

November 12, 2019

Wayland Planning Board Town of Wayland c/o Mr. Sarkis Sarkisian Town Planner 41 Cochituate Road Wayland, MA 01778	<b>A&amp;M Project #:</b>	1670-09A
	<b>Re:</b>	Alta at River's Edge A&M Response to Peer Review Letter

Dear Mr. Sarkisian:

On behalf of the Applicant, WP East Acquisitions, LLC. (WP), Allen & Major Associates, Inc. (A&M), respectfully submits this response letter for the proposed development known as ALTA at River's Edge. The responses are in regards to three (3) sources of comments/questions: peer review comments submitted by BSC Group on behalf of the Town of Wayland Conservation Commission (Con. Comm.), dated October 31, 2019, comments submitted by the Department of Public Works (DPW), dated November 5, 2019, and comments provided by the Wayland Fire Department (WFD), dated November 4, 2019.

**BSC Project Review Comments**

**I. Procedural Items and/or miscellaneous Comments**

- a. It is BSC's understanding that negotiations are currently underway between the Town of Wayland and the project proponent, WP Acquisitions, LLC. The resolution of these negotiations may have impacts to the proposed development project that are not foreseen at this time, which could require modifications and/or more detailed design for specific elements of the project, e.g. the design of the onsite sanitary sewage treatment facility and subsurface sewage disposal system.

***A&M Response: This has been noted by the applicant. No response required.***

- b. The proposed development plans show impacts to offsite areas to the west and east of the project site. To the west, proposed demolition and grading activities are shown on property contained within the Town of Sudbury. To the east, site access, grading, utilities connections, landscaping and drainage outlets are shown on property owned by the Town of Wayland.

BSC recommends that approvals and/or easements for this work be sought from the appropriate municipal authorities for these impacts.

***A&M Response: The plans have been updated to illustrate the proposed easements to be sought for all of the offsite improvements identified on the proposed plans (See Sheet C-107).***

- c. A general review of the State permitting required for this project indicates that a Groundwater Discharge Permit will be required from MassDEP for the proposed subsurface sewage disposal system (anticipated sanitary sewer flow of 37,380 gpd per page 1, Hydrogeologic Evaluation Alta at River's Edge), and a Highway Access Permit will be required from MassDOT (Boston Post Road is under MassDOT jurisdiction).

***A&M Response: The applicant acknowledges that a Groundwater Discharge Permit will be required from the MassDEP and an Access Permit will be required from the MassDOT.***

- d. BSC has reviewed the proposed development as it relates to project review thresholds under the Massachusetts Environmental Policy Act, MEPA. With the proposed development anticipated to generate at least 1,000 new vehicle trips per day (see page 6, under Item 5, Drainage Report) and the construction of 348 parking spaces, along with the required MassDOT Highway Access Permit, it appears that the project will trigger two of the MEPA thresholds under Transportation, 301 CMR 11.03 (6) 14. –1,000 new vehicle trips per day and 150 new parking spaces, and 15. – 300 new parking spaces. The above will require the filing of an Environmental Notification Form (ENF) for the proposed development with the MEPA office.

***A&M Response: This has been noted by the applicant. No response required.***

- e. Understanding that the design, operation and details of the proposed onsite sewage treatment plant and subsurface disposal system are to be finalized in the near future, and that this system may involve the Town of Wayland, BSC has not reviewed this system.

BSC recommends the appropriate Town boards and agencies, particularly the Wayland Board of Health, be involved in the review and approval of the final design of the proposed sewage treatment plant and subsurface disposal system.

***A&M Response: The applicant is currently coordinating the design of the proposed treatment plant and subsurface disposal system with the Wayland Board of Health and Town Engineer.***

- f. Wayland Wetlands Regulations note "The Conservation Commission does not permit an increase in the rate or volume of runoff for frequent storm events (0.5" rainfall, 1" rainfall, 2-year storm event) and generally requires no increase in volume for 10-year, 25-year storm events and generally for 100-year events." These regulations also require runoff calculations for 1" rainfall, 10-year and 100-year storm event. No calculations are included within the NOI for 0.5" rainfall and 25-year storm events.

***A&M Response: The drainage report calculations have been updated to illustrate the ½" rainfall and the 25-year rainfall event (Section 4.0).***

- g. Acknowledging ongoing negotiations between the Town and the project proponent, a generalized construction schedule, as required under the various Town regulations, has yet to be developed or submittal as part of the local permitting process.

BSC recommends the appropriate Town boards and agencies be involved in the review and approval of the final construction schedule.

***A&M Response: This has been noted by the applicant. No response required.***

- h. Based upon a review of the proposed site grading for the River's Edge development, it is not clear how much cut or fill material will be generated during its construction, and whether any local approvals may be required for earth removal operations on the site.

***A&M Response: There are no local approvals required for Earth Removal operations on this site.***

- i. BSC wants to point out that the Headwall #2 outlet proposed at the eastern edge of the property will result in a new point source discharge to the adjacent property, which eventually flows into nearby Great Meadows Natural Wildlife Refuge lands, owned by the United States of America. BSC wants to make sure the Commission approves this discharge to the Federal Lands. We do note that the discharges from this outlet are proposed to meet the Massachusetts Stormwater Guidelines and will not exceed the pre-construction peak flows from the project site to this adjacent property.

***A&M Response: This area currently receives stormwater discharges from the existing site unmitigated via overland flow. The proposed conditions will greatly improve the quality of stormwater which discharges to this location resulting in a net improvement for this area.***

## **II. Technical Items**

- a. Site Plans, Demolition and Erosion Control Plan, Sheet C-101: Perimeter sedimentation and Erosion Controls are shown along the proposed limits of work within the subject property. However, as noted under Item I. b. above, work associated with the proposed development will be undertaken outside the western and eastern edges of the proposed development, on separate properties. This work includes site access connections, grading, utilities connections, landscaping and drainage outlets.

BSC recommends that the perimeter sedimentation and erosion controls be extended to encompass these offsite work areas.

***A&M Response: The plans have been updated to illustrate the perimeter sedimentation and erosion controls be extended to encompass these offsite work areas.***

- b. Site Plans, Demolition and Erosion Control Plan, Sheet C-101: Several Stockpile & Staging Areas are noted on this plan. The northernmost staging area is located at the top of the existing bank which steeply slopes down to wetlands along the northern border of the site, close to the proposed location of the future storm drainage outfall, Headwall #1. The stockpile area is proposed to be surrounded with erosion and sedimentation controls, and there are similar controls along the perimeter of the project work area.

BSC recommends that this Stockpile & Staging Area be shifted to provide more separation between the stockpile and adjacent top of slope, to avoid potential sedimentation from entering the wetlands downslope.

***A&M Response: The plans have been updated to illustrate the Stockpile & Staging Area be shifted to provide more separation between the stockpile and adjacent top of slope, to avoid potential sedimentation from entering the wetlands downslope.***

- c. Site Plans, Layout and Materials Plan, Sheet C-102: The western portion of the project site lies within the Refuse Disposal Zoning District, which prohibits residential use within this zoning district. In addition, under the Land Usage Table, and its associated notes, for several dimensional controls Note 8 states "Relief from Town of Wayland Zoning Bylaws required." These dimensional controls include maximum lot coverage, minimum building setback, minimum front and side yards, maximum building height, and maximum number of dwelling units.

BSC presumes these zoning dimensional control items will be addressed through River's Edge Zoning Overlay District and pending Zoning variance requests.

***A&M Response: This has been noted by the applicant. No response required.***

- d. Site Plans, Layout and Materials Plan, Sheet C-102: Two 10' wide by 35' deep Moving Truck Parking Area spaces are provided along the northern edge of the proposed parking field. The access to these spaces is directly from the 24' wide driveway access, which are located adjacent to standard parking spaces.

BSC recommends truck turning information be provided for these Moving Truck Parking spaces to insure there is adequate area to maneuver vehicles, particularly larger moving trucks more than 20' in length, into and out of these spaces.

***A&M Response: The plans have been updated to illustrate truck turning movements for the Moving Truck Parking spaces (See Sheet C-105B).***

- e. Site Plans, Grading and Drainage Plan, Sheet C-103: The Site Plan shows extensive grading in the slope area immediately to the west of proposed Building 3. The proposed grading will have a 2:1 slope, range from a high point of elevation 169 to a low point, near the building, of elevation 142. A shallow swale, 2' to 3' deep, is proposed approximately 20' from the western face of Building 3. Two area drains with 12" diameter grates and rims at elevation 142 are located within the swale. These area drains will intercept runoff from the slope, drop into their structure, with inverts 3.2' and 3.4' below their rims, and convey it through a 6"

diameter pipe into the overall site storm drainage system. The ground surface elevations at the northern and southern ends of this swale are proposed to be elevation 145.5 and 146.0, respectively.

Comparing the information regarding the proposed area drains, identified as AD#1 and AD#2 on the Site Plan and as shown on Details Sheet C-505, Detail 7, with the information contained within the Stormwater Pipe Sizing Table contained within the Section 6.7 of the Drainage Report, several minor discrepancies are noted. No information on AD#1 is found in the Pipe Sizing Table. The anticipated stormwater runoff to AD#2 for a 25-year frequency storm event calculated in the Pipe Sizing Table is 1.63 cfs. The required pipe size from AD#2 into the proposed storm drainage system is given as 12" in the Pipe Sizing Table. The rim elevation for AD#2 is given as 144.5 in the Pipe Sizing Table.

The floor elevation of the residential building is indicated to be elevation 146.5, with the floor elevation of the parking level below at elevation 135.5. BSC's concern relates to the proximity of the swale to the building, and the limited elevation difference between the top swale overflows at 145.5 and 146, and the building first floor elevation of 146.5. These overflow elevations provide between 0.5' to 1' of "freeboard" between the overflow elevations out of the swale and the adjacent first floor elevation. Typically, area drain grates have a limited capacity to allow inflow of runoff through their grate and into the structure to be conveyed into the overall storm drainage system.

BSC would recommend that the project proponent's engineer review the design of the area drains, resolve the minor discrepancies noted above, utilize a 12" diameter drain pipe for the connections from the area drains into the storm drainage system, evaluate the inlet capacity of the area drain grates, and consider providing overflows from the swale that will afford more freeboard between the overflow elevations and the adjacent building first floor elevations.

***A&M Response: The plans have been revised to illustrate a 12" diameter drain pipe for the connections from a catch basin to the storm drainage system and revised the grading to provide overflow, to the north, from the swale that will afford more freeboard between the overflow elevations and the adjacent building first floor elevations.***

- f. Site Plans, Grading and Drainage Plan, Sheet C-103: The Site Plan shows a retaining wall to be constructed at the southeastern corner of the project site located approximately 20' from the existing roadway Right of Way/property boundary at Boston Post Road. This retaining wall will provide the grade transition between the higher existing ground elevations along Boston Post Road and lower proposed grading for the proposed parking area. The vertical height of the retaining wall going from north to west to east will range from 2' to 8' to 5' to 0'. The proposed retaining wall will consist of a segmented block retaining wall, as shown on Site Plan Details Sheet C-505. Between the top of the wall and the roadway Right of Way/property line, a 3:1 slope is proposed to meet the existing grade at the property boundary.

A segmented type retaining wall requires that a geosynthetic reinforcement fabric be placed behind the face of the wall to provide adequate stability for the structure. This geo-fabric could extend 5' feet or more behind the wall face. BSC's concern is the constructability of this retaining wall, as the actual limit of construction will need to extend farther back into the existing slope and much closer to the property boundary.

BSC recommends the project proponent's engineer review the proposed segmented block retaining wall design to address potential constructability issues that may be associated with this wall.

***A&M Response: A&M notes the reviewers comment. The modular block wall may need to be a gravity block system rather than a geosynthetic reinforced block wall. The applicant will coordinate with contractor prior to construction on the most appropriate wall design, but believes there is enough room in this location to construct a block wall.***

- g. Site Plans, Grading and Drainage Plan, Sheet C-103: The Site Plan indicates there will be precast concrete curb (PCC) along the proposed parking areas. While there are earthen berms proposed along portions of the parking area located at the northern side of the development, there are sections of the parking where spaces are located immediately adjacent to the 1:1 to 3:1 slope that falls 15' or more vertically to the bottom of the slope.

BSC recommends the project proponent's engineer consider utilizing guard rail or other safety measures to provide a barrier at the edge of those portions of the parking area immediately adjacent to the slope.

***A&M Response: The plans have been updated to illustrate a guard rail at the edge of the parking areas adjacent to the slope.,***

- h. Site Plans, Grading and Drainage Plan, Sheet C-103: The Site Plan indicates that Headwall #1, located at the northerly edge of the development will discharge at an elevation of 125.23. A rip rap apron will be installed from the outlet headwall extending partially down the slope. See Site Plan Details, Sheet C-505, Detail 8. The Site Plan appears to indicate the rip rap apron will end about 15' from the outlet pipe headwall, at elevation 122. Below the end of the rip rap apron, the existing slope drops 5' vertically over 5' horizontally. It is understood that the toe of the slope in this area is generally at the limits of the Bordering Vegetated Wetlands (BVW), and that the Town typically requires a no-disturb zone setback from the BVW.

Outflows from this pipe are anticipated to be 3.68 cfs for the 2-year frequency design storm and 6.96 cfs for the 10-year design storm. These peak flow rates will have velocities at the outfall of approximately 4 to 6 feet per second (fps). While the rip rap will act as an energy dissipater, these flows when passing over the existing slope after leaving the rip rap apron could cause significant scour and erosion of the slope downstream of this outlet.

BSC recommends the project proponent's engineer consider means of providing protection and/or additional energy dissipation measures to avoid scour and erosion downstream of the drainage outlet at Headwall #1.

***A&M Response: The plans have been revised to illustrate level spreader in his location.***

- i. Site Plans, Grading and Drainage Plan, Sheet C-103: The Site Plan shows runoff from the proposed access driveway in the front of the site, adjacent and parallel to Boston Post Road will be collected in two catch basins, CB#8 and CB#9. These two CB's intercept runoff from approximately 280 feet of this driveway, as well as about 60 feet of the parking lot in front of Building 2. This driveway runs from the main site access from Boston Post Road to the parking area in front of Building 2 at a slope of 5%. Runoff flowing down this driveway could be flowing at an increased velocity due to this slope and could bypass these two catch basins, and flow into the main site access drive.

BSC recommends the project proponent's engineer consider a means of reducing the potential bypass at CB#8 and #9, such as providing a double grate CB or other appropriate measures.

***A&M Response: The plans have been updated to illustrate CB#8 and CB#9 as double grate catch basins.***

- j. Site Plans, Grading and Drainage Plan, Sheet C-103 and Drainage Report Section 4.0 Existing and Proposed HydroCAD and Section 6.7, Stormwater Pipe Sizing Table: BSC has reviewed the Site Grading and Drainage Plan and Pipe Sizing Table and found these to be consistent. BSC has also reviewed the Existing and Proposed HydroCAD calculations and found these to be prepared utilizing standard engineering practice.

However, when BSC reviewed the HydroCAD calculations for the three proposed Underground Infiltration Systems (UIS), it was noted that during some of the design storms, the elevation of the stormwater temporarily contained within these systems resulted in water backing up into the storm drainage system upstream (U/S) of these structures. This situation means the upstream drainage system has a tailwater, i.e. the downstream water surface is above the invert elevation of the inlet pipe. Such situations can result in a reduction of the flow capacity within the upstream pipe system.

Here is a summary of the water elevations within the UIS vs upstream structures:

For UIS#1: peak elevation of stormwater within structure for:

2-year event = 137.04  
10-year event = 137.90

Invert at U/S CB#3 = 136.80  
Invert at U/S AD#2 = 137.45

For UIS#2: peak elevation of stormwater within structure for:

2-year event = 127.61  
10-year event = 128.52

Invert at U/S CB#4	= 126.85
Invert at U/S CB#5	= 128.35
Invert at U/S CB#8	= 127.12
Invert at U/S CDS#2	= 125.80

For UIS#3: peak elevation of stormwater within structure for:

2-year event =	126.33
10-year event =	127.15

Invert at U/S CB#6	= 125.60
Invert at U/S CB#7	= 125.95
Invert at U/S CB#10	= 125.45
Invert at U/S AD#11	= 126.47
Invert at U/S CDS#4	= 125.00

A drainage pipe operating under a tailwater or outlet control (vs the standard assumption of inlet control for pipes) condition can be evaluated using standard methodology, and, depending upon the situation, may not result in a significant reduction in pipe flow capacity or increased water elevations upstream. However, this situation should be checked to ensure no negative impacts occur within the upstream drainage system. This may be more critical for the area drains noted under Item e above, where a reduced pipe capacity could potentially limit the capacity of Area Drains #1 and #2.

BSC recommends the project proponent's engineer consider evaluating the proposed drainage system components upstream of the Underground Infiltration Systems for outlet control or tailwater conditions to determine if there are any adverse impacts to the upstream drainage system's capacity.

***A&M Response: The Hydro CAD and Drainage Report were revised to utilize the "Dynamic Storage Indication" routing procedure. This procedure allows each node (drainage structure) to respond to upstream and downstream conditions, such as tailwater.***

- k. Site Plans, Utilities Plan, Sheet C-104: The Site Plan indicates two locations for proposed hydrants on the site. One of these proposed hydrants is in front of Building 2 and the other is located behind Building 2. These hydrants are located approximately 500' along the proposed access drives from each other.

BSC will defer to the Wayland Fire Department relative to their requirements for adequately providing accommodations for fire protection and fighting requirements.

BSC recommends the input of the Wayland Fire Department be sought regarding whether additional fire hydrants might be located in strategic positions on the site.



**A&M Response: Please refer to Wayland Fire Department comments starting on page 15.**

- i. Understanding the Town is currently installing a new water main within Boston Post Road, which will service the proposed River's Edge development, it is presumed that this system has been evaluated to insure the proposed residential development has adequate pressure and flows for domestic and fire services.

**A&M Response: The applicant will require the Town to provide a new water main that will supply at least 1500 GPM design flow and 70 PSI residual pressure.**

- m. Site Plans, Utilities Plan, Sheet C-104: As noted previously, schematic information is presented on this Site plan regarding the proposed onsite sewage treatment plant and subsurface sewage disposal system. The Site Plan also indicates a 2,000-gallon tight tank to be installed onsite to contain runoff from the under-building parking areas.

BSC recommends the appropriate Town boards and agencies, particularly the Wayland Board of Health, be involved in the review and approval of the final design of the proposed sewage treatment plant and subsurface disposal system, as well as the 2,000- gallon tight tank, especially relating to its operation and disposal of its contents.

**A&M Response: The disposal of the tight tank content will meet all local, state and federal guidelines.**

- n. Site Plans, Fire Truck Turning Plan, Sheet C-105: The Plan shows the turning movement from Boston Post Road. This turning radius appears to cross off the limits of the existing pavement at the southern side of the access drive.

BSC recommends the proposed turning radius should be checked to ensure that all portions of the fire truck will pass over pavement areas, and if needed, the pavement in this area should be adjusted accordingly.

The Site Plan indicates two locations are provided to allow fire trucks to turnaround via the utilization of turnouts.

BSC will defer to the Wayland Fire Department relative to their requirements for adequately providing accommodations for fire protection and fighting requirements.

BSC offers the following for consideration regarding the fire access for this site:

- There does not appear appropriate pedestrian access for emergency operations around the west end of Building 3;
- Vehicular access to Building 3 is limited to the south and northeast portions of that building.

BSC recommends the input of the Wayland Fire Department be sought regarding the adequacy of provided for vehicular and pedestrian emergency access across the project site.

***A&M Response: Please refer to Wayland Fire Department comments starting on page 15.***

BSC has conducted a limited review of the VERTEX's August 2019 Phase I Environmental Site Assessment & Phase II Limited Site Investigation and the Site Development Plans for ALTA at River's Edge, 490 Boston Post Road in Wayland, Massachusetts, dated October 18, 2019. Based on our preliminary review, BSC has the following recommendations, conclusions, and questions. Overall, BSC highly recommends the Town's LSP review the design closely for thresholds that may exceed reportable conditions and ensure the site is suitable for residential use.

- o. Have the reportable conditions been reported to MassDEP? The owner of the property has 120 days from the date of obtaining knowledge of the reportable conditions to notify MassDEP. The 120-day deadline from the date of VERTEX's report is December 5, 2019.

***A&M Response: The reporting is the responsibility of the Owner, the Town of Wayland. They are planning to report upon a letter from Vertex allowing them to use the Phase I/Phase II.***

- p. With regard to the former wastewater treatment basins, only two soil borings were completed for all three basins; no groundwater monitoring wells were installed. BSC recommends that additional sampling be completed to assess more than just two locations, and that wells be installed to determine if groundwater was affected by historic use. Overall, BSC recommends the Town have a solid understanding of groundwater flow direction across the site and possible contaminant distribution at the property since there are three proposed groundwater recharge areas. Some groundwater contamination appears to be coming from the off-site landfill and VERTEX recommended filing a Downgradient Property Status (DPS) Opinion relative to that contamination. The use of the groundwater recharge areas could exacerbate the current situation by changing the groundwater flow direction, thereby forcing the contamination to migrate in a different direction.

***A&M Response: Localized mounding is anticipated with the injection of treated wastewater, however, based on groundwater modelling, the site-wide groundwater flow direction is not anticipated to change.***

- q. With regard to soil vapor issues and elevated methane levels, VERTEX concluded "VERTEX recommends the installation of a chemically resistant vapor barrier and/or a vapor mitigation system to protect indoor air in future buildings constructed where occupied ground floors and/or basement areas are in contact with the site soils. Based on current development plans, mechanically ventilated garages are to be constructed along the lower levels of the proposed buildings, which would be appropriate for vapor mitigation." BSC did not review specific plans for mechanical ventilation in the garages but recommends that the proposed construction include vapor mitigation strategies across the entire site to address soil gas vapor issues associated with the adjacent landfill.

**A&M Response: As recommended by VERTEX, the vapor mitigation strategies will include the installation of a chemically resistant vapor barrier and/or a vapor mitigation system to protect indoor air in future buildings constructed where occupied ground floors and/or basement areas are in contact with the site soils.**

- r. BSC recommends that a Health and Safety Plan (HASP) and Soil Management Plan (SMP) be prepared by the contractor(s) before beginning construction work at the property. Due to the detection of reportable concentrations of soil and groundwater contaminants at the Site, a HASP should be prepared to address the known and potential contaminants at the Site. In addition, a SMP should be prepared to address the proper handling of soils from the property in terms of sampling for disposal purposes, appropriate temporary storage, shipping documentation, and confirmation that soil was disposed appropriately.

**A&M Response: Prior to the submittal of a Permanent Solution Statement to the Massachusetts Department of Environmental Protection (MassDEP) indicating that a condition of No Significant Risk has been achieved, United States Occupational Safety and Health Administration (OSHA) compliant HASPs will be required of all contractors whose employees are expected to perform activities that require work within site soil during construction. Site access will be restricted with security fencing and locked gates. A SMP will be prepared to address the proper handling of soils from the property in terms of sampling for disposal purposes, appropriate temporary storage, shipping documentation, and confirmation that soil was disposed appropriately.**

### Wayland DPW - Specific Comments

1. Sheet C-001, Grading & Drainage Note #3. This appears to be the only note associated with manholes. As the proponent is looking to have all manholes flush mount, we request that those used as part of the sewer system and parking lot drainage tight tank be a water-tight to prevent inflow.

**A&M Response: Grading & Drainage Note #3 was revised to indicate all structures shall be flush with finished grade and that the tight tank shall be water-tight to prevent inflow.**

2. Sheet C-001, Utility Note #9. Please ensure that the 18-inch separation is in instances where the water utility is over the sewer.

**A&M Response: Utility Note #9 has been revised accordingly.**

3. Sheet C-001, Utility Note #15. We recommend that the water main be encased in a poly wrap when concrete encasement is used. Concrete can corrode the water main and cause premature failure.

**A&M Response: Utility Note #15 has been revised accordingly.**

4. Sheet C-002, Note #24. Please identify the party responsible for obtaining the NPDES permit and developing the SWPPP.

***A&M Response: Note #24 on Sheet C-002 has been revised to note that A&M will prepare and submit the information, on behalf of WP East Acquisitions, LLC.***

5. Sheet C-002. Note #28. Appears to be a typographical error. "Capatown" is found in a few places on the plans.

***A&M Response: The plans have been updated accordingly.***

6. Sheet V-101, The plans should be updated to show the new pipe-gate entrance that the DPW recently installed at the entrance to the transfer station access road. Currently the pipe-gate is near the existing fence-style gate immediately to the north of the south entrance to the site (about 100-feet north of Boston Post Road). This gate will require removal and reinstallation approximately 300-feet northward on the transfer station access road.

***A&M Response: The plans have been revised to illustrate the existing pipe gate location and the proposed new location.***

7. Sheet C-101. The property/limit of work line is not consistent with the proposed project.

***A&M Response: The plans have been updated to illustrate a consistent limit of work with the proposed project.***

8. Sheet C-101. Note #4. The field locations of the erosion control should be coordinated with the DPW and the Conservation Department.

***A&M Response: Note #4 was revised accordingly.***

9. Sheet C-101. There are a number of existing utilities to the Septage Treatment Facility. The plans should demonstrate how these will be terminated/abandoned.

***A&M Response: A note has been added to Sheet C-101 indicating that "all existing utilities shall be abandoned, demolished, and/or removed from the site and disposed of in full compliance with all utility company and local, state, and federal regulatory requirements."***

10. Sheet C-101. The plans depict a portion of the work within Sudbury. Proponent should provide information related to the approvals for that portion of the work.

***A&M Response: Discussions with the Town of Sudbury regarding easements to grade and remove any remnants of the former WWTP have not yet been held. The Applicant intends to do so prior to the start of construction. If the requested easement(s) is not granted, the grading in this area will be removed and no work will be performed in the Town of Sudbury lot.***

11. Sheet C-101. A construction entrance is depicted at the northeast corner of the project. This will require the pipe-gate mentioned in the aforementioned comment 6 to be relocated prior to construction. The DPW recently replaced the asphalt in a portion of the access road. A pre-construction survey should be conducted to ensure the use of this entrance for construction vehicles does not result in damage to the renewed asphalt on the access road.

***A&M Response: The plans have been updated to illustrate this construction entrance at the northeast corner of the project removed from the plans. All construction access shall be from the front entrance located at the southeast corner of the property so as not to disturb the transfer station access road.***

12. Sheet C-102. The word "City" is used.

***A&M Response: Sheet C-102 has been updated accordingly.***

13. Sheet C-102. The use of the transfer station access road will require coordination and approvals from the Town to ensure that the project does not impact the Town during construction and after by residents of the development. The addition of the northeast access entrance will likely require transfer station patrons to turn around using the Alta roads to "U-turn" on days/times when the facility is closed and the pipe-gate is closed.

***A&M Response: This has been noted by the applicant. No additional response required.***

14. Sheet C-102. There are a number of traffic markings depicted on the transfer station access road. The proponent needs to coordinate these with DPW. The DPW will also need to modify signage on the access road.

***A&M Response: A note was added to Sheet C-102 indicating that all traffic signage and pavement markings shall be coordinated with the Wayland DPW and shall conform to MUTCD standards.***

15. Sheet C-102. A water main connection and a drainage pipe, headwall and spreader is depicted on the Town's property, extending from the project across the transfer station access road to the embankment on the east side of the Town's access road. The drainage work will require an easement from the Town. The work will need to be coordinated to mitigate impacts on transfer station access during construction and an easement and maintenance plan specific to the drainage elements on the Town property will need to be developed and approved.

***A&M Response: The plans have been updated to illustrate an easement for this work. The applicant has prepared a stormwater operation and maintenance plan, which is located in the drainage report, noting specific maintenance items. The applicant respectfully requests that any mitigation required be made a condition of approval.***

16. Sheet C-103. The configuration of the water system was updated appropriately. A loop is now provided. The DPW requests that the meter pit be located in a non-paved area to facilitate access and reduce roadway impacts. The DPW also requests that a large hatch be provided for the meter pit to facilitate the maintenance and replacement of the meter.

***A&M Response: The plans have been updated to illustrate the location of the meter pit in a landscaped area. A large hatch detail has been provided on the Civil Detail sheets (C-501 – C-506).***

17. Sheet C-104. Garage Drainage for Building #3 appears to be missing.

***A&M Response: The applicant respectfully notes that the final details of interior plumbing elements have not been designed to date. Current layout of plumbing building connections needs to be finalized with Plumbing Engineering prior to Building Permit. It is the current design intention to have Building #2 and Building #3 share a garage discharge connection as they are internally connected.***

18. Sheet C-504. Detail 5 appears to have a typographical error.

***A&M Response: Sheet C-504, Detail #5 was revised accordingly.***

19. Sheet C-504. Details 2 and 8 do not appear to be coordinated. Additionally, the DPW requests that only precast concrete manholes be provided for wastewater and holding tank applications, using a watertight manhole frame and cover.

***A&M Response: The plans have been updated to illustrate Details 2 and 8 coordinated accordingly and all wastewater manholes shall be pre-cast and water-tight.***

20. Sheet C-506. Detail 5 does not appear to be consistent with the proposed roof leaders.

***A&M Response: The plans have been updated to illustrate detail to be consistent with the proposed roof leaders.***

21. Sheet C-506. Details 3, 4, and 6 indicate that 4-foot sumps will be provided. These will be hard to construct and maintain. Please clarify whether they are required and update accordingly.

***A&M Response: The plans have been updated to illustrate the 4 foot sumps have been removed from the outlet control structures***

22. Sheet A-101. The utility rooms are depicted on the opposite side of the building from the water services that are feeding them. Domestic and Fire backflow devices should be location as close as practicable where the service enters the building.

***A&M Response: The location of the domestic and fire protection water service lines was revised to match with the utility rooms.***

23. Form C indicates a Traffic report was completed by TEC on September 18, 2019. Proponent should submit this plan to the DPW for their review.

***A&M Response: As requested, the Traffic Report has been provided under separate cover to the Town Engineer.***

### **Wayland Fire Department - Comments**

#### **Access to Property**

1. The curbing in the main access areas (SE and NE corners) need to be modified (softened) to better accommodate the turning radius of the larger fire department vehicles.

***A&M Response: The plans have been updated to illustrate curbing at the main access to better accommodate the turning radius of the larger fire department vehicles.***

2. The designed turnaround area on the NW corner of site by building #2 is inadequate to accommodate larger fire vehicles from being able to turn around using the designed turnaround area. Plan C-105 shows that the ladder truck would need to have the rear of the vehicle virtually touch the building to make the turn. The proposed size will be further reduced in the winter months making it unusable. This turnaround needs to be redesigned or have adjustments made.

***A&M Response: The plans have been updated to illustrate a larger turnaround area for the ladder truck.***

3. The fire department turnaround on the SW corner of the building has two spurs. The south spur has a width that does not meet the fire code requirement for fire roads which is 20 feet. See (18.2.3.4.1.1).

***A&M Response: The plans have been updated to illustrate the fire department turnaround has a minimum width of 20 feet. .***

4. The fire department access to the NW corner of building #3 is inadequate, and needs to be expanded. The fire department is willing to consider a non-paved vehicle access road designed for fire apparatus that utilizes alternative road technologies to achieve this access.

***A&M Response: The plans have been updated to provide additional access to the NW corner of Building #3.***

#### **Access in Parking Areas**

1. All access roads must have an unobstructed width of not less than 20 feet. See (18.2.3.4.1.1).

***A&M Response: The plans have been updated to provide all access roads have an unobstructed width of not less than 20 feet.***

## Access to Buildings

### Fire Hydrants

1. Three fire hydrants must be installed on the grounds of this complex. We are requesting that a minimum of three fire hydrants be installed on this property, and at least one hydrant shall be located within 100 feet of each sprinkler system fire department connection. We have specific locations at which we would like to see the hydrants installed.

***A&M Response: The plans have been updated to illustrate 3 fire hydrants on-site and one within 100 feet of each sprinkler room. A note has been added to the plans (Sheet C-103) noting that prior to submitting for a building permit the applicant must confirm final locations of hydrant with Wayland Fire Department (WFD). The applicant respectfully requests that final approval from WFD be made a condition of approval.***

2. In accordance with 527 CMR 16.4.3.1.1, the hydrants will need to be installed when combustible materials are on site.

***A&M Response: A note has been added to the plans (Sheet C-104) noting that the hydrants will need to be installed when combustible materials are on site.***

### Fire Department Connections (FDC)

1. Fire department connections for the sprinkler system shall be provided for the buildings on the property. The locations of these FDCs should be determined in conjunction with the fire department to ensure accessibility. The developer will provide the proper fitting to accommodate the department's four-inch Stortz supply lines.

***A&M Response: A note has been added to the plans (Sheet C-104) noting that prior to submitting for a building permit the applicant must confirm final locations of FDCs with Wayland Fire Department (WFD). The applicant respectfully requests that final approval from the WFD be made a condition of approval.***

### Fire Standpipes

1. Standpipes must be provided in the stairwells on all floors in each of the buildings in accordance with the relevant code. This may require remote hose stations in the garage area, and the maximum distance between hose stations shall not exceed 200 feet. See (NFPA 14).

***A&M Response: The travel distance to a standpipe cannot exceed 200 feet, so the maximum distance between standpipes shall not exceed 400 feet since this will be a fully sprinklered building. All Fire Protection systems to fully comply with the relevant NFPA codes.***



### Manual Ventilation Control for Parking Garage (Buildings #2 and #3)

1. The garage located in buildings #2 and #3 is a significant size and can't be properly ventilated with fire department fans. We are requesting a manual control that would allow the garage to be vented in the event of a smoke condition.

***A&M Response: The parking garage will be fully vented with an exhaust system complying with International Mechanical Code 2015, Section 404, Enclosed Parking Garages and be activated by CO/NOx detectors. The exhaust system will also be activated by smoke detectors in the event of a smoke condition.***

### Dry Sprinkler System in Garage Area

1. Although the sprinkler code does allow for the installation of a wet sprinkler system in the garage area, we recommend that a dry system be installed. This recommendation is being made to reduce the chance of sprinkler system freeze-ups and broken pipes.

***A&M Response: The parking garage will be designed to have a dry sprinkler system.***

### Elevators

1. Full size elevators should be installed in all three buildings, and these elevators must be capable of accommodating a medical stretcher.

***A&M Response: The parking garage will be designed to have a dry sprinkler system. All 3 buildings will have a 4,000 lb capacity elevator and will fully comply with all code-required elevator regulations, which include the dimensional capacity for a medical stretcher.***

### Building Safety While Under Construction

1. NFPA 241 requires that a plan be developed to safeguard the buildings during construction. This plan should be drafted and submitted to the fire department prior to starting the construction of the buildings.

***A&M Response: This has been noted by the applicant. No additional response required.***

### Third Party Plan Review

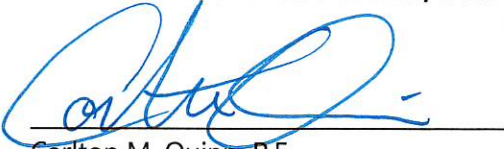
1. The fire department may use a third-party vendor to conduct a plan review and site inspections. This cost should be incurred by the developer or other responsible parties.

***A&M Response: This has been noted by the applicant. No additional response required.***

If you have any questions or comments, please do not hesitate to contact me at (781)-935-6889. We look forward to further discussing the project at the Alta's River Edge public hearing on November 19, 2019.

Very Truly Yours,

**ALLEN & MAJOR ASSOCIATES, INC.**



Carlton M. Quinn, P.E.  
Senior Project Manager



Cc via email: Jim Lambert, Mark Seck, Mike Tulipani, Mike Binette, Mike Doherty, Becky Rupel, James Ward, Steven Lee, John Copley, Matthew Snell & David Moore

Enclosures: 1) ALTA at River's Edge Site Development Plans  
2) ALTA at River's Edge Drainage Report