the MBTA as detailed later in this document

- The Hotel Indigo will be demolished

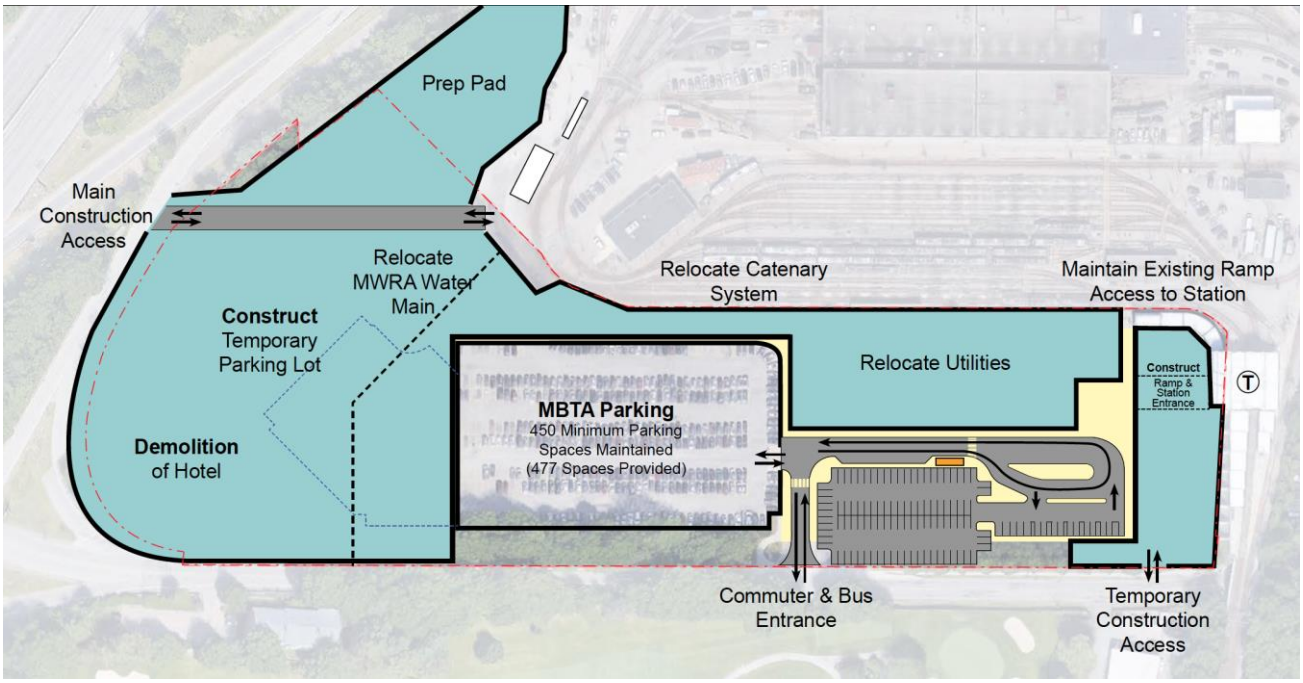


Figure 3 - Site Enabling (Months 3-10)

- 2.0 ~~Garage Construction~~Vertical Construction Phase
  - 2.1 Off Site Construction **(Figure 4)**
    - Construction of the off-site highway improvements will begin at the start of vertical construction. Greater detail on the offsite work is included in the next section of this document. This work will include:
      - **A:** The new roundabout and associated improvements at the I-95/128S Grove Street on-/off-ramp
      - **B:** The relocation of the existing I-95/128N Grove Street on-/off-ramp to its new location at the Recreation Road/Main Street Intersection
      - The installation of three traffic signals at:
        - **C:** Grove Street/Road B,
        - **D:** Grove Street/Recreation Road
        - **E**: Grove Street/Main Street/I-95/128N ramp
    - Pedestrian and bicycle facilities from the I-95/128 S on-/off-ramp (**A**) across the Grove Street bridge (**B**) and up to the Grove Street/Recreation Road intersection (D) will be completed at this time.
    - The remainder of the bicycle and pedestrian facilities will not be completed until the adjacent buildings are open and occupied. In locations along Grove Street where buildings are under construction or construction has yet to commence, the existing or a temporary pedestrian walkway will be maintained to connect pedestrians from Lower Falls to Auburndale and the train station.

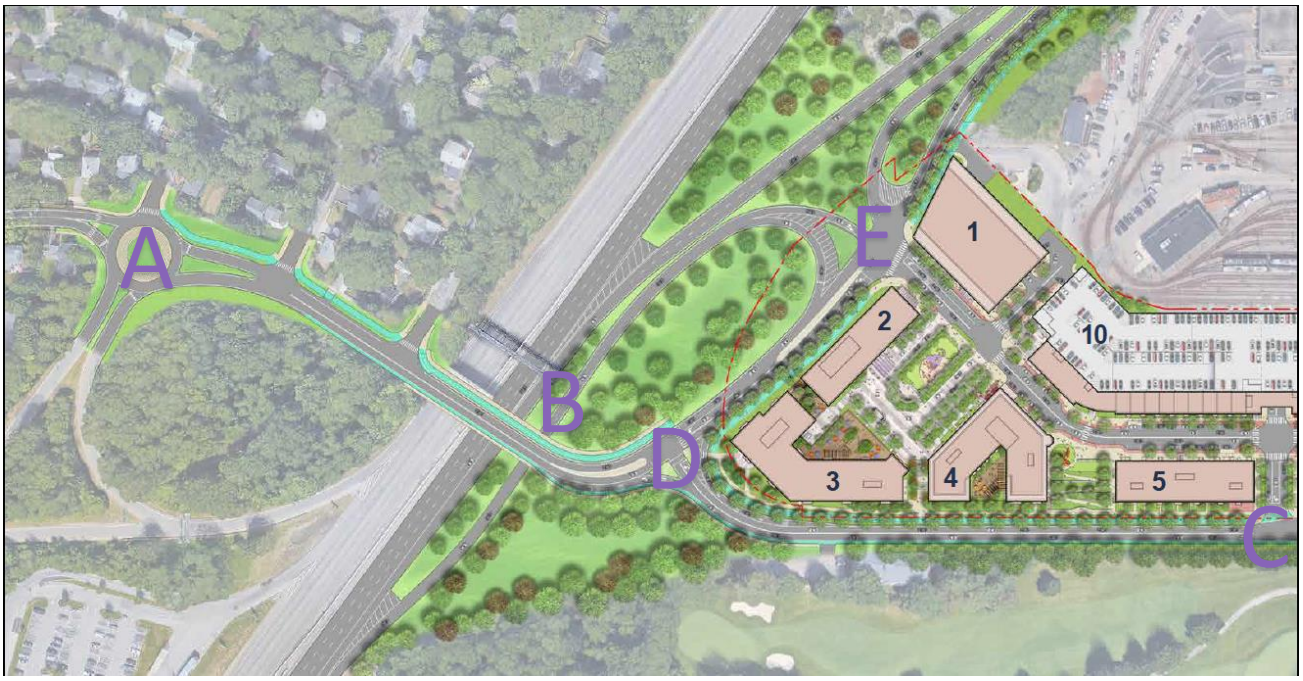


Figure 4 - Off-site Construction (Months 11-34)

- 2.2 Garage Construction (**Figure 5**)
  - Contractor will prepare the location for the new parking garage and a portion of the development buildings. Bituminous pavement from the Project Site will be demolished and processed for re-use on-site as fill material.
  - Construction of ~~a~~ cast-in-place foundations ~~of~~ for the parking garage and foundations for the adjacent buildings.

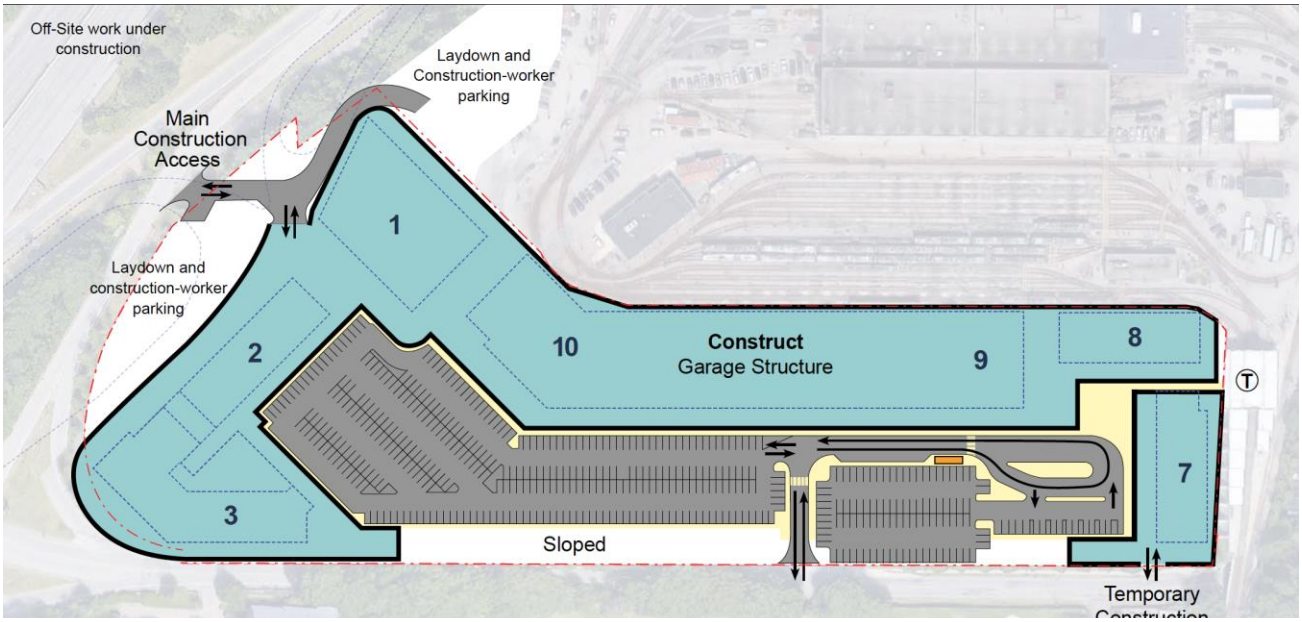


Figure 5 - Garage Construction (Months 11-28)

- Placement of pre-cast concrete structural elements for the floors of the parking garage. Vertical construction of adjacent buildings.
- Primary construction vehicle and MBTA yard access will be via Recreation Road
- A secondary construction vehicle access will be created for Building 7 via Grove Street
- Interim commuter parking will be maintained for a minimum of 450 vehicles
- Vertical construction will begin for a portion of the remaining buildings
- Off-site construction will commence per section 2.1 above.

- 2.3 MBTA Garage Opening, Completion of Buildings 7, 8 and Transit Square (**Figure 6**)
  - Upon completion and Occupancy Permit for the garage, all parking will be relocated to the new garage
  - A temporary protected pedestrian route will be established from the garage to the station
  - An interim drop-off and bus loop will be relocated
  - Buildings 7 and/or 8 will complete construction
  - Off-site construction will complete construction

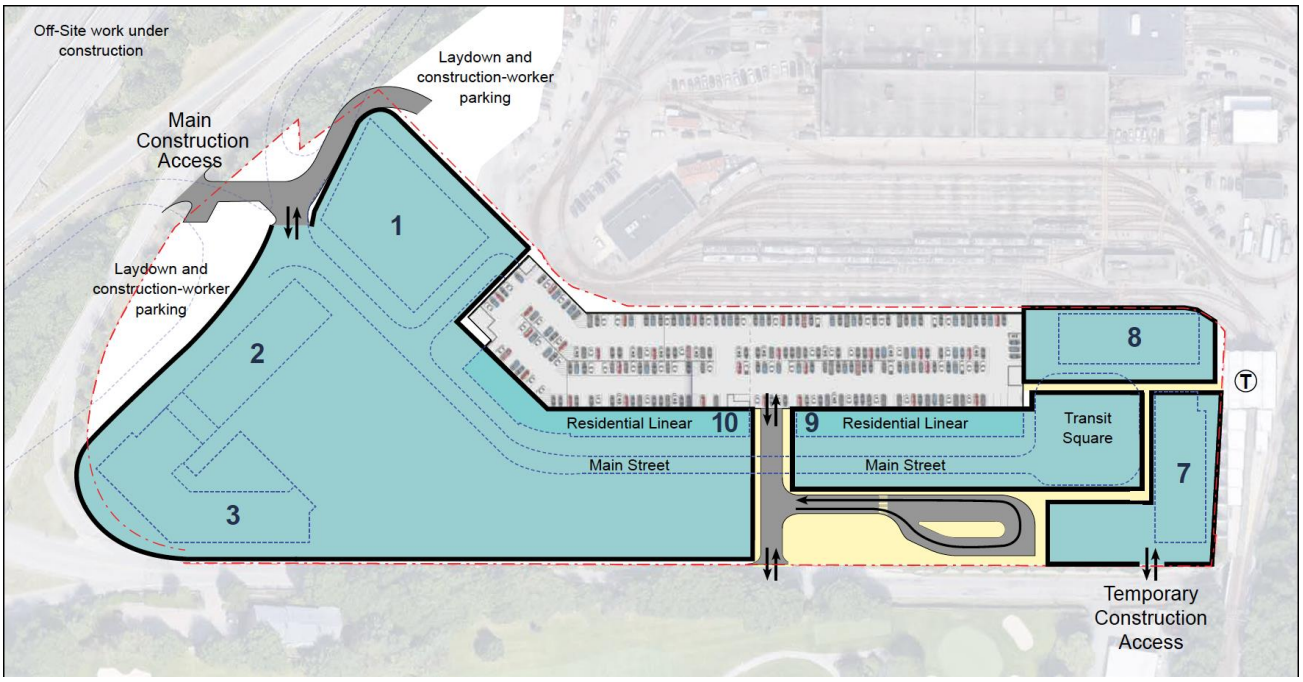
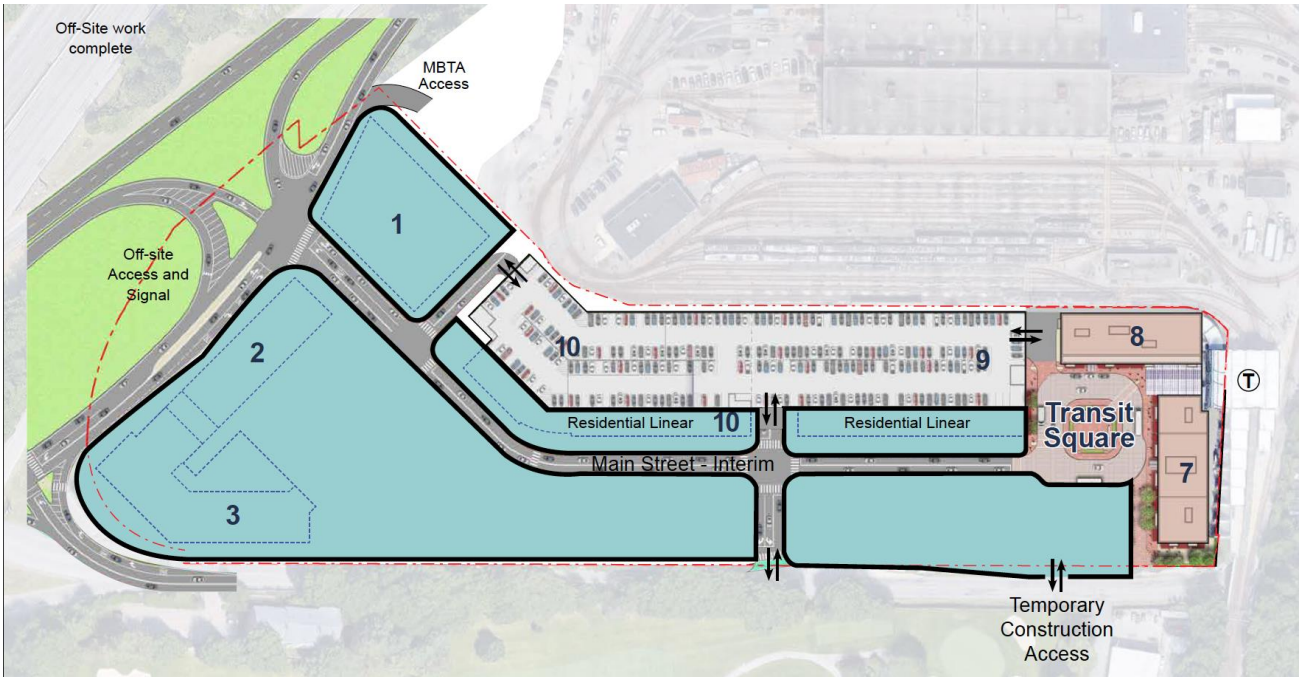


Figure 6 - Garage Structure Temporary Access (Months 29-34)

- 3.0 Remainder of project construction (**Figure 7**)
  - During this stage, the offsite highway access, garage, transit loop and Buildings 7 and 8 will be complete.
  - The remainder of the proposed development will continue construction~~, with a priority on completing structures and features adjacent to the station including but not limited to Building 8, the Transit Loop and the Northern portion of Main Street.~~
  - ~~T~~This remaining portion to work will continue to include:
    - Construction of the remaining structures
    - Earthwork activities, which includes excavation and backfill to bring the Project Site up to proposed grades.
    - Installation of final utilities and continued building pad preparation.



- Installation of curbing, pavement, and Project Site features including signage, fencing, guardrail, etc.
- Building construction and completion of Project Site features.
- Installation of landscaping.

As demonstrated above, tThe construction sequencecing ~~and progress of the construction~~ of the buildings other than the MBTA garage will progress in one rolling phase beginning at the start of the garage construction. The order of commencement of each building is subject to market conditions, site logistics and further coordination with the MBTA. It is expected that Buildings 7 and/or 8 will be the first to complete construction after the garage. Although the exact buildings have yet to be determined, we will commit that a Certificate of Occupancy for the privately-owned buildings (i.e. non-MBTA) will not be allowed until the agreed upon scope of the offsite work is completed.

As referenced above, it is expected that construction will be continuous and uninterrupted. However, certain buildings will start later in the timeline. To the extent that the construction pad area for any building has been cleared and stripped and has not or is not planned to start construction within a two month period, the pad area will be stabilized with seeding or stone covering to minimize erosion and to limit unsightliness.

Figure 7 - Remainder of Construction (Month 35-on)

1.2 – Off-site Roadway Improvements~~Off-Site Roadway Improvements~~

~~As necessary to accommodate the progress of the work on the project site, off site improvements will progress generally as follows:~~

Grove Street Bridge Modifications

The relocation of the Grove Street off-ramp (Item **B** in **Figure 4**) will require the modification or replacement of the end span of the Grove Street bridge. This can be accomplished in one of two ways (see **Figure 8**). The first option involves underpinning the existing bridge abutment with mini piles, retaining the earth under the existing abutment with a soil nail wall or similar earth support system, and then excavating the existing embankment to allow the new off ramp to pass under the bridge. The second option involves the complete reconstruction of the abutment with a new full-height abutment and the replacement of the existing deck. Both options will require adjustments to the routing of traffic through the work zone, subject to a final Traffic Maintenance Plan (TMP) to be approved by MassDOT during the design review process.

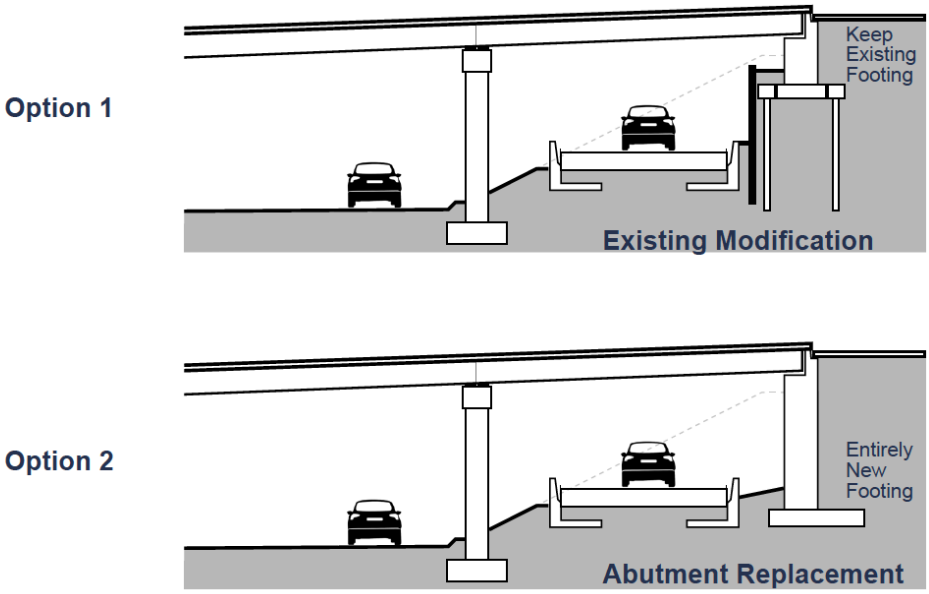


Figure 8 – Grove Street Bridge Modification Options

Option 1 presents an opportunity to ~~substantially~~ shorten the timeframe and minimize the impact to the neighborhood by reducing the period of traffic routing adjustments when compared with Option 2. **Figure 9** shows an example of how traffic patterns would change through the work zone while construction is

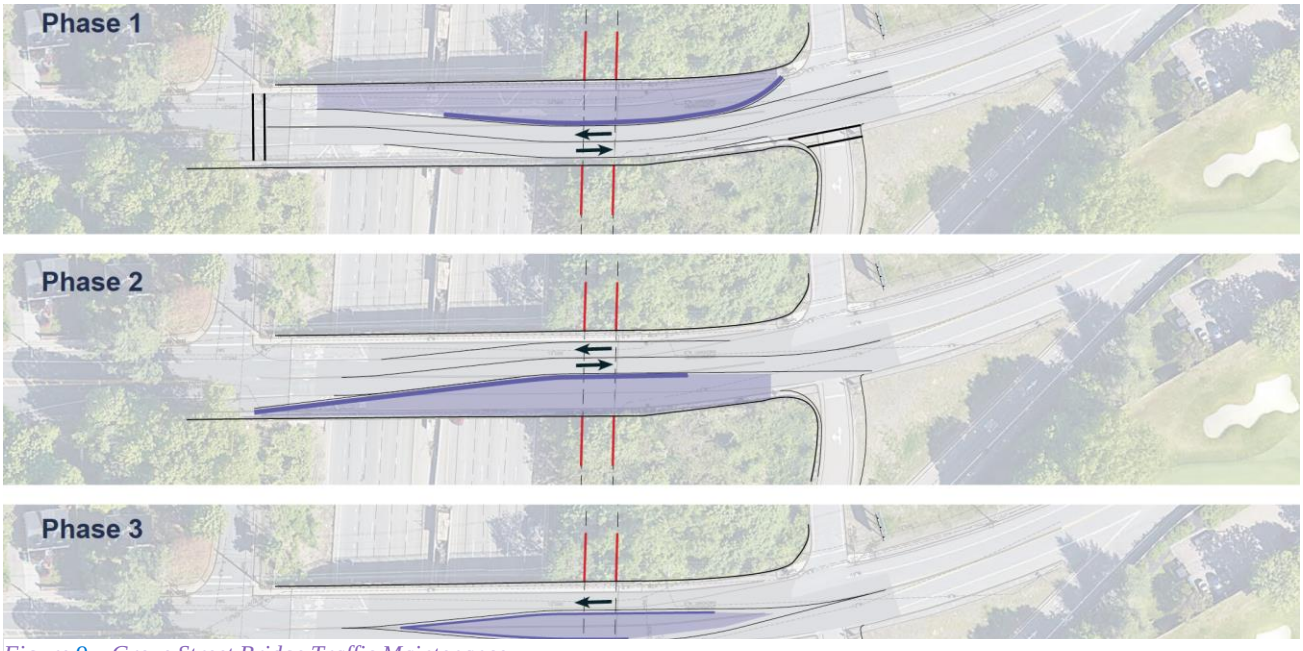


Figure 9 – Grove Street Bridge Traffic Maintenance

proceeding on this portion of the scope.

~~Lost the label~~

- ~~Install temporary traffic control signs and erosion control measures.~~
- ~~Remove existing features and perform clearing and grubbing activities.~~
- ~~Relocate existing overhead wires.~~
- ~~Begin box widening (bridge/underpass construction) and perform remaining utility work and drainage improvements.~~
- ~~Install curbing, signal system mast arm foundations, and signal system conduit.~~
- ~~Install pavement base course, sidewalks, landscaping, and site features such as guardrail.~~
- ~~Cold plane existing roadway and place pavement overlay.~~
- ~~Install signal system components and roadway striping.~~
- ~~Remove traffic control signs and erosion control measures upon stabilization.~~

Throughout the course of the construction of thesee offsite improvements, efforts will be made to provide

Figure 11~~10~~ – 128 South Roundabout Traffic Maintenance

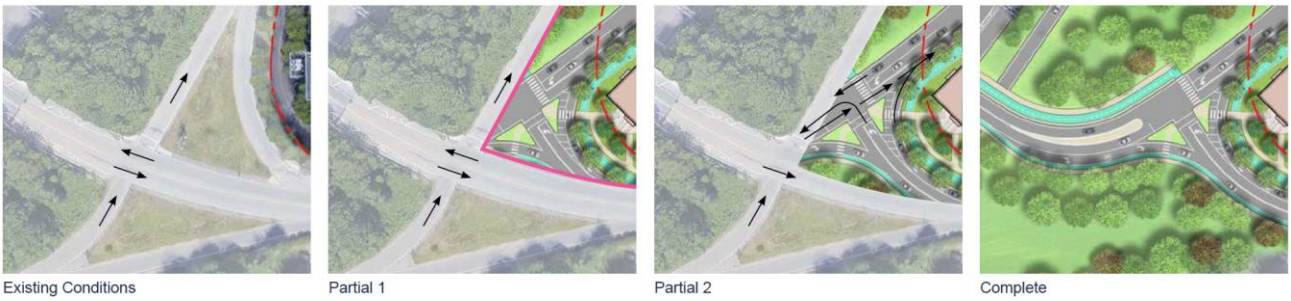


Figure 10~~11~~ – Grove Street/Recreation Road Traffic Maintenance

uninterrupted two-way traffic flow as well as maintaining safe routes for bicycles and pedestrians. This will be most challenging to accommodate if ~~the box widening (bridge construction)~~bridge modification requires the installation of a new abutment as referenced above. The two other locations that will require careful attention to traffic maintenance are at the on- and off-ramps from Route 128 south and the intersection of Grove Street and Recreation Road. The majority of this work is subject to further design, coordination and review by MassDOT as the construction document review process continues. A final Traffic Maintenance Plan will be developed and approved by MassDOT during this process. However, **Figure 10** shows conceptually how this work could proceed at the Route 128 south roundabout and **Figure 1**1 shows Grove Street/Recreation Road. The proponent recognizes that it is important to maintain two way flow on Grove Street, especially through the Lower Falls Neighborhood. Detours, if necessary, will be coordinated with the Liaison Committee, Public Works Department and Police Department and will avoid routing traffic through the adjacent streets in Lower Falls.

■

1.3 – Impacts to Adjacent Neighborhoods

In order to limit the potential for any construction vehicle traffic on local roadways, it is anticipated that all contractors will be required to access the property primarily by means of the Route 128/Grove Street interchange. At this time, the Proponent is considering two options for the main construction access.

- Option 1: provides a new dedicated construction access from the existing Recreation Road. This option is intended to further limit the amount of construction traffic on Grove Street and is subject to MassDOT and FHWA approval.
- Option 2: the Project would provide a temporary secondary means of access through the Hotel Indigo property. Construction access via the Grove Street frontage will be limited and subject to approval by the City's transportation and public works departments.

Preliminary discussions with MassDOT indicate that Option 1 will be the most likely solution

Where access is infeasible from the primary construction entrance, such as for portions or all of the construction of buildings along Grove Street, temporary access points along Grove Street will be created. These access points will be consolidated to the greatest extent practicable and will be managed by a police detail during construction hours.

All construction vehicles will be directed from the site to the I-95/128 interchange to use either I-95/128 or the Mass Pike/I-90 to limit and minimize disruption to the adjacent neighborhoods of Newton Lower Falls and Auburndale. **Figure 12** shows the proposed truck routing

Limitations further detailed ~~herein~~ in the subsequent portions of this document will be placed on construction hours, air quality/dust control, noise, and construction traffic to further address the impacts of the project construction to the neighborhood.

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Interim Commuter Accommodations

The Proponent has and will continue to coordinate extensively with the MBTA to ensure that customer experience and safety is preserved during construction. The erection of the new garage to accommodate commuters will be the first step of construction. During this initial step, a minimum of 450 available parking spaces will be maintained within the existing lot, portions of the unimproved MBTA property, and potentially on the Hotel Indigo site. During this and subsequent stages of construction, a clear and safe access route for all vehicles to the parking areas and the station drop-off will be maintained. Additionally, safe and accessible pedestrian routes will be created and maintained from the parking, drop-off, bus berths, and Grove Street to access the station. Typically, the Riverside Station parking facility sees a peak demand of 650 vehicles. Additional parking capacity exists at the Woodland Station Garage, typically in excess of 200 spaces, which will accommodate any displaced commuters. ~~The proponent is working with the MBTA and MassDOT on both an~~

~~interim and permanent signage program to direct commuters on 128 to the stations that have available parking.~~

The proponent acknowledges that with the unique routing of the MBTA Green Line D branch to the Fenway station, the Riverside Terminal serves an important role in providing parking for those commuting to Red Sox games from the metro west region. For both weekend day games and evening night games the peak number of red sox commuters will be handled by the excess space available at Woodland Station as during this period the combined availability of parking at Riverside and Woodland will exceed this quantity. For the very few occasions that the Red Sox day games occur, the proponent will work with the MBTA to advertise the limited parking availability on these days and encourage the use of the Framingham Commuter Rail to Yawkey Station as an alternative.

The proponent is working with the MBTA and MassDOT on both an interim and permanent signage program to direct commuters on 128 to the stations that have available parking. These signs will be located strategically so that drivers make the correct decision to drive to the station with available parking rather than arriving at riverside only to find that they need to head to Woodland. Additionally an informational campaign will be coordinated in advance of the reduction in parking to allow commuters time to plan for adjusting their behaviors as they adjust to potentially parking at Woodland instead of Riverside.

The Proponent will also work with the appropriate City agencies and the Lower Falls community to establish a resident-only parking plan for the Lower Falls neighborhood during this period of reduced availability.

Upon interim completion of the garage building, the structure will be opened for commuters and a safe vehicular access route to the garage and a safe pedestrian route from the garage to the station will be maintained throughout the remainder of construction.

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Contractor Parking

During the initial stages of construction prior to the opening of the garage, approximately 150 construction workers will park on site. During this phase, we have allocated space for contractor parking on portions of the existing Hotel Indigo site and a presently unused portion of the MBTA Maintenance yard that will be cleared and leveled prior to the start of the garage construction. After the opening of the garage, construction parking will peak at about 250 vehicles. At that point there will be approximately 1,000 unused parking spaces available for construction workers in the garage in addition to the space in the MBTA maintenance yard. Until completion of the project at least 250 spaces will be available in the garage.

Construction Hours

Construction of the Project will conform to all local, state, and federal laws and employ reasonable means to minimize inconvenience to residents in the general area. Exterior construction of the Project will occur predominantly during daytime hours no earlier than 7:00 AM and no later than 7~~6~~:00 PM on any weekday, except for certain operations such as concrete finishing and emergency repairs. On Saturdays, exterior

construction will occur no earlier than 8~~7~~:00 AM and no later than 7~~5~~:00 PM, with the same exceptions. The ~~Building Inspector~~Mayor's office may allow longer hours of construction under special circumstances, if a written request is provided to the ~~Building Inspector~~Mayor's office in advance (except in emergencies). There shall be no exterior construction on Sunday or any state or federal legal holiday except under unusual circumstances and with the consent of the ~~Commissioner of Inspectional Services~~Mayor's office.

Air Quality Emissions

Dust generated from earthwork and other construction activities will be controlled by spraying with water. If necessary, other dust suppression methods will be implemented to ensure minimization of the off-site transport of dust. There also will be regular sweeping of the pavement of adjacent roadway surfaces during the construction period to minimize the potential for vehicular traffic to kick up dust and particulate matter.

All contractors will be required to adhere to all applicable regulations regarding control of dust and emissions. This will include, but not be limited to, maintenance of all motor vehicles, machinery, and equipment associated with construction activities and proper fitting of equipment with mufflers or other regulatory-required emissions control devices. The Proponent will require that the machinery of the contractor hired and the machinery of other sub-contractors hired to perform site work will utilize Low Sulfur Diesel (LSD) fuel or Ultra-Low Sulfur Diesel (ULSD) fuel in off-road construction equipment.

The construction process typically involves operations that may introduce two main types of air emissions: dust and vehicle exhaust. Clearing of vegetation, earthwork, blasting/excavation, and demolition activities provide the potential for release of fugitive dust emissions. The use and operation of construction vehicles and equipment provides the potential for increases of motor vehicle engine emissions.
Blasting will be carried out in accordance with all federal, state, and local blasting permit practices. No perchlorate containing explosives will be utilized. The proposed blasting is anticipated to be limited to the initial enabling phase of the project and last approximately 2 months.

Dust will be controlled using wetting agents, as necessary, and the direct transfer of excavated soil into covered trucks will greatly diminish the potential for soil migration. If necessary, other dust suppression methods will be implemented to ensure minimization of the off-site transport of dust. There also will be regular sweeping of the pavement of adjacent roadway surfaces during the construction period to minimize the potential for vehicular traffic to kick up dust and particulate matter. Dust control and street cleaning will be components of the contractor's SWPPP under the EPA GCP.

The Proponent is aware of the Clean Construction Equipment Initiative actively promoted by the Department of Environmental Protection (DEP) (engine retrofit program and/or use of low sulfur fuel). A number of construction managers and contractors already are participating in this program. To the greatest practical degree, the Proponent will seek to engage a contractor familiar with and participating in this program.

The Proponent will require the use of ultra-low-sulfur diesel fuel exclusively in all diesel-powered construction equipment. Ultra-low sulfur diesel has a maximum sulfur content of 15 parts per million as opposed to low sulfur diesel fuel, which has a maximum sulfur content of 500 parts per million. In fact, by using ultra-low sulfur diesel fuel, there is a 97 percent reduction in the sulfur content as compared to low sulfur diesel fuel. In

addition, the Proponent will direct its contractor(s) to retrofit any diesel-powered non-road construction equipment rated 50 horsepower or above to be used for 30 or more days over the course of the Project with EPA-verified (or equivalent) emission control devices (e.g., oxidation catalysts or other comparable technologies).

The Proponent and its contractors will comply with state law (M.G.L. Chapter 90, Section 16A) and DEP regulations (310 CMR 7.11(1)(b)), which limit vehicle idling to no more than five minutes in most cases. There are exceptions for vehicles being serviced, vehicles making deliveries that need to keep their engines running, and vehicles that need to run their engines to operate accessories.

The Proponent will contractually require the construction contractors to adhere to all applicable regulations regarding control of dust and emissions. This will include, but not be limited to, maintenance of all motor vehicles, machinery, and equipment associated with construction activities and proper fitting of equipment with mufflers or other regulatory-required emissions control devices. No significant uncontrolled dust or air quality impacts are anticipated to be generated by construction activities.

Earthwork Activities

The development plan strives to minimize significant cut and fill to the extent possible. Site imported fill materials will primarily include structural materials to support the development. These materials include bituminous pavement, concrete pavement, and slab base sections and building structural fill. All disturbed undeveloped areas will receive six inches of topsoil and, at a minimum, will be planted with an appropriate seed mix.

The source of the import material has not yet been determined. This determination will occur during the construction/bidding process when the site contractor is selected. However, the Proponent and their consultants will produce Project specifications that define the parameters of the materials that can be used at the Project Site for both structural and non-structural needs.

Construction Noise

The Project will generate typical sound levels from construction activities, including foundation construction, truck movements, heavy equipment operations, blasting for ledge removal, and general construction activities. It should be noted that the proponent has committed to remove all ledge and demolition materials in the largest form possible and will not use a material crusher on-site. Construction activity associated with the Project may temporarily increase nearby sound levels due to the use of heavy machinery. Heavy machinery will be used intermittently throughout the Project's construction phases. The contractor will be required to comply with the MassDEP noise policy maintaining noise levels not to exceed 10 dBA over ambient levels at the location of sensitive receptors.

The Proponent will implement mitigation measures to reduce or minimize noise from construction activities. Specific mitigation measures may include:

- Construction equipment will be required to have installed and properly operating appropriate noise muffler systems and contractors will be required to maintain all original engine noise control equipment.
- All exterior construction activities, such as site excavation/grading and new building construction, will be managed and conducted in accordance with the City of Newton's requirements. Any necessary off-hour work will be minimized to the extent practicable.
- Appropriate traffic management techniques implemented during the construction period will mitigate roadway traffic noise impacts.
- Proper operation and maintenance, and prohibition of excessive idling of construction equipment engines will be implemented as required by DEP regulation 310 CMR 7.11.
- The Project Site will be surrounded by safety fencing to provide security, as well as to mitigate construction noise and fugitive dust.
- Work hours and relevant noise generating activities will be reviewed with the City of Newton prior to construction.
- Appropriate operational specifications and performance standards will be incorporated into the construction contract documents.

Limited ledge removal will be required during the site work phase of the Project. Blasting activities to remove rock and ledge will be restricted to daytime periods only during approved construction hours. All blasting will be conducted in accordance with applicable safety regulations and immediate residential abutters to the Project Site will be notified prior to any blasting activities. A typical rock blast produces a maximum sound level in the audible range of 94 dBA Lmax at 50 feet. The estimated instantaneous maximum (Lmax) sound levels at the nearest residential properties from blasting on the site are 69 to 84 dBA. These levels are similar to existing daytime sound levels at these same locations of 60 to 87 dBA Lmax. Therefore, blasting sound for brief periods during the day is not expected to create a noise nuisance condition to surrounding residential properties. Furthermore, all blasting activity will be done by a licensed blasting contractor in full compliance with all state and federal regulations for protecting residential areas.

Wetlands and Water Quality

During construction, the Project will include installation of redundant erosion and sedimentation controls to eliminate discharge of any sediment material into nearby wetland resource areas or off-site drainage systems. Site preparation activities, construction staging, and other requirements are described below. Additionally, a Stormwater Management Plan, as described in the Stormwater Management Report, has been developed to minimize impacts on nearby resource areas from construction activities, and long term operation of the Project.

There is no work anticipated directly within wetland resource areas. Work within the 100-foot wetland buffer zone is also limited and includes minor re-grading and restoration of open space to accommodate the roadway improvements and future connection to the DCR bike path. Erosion and sedimentation controls including silt fence and hay bales will be installed along appropriate downgrade portions of the perimeter of the excavated areas to prevent construction materials from contaminating the storm drainage system.

Site Preparation, Construction Staging and General Construction Requirements

The Project Site preparation and construction staging for the Project will include several important steps. The contractor will establish site trailers and staging areas to minimize impacts on natural resources. The site trailers and staging areas will provide a location for erosion control equipment and supplies, documentation related to the Project's local and State permits as well as NPDES compliance, and spill control equipment. It is expected that the staging area will be located on compacted gravel or a paved surface, which will reduce potential erosion. As previously noted, the vast majority of the site has been previously altered with predominately paved areas associated with commuter parking areas. As such, these areas will be far more manageable as compared to a previously undisturbed site.

The following are some general requirements related to construction vehicle fueling and storage:

- Any refueling of construction vehicles and equipment will take place outside of the 100-foot wetlands buffer zone or riverfront area and will not be conducted in proximity to temporary sedimentation basins or diversion swales.
- No on-site disposal of solid waste, including building materials, is allowed in the 100-foot buffer zone.
- No materials will be disposed of into the wetlands or existing or proposed drainage systems. All contractors, including concrete suppliers, painters and plasterers, will be informed that the cleaning of equipment is prohibited in areas where wash water will drain directly into wetlands or stormwater collection systems.
- The contractor will establish a water resource to supply a "water truck", or other means, to provide moisture for dust control and irrigation. Water will not be withdrawn from wetland areas.

Upon establishing the staging area, the contractor will then establish sedimentation and erosion controls as identified in the next section. Although specific construction and staging details have not been finalized, the Proponent will work with the Contractor to verify that materials staging and storage areas will be located to minimize impact to the surrounding neighborhood, pedestrian, and vehicular traffic. All staging and vehicular unloading is anticipated to occur on-site.

Sedimentation and Erosion Control

The Project will include implementation of erosion and sedimentation controls during each phase of construction through implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will be adapted to fit the contractor's equipment, weather conditions, and specific construction activity. The following sedimentation and erosion control measures will be employed, as well as additional construction methods, in order to minimize impacts.

The program incorporates Best Management Practices (BMPs) specified in guidelines developed by the DEP and the U.S. Environmental Protection Agency (EPA). Proper implementation of the erosion and sedimentation control program will:

- Minimize exposed soil areas through sequencing and temporary stabilization;

- Place structures to manage stormwater runoff and erosion; and
- Establish a permanent vegetative cover or other forms of stabilization as soon as practicable.

The structural and non-structural practices proposed for the Project comply with criteria contained in the NPDES General Permit for Discharges from Large and Small Construction Activities issued by the EPA. Non-structural practices include:

- Temporary Stabilization;
- Temporary Seeding;
- Permanent Seeding;
- Pavement Sweeping; and
- Dust Control.

Structural practices include:

- Erosion Control Barriers,
- Stabilized Construction Exits;
- Temporary Sediment Basins;
- Diversion Swales;
- Temporary Check Dams;
- Catch Basin Inlet Protection; and
- Dewatering Filters.

In addition, a hay bale/silt fence line will be installed along the down gradient slope at the limit of work line. The installation of this hay bale/silt fence line will provide erosion and sedimentation controls for the Project, and will define the limit of disturbance for the site contractor.

Pre-Construction Erosion Control

- Erosion control barriers (silt fences or hay bale dyke) will be installed prior to the start of construction. These barriers will remain in place until all tributary surfaces have been fully stabilized.
- The contractor will establish a staging area, outside the 100-foot wetland buffer zone and riverfront area, for the overnight storage of equipment and stockpiling of materials.
- In the staging area, the contractor will have a stockpile of materials required to control erosion on-site to be used to supplement or repair erosion control devices. These materials will include, but are not limited to, hay bales, silt fence, erosion control matting, and crushed stone.
- A temporary stone construction entrance is required to prevent tracking of silt, mud, etc, onto existing roads. The stone will be replaced regularly and, as needed, if silt-laden.
- The contractor is responsible for erosion control on the Site and will utilize erosion control measures where needed, regardless of whether the measures are specified on the construction plans or in supplemental plans prepared for the SWPPP.

General Erosion Control Measures

The most important aspects of controlling erosion and sedimentation are limiting the extent of disturbance, and limiting the size and length of the tributary drainage areas to the worksite and drainage structures. These fundamental principles will be the key factors in the contractor's control of erosion on the Project Site. If appropriate, the contractor will construct temporary diversion swales, settling basins, or use a settling tank. If additional drainage or erosion control measures are needed, they will be located in the upland, up-gradient from the hay bales and silt fences.

All disturbed surfaces will be stabilized a minimum of 14 days after construction in any portion of the Project Site has ceased or is temporarily halted, unless additional construction is intended to be initiated within 21 days.

The contractor is responsible for the maintenance and repair of all erosion control devices on-site. All erosion control devices will be regularly inspected. At no time will silt-laden water be allowed to enter sensitive areas (wetlands, streams, and drainage systems). Any runoff from disturbed surfaces will be directed through a sedimentation tank that will discharge by gravity to the existing on-site drainage system.

Soil Stabilization Specifications

All disturbed areas to remain open will be graded and stabilized with plantings, sod, grass, riprap, or other suitable material as shown or specified on the plans. A minimum of six inches of loam will be applied to all surfaces to be seeded. Loam will be uniformly applied, compacted, shaped, and smoothed prior to being seeded.

Seeding may be performed by hand, mechanical, or by tractor-mounted spreader. Hydroseeding or sod may also be used. Seeding before April 15, or after October 15, will be reapplied between these dates if a minimum germination of 90 percent of surface area coverage has not occurred, or if the surface has become unstable. Seed will be lightly raked into a depth of ¼-inch to one inch, with raking to be perpendicular to slope. Seeded areas will be mulched using seed-free straw, covering the area to a depth of one inch.

Utility Construction

The Proponent will construct utility trenches in a manner that will not direct runoff toward wetlands or to drainage system structures.

Drainage System

The following will be employed during construction activities in order to minimize impacts to the local drainage system:

- Inlet works shall be constructed to a point that will allow the stabilization of the area over the pipe, if the tributary drainage works are not to be immediately extended.

- Hay bale check dams shall be used on roadways to divert runoff onto stabilized areas.
- The drainage system will be installed from the downstream end up.
- Until tributary areas are stabilized, catch basin inlets will be filtered with a siltsack, or by placing filter fabric over catch basin grates and surrounding the grate with stone or sand bags. If intense rainfall is predicted before all tributary areas are stabilized, erosion control measures will be reinforced for the duration of the storm. Downstream areas will be inspected and any sediment removed at the end of the storm.
- Unfiltered water will not be allowed to enter pipes from unstabilized surfaces.
- Trench excavation will be limited to the minimum length required for daily pipe installation. All trenches will be backfilled as soon as possible. The ends of pipes will be closed nightly with plywood.
- Silt-laden waters should be intercepted prior to reaching catch basins. Any gross depositions of materials on paved surfaces will be removed.
- All paved areas shall be vacuum swept during the April-May period.
- Catch basins should be inspected monthly and cleaned in anticipation of the winter season in November and at the same time the roads are swept in the spring.

Massachusetts Contingency Plan (MCP) Compliance

The project Licensed Site Professional (LSP) will prepare a draft Release Abatement Measure (RAM) Plan consistent with the MCP. The RAM Plan will detail soil and groundwater management activities during all site earthwork operations. Prior to submitting the RAM Plan to MassDEP, the draft will be provided to the City for review. The RAM will require the LSP or its designee to be on-site during all earthwork activity in areas where oil and/or hazardous material concentrations exceed the applicable Method 1 Standards. Modifications to the Plan and status reports prepared by the LSP shall be provided to the City. If additional contamination sources in excess of reportable limits are encountered the Proponent will notify City and provide recommendations on additional soil and/or groundwater testing to confirm the presence or absence of hazardous materials. If additional contamination in excess of reportable limits are in fact encountered, the Proponent and its LSP will prepare a Release Notification and submit to MassDEP. Air quality monitoring will be conducted throughout earthwork activities in accordance with the RAM Plan.

Maintenance of Erosion and Sedimentation Controls

Scheduled inspections and maintenance of erosion and sedimentation controls will be routinely performed by the Contractor and/or an Environmental Site Monitor to maintain the functional capacity of the stormwater system and to protect stormwater quality during construction. Sediment and erosion controls will be inspected within 12 hours following each storm event of 0.5-inch or greater. Immediate action will be taken to correct any failures that are observed and repairs and/or adjustments made promptly to any erosion and sedimentation control measures found to be inadequately performing. Silt sacks or hay bales will be installed in or around existing and new catch basins and a supply of replacement materials such as silt fence, hay bales, etc. necessary to make repairs or for first response in the event of an accidental release or failure, will be stored on-site. Catch basins in work areas will be cleaned when the sump becomes one-half full and accumulated sediment and debris should be removed from the site.

National Pollutant Discharge Elimination System

As previously discussed, the Project is subject to the provisions of the NPDES because the proposed development results in the disturbance of more than one acre of land. Prior to the start of construction, the property owner and/or general contractor must file a Notice of Intent (NOI) with the U.S. Environmental Protection Agency (EPA) under the NPDES General Permit for Construction Activities. The NOI will include a Storm Water Pollution Prevention Plan (SWPPP), largely consisting of the erosion and sedimentation control plan described herein. A SWPPP will be prepared by the general contractor prior to filing the NOI for the NPDES Phase II Stormwater General Permit. The general contractor is solely responsible for developing and implementing the SWPPP.

The SWPPP will be implemented during construction to comply with the requirements of the NPDES General Permit. The Project contractor will be responsible for implementing and maintaining all erosion and sedimentation control measures. Below are specific recording and inspection requirements:

NPDES Record Requirements

- A copy of the NPDES submittal and SWPPP must be kept on-site at all times during construction and will be made available to all interested parties.
- Records must be maintained pursuant to the permit for a period of three years from the date of stabilization of the Project Site as required. Stabilization occurs when the Project Site has over 70 percent vegetative growth and/or mechanical stabilization throughout.
- The detailed plans of completed work must be added to the NPDES and SWPPP information specified above as they become available.

NPDES Inspection Requirements

- All inspections will be conducted by qualified personnel who will produce written quantitative and qualitative reports on the construction methods, general condition of the Project Site, the condition of erosion control measures, and the status of the installation of drainage structures.
- Inspections are required during site alteration a minimum of one out of every seven days while surfaces are not stabilized.
- Inspections are required within 24 hours of storms which have 0.25-inches or greater of precipitation.
- Before/until the Project Site is fully stabilized, inspections will be conducted at monthly intervals for a period of one year.

Construction Traffic

The construction period will generate construction truck/vehicle traffic and construction employee traffic. The following is a summary of the expected impacts of construction truck traffic and the measures to be used to reduce any potentially negative impacts during the construction period.

Truck Access

The Proponent is committed to working with local and MBTA public officials to help ensure that appropriate traffic maintenance and protection measures are in place during construction. Designated routes for all associated construction truck traffic will be implemented. All construction deliveries will be required to access the project site via the Route 128 corridor and Grove Street interchange and not via local Newton or Wellesley roads.

The contractor will establish site construction trailers and staging areas to minimize impacts on traffic. Trucks will be required to wait in on-site staging/waiting areas and will be prohibited from stopping for extended durations on public roads, including Grove Street. **Figure 12** below shows the proposed construction vehicle routes.

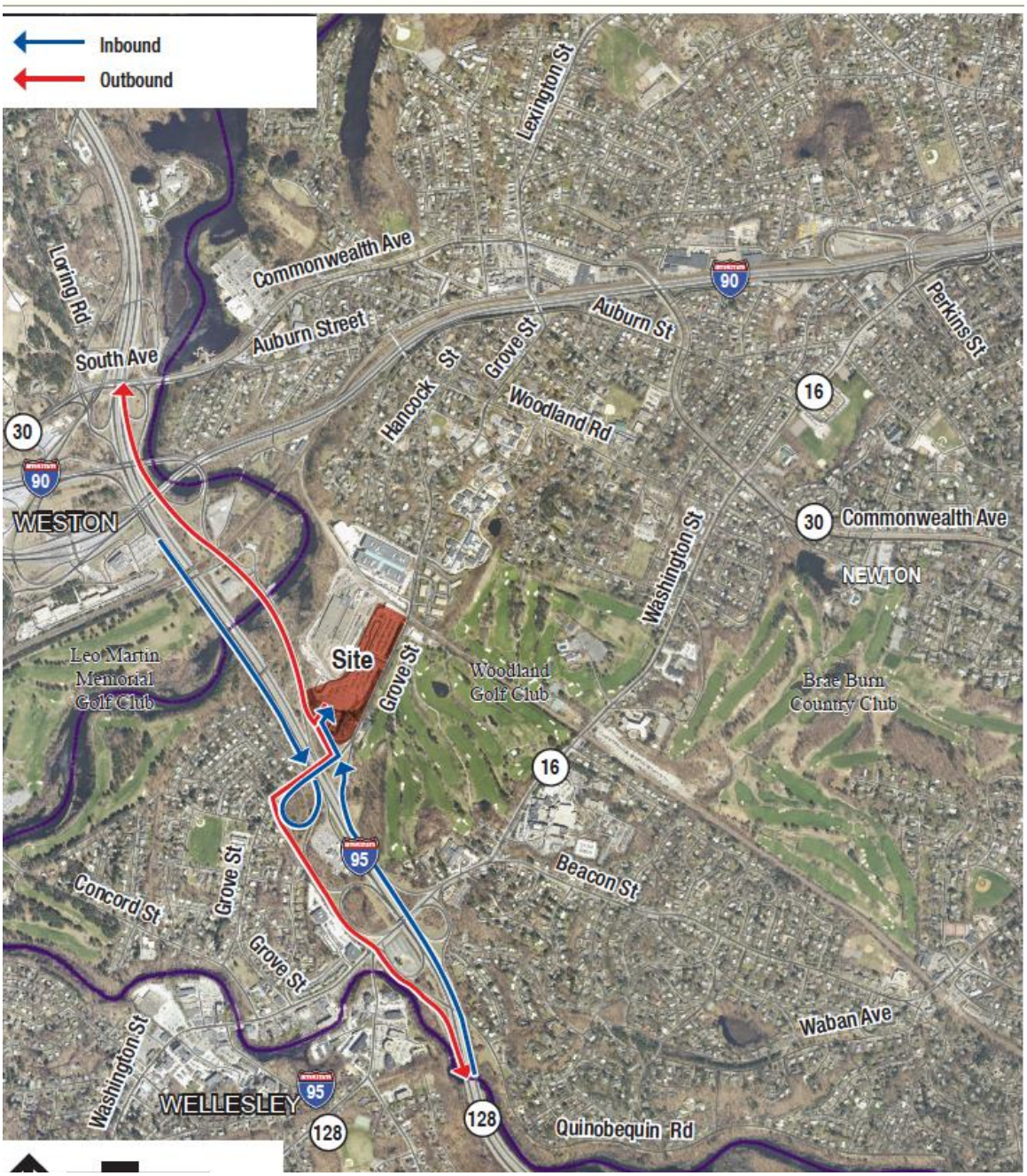

Figure 12 - Construction Vehicle/Delivery Routes

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Traffic Maintenance

A pre-construction coordination meeting with the Proponent, General Contractor, and City will be scheduled to designate truck routes and coordinate operations for off-site work required for the construction of roadway and related utility improvements. Generally, the off-site construction will be performed during off-peak travel

periods. All reasonable efforts will be made to maintain existing traffic patterns at all times. Full road closures and detours will be avoided to the maximum extent possible and will be limited to off-peak travel periods.

Demolition, Excavation and Construction Waste

While overall demolition activities are minimal, all construction and demolition debris will be handled, managed, and disposed of in accordance with applicable regulations, including the "Waste Bans" as applicable at local solid waste facilities in the Project Site area (effective July 1, 2006 solid waste facility management regulations at 310 CMR 19.017). In addition, solid waste/debris generated by the Project's construction activities will be managed and disposed of in accordance with DEP's Waste and Recycling Regulations and Standards (310 CMR 16.00 and 310 CMR 19.000). ~~It is anticipated that a majority of the existing asphalt, brick, and concrete will be recycled and/or reused on-site, where feasible.~~

~~As mentioned above, the~~The amount of demolition to occur is limited to the existing hotel and a few ancillary MBTA structures. It is anticipated that any concrete demolition debris will be removed and hauled away in the largest sections possible to minimize dust and disturbance. Bedrock and large boulders also will also be hauled away rather than crushed on site to minimize disturbance. To the extent possible, granular soils that are excavated will be reused as compacted backfill. Any geotechnically unsuitable soil, such as organic peat, will be disposed off-site at appropriate locations. During construction, there also will be solid waste generated by the various trades. These materials will be collected into dumpsters and hauled to licensed disposal facilities. To the extent feasible, separate containers or dumpsters will be provided to separate recyclable materials such as cardboard, paper, wood, and metals.

Any asbestos-containing waste material will be managed in accordance with DEP's Solid Waste Management Regulations (310 CMR 19.061) for "special waste." A licensed waste management contractor will be retained to transport all debris to an approved landfill/disposal facility or reclamation facility.

Liaison Committee

At least two months prior to the start of construction, the proponent will work with the City Planning Department to establish a Liaison Committee. The purpose of the Liaison Committee will be:

1. To enhance and ensure communication as to the status and progress of the construction of the Project by the Petitioner
2. To provide a forum for initial presentation of a construction schedule and any significant changes to schedule or changes of plans for which public review is appropriate.
3. To receive and deal with construction-specific issues including, without limitation, noise, dust, parking and traffic; to monitor implementation of the final Construction Management Plan; and to receive notices and communications from the Department of Inspectional Services and the Planning and Development Department

The Liaison Committee will meet monthly for the first six months of construction and thereafter every three months unless there is consensus within the Liaison Committee that no meeting is necessary until at least six months after the occupancy of the final building is complete.

The Committee will consist of two designees of the Petitioner, four residents from the neighborhood surrounding the project and the Ward 4 City Councilors. The President of the City Council shall appoint the resident neighborhood members. Meetings of the Liaison Committee will be open to the public.

Horsley Witten Group
Sustainable Environmental Solutions
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MEMORANDUM

To: Neil Cronin, Jennifer Caira – City of Newton

From: Janet Carter Bernardo, P.E. – Horsley Witten Group, Inc.

Date: April 23, 2020, **Follow up June 5, 2020**

Re: Peer Review - Riverside Station: Preliminary Construction Management Plan

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This memorandum is a follow up peer review of the Preliminary Construction Management Plan (CMP) (Updated 5/8/20) prepared for the Riverside Station proposed development on Grove Street in Newton, Massachusetts. The Applicant is proposing to redevelop the existing Massachusetts Bay Transportation Authority (MBTA) parking lot and Hotel Indigo located off Grove Street.

The proposed redevelopment includes the construction of ten mixed use buildings with roadways, parking areas, landscaping, stormwater management, and utility improvements. Construction is anticipated to begin in the fall of 2021 and completed in 2025.

The Applicant has provided a revised Preliminary CMP, stating that a final CMP will be developed with input from the City of Newton Inspectional Services, Public Works and Planning Departments as well as the MBTA, Massachusetts Department of Transportation (MassDOT) and other State agencies.

HW has reviewed the following documents:

- Preliminary Construction Management Plan (CMP) (Updated 5/8/20)

HW has the following comments and recommendations that may be considered for inclusion in the conditions of the Special Permit or in the development of the final CMP, comments below correlate to our April 23, 2020 memorandum, with follow up comments in **bold** font:

1. The Applicant's Licensed Site Professional (LSP) shall prepare a draft Release Abatement Measure (RAM) plan consistent with the Massachusetts Contingency Plan (MCP). The RAM will detail soil and groundwater management activities in addition to ambient air monitoring requirements. Prior to issuance to Massachusetts Department of Environmental Protection (MassDEP) the RAM should be provided to the City of Newton for review and approval.

The Updated CMP states on page 18 that a draft of the RAM Plan will be provided to the City for review prior to submitting to MassDEP. No further comment.

2. The RAM shall require that an LSP or his/her designee be on site during all intrusive matters of land disturbance in areas where oil and/or hazardous material concentrations exceed the applicable Method 1 Standards documented in the MCP. Furthermore, if any modifications are made to the RAM, the City will be provided with the modified RAM as well as all status reports prepared by the LSP during site construction for review and comment prior to submission to the MassDEP.

   The Updated CMP states on page 18 that the RAM will require the LSP to be on-site as noted above and that modification to the Plan and status reports will be provided to the City. No further comment.

3. If additional contamination sources are identified, the Applicant will notify the City and will provide recommendations on additional soil and/or groundwater testing to confirm the presence or absence of hazardous materials. The Applicant will follow these recommendations or propose an alternate approach, acceptable to the City, to evaluate the presence or absence of hazardous materials.

   The Updated CMP states on page 18 that the Applicant will follow the above recommendations if additional contamination sources are identified. No further comment.

4. If during construction Reportable Concentrations are detected at the site the Applicant shall provide a Release Notification to MassDEP based on contaminant concentrations above MCP standards. The Applicant will provide a plan and schedule to address the contaminated soil and/or groundwater for approval by the City prior to the commencement of any onsite remediation activities. If notification exemptions exist, the Applicant will provide the Town with adequate documentation for review and comment.

   The Updated CMP states on page 18 that the Proponent and its LSP will prepare a Release Notification if additional contamination in excess of reportable limits are encountered. No further comment.

5. Air Quality monitoring will be conducted in the manner specified in the RAM Plan.

   The Updated CMP states on page 18 that air quality monitoring will be conducted in accordance with the RAM Plan. No further comment.

6. Site noise levels shall conform to the MassDEP's Division of Air Quality Control's Noise Policy. A baseline condition is advised to be taken prior to the commencement of any construction activities.

   Page 13 and 14 of the Updated CMP describes the mitigation measures that the Proponent will implement to reduce or minimize noise from the construction activities, including complying with the MassDEP noise policy. No further comment.

7. Traffic management plan shall be provided to the City for review and approval with signage and measures to establish safe pedestrian and vehicular movement for MBTA patrons and employees.

   Page 10 of the Updated CMP details the Interim Commuter Accommodations. Furthermore, the Applicant has stated on page 21 that at least two months prior to the start of construction it will work with the City Planning Department to establish a Liaison Committee. No further comment.

8. The truck hauling route will be approved by the City of Newton and designated truck entrance and exit lanes will be established to limit movement on Grove Street.

   Page 20 of the Updated CMP describes the designated routes for all associated construction truck traffic, truck access to Grove Street has been minimized to the Route 128 corridor interchange. No further comment.

9. Applicant shall provide anticipated schedule of heavy truck traffic to City.

   The Applicant has stated on page 21 that at least two months prior to the start of construction it will work with the City Planning Department to establish a Liaison Committee. The Liaison Committee will deal with construction-specific issues including traffic. No further comment.

10. The Applicant shall remove large pieces of concrete, ledge, and boulders and will not operate a crushing machine on the site.

    Page 13 and page 21 of the Updated CMP states that any concrete demolition will be removed and hauled away in the largest sections possible. No further comment.

11. Dust will be controlled using wetting agents as necessary, and excavated soil will be directly transferred into covered trucks to diminish the potential for soil migration.

    Page 12 of the Updated CMP states that dust will be controlled using wetting agents, as necessary, and the direct transfer of excavated soil into covered trucks. No further comment.

12. Regular sweeping of the pavement of adjacent roadway surfaces during the construction period to minimize the potential for vehicular traffic to kick up dust and particulate matter. At a minimum street sweeping to occur at the end of every day of construction activity. Street sweepings shall be managed consistent with MassDEP requirements.

    Page 12 of the Updated CMP details the Applicant's intended practice to manage air quality emissions including regular street sweeping. No further comment.

13. The Applicant will require the use of ultra-low-sulfur diesel fuel exclusively in all diesel-powered construction equipment. Ultra-low sulfur diesel has a maximum sulfur content of 15 parts per million as opposed to low sulfur diesel fuel, which has a maximum sulfur content of 500 parts per million.

Page 12 of the Updated CMP details the Applicant's intended practice to manage air quality emissions including engaging a contractor familiar with the Clean Construction Equipment Initiative. No further comment

14. Applicant shall document in the CMP how fueling of the construction equipment will occur.

    Page 15 of the Updated CMP describes the general requirements related to construction vehicle fueling and storage. No further comment.

15. Exterior construction of the Project will occur during daytime hours no earlier than 7:00 AM and no later than 6:00 PM on any weekday, except for certain operations such as concrete finishing and emergency repairs. On Saturdays, exterior construction will occur no earlier than 7:00 AM and no later than 5:00 PM, with the same exceptions. There shall be no exterior construction on Sunday or any state or federal legal holiday except under unusual circumstances and with the consent of the Commissioner of Inspectional Services.

    Page 12 of the Updated CMP notes the proposed Construction Hours to be no earlier than 7:00 AM and no later than 7:00 PM on any weekday. On Saturdays, exterior construction will occur no earlier than 8:00 AM and no later than 7:00 PM. HW has no objection to this time frame.

16. Applicant shall provide the City with the foot-candle specifications regarding the light intensity for the construction site as well as the pedestrian access to the MBTA station.

    Page 1 of the Updated CMP states that the Final CMP will include lighting and signage to address public safety throughout the construction period.

17. Applicant shall provide detailed construction sequencing regarding Infiltration System 101 located beneath the garage, including the final connection to the 60-inch culvert and the connection of the garage roof drain to Infiltration System 101.

    Page 17 of the Updated CMP details construction activities associated with the Drainage System. HW recommends that the Final CMP outlines the proposed procedures to either utilize Infiltration System 101 during construction or preventing stormwater from entering the infiltration system during construction. The Final CMP should include a plan to manage stormwater during construction of the garage as well as the construction of the remaining site.

18. Applicant has noted that blasting will occur during the initial phase and will last approximately 2 months. Will surveys be conducted of adjacent properties prior to construction? Blasting restrictions required by the MBTA, MassDOT, and City shall be provided in the final CMP.

    Page 14 of the Updated CMP describes the blasting activities. HW believes that the Liaison Committee forum will provide an opportunity for additional dialogue regarding the blasting operations if needed. No further comment.

19. Once off-site roadway improvements are finalized with MassDOT the final Traffic Maintenance Plan shall be provided to the City.

    Page 21 of the Updated CMP addresses the Traffic Maintenance and coordination. No further comment.

20. Final CMP shall include designated parking areas for construction personnel, MBTA vehicles, and minimum of 450 parking spaces for MBTA patrons.

    Page 3 of the Updated CMP includes a figure illustrating temporary parking areas. No further comment.

21. Garage shall be first building constructed.

    Pages 2-6 of the Updated CMP include the anticipated project schedule, with the construction of the Garage as the first building.

22. Erosion control barriers will be installed prior to any land disturbance with additional controls placed upgradient of the 60-inch culvert daylighting at Grove Street.

    Pages 15-17 of the Updated CMP describe the erosion control measures proposed for the development. No further comment.

23. HW recommends that the 60-inch culvert be videoed pre-development and post-development to verify that the pipe is structurally sound and has no restrictions.

    The Applicant has provided a preconstruction video of the 60-inch culvert conducted on May 6, 2020. It is HEW's understanding that the Applicant intends to video the culvert post-construction as well. No further comment.

24. HW recommends that a flow measuring device be installed in the 60" culvert to obtain flow rates during dry conditions and during wet conditions, pre-development, at intervals during construction, and post-construction.

    The Updated CMP did not address potential monitoring of the 60-inch culvert. HW recommends that consideration be given to potential monitoring in the Final CMP.

25. HW recommends that a sediment sampling program be included in the CMP to measure at a minimum total suspended sediment (TSS) and total Phosphorus (TP) discharging from the 60-inch culvert, pre-development, at intervals during construction, and post-construction.

    The Updated CMP did not address potential monitoring of the 60-inch culvert. HW recommends that consideration be given to potential monitoring in the Final CMP.

26. The Spill Prevention, Control, and Countermeasure (SPCC) plan shall be included as part of the final CMP.

    HW recommends that the SPCC Plan be included in the Final CMP.

27. The Stormwater Pollution Prevention Plan (SWPPP) shall be included with the final CMP. The SWPPP is a living document and may require modifications during construction.

    Page 19 of the Updated CMP references the SWPPP. No further comment.

28. The SWPPP shall detail stormwater diversion methods to prevent sediment from entering the municipal system including the 60-inch culvert.

    HW recommends that the SWPPP detail stormwater diversion methods to prevent sediment from entering the municipal system including the 60-inch culvert.

29. The SWPPP shall include inspection of sediment and erosion controls within 24 hours of storm events which have 0.25-inches or greater of precipitation.

    Page 18 of the Updated CMP notes that inspections will occur following every storm event of 0.5-inches or greater. HW has no objection.

MEMO

TO: David Roache – Mark Development

FROM: Fernand Tomaz

PROJECT NAME: Riverside Station Development Utility Coordination

PROJECT NUMBER: B1912300.001

SUBJECT: **Fire Flow Test**

DATE: May 28, 2020

We reviewed the hydrant flow test performed by VHB on 3/16/2020 (see attached document), which indicates that the pressure in the residential area located south of the proposed site appears to have high pressure, and the flow appears to be adequate to support the new Newton Riverside Development.

There are two water mains in Grove Street adjacent to our site, which are an 8" and 12" mains, both appear to be gridded. Note well, the 8" main serves the residential area, whereas, the proposed site will be fed off the 12" main.

At full flow, the hydrant flow test was performed on the 12", near the proposed site, whereas, the pressure was taken off the 8" adjacent to the residential area.

Based on the conceptual plans, this mixed-use development consisting of a hotel, R&D lab office, 8 residential buildings, retail, and large parking garage, the peak load is in a range of 2,000 to 2,300 gpm.

With that said, based on the flow data, the system could deliver the 2,000 gpm at a reasonable pressure and expect similar (minimal) pressure drop on the 8" main, as was revealed by the flow test. The hydrant flow at proposed site is close to our projected peak domestic water demand and would lead us to think that the drop in pressure adjacent to the neighborhood would be minimal.

Once the designs of the building progresses, we should revisit this question.

WSP would recommend the following : Provide updated flow tests on the out-of-function hydrant, confirm hydrant and main relation, and a municipal flow model should be performed to validate the new flows and provide detailed flow and pressure calculations to confirm the impact on the local neighborhood.

If you have any questions or would like to discuss, please do not hesitate to contact me.

Attachment

WSP USA
Suite 210
88 Black Falcon Avenue
Boston, MA 02210

Tel.: +1 617 210-1600
Fax: +1 617 210-1800
wsp.com

Field Notes

Date: 3/16/2020 **Notes Taken By:** MGH

Place: Grove St, Newton, MA 02462

Project No.: 10865.03 **Re:** Hydrant Flow Test

VHB met with Newton Utilities on site to perform hydrant flow test at four (4) fire hydrants along Grove St (See Figure 1).

Test #1:

- Static and residual readings (See below) were recorded on hydrant #1 (See Figure 1), while hydrant #2 was flow. Flow reading was not recorded on hydrant #2 due to defective gauge on diffuser.
- Newton Utilities noticed water leaking through landscape area around hydrant #2 during flow (See Figure 2) and would not re-open hydrant #2 once VHB had replaced gauge on diffuser.

Test #2:

- VHB intended to static hydrant #2 and flow hydrant #1.
- Newton Utilities noticed water leaking through landscape area around hydrant #2 (See Figure 2) during Test #1 and would not open hydrant #2.

Test #3:

- VHB Intended to static hydrant #3 and flow hydrant #2.
- Newton Utilities informed VHB that Hydrant #3 had been decommissioned and would not be opened.
- Newton Utilities would not open hydrant #2 – see Test #1 description for further details.

Test #4:

- VHB intended to static hydrant #4 and flow hydrant #1.
- Static and residual readings (See below) were recorded on hydrant 4 (See Figure 1), while hydrant #1 was flow. Flow reading was recorded on hydrant #1 (See below).

Flow Test Information Sheet

VHB Project Number: 10865.03

VHB Project Name: Riverside Station

Location of Test: Grove St, Newton, MA 02462

Fire hydrant No., if any: 1

Date & Time of Test: Date: 03/16/2020 Time: 10:20 (AM) (PM)

Temperature 31 (F)

Test conducted by: MGH/ASB

Test witnessed by: MGH/ASB

Name of Water District: Newton Utilities (Water & Sewer)

Name of Fire District:

Source of Water Supply: Gravity ☐ Pump ☒ Other

Is water supply provided by: PRV STA's ☐ Yes ☐ No ☐ Other

Area Map: (Draw sketch showing property location: bounding streets and names, north arrow, hydrant location and identification numbers, distances from hydrants to property, elevations of hydrants and building floors & grade, all water mains and sizes interconnection valves, etc.)

See Figure 1 for area map.

Notes:

*** Flow reading was not recorded at hydrant 2 (see location map below), due to faulty Gauge.**

*** Newton Utilities noticed water leaking through landscape area around hydrant 2 (See Figure 2).**

*** Newton Utilities would not re-open hydrant 2 (once gauge had been replaced), due to water leaking through landscape area around hydrant 2.**

****Newton Utilities informed VHB that hydrant 3 (see figure 1) had been taken out of commission and could not be opened.**

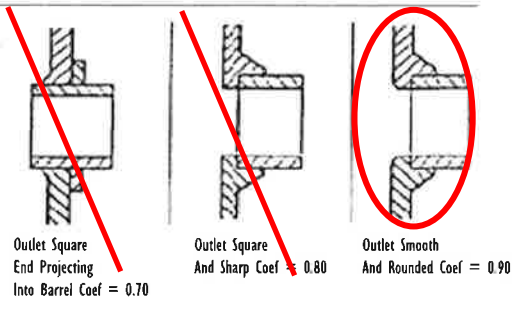
Flow Test Data

Flow at Hydr. No.	Elevation at Hydr.	Static at Hydr. No.	Static PSIG	Residual PSIG	Flow PSIG	Outlet size and coefficient		GPM
2	-	1	97	91	*	2.5	0.9	
3	-	1	**	**	**			

Miscellaneous Comments:

Signed: Max Hagemann

Witness:



Flow Test Information Sheet

VHB Project Number: 10865.03

VHB Project Name: Riverside Station

Location of Test: Grove St, Newton, MA 02462

Fire hydrant No., if any: 4

Date & Time of Test: Date: 03/16/2020 Time: 10 (AM) (PM)

Temperature 31 (F)

Test conducted by: MGH/ASB

Test witnessed by: MGH/ASB

Name of Water District: Newton Utilities (Water & Sewer)

Name of Fire District:

Source of Water Supply: Gravity ☐ Pump ☒ Other

Is water supply provided by: PRV STA's ☐ Yes ☐ No ☐ Other

Area Map: (Draw sketch showing property location: bounding streets and names, north arrow, hydrant location and identification numbers, distances from hydrants to property, elevations of hydrants and building floors & grade, all water mains and sizes interconnection valves, etc.)
See Figure 1 for area map.

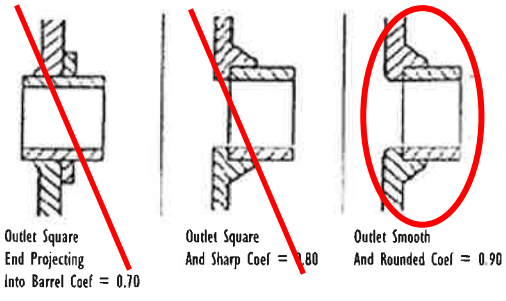
Flow Test Data

Flow at Hydr. No.	Elevation at Hydr.	Static at Hydr. No.	Static PSIG	Residual PSIG	Flow PSIG	Outlet size and coefficient		GPM
1	-	4	106	98	46	2.5	0.9	1138

Miscellaneous Comments:

Signed: Marc Hogenauer

Witness:



Hydrant Flow Test Calculations

Project Name: Riverside Station **Proj. No.:** 10865.03

Date: 3/16/2020

Project Location: Grove St, Newton **Calculated by:** MGH/ASB

Hydrant #4 Flow Test Summary

Hydrant #4	
OUTLET SIZE (INCHES)	2.50
OUTLET COEFFICIENT	0.90

Hydrant #5	
OUTLET SIZE (INCHES)	2.50
OUTLET COEFFICIENT	0.90

$$Q = 29.83CD^2\sqrt{P}$$

Q = Flow Rate (gpm)
C = Outlet Coefficient
D = Outlet Size (inches)
P = Pressure (PSI)

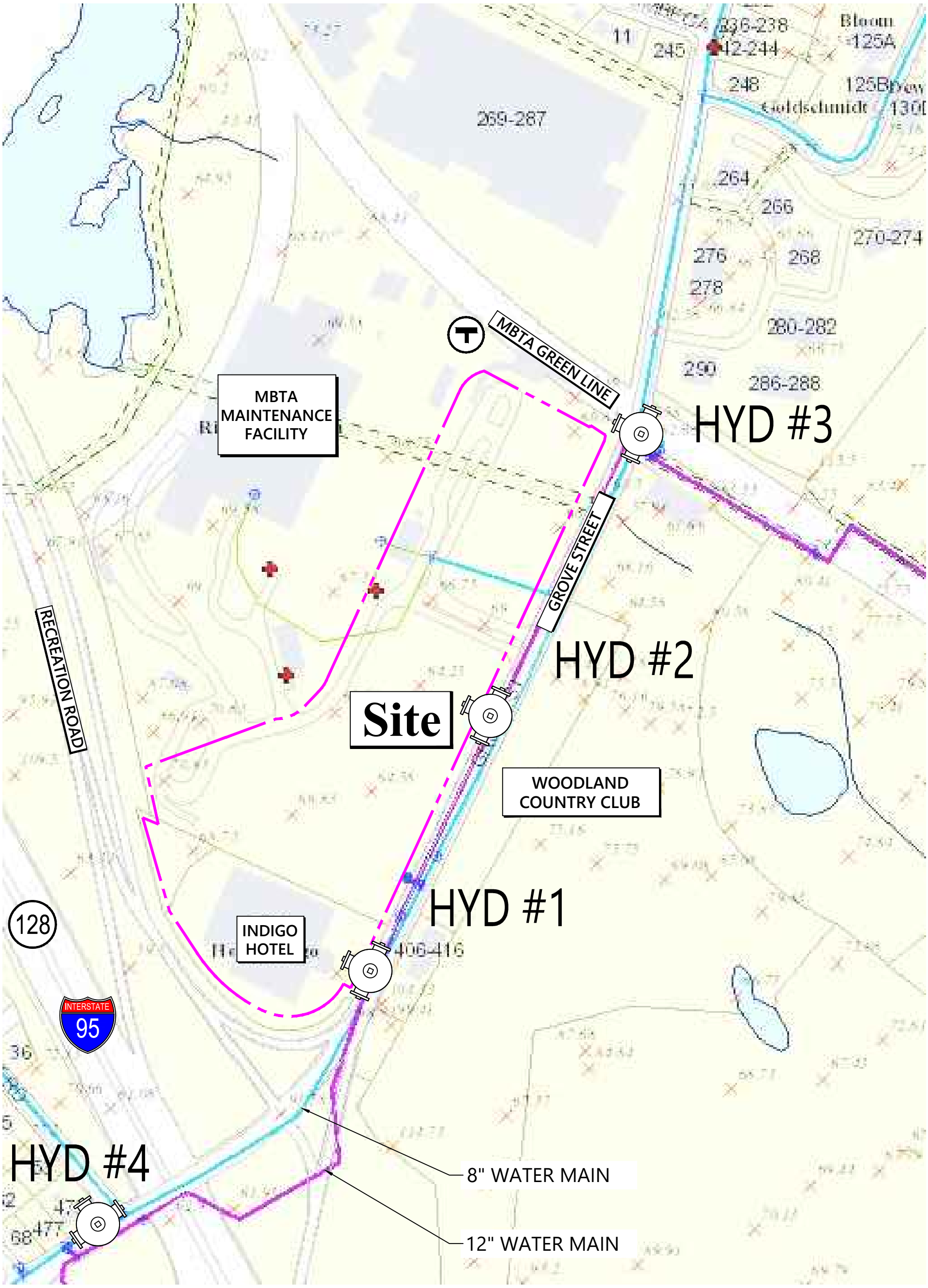
Observed Flows

Hydrant #	Flow (PSIG)	Equivalent Flow (gpm)
1	46	1138

$$Q_{20} = Q_{obs} \cdot \frac{D_D}{D_{obs}}^{0.54}$$

Q_{20} = Flow at 20psi (gpm)
Q_{obs} = Observed Flow (gpm)
D_D = Desired Pressure Drop (Static to Residual) (PSI)
D_{obs} = Observed Pressured Drop During Test (PSI)

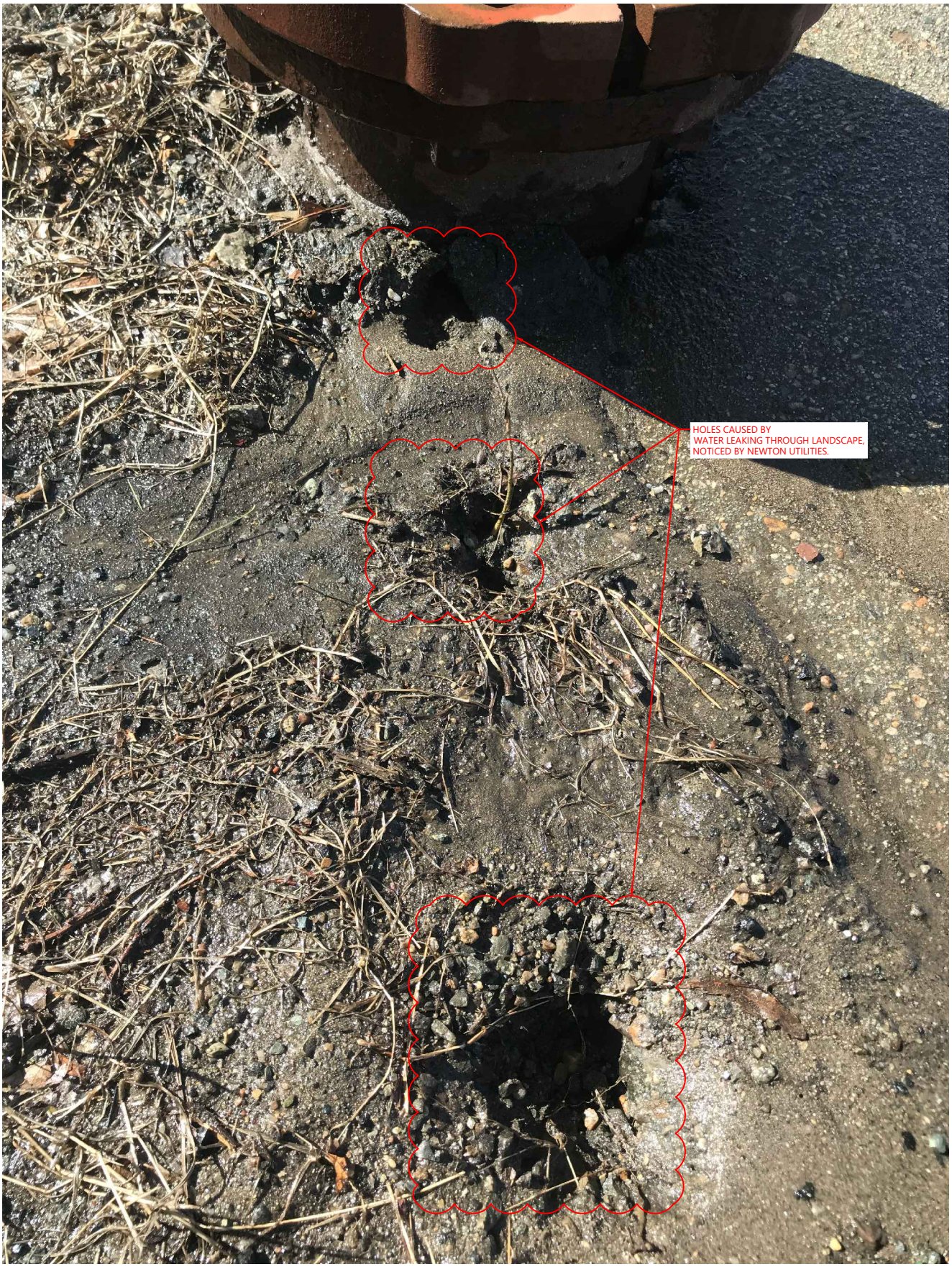
Test #1	Static (PSIG)	Residual (PSIG)	Q_{obs} Flow (gpm)	Q_{20} (gpm)
4	106	98	1138	4103



Fire Hydrant Flow Test Locations
333 Grove Street
Nerton, MA 02466

Figure 1

March 16, 2020



Hydrant #2 Holes
333 Grove Street
Nerton, MA 02466

Figure 2

March 16, 2020

TATA & HOWARD

May 8, 2020

Mr. Ted Jerdee, Director of Utilities
City of Newton DPW
1000 Commonwealth Avenue
Newton, MA 02439

Subject: Riverside Station Redevelopment Hydraulic Analysis
T&H No. 6226-03

Dear Mr. Jerdee:

As requested, Tata & Howard has performed a hydraulic analysis of the proposed Riverside Station Redevelopment project. The proposed project is located off Grove Street northeast of I-95 and includes both commercial and residential buildings. Reportedly, demands in the development will be between 96,000 to 140,000 gallons per day (62 to 97 gallons per minute (gpm)). It was assumed that the peak hour demand in the proposed development could be as high as 375 gpm or six times the average day demand. The peak hour demand was estimated for the sole purpose of evaluating the potential impact on the system and does not represent a comprehensive analysis of the proposed peak hour water usage.

The model was run under maximum day demand, 13.4 million gallons per day (mgd) and peak hour, 22.9 mgd, and conditions with both the Commonwealth Avenue Pump Station online and offline. The table below describes each scenario and includes system demands, the status of the Commonwealth Avenue Pump Station, demand at the proposed development, pressure at the proposed development, and pressure at Newton Wellesley Hospital.

Tata & Howard
67 Forest Street | Marlborough, MA 01752
T: 508-303-9400 | F: 508-449-9400
www.tataandhoward.com

Other Offices
MA | NH | CT | ME | VT | AZ

Modeling Summary

Scenario	System Demand (mgd)	Comm Ave Pump Station Status	Development Demand (gpm)	Pressure at Development (psi)	Pressure at Newton Wellesley Hospital (psi)
1A	13.4	Offline	0	88	59
1B	13.4	Offline	62	87	59
2A	13.4	Online	0	107	78
2B	13.4	Online	62	107	78
3A	22.9	Offline	0	52	24
3B	22.9	Offline	97	51	23
3C	22.9	Offline	375	48	20
4A	22.9	Online	0	94	65
4B	22.9	Online	97	93	65
4C	22.9	Online	375	91	63

Demands at the proposed development will not negatively affect pressures in the system or at the Newton Wellesley Hospital. Pressure issues at Newton Wellesley Hospital are present during peak demand with the Commonwealth Avenue Pump Station office with and without the new development. While the peak water usage at the Riverside Development reduces the pressure at the hospital further with the Commonwealth Avenue Pump Station offline, it should be noted that currently, the existing pressure under the same conditions without the development is not adequate. In order to provide adequate pressure at the hospital, the Commonwealth Avenue Pump Station needs to be online. If you have any questions, please do not hesitate to contact us.

Sincerely,

TATA & HOWARD, INC.

Karen L. Gracey, P.E.
Co-President

TATA & HOWARD

CITY OF NEWTON
Department of Public Works
ENGINEERING DIVISION

MEMORANDUM

To: Council Rick Lipof, Land Use Committee Chairman

From: John Daghlian, Associate City Engineer

Re: Special Permit – *Riverside Station*

Date: May 29, 2020

CC: James McGonagle, Commissioner DPW
Shawna Sullivan, COS DPW
Barney Heath, Director of Planning
Jennifer Caira, Deputy Director
Lou Taverna, PE City Engineer
Ted Jerdee, Director of Utilities
Doug Valovcin, Deputy Director of Utilities
Nadia Khan, Committee Clerk
Neil Cronin, Chief Planner
Michael Gleba, Sr. Planner
Katie Whewell, Sr. Planner

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

Riverside Station
Grove Street
Prepared by: VHB Inc.
Dated: December 9, 2019
Revised: April 28, 2020

Executive Summary:

This project involves a proposed *"Smart Growth"* mixed-use development that entails construction of 10 buildings: (a hotel, multiple offices, residential, parking garage, and retail space) on 14.4 acres [627,264 square feet] parcel. The entire property is owned by the MBTA totaling 22.5 acres.

Sheet C 2.0 indicates four separate lots; three lots for the development that will comprise of the 14.4 acres and the second lot of 8.1 acres to remaining as MBTA riverside station-garage & tracks. Typically when multiple lots comprise a project site they are combined into one lot should this permit obtain approval, an Approval Not Required (ANR) plan will be needed in accordance to Massachusetts General Laws Chapter 41 Section 81P requiring the multiple lots to be combined into one lot. This plan must be recorded at the Middlesex Registry of Deeds, so that the Conditions of Approval and the Board Order runs with the consolidated property. The Engineering Division's understanding is that portions of the lot will be under a lease agreement and only the land of the future hotel is owned in the name of the applicant; the Engineering Division would request that the Law Department to comment on the standard requirement of common ownership and how the Board Order and conditions will be recorded at the Middlesex Registry of Deeds.

To properly assign legal addresses to the proposed buildings that the *U.S. Postal Service* will recognize and to help navigate emergency 911 responders, the applicant will eventually have to apply for a Definitive Subdivision plan to create a private *"named way"* so that addresses can be officially assigned by the City Engineer. The official naming of ways is via approval of the City Council.

The siting of a proposed residential building labeled '*building # 4 & a portion of #10* are directly over an existing 48" diameter water transmission main, owned by the *Massachusetts Water Resource Authority* (MWRA). The Authority is requiring the applicant to relocate a portion of it so that the water main is completely accessible. Based on the proposed alignment soil boring investigation is required to determine if some blasting and/or hammering of ledge may be required for the relocation of the water main, and construction of some components of '*Building 1*' along the property line and Route 128. This work will require an MWRA 8M permit as well MassDOT permits.

Vehicular access is proposed from three points; the first, is an interface with *Interstate Route 95/128 & Recreational Road*; this access driveway is under negotiations with MassDOT & the Federal Highway Administration. The second access point is from a new driveway approximately 84-feet southerly from the existing driveway on Grove Street, and a third proposed access point that is an "emergency access" driveway, to deter regular use of this entry point, removal bollards are proposed along the curb cut placed between the gutterline of the road and proposed bike path. This driveway is approximately 300-feet northerly from the current driveway, sight distance for motorists is a concern as this driveway is near the curvature of Grove Street looking northerly. A stopping sight distance plan is needed to ensure adequate stopping distance is available for the posted speed limit of Grove Street. Additionally, a turning template plan will be needed to verify safe access for emergency vehicles (Fire aerial trucks & buses) to the site.

An existing 60" diameter reinforced concrete drainage pipe which transmits *Runaway Brook* [flowing east to west] from the Woodland Country Club then under Grove Street and is within a 30-foot wide City main drain easement traverses the site to the Charles River. Prior to any Building Permit being issued or construction activity, the applicants will have to conduct a Closed Circuit Television (CCTV) inspection along with a tracer unit to pinpoint the actual pipe alignment on the surface to ensure that the drain pipe is within the actual easement limits, this is needed to ensure that the proposed building foundations do not interfere with the drain pipe. The CCTV inspection must be witnessed by the Engineering Division, a copy of the video, report, alignment & easement plan shall be submitted to the City Engineer & Director of Utilities for review. Various utilities encroach this City easement, it is recommended that alternate routes be provided, otherwise license agreements will be required. Cross-sectional details are needed for utilities that transverse the culvert. The limits of the easement shall also be delineated on the site via a survey layout for confirmation.

Various portions of the proposed roadways have a 1% cross-slope; this is a relatively flat cross-slope for proper drainage; the slope should be increased to help direct sheet flow to the catch basins.

It appears that the overhead wires along Grove Street are to be placed underground along the entire frontage of this petition. The applicant needs to demonstrate that adequate electrical power supply & distribution is available for this development, since this project is in close proximity to the *Lower Falls* which recently has experienced frequent power outages, the applicant and Eversource Electric need to assure the City that adequate power is available for the demand from the site and that no negative impact will be placed on the homes or businesses in Lower Falls.

Grove Street is a Scenic Road per City Ordinance, and any tree removal, curb line modification and street modifications need to be approved by the Planning Board. The proposed sidewalks & bicycle paths that terminate at *road B* need ADA tactile warning plates ADA Solution "wet set" or equal in Federal Yellow. Will the developer clean snow and ice off the proposed sidewalk & bike path along Grove Street? It appears that the bike path towards the east of road B fades out, clarification is needed for the transition as the plan is not clear at this point.

A separate utility demolition plan is required as the site has several existing utilities that conflict with proposed building footprints, additionally detailed utility plans are needed at larger scale to determine the constructability of the utilities the 1"=40 scale is too small to determine if conflicts are expected and minimum separation distances are achievable.

The design entails natural gas services to each building, the applicant and Nation Grid need to demonstrate that the existing gas main within Grove Street has adequate capacity provide for the development and to ensure that the area is not negatively impacted.

Emergency Evacuation System:

The Riverside MBTA Station is part of the Federal & State Emergency Evacuation System, it is imperative to note that the Station access must never be hindered during construction process. The applicant and all contactors shall coordinate construction activity with the City's Emergency Response Teams.

Drainage & Environmental:

1. The Riverside site essentially has little to no stormwater controls, every catch basin discharges through a closed network of pipes directly to the City's 60" ϕ pipe with little to no treatment and no control. The proposed drainage improvements will enhance both water quality and quantity exiting the site. The proposed systems meet DEP & DPW Stormwater Management Requirements. In addition to reducing volume and flow rate off the site, the proposed system reduces phosphorous loading rates that discharge to the Charles River through on-site infiltration system.

2. Further detailed profiles of each infiltration system are required, in addition to on-site soil investigation (test pits & percolation test) each recharge systems, all tests are required within 25-feet of each system and must be witnessed by the Engineering Division. As the site exists today there is a concern about the possibility of contaminated soils from railroad yard runoff, and if this is the case, how will the soils be treated prior to any infiltration systems coming online.

3. The long-term Operations and Maintenance (O&M) plan for Stormwater Management Facilities is acceptable and if the project is approved the O&M must be incorporated into the deeds; and recorded at the Middlesex Registry of Deeds. A copy of the recording instrument shall be submitted to the Engineering Division. Maintenance records shall be kept by the property owner and submitted as outlined by the O&M to the City.

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

5. Any overflow connection to a City drainage system, will require Pre & Post-Construction inspection via Closed Circuit Television (CCTV) and the inspection must be witnessed by the City Engineer. All overflow connections connecting to the City's 60-inch reinforce concrete pipe shall be cored by mechanical system, jackhammering will not be permitted.

6. It appears that the southwest corner of building #3 will be over the existing 10" drainpipe, the pipe needs to be re-routed, as there is no note that it is to be abandoned.

7. The proposed DMH #13 that is directly over the 60" pipe shall be a vault built around the culvert, separate design and details and requirements will be implemented by the Utilities Division, the engineer of record shall coordinate the final design with the Utilities Division. By-pass pumping maybe needed during the construction of the vault.

8. The drainpipe behind building #7 needs to be re-routed this is not shown on the plans.

9. Catch basins with Grove Street shall have Neenah R-3705 (or equal) gas trap outlets.

10. On sheets C – 9.2 & 11.4 the base for the trench drain needs a concrete base below the frost line to prevent frost heaving. Additionally, the grate shall be ADA compliant.

11. On sheet 11.4 the infiltration unit SC-740 needs to have filter fabric planed over the entire system then a 3" layer of peastone and covered with filter fabric. Additionally, inspection & cleaning out ports are needed.

12. On sheet C-11.5 the Planted Biofiltration Island the perforated pipe needs to be specified with a filter sock wrap in addition to the choker layer.

13. The proposed biofiltration basin should be relocated outside of the City's drain easement and off the 60" RC pipe, otherwise a license agreement will be needed.

14. All catch basins within the construction zone shall have temporary siltation control; installed and maintained by the contractor of record.

Construction Management:

A detailed construction management plan [CMP] is needed for this project. At a minimum, it must address the following: staging site for construction equipment, lay down areas identified for construction materials, delivery of materials, trucking routes, parking of construction worker's vehicles, phasing of the project with anticipated completion dates and milestones, safety precautions, emergency contact personnel of contractor. Excavation and shoring methodology for each building.

The CMP also needs to address any anticipated dewatering during construction, site safety & stability, any impact to abutting properties. Additionally, it must address the need to keep the Riverside Station open for commuters and navigation on the site for pedestrians, motorist, and emergency responders.

Stabilized driveway entrances are needed during construction in concert with a tire wash and mud removal to ensure City streets are kept clean, and to control dust from the site.

Since Grove Street only has an accessible sidewalk along the west side of the street, pedestrian access needs to be addressed when the undergrounding of the power and telecommunications phase of construction commences, and for the duration of construction when new curbing and sidewalks are updated. A protected (via jersey barriers) temporary 6' wide sidewalk in conformance with ADA & AAB Standards and City requirements will be required to help pedestrian navigate along Grove Street.

A site safety plan is needed which will show paths of travel for emergency vehicle access during construction. How the site will be secured during construction and after hours. The applicants shall obtain Newton Police Details during construction hours for safe passage of motorist, pedestrians, and commuters.

If the project is approved, upon completion of all utility, sidewalk & curb line improvements Grove Street shall be milled *1-1/2" - 2"* deep and paved with the City's Hot Mix Asphalt specification of *Superpave*, for the entire frontage of the project site, or to the limits as determined by the DPW.

If the project is approved, the contractor of record shall arrange a Pre-construction meeting with the various City Departments involved with construction including but not limited to (Police, Fire, School Bus, ISD, DPW, Health) along with private utility companies.

Environmental:

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

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

3. As the total site disturbance is over an acre, a Phase II General Construction (NPDES) Permit will need to be filed with DEP & EPA. A Stormwater Pollution Prevention Plan (SWPPP) will need to be developed.

4. Are any of the proposed infiltration systems located in areas that have contaminated soils?

Sanitary Sewer:

1. The sewer mains proposed for this development will be considered as a *"private sewer connection"* and not a City main. Ownership and long-term maintenance shall be the responsibility of the applicant/property owner(s).

2. Detailed profiles are needed of the proposed sewer main installation, stationing and offsets for each manhole are needed starting from Sta 0+00 at the existing sewer manhole within the state highway and extending upstream to the last manhole. The profiles need to show the centerline grade of the road and all utilities within 10-feet, the pipe material must be listed, proposed slope(s), rim and invert elevations of each manhole.

3. Hydraulic capacity calculations for each section of pipe is required to justify the sizing of each run between manholes for the anticipated flows from the buildings.

4. All new sewer service(s) shall be pressure tested and videotaped after final installation is complete. All sewer manholes shall be vacuum tested in accordance to the City's Construction Standards & Specifications. The sewer service(s) will NOT be accepted until testing is satisfactorily completed. 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 and a written report is received by the City Engineer. ***This note must be added to the final approved plans***.

5. Except for natural gas service(s), all utility trenches within the City's right of way shall be backfilled with Control Density Fill (CDF) Excavatable Type I-E, a detail is available in the City of Newton Construction Standards Detail Book.

6. Floor drains of parking garages must be connected to the sanitary sewer via MDC gas traps details are needed.

Infiltration & Inflow: Via a separate memo.

Water:

1. The applicant shall coordinate with the Director of Utilities a quantitative analysis that demonstrates that the water demands of the proposed development will not overburden the water supply of existing infrastructure provided by the City. It shall include fire flow testing for the proposed fire suppression system for each building, exterior fire hydrants, as well as domestic demands from the entire development. The applicant must coordinate these tests with both the Fire Department and Utilities Division; representatives of each department shall witness the testing and test results shall be submitted in a written report. Hydraulic calculations shall be submitted to the Fire Department for approval. Hydraulic analysis for both domestic and fire suppression will be required via hydraulic modeling in a format acceptable to the Utilities Director.

2. The proposed alignment of the new 12" water line between buildings #3 & 4 is directly beneath a series of stairs which is not acceptable for the Utilities Division; an alternate route should be considered.

3. The developer shall install new water mains and hydrants throughout the development within their proposed "Main Street". This water main will be owned and operated by the developer, not the City as it will be considered a service connection for the entire development. This water main shall be looped and tied into the existing 12" water main in Grove Street at 2 locations, one toward the west end of the development, and one towards the east end of the development. Each tie in shall be triple gated. Master water meters and meter pits are required at each tie in location, within the development property. If it is feasible to put the master meters inside a building or a parking garage, would be acceptable. The water meters will be owned by the City. All water distribution piping and hydrants beyond the meters within the development will be owned and operated by the developer. The proposed water meter vaults or pits should be located as close as possible to the sidewalk along Grove Street, access easements to the City maybe required for these vaults.

4. The metering vaults/pits will require electric service for lights, pumps and exhaust fans that come on when the light switch is turned on. The power consumption shall be provided by the developer. All meter installed should conform with the (Automatic Meter Reader (AMR) system that the City uses; additional conduit may be needed to be installed to locate the transmitter outside of the vault. If the project is approved the developer shall arrange a meeting with the Utilities Division to work out the various components, details and requirements for water services.

5. All water connections shall be chlorinated & pressure tested in accordance to AWWA and the City of Newton Construction Standards and Specifications prior to opening the connection to existing pipes.

6. Approval of the final configuration of the water service(s) shall be determined by the Utilities Division, the engineer of record should submit a plan to the Director of Utilities for approval. Fire & domestic water service connections shall be separate dedicated services tapped from the main.

7. Any water needed during construction for dust control, or other construction activities shall be provided via a temporary hydrant meter and backflow preventor obtained from the Utilities Division.

8. Sheet C -10.1 Building #1 does not have domestic or fire suppression service connections. Water supply lines for the proposed hotel is not shown.

9. Sheet C-10.2 building #6 does not have water services shown.

10. Sheet C-10.1 building #3 the domestic and fire suppression service lines must be separate connections off the main.

11. The intersection of road "A" and Main Street has a lot of utilities converging into a tight area, detailed cross-section and/or profile(s) will be needed to ensure conflicts in utilities are avoided specifically near the new 48" MWRA trunk line.

12. An existing hydrant near the MBTA yard behind buildings # 9 &10 has a note "hydrant to remain", however it is unclear as how this hydrant will be supplied with water.

13. The hydrant detail needs to specify *American Darling* "*Open Right*".

Blasting:

1. Any blasting that is expected will require a Blasting Permit [which will include a pre-blast survey and associated monitoring] from the Newton Fire Department.

2. If an on-site rock crushing operation is planned, the applicants need to address issues regarding: noise control & dust control, trucking operations, and hours of crushing operations.

Grade Changes:

- All retaining walls over 4-feet will need a safety fence along its entire length. All retaining wall construction shall be reviewed and approved by the Inspectional Services Department.

Building Permits and Certificate of Occupancy:

1. A project of this magnitude will obviously be started and completed in various phases; a phasing plan is needed to properly plan the issuance of various permits. It shall be required that all underground utilities be fully installed, tested, and approved by the DPW before any building permit is issued to minimize on site conflicts and activities.

2. If this project is approved each building construction will require complete Building Permits from Inspectional Services Department.

Trash & Recycling:

- The developer shall engage private services for trash & recycling for the entire development, the City encourages that composting also be provided for the project.

General:

1. Sheet L 1.2 indicates "Vehicular Bollard Operable" a detail is needed for this feature that is to be placed at the emergency access driveway.

2. Sheet C-7.2 shows various cross-sections for the roadway, station numbers and range need to be added to the cross-sections.

3. The mountable granite curb detail needs to be completely set in cement concrete to prevent settlement from heavy truck loads.

4. Sheet C-11.1 ADA tactile panels detail the City recommends the use of our standard ADA "Wet Set" Solutions or equal in Federal Yellow for uniformity throughout the development and along Grove Street.

5. Clarification is needed for the material that will delineate the division between the sidewalk & bike path along Grove Street. Ideally it should be a textured & reflective type of material.

6. As of January 1, 2009, all trench excavation contractors shall comply with Massachusetts General Laws Chapter 82A, Trench Excavation Safety Requirements, to protect the general public from unauthorized access to unattended trenches. Trench Excavation Permit required. This applies to all trenches on public and private property. This note shall be incorporated onto the plans

7. All tree removal shall comply with the City's Tree Ordinance.

8. Due to the total square footage of the buildings, a scale-massing model will be needed.

9. The contractor 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 service, and drainage system installation. The utility is question shall be fully exposed for the inspector to view; backfilling shall only take place when the City's Inspector has given their approval. This note should be incorporated onto the plans

10. The applicant will have to apply for Street Opening, Sidewalk Crossing, and Utilities Connecting permits with the Department of Public Works prior to any construction. This note must be incorporated onto the site plan.

11. The applicant will have to apply for a Building Permits with the Department of Inspectional Service prior to any construction.

12. Prior to Occupancy Permit being issued, an As-Built Plan shall be submitted to the Engineering Division in both digital format and in hard copy. The plan should show all utilities and final grades, any easements and final grading. This note must be incorporated onto the site plan.

13. Since this development will be phased, Certificate of Occupancy request for each separate building can be applied, however all infrastructure associated with the specific building shall be completed and acceptable to the City Engineer. This note must be incorporated onto the site plan.

14. The contractor of record shall contact the Newton Police Department 48 hours in advanced and arrange for Police detail to help residents & commuters navigate around the construction activity and the coordination of delivery trucks and materials.

15. If any changes from the original approved design plan that are required due to unforeseen site conditions, the engineer of record shall submit a revised design & stamped and submitted for review and approval prior to continuing 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