



April 20, 2022

Ms. Valerie Oorthuys, Town Planner
Bolton Town Hall
663 Main Street
Bolton, MA 01740

Re: Second Stormwater Technical Peer Review
Comprehensive Permit Application – ALTA Nashoba Valley
580 Main Street, Bolton MA

Dear Ms. Oorthuys:

The Horsley Witten Group (HW) is pleased to provide the Bolton Zoning Board of Appeals (ZBA) with this letter report summarizing our second technical peer review of the multi-family residential development proposed at 580 Main Street in Bolton, MA (Assessor's Map 4C Lot 24). Allen & Major Associates, Inc. has prepared the Comprehensive Permit plan set and Project Narrative & Drainage Report on behalf of Limited Dividend Affiliate of WP East Acquisition, LLC (Applicant). The proposed development, submitted in accordance with Massachusetts General Law Chapter 40B, Section 20-23, includes four (4) three-story residential buildings (229 units), a clubhouse, a mail center, and access road, 382 parking spaces and supporting infrastructure. The project includes private on-site wells for water supply, and a private on-site wastewater treatment system.

The subject property contains approximately 39 acres of land and is the current location of the Bolton Office Park, which will be modified under a separate application to allow for the proposed development. The subject property is proposed to be divided into two parcels: Lot 1 will be created for the modified Bolton Office Park, and Lot 2 (comprised of 32.4 acres) will be created for the proposed residential development. The existing access driveway into the site will be preserved and will provide access for the proposed development, the existing senior housing facility, and the existing office building. Located within the Limited Business (LB) Zoning District and adjacent to the Residential Zoning District, the 39-acre parcel contains several resource areas including Bordering Vegetated Wetlands (BVW), Isolated Vegetated Wetlands (IVW), Riverfront Area, and Bordering Land Subject to Flooding (BLSF). HW understands that the Applicant will be required to file a Notice of Intent (NOI) with the Bolton Conservation Commission for work proposed within these resource areas as well as the wetland buffer zones.

Documents Reviewed

HW has received the following documents in response to our initial review dated February 4, 2022:

- Response to Peer Review Comments letter, prepared by Allen & Major Associates, Inc., dated April 12, 2022, (142 pages) including attachments:
 - Hantush Groundwater Mounding Spreadsheets
 - Appendix G – HydroCAD
 - Appendix I – Operation & Maintenance Plan
 - Appendix A – Supplement Information
 - Appendix B – Site Plan (dated 4/12/22)
 - Appendix J – Watershed Plans
- Plan Set entitled “Application for Comprehensive Permit, Alta Nashoba Valley, 580 Main Street, Bolton, MA”, prepared by Allen & Major Associates, Inc., and Market Square Architects, dated September 10, 2021, revised through April 12, 2022, which includes:
 - Title Sheet
 - Existing Conditions V-101 – V-104
 - Notes & Abbreviations C-001 – C-002
 - Conceptual Property Line Modification C-003
 - Erosion Control Plan C-100
 - Overall Layout and Materials Plan C-101
 - Layout and Materials Plan C-102 – C-104
 - Overall Grading and Drainage Plan C-105
 - Grading & Drainage Plan C-106 – C-108
 - Overall Utilities Plan C-109
 - Utilities Plan C-110 – C-112
 - Details C-501 – C-507
 - Vehicle Movement Plan C-601
 - Service/Delivery Vehicle Movement Plan C-602
 - Landscape Plan (by Grady Consulting, LLC) 1
 - Arch Plans – Building 1 B1.A1.01 – B1.A2.00
 - Arch Plans – Building 2 B2.A1.01 – B2.A2.00
 - Arch Plans – Building 3 B3.A1.01 – B3.A2.00
 - Arch Plans – Building 4 B4.A1.01 – B4.A2.00
 - Arch Plans – Clubhouse CH.A1.01 – CH.A2.00
 - Arch Plans – Garages GA.A1.01 – GC.A2.01
 - Arch Plans – Mail and Parcel MP.A1.01 – MP.A2.01

In addition to the materials above, HW reviewed relevant source data from MassGIS to better understand site constraints and context.

This second peer review dated April 20, 2022 does not include the Wetlands Resources portion. The wetlands review will be submitted at a later date.

Stormwater Review

The proposed stormwater management design includes a closed drainage system consisting of deep sump hooded catch basins, drain manholes, and proprietary treatment units, and two (2)

subsurface infiltration chamber systems. There are two existing stormwater wet basins on the property which also serve as fire ponds, and these will be preserved. The proposed disturbance is greater than one acre and a portion of the work is within the 100-foot buffer zone of a BVW, Riverfront Area associated with Great Brook, and Bordering Land Subject to Flooding. HW based our review on the Massachusetts Stormwater Handbook (MSH) dated February 2008 which includes ten stormwater performance standards that apply to the proposed project, the Massachusetts Wetlands Protection Act (310 CMR 10.00), and standard engineering practice.

According to the MSH, the project is considered to be a mix of redevelopment and new development due to the existing office building, parking lots and maintained landscape area currently occupying most of the project area. The Applicant has explained that the front portion of the project area is being considered redevelopment while the remainder of the project was designed as new development. HW agrees with the Applicant's designations, which are consistent with the intent of the MSH. The new development portion(s) must fully comply with the Stormwater Standards, while the redevelopment portion is only required to comply with certain standards to the maximum extent practicable. Further information on the redevelopment requirements can be found in the discussion of Standard 7 below.

After reviewing the documents listed above, HW offers the following comments, which are presented in accordance with the ten Massachusetts Stormwater Standards:

1. ***Standard 1 states that no new stormwater conveyances may discharge untreated stormwater directly to or cause erosion in wetlands of the Commonwealth.***
 - a) The project includes two new outfalls for each subsurface infiltration system, which will discharge treated stormwater at stabilized outlets protected by riprap energy dissipators as detailed on Sheet C-503. The outlets for Subsurface Infiltration System 1 discharge treated stormwater to the south, into the BVW at the rear of the site. The outlets for Subsurface Infiltration System 2 discharge treated stormwater to the east toward Great Brook and the adjacent BVW. HW notes that the riprap energy dissipators do not appear to be drawn to scale on the Grading & Drainage Plans and recommends that the Applicant revise them for consistency with the detail on Sheet C-503.

April 20, 2022: The Applicant has revised the scale of the riprap aprons as suggested. HW has no further comment.

- b) It does appear that both systems are discharging within feet of the edge of the adjacent BVWs. HW recommends that if feasible the Applicant pull back the outfalls to respect the local 25-foot buffer zone. It is not clear why the Applicant has chosen to create a parking lot on the east side of the site within an existing grassed area so close to the wetland and in turn remove an existing parking lot that is further from the wetland.

April 20, 2022: The Applicant has clarified that the parking area has been relocated because of the proposed well and the state regulations. Furthermore, the Applicant has pulled the discharge point for Infiltration System 2 to outside of the 25-foot buffer zone. The riprap aprons for Infiltration System 1 are located within the adjacent wetland and considered fill. The approximately 400 sf of fill will require an Order of Conditions from the Bolton Conservation Commission. HW recommends that the ZBA consider as a Condition of Approval receipt of an Order

of Conditions from the Bolton Conservation Commission allowing the riprap fill material in the resource area.

- c) HW further recommends that the Applicant limit the area of disturbance on the south side of the project area to the edge of the existing parking lot.

April 20, 2022: The Applicant stated that it believes that the work on the south side of the project can be completed without degradation of the surrounding area. As noted above, HW recommends that the ZBA require receipt of an Order of Conditions allowing the work within 25 feet of the resource area. HW notes that the resource area to the south of Infiltration System 1 was previously used as a fire pond, the Applicant intends to allow the pond to function as a wetland and it will no longer be used as a fire pond. HW has no further comment.

- d) The existing outfall location at the northern BVW at the front of the site will be maintained, which will receive runoff from the portion of the site being considered “redevelopment” as it relates to the MSH. The first 150 feet ± of the existing access drive will be preserved, including the drainage infrastructure which captures and conveys runoff to the northern BVW. Further discussion of the redevelopment aspects can be found under Standard 7.

April 20, 2022: HW has no further comment.

2. ***Standard 2 requires that the stormwater management systems be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.***

- a) The Applicant provided a hydrologic analysis for the 2-year, 10-year, 25-year, and 100-year storm events, under both Existing and Proposed Conditions. The precipitation rates utilized were obtained from the NOAA Atlas 14 database for the Bolton area, which is currently the local industry standard. HW reviewed all components of the hydrologic analysis, which include Existing & Proposed Watershed Plans, Existing & Proposed HydroCAD models, and a Narrative summary of the hydrologic analysis.

The proposed subsurface infiltration systems were sized appropriately, such that the peak discharge rates under Proposed Conditions do not exceed those under Existing Conditions for all storm events analyzed. Additionally, the Applicant has documented that total runoff volumes are decreased in the Proposed Condition for all storm events.

April 20, 2022: The Applicant has revised the HydroCAD model and has provided the updated information and Table illustrating that the pre-development peak flows and volumes will be reduced under post-development conditions. HW has no further comment.

- b) There is a minor discrepancy between the total watershed areas reported in the Existing and Proposed models. HW recommends that the Applicant revise the models as necessary to ensure the total areas match.

April 20, 2022: The Applicant has revised the HydroCAD model and confirmed that the pre-development and post-development watershed areas are equivalent. HW has no further comment.

- c) The Applicant has chosen to include two separate areas within Subcatchment E-3, both technically are tributary to Great Brook, however one side flows into a large wetland before reaching Great Brook. HW recommends that the Applicant separate these two areas of Subcatchment E-3 and revise the HydroCAD model accordingly.

April 20, 2022: The Applicant has revised the HydroCAD model as suggested. HW has no further comment.

- d) The peak discharge rates and volumes are controlled by the use of two outlet control structures for each subsurface infiltration system, which are located within the pavement areas. These outlet control structures discharge treated stormwater to the stabilized outlets described under Standard 1. HW notes that the inside diameter of the outlet control structures is listed as 4 feet on the detail on Sheet C-506, but the plan view appears to depict a larger diameter to accommodate the inlet and outlet pipe connections. HW recommends that the Applicant verify the required diameter of the outlet structures (and any other oversized manholes) and update the plans and/or details accordingly. As noted previously HW recommends that the outfalls be pulled further away from the edge of the adjacent wetlands.

April 20, 2022: The Applicant has adjusted several proposed manhole structures to be 5-foot diameter. HW notes that the information associated with the outlet control structures for Subsurface Infiltration System 2 is difficult to read. HW has no further comment.

- e) Due to the large size of the subsurface infiltration systems, the Applicant included pipe manifolds on either end to facilitate even distribution of stormwater during large storm events. The manifold elevation is set approximately 12 inches above the primary inlet to the isolator row, which means that stormwater is forced to first enter the isolator row for treatment and will only enter the manifold pipe when the depth exceeds 12 inches. HW finds this to be an acceptable design but recommends that the Applicant adds text to the inlet manhole call-outs to clarify which pipe is meant to be higher.

April 20, 2022: The Applicant has added the clarification to the Grading and Drainage Plans as suggested. HW has no further comment.

- f) The Applicant provided pipe sizing calculations for both the 25-year and 100-year storm events using the Rational Method, which document that all pipes within the closed drainage system are sized properly. No further action required.

April 20, 2022: HW has no further comment.

- 3. **Standard 3** requires that the annual recharge from the post-development site approximate the annual recharge from pre-development conditions based on soil type.

- a) The Applicant provides calculations for the required recharge volume using both the Hydrologic Soil Group (HSG B=0.35") and the MA MS4 General Permit requirement of 1" rainfall over the total post-development impervious area. Based on the 1" rainfall depth over 377,668 square feet (SF) of impervious area, the required recharge volume is 31,472 cubic feet (CF). The Applicant utilized the Simple Dynamic Method for sizing the two subsurface infiltration systems to retain/infiltrate the required recharge volume. HW

notes that there are minor discrepancies in the impervious area number used, between the Narrative, the Post-Development HydroCAD model and the Simple Dynamic Method HydroCAD model. These discrepancies should be rectified by the Applicant based on the final impervious area calculations.

HW further notes that the total recharge volume presented in the Simple Dynamic Method calculation is 30,755 CF, which is less than the required 31,472 CF. It is also noted that the Simple Dynamic Method HydroCAD model shows a minor amount of additional storage above the peak elevation and below the low outlets, which effectively adds storage volume to the numbers reported. HW recommends that the Applicant revisit this calculation or provide further explanation of its design methodology.

April 20, 2022: The Applicant has adjusted the total impervious area and revised the recharge calculations. It appears that the Applicant is providing the required recharge volume. HW has no further comment.

- b) The Applicant included soil testing results in the application package, but the test locations are not depicted on the plans. HW notes that small symbols appear on the grading and drainage plans which appear to indicate the locations of TP-11,12 & 14, but the corresponding test pit logs were not found in the application package. In accordance with Volume 2, Chapter 2, page 97 of the MSH the Applicant is required to conduct a minimum of two test pits within each infiltration system. HW recommends that the Applicant revisit the soil testing information to ensure that all available test results are adequately documented on the plans and report(s).

April 20, 2022: The Applicant has clarified the location of the four test pits and provided the test pit logs on Sheet C-107. HW has no further comment.

- c) In accordance with the previous comment, HW is unable to confirm the soil testing information used in the design of the subsurface infiltration systems. However, both systems are located within a "fill" area, which will likely provide adequate separation to the seasonal high groundwater table. Based on the narrative description, the infiltration rates used seem appropriate, but will need to be confirmed based on HW's review of the additional soil testing information to be submitted by the Applicant.

April 20, 2022: The Applicant has provided the test pits logs as noted above. The exfiltration rates utilized appear reasonable for the soil texture identified below the systems. The bottoms of the subsurface infiltration systems are located two feet above the ESHGW table. The Applicant has provided the groundwater mounding analysis and has clearly detailed the various variables utilized for the Hantush calculation. As designed the groundwater mound should not rise into the subsurface chambers. HW has no further comment.

- d) HW recommends that the Applicant modify the construction detail for the subsurface infiltration systems to clearly state which existing soil layers must be removed prior to installation.

April 20, 2022: The Applicant has added a note regarding the removal of fill material beneath the Stormtech Chamber System on sheet C-505. HW has no further comment.

4. **Standard 4** requires that the stormwater system be designed to remove 80% Total Suspended Solids (TSS) and to treat 1-inch of volume from the impervious area for water quality. The drainage system must also provide at least 44% TSS removal for pre-treatment of runoff from paved surfaces prior to entering any infiltration practices.

a) The Applicant has provided the required water quality calculations to verify compliance with Standard 4 on pages 4-4 through 4-6 of the Project Narrative & Drainage Report. The stormwater treatment train included deep-sump hooded catch basins, proprietary water quality structures (Contech CDS, Cascade, and Stormceptors), and subsurface infiltration systems (Stormtech SC-740 chambers) equipped with isolator rows. HW finds the selected best management practices (BMPs) and associated calculations reasonable and appropriate for the project. No further action required.

April 20, 2022: HW has no further comment.

b) HW notes that the Applicant has proposed a Contech CDS unit within the parking lot of the adjacent office building property, which treats runoff from the adjacent proposed pavement areas. HW finds this to be a reasonable design approach, but notes that an easement would likely need to be secured for future maintenance of the structure.

April 20, 2022: The Applicant is in the process of developing the applicable easement.

The Applicant appears to comply with Standard 4.

April 20, 2022: HW has no further comment.

5. **Standard 5** relates to projects with a Land Use of Higher Potential Pollutant Loads (LUHPPL).

a) The Applicant explains that the proposed project is considered a LUHPPL because the parking area is "high intensity" (greater than 1,000 trips per day). As required, the Applicant documents that the stormwater management system was designed using the 1" Water Quality Volume and that proprietary water quality structures will provide greater than 44% pretreatment prior to conveyance to the subsurface infiltration systems. No further action required.

The Applicant appears to comply with standard 5.

April 20, 2022: HW has no further comment.

6. **Standard 6** relates to projects with stormwater discharging into a critical area, a Zone II or an Interim Wellhead Protection Area of a public water supply. These discharges require the use of the specific source control and pollution prevention measures and the specific structure stormwater best management practices determined by the Department to be suitable for managing discharges to such areas, as provided in the MSH.

a) Standard 6 applies because the project development is located adjacent to several Zone I's and within the Interim Wellhead Protection Area. The stormwater treatment train and infiltration practices described previously in this letter are suitable for use in these areas. No further action required.

April 20, 2022: HW has no further comment.

- b) The Applicant states that the existing southerly wet basin/fire pond will be located within a Zone I to the proposed drinking water supply well. As a result, this pond is no longer considered as part of the stormwater management system but will continue to perform its function as a fire pond and receiving water body for the outlets from proposed subsurface infiltration system 1. Based upon the proposed stormwater design, HW finds this to be a reasonable assessment. No further action required.

April 20, 2022: HW has no further comment.

- 7. **Standard 7** relates to projects considered redevelopment. A redevelopment project is required to meet the following Stormwater Management Standards only to the maximum extent practicable: Standard 2, Standard 3, and the pretreatment and structural best management practice requirements of Standards 4, 5, and 6. Existing stormwater discharges shall comply with Standard 1 only to the maximum extent practicable. A redevelopment project shall also comply with all other requirements of the Stormwater Management Standards and improve existing conditions.

- a) The proposed development is considered a mix of redevelopment and new development. The main access road and existing driveway to the office building parking lot will generally be preserved, with proposed pavement resurfacing, sidewalks, and landscaping improvements. The redevelopment portion of the project also includes runoff from the proposed clubhouse roof and associated parking lot and amenity space. These flows will be treated by a proposed CDS unit prior to draining toward the front wet basin/fire pond. The overall impervious area draining to the front wet basin/fire pond will be reduced, which satisfies the requirement for the redevelopment classification.

April 20, 2022: HW has no further comment.

- b) HW notes that there are two existing catch basins at the existing driveway entrance off Main Street, with the westerly catch basin flowing through the easterly catch basin prior to discharging toward the existing BVW. The existing discharge pipe is a 12-inch reinforced concrete pipe which runs underneath proposed Leaching Field B. HW recommends that the Applicant review the drainpipe network in this area to confirm that it complies with Title 5, and also whether any drainage improvements could be made to provide additional treatment for this runoff from the high-intensity driveway entrance, prior to discharging into the existing BVW.

April 20, 2022: The Applicant has relocated the drainage pipe to avoid the leaching field. HW has no further comment.

- 8. **Standard 8** requires a plan to control construction related impacts including erosion, sedimentation or other pollutant sources.

- a) The Applicant prepared an Erosion Control Plan (Sheet C-100) and has also included Erosion Control Notes on Sheet C-002 and corresponding details on Sheet C-501. The design calls for "silt fence & tubular barrier" around the limit of work where warranted and shows the location of a stabilized construction entrance and proper protection for the existing catch basins on site. These erosion control measures, and associated documentation are consistent with standard engineering practice. The Applicant also notes that the project will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) prior to construction, which is a requirement of the EPA National Pollutant Discharge Elimination System (NPDES) Construction General Permit for

construction sites which disturb more than one acre of land. HW recommends that the Town require receipt of the SWPPP a minimum of 14 days prior to land disturbance.

April 20, 2022: HW recommends that the Town require receipt of the SWPPP a minimum of 14 days prior to land disturbance. HW has no further comment.

- b) HW recommends that the Applicant confirm that the proposed grading and erosion control barrier along the Great Brook corridor can be constructed without disturbing the existing native trees or shrubs. There is a minor adjustment to the treeline in the proposed conditions, but it is unclear what type of vegetation will be affected. HW further recommends that trees greater than 10-inch diameter within the work area be located on the existing conditions plan, if not already shown, and recommends that the Applicant note any trees that will be removed because of the proposed development. It appears that the Applicant has chosen to protect the trees that are located within the islands of the existing southern parking lot. The parking lot is proposed to be removed and a meadow created with a number of the trees within the parking lot to remain.

April 20, 2022: HW defers to the ZBA the needed to understand the quantity and size of trees proposed to be removed for this development.

- c) HW recommends adding construction fence surrounding the infiltration areas during construction to protect from compaction due to heavy equipment.

April 20, 2022: The Applicant has added a note to Sheet C-100 as suggested. HW has no further comment.

- d) A note on the Sheet C-002 describes basic instructions for dewatering. If the Applicant anticipates dewatering to be required, HW recommends that a detail for dewatering be provided along with proposed locations.

April 20, 2022: The Applicant has added a note requiring the contractor to provide a dewatering plan to the Town for review if determined to be needed. HW has no objection to this suggestion.

9. **Standard 9** requires a Long-Term Operation and Maintenance (O&M) Plan be provided.

The Applicant has provided an Operation & Maintenance Plan for this project, prepared by Allen & Major Associates, Inc. and dated September 10, 2021. HW has the following comments:

- a) Under the "Structural Pretreatment BMPs" section, the reference to the various Contech water quality structures does not match the design plans. HW recommends that the Applicant revisit this section to clearly state the different types of structures and ensure that the corresponding manufacturer O&M Plans are included for each structure. References to cast iron hoods and deep sump catch basins should also be removed from this section as appropriate.

April 20, 2022: The Applicant has revised the O&M Plan as suggested. HW has no further comment.

- b) The "Subsurface Structures" section should be modified to include provisions for inspecting the systems at certain intervals following large rain events to ensure they are

properly draining. HW notes that a detail is included for inspection ports, but their locations are not identified on the plan view. HW recommends that the Applicant identify the proposed inspection port locations on the plans, which are preferably located in drive aisles rather than parking spaces to facilitate access. A note should also be added for the inspection of outlet control structures on an annual basis.

April 20, 2022: The Applicant has revised the O&M Plan as suggested. HW has no further comment.

- c) The Applicant included plan sheet O&M 1 entitled "Operation & Maintenance Plan" which depicts the key elements of the stormwater management system for reference during long term maintenance activities. HW recommends that all water quality structure labels are updated to call out the specific Contech products being used, since each has individual O&M requirements. It may also be appropriate to coordinate further with Contech to see if future maintenance could be simplified by reducing the number of different Contech products being used in the design.

April 20, 2022: The Applicant has revised the O&M Plan as suggested. HW has no further comment.

- d) Sheet O&M 1 should be updated to call out the inlet and outlet locations for both of the existing wet basins/fire ponds, so that they can be regularly inspected for signs of erosion or blockage. Even though the rear wet basin is no longer considered part of the project's drainage system, it is still important that it is inspected regularly.

April 20, 2022: The Applicant has revised the O&M Plan as suggested. HW has no further comment.

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

- a) To comply with Standard 10 the Applicant states that an Illicit Discharge Compliance Statement will be provided to the Town prior to the discharge of stormwater to the post-construction stormwater BMPs and prior to the issuance of a Certificate of Compliance. The Town may choose to require receipt of this statement as a condition of approval.

April 20, 2022: The Town may choose to require receipt of this statement as a condition of approval.

General Technical Review

11. *Water Supply Comments:*

- a) The proposed development will be serviced by a combination of new and existing private wells on the subject property. Due to the intensity of use, this is considered a Public Water System (PWS), and the Applicant states that all permitting will be done through MassDEP in accordance with 310 CMR 22 and MassDEP's Guidelines for Public Water Systems. A waiver has been requested from local permitting through the Bolton Board of Health. HW has no opposition to this waiver request, but defers to the appropriate Town of Bolton staff, Boards and Commissions.

April 20, 2022: HW has no further comment.

- b) The Public Water System wells generate a Zone I radius of protection and an Interim Wellhead Protection Area (IWPA), which are both dependent on the approved yield/volume of each well. The Zone I radii for the existing and proposed well(s) are depicted on the Site Development Plans. The Applicant states that the proposed well is only shown conceptually and that final layout is subject to MassDEP approvals. The Applicant further states that the drilling and installation of all private wells will be coordinated with the Bolton Conservation Commission and Board of Health.

April 20, 2022: The Applicant is coordinating with the Board of Health and MassDEP. HW has no further comment.

- c) The design of the Public Water System is being performed by Onsite Engineering, Inc. and a design summary memo can be found in Appendix C of the Project Narrative which provides details about the existing and proposed wells along with a description of water treatment, distribution and fire protection.

April 20, 2022: The Applicant has provided a narrative in it April 12, 2022 response letter explaining that the wastewater and water supply systems proposed are permitted on the state level and therefore no waivers from local regulations are needed. HW concurs with the Applicant's statement.

12. *Wastewater Disposal Comments:*

- a) The project will include a new on-site wastewater treatment and disposal system to serve both the proposed residential development and the modified office building. The Applicant states that the system will be designed by Onsite Engineering, Inc. in accordance with MassDEP *Guidelines for the Design, Construction, Operation and Maintenance of Small Treatment Facilities with Land Disposal*, revised July 2018, and that it is subject to a MassDEP Groundwater Discharge Permit subsequent to a hydrogeological evaluation approval process.

April 20, 2022: The Applicant has provided a narrative in it April 12, 2022 response letter explaining that the wastewater and water supply systems proposed are permitted on the state level and therefore no waivers from local regulations are needed. HW concurs with the Applicant's statement.

- b) The design flow for the proposed residential development is 43,440 gallons per day (GPD) based on 394 total bedrooms (at 110 GPD/bedroom) along with a 100 GPD allowance for the leasing office space. Since the clubhouse and amenity space are restricted to only residents and their guests, there are no additional flows associated with those elements, as per MassDEP advisory opinions. HW agrees with this preliminary design flow calculation.

April 20, 2022: HW has no further comment.

- c) The design flow for the modified office building is 4,688 GPD, which is based on a total floor area of 62,500 SF. Since the office building modifications will be carried out by

others under a separate application, HW notes that the actual design flows may vary based on the final architectural plans.

April 20, 2022: HW has no further comment.

- d) HW recommends that the existing leaching facility location be called out on the Existing Conditions Plans, and that the existing office building sewer service is depicted on the Utility Plans with connection to the proposed sewer.

April 20, 2022: The Applicant has added the existing leaching field to the existing Conditions Plan as well as the sewer service on the Utility Plan. HW has no further comment.

- e) HW recommends that the proposed sewer manhole annotation is changed on the Utility Plans from PDMH to PSMH and that the Utility Legend is depicted on all Utility Plans.

April 20, 2022: The Applicant has revised the sewer manhole notations. HW has no further comment.

- f) An existing drainpipe near the driveway entrance flows under the proposed leach field toward the wet basin/fire pond. HW notes that this pipe and other elements of the drainage system may need to be modified to comply with Title 5 requirements.

April 20, 2022: The Applicant has relocated the drainage pipe to avoid the leaching field. HW has no further comment.

13. *Additional Comments:*

- a) There is a small dog park proposed to service the apartment buildings, which is shown to the west of Building 3. HW recommends that the Applicant confirm that the dog park size and shape shown are appropriate for the project, and that additional information is added, such as the surface materials, fence specifications, park amenities, drainage and means of disposal for both dog waste and regular trash/recycling. HW notes that the dog park is located outside of the Zone I boundary and outside of any jurisdictional areas under the Wetlands Protection Act, but it is within the Interim Wellhead Protection Area associated with the existing wells on the subject property.

April 20, 2022: The Applicant has noted that it will provide final design details to the Town for documentation purposes. The ZBA may choose to include receipt of these details prior to occupancy as a Condition of Approval.

- b) HW recommends that the flow direction of Great Brook is added to the Site Development Plans.

April 20, 2022: The Applicant has added the flow direction of Great brook as requested. HW has no further comment.

- c) A proposed maintenance gate for the existing well area is shown on the Site Development Plans, but the access drive linework appears to be missing. HW also advises the Applicant to consider whether any dedicated access is required for the new well location.

April 20, 2022: The Applicant has provided the access drive on Sheet C-104. HW has no further comment.

- d) There is a large ledge outcrop located within and to the north of proposed Building 1 which will need to be entirely removed to accommodate the project, including subsurface elements such as the foundation and utilities. HW recommends that the Applicant provides a preliminary description of the proposed ledge removal method(s) being considered for the project, for review by applicable Town staff, Boards and Commissions.

April 20, 2022: The Applicant has stated in its response letter that the ledge may be removed by hoe ramming and/or controlled blasting. HW has no further comment.

14. *Waiver Requests:*

- a) Applications for a Comprehensive Permit through the Zoning Board of Appeals requires an Applicant to comply with all local codes, ordinances, Bylaws, or regulations unless an exemption or variance is formally requested in the application or modification to the application. As described in detail in *Section 5.1* of the Project Narrative & Drainage Report, the Applicant is requesting waivers from the following local Bylaws, rules and regulations:

- Town of Bolton Bylaws (Zoning & Wetlands)
- Planning Board Rules & Regulations
- Conservation Commission Rules & Regulations
- Rules & Regulations of the Board of Health

April 20, 2022: HW has no further comment.

- b) HW defers to the Bolton ZBA on the granting of these waivers, but notes that the proposed development project is still required to comply with all applicable regulations, permits and policies of the Commonwealth of Massachusetts. These include, but are not limited to, the Massachusetts Stormwater Handbook, the Wetlands Protection Act/Regulations, Title 5 of the State Environmental Code, MassDEP *Guidelines for the Design, Construction, Operation and Maintenance of Small Treatment Facilities with Land Disposal*, MassDEP Groundwater Discharge Permit, and MassDEP's Guidelines for Public Water Systems. As noted above HW recommends that the Applicant respect the local 25-foot no disturb zone to the adjacent BVWs surrounding the project site.

April 20, 2022: HW has no further comment.

Conclusions

HW is satisfied that the Applicant has adequately addressed our stormwater comments as well as our general technical review. We reserve further comment regarding the wetlands review. The Applicant is advised that provision of these comments does not relieve him/her of the responsibility to comply with all Commonwealth of Massachusetts laws, and federal regulations as applicable to this project. Please contact Janet Carter Bernardo at jbernardo@horsleywitten.com or at 508-833-6600 if you have any questions regarding these comments.

Sincerely,

Horsley Witten Group, Inc.



Janet Carter Bernardo, P.E.
Associate Principal