

May 13, 2024

Mr. Gregory Rondeau, Chairman  
Franklin Planning Board  
355 East Central Street  
Franklin, MA 02038

**Re: Autumn Hill Senior Village  
Peer Review**

Dear Mr. Rondeau:

BETA Group, Inc. is pleased to provide engineering peer review services for the proposed project entitled "**Autumn Hill Senior Village**" located at 488-496 Summer Street in Franklin, Massachusetts. This letter is provided to outline findings, comments, and recommendations.

### **BASIS OF REVIEW**

The following documents were received by BETA and formed the basis of the review:

- Site Plan Review and Special Permit Application Package, prepared by Doherty, Dugan, Cannon, Raymond ^ Well, P.C. of Franklin, MA, including the following:
  - Cover letter
  - Application for Approval of a Site Plan and Special Permit
  - Form P Application for Approval of a Site Plan
  - Certificate of Ownership
  - Site Plan Review Narrative
  - Certified Abutters List
- Plans (15 sheets) entitled: **Autumn Hill, Senior Village Franklin MA, Site Plan**, dated January 26, 2024, prepared by Legacy Engineering, LLC Millis MA.
- **Stormwater Report for Autumn Hill Senior Village** dated January 26, 2024, prepared by Legacy Engineering, LLC.
- **Architectural Plans for Autumn Hill Condos**, including front and side elevations and floor plans for 4-unit buildings.

Review by BETA will include the above items along with the following, as applicable:

- Site Visit
- **Zoning Chapter 185 From the Code of the Town of Franklin**, current through July 2021
- **Zoning Map of the Town of Franklin, Massachusetts**, attested to October 7, 2020
- **Stormwater Management Chapter 153 From the Code of the Town of Franklin**, Adopted May 2, 2007
- **Subdivision Regulations Chapter 300 From the Code of the Town of Franklin**, current through March 8, 2021
- **Wetlands Protection Chapter 181 From the Code of the Town of Franklin**, dated August 20, 1997
- **Town of Franklin Best Development Practices Guidebook**, dated September 2016

## INTRODUCTION

The project site includes two parcels, Lots 302-006 & 008 with a total area of 12.39 acres located at 488 and 496 Summer Street in the Town of Franklin (the "Site"). The Site is located within the Rural Residential 1 Zone and the Senior Village Overlay District along Summer Street. There are 2 existing residential dwellings on the parcel currently which will be maintained. Lots to the west, north and south of the Site are also within this district and there are single family residential dwellings in each of the lots. The lot to the east of the parcel is the Town Forest and Uncas Brook flows north through the parcel. A short section of Uncas Brook is located at the far southeast corner of the parcel before it flows into the adjacent town owned parcel. Accordingly, the riparian zone associated with Uncas Brook does protrude into the lot in this area as well as the 100' buffer to the adjacent bordering vegetated wetlands. The Site is heavily wooded with few openings except the immediate area around the 2 dwellings.

Topography at the Site varies significantly across the site. The 2 dwellings are located on the crest of a ridge which generally parallels Summer Street in the north-south direction. Along the southerly property line, the grade at the site slopes from a high point of Elevation 426 adjacent to the dwelling to elevation 296 adjacent to Uncas Brook. Summer Street is at elevation 412, 14' lower along this property line. The elevation at the northerly end of the parcel is not as significant. The crest of the ridge is elevation 394, while the downgradient edge to the east sits at elevation 346. Summer Street is at the crest of the ridge also so grades along the street are even with the grades around the dwelling which is 130± feet back from the street. The Site is not located within an NHESP-mapped estimated habitat of rare or endangered species. Based on the presence of Uncas Brook at the southeast corner of the parcel, a portion of the parcel in this area is located within the Water Resource District and a FEMA designated flood zone. NRCS soil maps indicate the presence of Charlton-Hollis-Rock Outcrop Complex and Hollis Rock Outcrop-Charlton Complex soils, with a Hydrologic Soil Group (HSG) rating of B & D (limited infiltration potential).

The project proposes to provide a driveway entrance at the far northerly edge of the parcel from Summer Street which will proceed along a 22' wide paved access driveway with cape cod berm to 42 new senior housing units. Vertical granite curbing will be provided at the entrance along Summer Street. The driveway will be a total length of 1527' but will be looped so that the initial intersection will be 440± feet from Summer Street. A 5' wide sidewalk will be provided along one side of the driveway and extend out to Summer Street. There are no sidewalks along Summer Street in this area. Each of the units will have a one-car garage on the first floor. 36 streetlights mounted on 10' high posts will be at each driveway and along the entrance driveway. Supplemental wall mounted fixtures will also be provided at the entrance doorways. No additional lighting is proposed at the existing dwellings.

The units will be attached townhouses clustered in units of 4, 3 or 2. A total of 44 units will be provided which will include 10 affordable units. As previously noted, the 2 existing dwellings will be maintained and used as individual units. The driveway access to each of these units will remain in their status. Landscaping will consist of 43 street trees. No additional amenities are proposed in the development. Proposed utilities include domestic water, electric & telecommunications, and sanitary sewer. The existing water main on Summer Street will be extended to the northerly property line and connected into the development at this single point. Sanitary sewer will be collected and connected into the existing municipal sanitary sewer collection system with a 2" force main. Low pressure pump units will be provided to serve 2 units apiece. The force main will be in the driveway and will connect with the sewer main in Summer Street at the northerly edge of the parcel. Because of the steep grades and significant vertical change in the grades across the site, there are a significant number of retaining walls proposed around the site. These walls vary in height and range up to 26' in height. Overall, the retaining walls have been used to minimize the

fill requirements for the development. Total cuts will be 25,700 cubic yards, which will be used to offset the fill requirements of 29,100 cubic yards. A net 3,400 cubic yards of fill will be required on site. Based upon the results of Test Pit 12, bedrock removal will be required to construct the entrance driveway somewhere from Station 2+0 to 3+80. Maximum depth of removal should be in the range of 4-5'. Stormwater management is proposed via three infiltration basins. Catch basins and manholes will be used to collect the runoff from the roadway surface. The 2 larger basins will discharge to the east towards Uncas Brook. The 3<sup>rd</sup> smaller basin will be located adjacent to the driveway access at the southerly end of the parcel which will discharge towards Summer Street. On all the basins, retaining walls are proposed to form the embankment and maintenance driveway for the basin.

## **FINDINGS, COMMENTS, AND RECOMMENDATIONS**

### **GENERAL**

G1. A P.L.S. stamp is needed on the existing conditions plan.

### **ZONING**

The Site is located within the Rural Residential 1 Zoning District and the senior Village Overlay District. The proposed use is a "Senior Village" which will be authorized by special permit granted by the Planning Board.

### **SENIOR VILLAGE OVERLAY DISTRICT (§185-48)**

As stated in the Bylaw, the purpose of the district is to "*encourage development of residential communities for persons 55 years of age and older, by allowing for a greater variety of uses and building types at a higher density than would normally be allowed..... It is intended that a senior village development provide a range of housing types and facilities that are responsive to the socio-cultural, health care, and recreational needs of senior residents.*" In addition, it also notes that "*Development should be concentrated in the most suitable and least environmentally sensitive areas of the landscape. Preservation of natural open space is strongly promoted, as is provision and enhancement of additional open space for recreational use and enjoyment of residents.*".

In accordance with the bylaw, the site meets the General Standards 48.D.(1) General Standards.

- a) The proposed development is 44 units which is greater than required 10 units.
- b) The total land area of the development is 12.39 acres which is greater than the minimum 5 acres required.
- c) No accessory uses including retail, restaurants or a village community center are proposed.

#### **(2) Density Determination**

- a) The Base density of the parcel is 1.5 units per gross acre which correlates to 19 units. The maximum allowable density is 5x the Base Density = 95 units.
- b) In accordance with this section of the bylaw, "*The allowable increased density, up to the calculated maximum number of housing units for the given senior village site, is at the discretion of the Board...*"
- c) In accordance with this section of the bylaw, a minimum of 15% of the Total Number of units shall be set aside as affordable housing if open space is  $\geq$  30%. Actual Open space is 35%.

- d) In accordance with 48.D.(2)(c)(ii)b. an additional 2.5 units can be added for each affordable unit added. The applicant is proposing an additional 7 affordable units which will allow an additional 18 units. This affordable housing bonus will add 25 units to the Base density of 19 bringing the total density to 44 units including 10 affordable units.

**Senior Village Application Requirements. (§185-48.E).**

- SV1. In accordance with Par 1 The applicant is **strongly** encouraged to request pre-application review. The applicant failed to take advantage of this recommendation.
- SV2. In accordance with par (ii)a. *A vertical aerial photograph enlarged to a scale not less detailed than 1 inch equals 400 feet, with site boundaries clearly marked;* An aerial image has been provided on sheet C-0 but is at a scale of 1"=500'. The scale of the image should be corrected to conform to the requirements of the bylaw.
- SV3. In accordance with par (ii)d. *Vegetative cover conditions on the property according to general cover type including cultivated land, meadow, pasture, woodland, and wetland; trees with a diameter at breast height (DBH) in excess of 15 inches, the actual canopy line of existing trees and woodlands.* This information is required and has not been provided.
- SV4. In accordance with par (ii)g. *A viewshed analysis showing the location and extent of views into the property from public roads and from public lands;* This information is required and has not been provided.
- SV5. In accordance with par (ii) h. *Geologic formations on the property, including rock outcroppings, cliffs, and sinkholes;* This information is required and has not been provided.
- SV6. In accordance with par (ii) j. *Locations of all historically significant sites or structures on the property, including but not limited to cellar holes, stone walls, earthworks, and graves;* This information is required and has not been provided.
- SV7. In accordance with par (iii) Primary and secondary open space lands and potentially developable lands shall be identified and delineated. This information has not been provided.
- SV8. In accordance with par (2) Application, a brief written description of the proposed project detailing the items listed in the bylaws is required and has not been submitted.

**Senior Village Standards. (§185-48.F).**

- SV9. In accordance with par. 1b. a minimum of 40% of the required open space shall be suitable for use for passive and/or recreational purposes. This area should be delineated on the plans.
- SV10. In accordance with par 1c. *The percentage of open space that is wetland resource areas as defined and regulated pursuant to the Massachusetts Wetlands Protection Act (MGL c. shall not normally exceed the percentage of the tract that is wetlands;* This data should be calculated and shown on the site plans. The calculation as shown on sheet for open space does not conform to this definition.
- SV11. In accordance with 1f. the plan should take into account any Town of Franklin or other public lands for preservation or improvements. There are no paths walkways or other appropriate physical connections to the adjacent open space at the rear of the parcel identified on the site plans. BETA recommends that potential linkage and access to the adjacent public lands be developed and shown in compliance with the bylaw.
- SV12. In accordance with par 2 at the owner's option, all areas to be protected shall be conveyed to a separate entity subject to the approval of the Board. The plans should delineate the boundaries of the proposed open space area including any and all associated monumentation.

In addition, the owners are required at the time of application to provide a management plan for the open space which has not been provided.

- SV13. In accordance with 3.A.v. Each home site shall be a minimum of 6,000 square feet in area. In addition, construction shall comply with the Town of Franklin Subdivision Rules and Regulations. The proposed buildings are all multifamily townhouses. Thus, as a minimum, BETA recommends that the design provide a right of way layout in accordance with the subdivision standards and identify overall lot layout areas to confirm that the development areas surrounding each townhouse meets this minimum.
- SV14. In accordance with 3. (b), (iv) Low Impact development practices shall be utilized to the greatest extent possible. Based on the existing steep grades on the parcel, these practices would be limited to the area of the 2 existing dwellings. There are no LID measures proposed for the control of stormwater runoff on site.
- SV15. In accordance with par (c) Parking standards. § (i) a maximum of 2 spaces per unit shall be permitted. The 2<sup>nd</sup> space on each unit is in the driveway in front of the garage. There are no guest spaces provided. BETA will defer the requirement for guest spaces to the Board as noted in this section of the bylaw.
- SV16. Par. ( c) § (i) also notes “*All off-street parking shall be sited to the side or rear of buildings and shall minimize visibility from public and private streets.*” Providing the second space between the garage and the street violates this requirement.
- SV17. A Landscape Design should be submitted to document compliance with par (d) Landscaping, Shade trees and infrastructure.
- SV18. In accordance with sub paragraph (vii) Solid waste storage, air conditioners, loading areas and the like shall be shielded from view by walls, dense vegetation, or fences. Each of these items should be identified on the plans including the method to be utilized to shield them from view. It should also be noted that the 12 units in the center of the proposed development will be in an island formed by the access roadway. Thus, the units and any outside utilities will be visible at some point as you drive through the development and landscaping and screening will become that much more important.

### **SUBDIVISION OF LAND (CHAPTER 300)**

As noted in the Senior Village section of the bylaw, §185-48. F.3.(a) *(v) Construction within a senior village residential subdivision shall comply with the Town of Franklin Subdivision Rules and Regulations.* Thus, this portion of the review will look at the conformance of the roadway design with the subdivision standards.

- SC1. Per §300-10. B.4.(c) Street sidelines at the curb shall not be less than a 30’ radius. The curb radius shall be indicated on the plan.
- SC2. Per §300-10. B.5.(a) The minimum centerline radius of the roadway shall be 150. The centerline radius at the north end of the roadway loop is approximately 125’ and does not conform.
- SC3. Per §300-10. B.6. Sight distances. *Sight distance requirements along roadways and at intersections shall be evaluated under two categories as defined by the Massachusetts Highway Department in its most current Highway Design Manual. Specifically, Stopping Sight Distance (SSD) and Intersection Sight Distance (ISD).*
- a. The sight distance at the intersection with Summer Street should be measured and identified on the plans for further evaluation.

- b. The vertical curves at Sta 2+50, 4+23.5, 4+ 67.3 and 7+00 provide less than 150' of sight distance. The recommended sight distance for a 30 MPH design speed according to AASHTO is 200' on a flat continuous grade. In accordance with the AASHTO manual, BETA recommends that the vertical curves be designed to provide a minimum sight distance of 250' to account for the steep grades.
- SC4. Per §300-10. D.2. Grades of streets shall not be less than 1.50%. The applicant has proposed a grade of 1.1% which should be corrected.
- SC5. Per §300-10. D.3. Leveling area. *On any street where the grade exceeds 6.0% on the approach to an intersection, a leveling area with a slope of not more than 3.0% shall be provided for a distance of not less than 100 feet, measured from the nearest exterior line of the intersecting street.* At the first intersection in the interior roadway system at STA 4+45± the approach grades are 8.0% and only 50' leveling areas at a grade of 4.0% are provided. This design does not conform to the regulations and should be modified.
- SC6. The roadway system as designed is a Dead-End Street. In accordance with §300-10. E.4. *Other. Dead-end streets shall serve no more than 12 dwelling units and shall be no longer than 600 feet and having a minimum length of 400 feet, measured from the center of the turnaround to the sideline of the closest, connecting through street.* In this instance the first intersection at the start of the turnaround is 425'±. However, as noted the street shall serve no more than 12 dwelling units. In this instance, there are 44 units proposed. Thus, either a waiver or a second means of access to Summer Street is required.
- SC7. Per §300-10. F.4. Pavement. The roadway shall have 2.5" binder course and a 1.5" top course. The design is proposing a 2" binder and 1.5" top course. The cross section shown on Sheet C-11 should be modified to reflect the regulation requirements.
- SC8. As noted in §300-10. H. Curbing, (1) Type which states that curbing shall be placed the full length of all streets. The type shall be vertical granite or slant granite. The design uses Cape Cod Berm along the edge of the roadway opposite the sidewalk. The applicant should either request the waiver or revise the design.
- SC9. §300-10. H.4. notes that transition pieces or 2' vertical granite radius pieces or transition pieces at slant granite should be placed at all driveway openings. A construction detail should be provided which identifies the curbing at the openings.
- SC10. In accordance with §300-11. A. (7) Setbacks. a) the minimum setback distance for a stormwater basin embankment to the property line is 10'. The embankment that forms Infiltration Basin #1 is adjacent to the property line with no setback. Either request the waiver or show the setback and bring the basin into conformance with the standard.
- SC11. In accordance with §300-11. A. (7) Setbacks. a) the minimum setback distance for a stormwater pond to the property line is 20'. Infiltration Basin #1 measures only 13'+. Either request the waiver or bring the basin into conformance with the standard.
- SC12. In accordance with §300-13. A. Sidewalks (1) Location. Sidewalks are required on both sides of the road unless the Board determines that one sidewalk will adequately serve pedestrian traffic. The plan proposes a sidewalk on one side only. BETA will defer this matter to the Board.
- SC13. §300-13. E. Shade Trees. The applicant shall submit a shade tree landscaping plan. Proposed street trees are shown on the driveway plan views shown on Sheets C-6 & C-7. However, species are not identified, and the locations do not conform to the requirements of the regulations. A separate landscape plan should be presented.

### **FLOODPLAIN DISTRICT (§185-24)**

A FEMA-mapped 100-year floodzone (Zone AE) is located at the southeast corner of the Site. No work is proposed within this area.

### **SITE PLAN AND DESIGN REVIEW (§185-31)**

The project has been submitted for Site Plan Review and is required to conform to the requirements of this section. The submitted planset appears to be in compliance with the drawing requirements except as noted below:

- S1. A Landscaping Plan is required. (§185-31.C.3(k)).
- S2. Indicate means of waste disposal and proposed dumpster locations, if applicable (§185-31.C.3(i)).
- S3. In accordance with §185-31.C.3. (s) *Description of traffic circulation, safety and capacity in sufficient enough detail for the Board to make a determination of whether a traffic impact analysis is necessary. If information is not sufficient, upon the request of the Planning Board, an applicant may be required to provide a comprehensive traffic study detailing the effects of the proposed development.* This information is required and has not been provided to the Board to allow them the ability to make this determination.

### **WATER RESOURCES DISTRICT (§185-40)**

A Portion of the Site in the southeast corner of the parcel, is located within the Town of Franklin Water Resources District and a Zone II Wellhead Protection Area. The project does not include any use that would be prohibited in this district.

### **STORMWATER MANAGEMENT**

The stormwater management design proposes three infiltration basins to treat and infiltrate stormwater. Conveyance to these BMPs will be achieved via a closed drainage systems consisting of 10 catch basins, manholes, and water quality units. Portions of the existing development which includes the 2 existing single-family dwellings will continue to flow untreated towards Summer Street. The overall stormwater analysis will be a combination of new development and redevelopment. Weighted averages and *DeMinimus* calculations have been provided in the report. The primary pretreatment will be 3 “*First Defender*” proprietary treatment units at the inlet into the 3 basins. Based upon the stormwater report and the design calculations, BETA has the following comments.

- SW1. The design of Infiltration Basins 2 & 3 utilizes a large block retaining wall to create the embankment which forms the basin both on the upgradient and in the case of basin 2 on the downgradient side. Based upon their height, the only means available to maintain these basins is to physically drive into the basins and maintain them from the inside out. Volume 2, Chapter 2 of the handbook is clear in that maintenance of these basins would occur from the crest of the dike which forms the basin. BETA does not agree with the design that it meets the design requirement of the standards for an infiltration basin as shown in Volume 2, Chapter 2.
- SW2. There is runoff from over 100,000 square feet of impervious surfaces being collected by 10 catch basins. In accordance with Volume 2, Chapter 2, page 4 of the handbook, the impervious surface area tributary to a deep sump catch basin cannot exceed 0.25 acres. BETA recommends that the designer review the tributary areas of impervious surfaces to each basin and document that this design requirement has been met.

- SW3. The soil descriptions in the test pits for each basin indicate that the soils are all Class 1 soils with rapid infiltration rates as defined by the handbook. In accordance with Volume 1, Chapter 1 page 9 of the handbook, the Water quality volume in accordance with the standards is 1". Thus, the statement on page 12 of the stormwater report that the water quality volume is 0.5" as defined by the Massachusetts Stormwater standards is incorrect and should be corrected.
- SW4. Except for a few test pits where bedrock was shallow, all the soil descriptions indicate that the soils on site are primarily Class 1 soils. Without the presence of exposed ledge, it is BETA's opinion that the soils on site should be considered HSG B. The HSG C and D soil classification is not supported by the test pit data and should be modified accordingly. Those areas of exposed ledge should be shown and separated out as a CN value of 98.
- SW5. In accordance with Volume 2, Chapter 2 of the standards, the infiltration basins need emergency dewatering capability and monitoring wells. Each of these should be designed into the proposed basins.

### **STORMWATER MANAGEMENT REGULATIONS (CHAPTER 153)**

The project proposes to disturb land in excess of one acre within the Town of Franklin. It is therefore subject to the Stormwater Management Regulations. The project is also required to comply with the Town of Franklin Best Development Practices Guidebook (BDPG). Compliance with these regulations is outlined below and throughout the following sections.

#### **MASSDEP STORMWATER STANDARDS**

The project is subject to the Massachusetts Stormwater Standards as outlined by MassDEP. Compliance with these standards is outlined below:

**NO UNTREATED STORMWATER (STANDARD NUMBER 1):** *No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.* The project proposes to connect new closed drainage systems to existing outfalls located within wetland resource areas. Existing splashpads are located at each outfall for erosion control.

SW6. The plans need to show how the runoff from the roof areas at the rear of units 17-27 is collected and directed to an infiltration and/or treatment train.

SW7. The plans need to document the location of the exposed ledge on site relative to the discharge locations from infiltration basins 2 & 3. If these discharge points cascade over the exposed ledge they could potentially cause erosion along the toe of the face, it must be addressed.

**POST-DEVELOPMENT PEAK DISCHARGE RATES (STANDARD NUMBER 2):** *Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.* The project proposes changes to site hydrology and ground cover which will impact stormwater flow to the analyzed design points. Stormwater runoff will be mitigated via capture, storage, and infiltration within the 3 Infiltration SCMs.

There are only 2 design points to be considered on the parcel. They are the flows to Uncas Brook east of the site and towards Summer Street to the west. Each of these design points run parallel with the ridge along the middle of the lot. The Calculations indicate a net decrease in peak discharge rate and volume for the 2-, 10-, 25, and 100-year storm events for each design point.

**RECHARGE TO GROUNDWATER (STANDARD NUMBER 3):** *Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to maximum extent practicable.* NRCS soil maps indicate the soils at the site are Canton loamy sand, and Charlton-Hollis-Rock Outcrop, all are rated in Hydrologic Soil Group (HSG) B (high infiltration potential). The exposed rock outcrops are appropriately classified as HSG D, however, these areas should be identified on the plans and not just based upon the NRCS-WSS delineation.

The project proposes 3 infiltration basins for recharge. Test pits conducted in the areas of the 3 basins indicate that the mineral soils in the areas of the basins are all class 1 soils which are suitable for recharge. The project is anticipated to provide a recharge volume well in excess of what is required. Calculations have been provided indicating that all BMPs will drawdown within 72 hours.

**TOTAL SUSPENDED SOLIDS (STANDARD NUMBER 4):** *For new development, stormwater management systems must be designed to remove 80% (90% per Town Bylaw) of the annual load of Total Suspended Solids (TSS).* The project proposes treatment trains generally consisting of deep sump catch basins, water quality units, and infiltration Basins. The project is anticipated to provide TSS removal in excess of what is required.

The project proposes to provide the 1.0-inch water quality volume in the 3 basins. A portion of the existing impervious surfaces associated with the existing single-family dwellings and the associated driveways will continue to flow untreated towards Summer Street. Deminimus calculations have been submitted for this flow.

SW8. The TSS Removal calculations assume a Removal rate of 80% for the “First Defender” proprietary separator. BETA and the Franklin DPW have consistently considered these units regardless of manufacturer as providing a maximum of 44% TSS Removal. It should be noted that this is consistent with the draft revised standards. In addition, these units have been accepted as providing the pretreatment required for the infiltration basins. Thus, the TSS Removal calculations should be revised accordingly.

SW9. The pretreatment for the infiltration basins cannot be included in the total TSS Removal Rate. The calculations should be revised accordingly.

SW10. The discharge pipe from the DMH at STA 6+54 into Infiltration Basin #2 does not flow through the first defender proprietary separator. Thus, this treatment train does not meet 44% TSS Removal rate required for pretreatment into the basin.

SW11. See Comment SW2 above regarding the impervious surface area tributary to the deep sump catch basins.

SW12. The “deminimus” calculations does not appear to account for all the untreated runoff from existing impervious surfaces which discharge towards Summer Street. BETA recommends that the designer review these calculations to ensure that all these areas are accounted for. It is also important to note that only the runoff which discharges towards Summer Street can be considered in the calculation.

**HIGHER POTENTIAL POLLUTANT LOADS (STANDARD NUMBER 5):** *Stormwater discharges from Land Uses with Higher Potential Pollutant Loads (LUHPPLs) require the use of specific stormwater management BMPs.* The development does not qualify as a LUHPPL. Standard does not apply.

**CRITICAL AREAS (STANDARD NUMBER 6):** *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.* The project includes stormwater discharges to a Zone II Wellhead protection area which is a critical area.

**REDEVELOPMENT (STANDARD NUMBER 7):** *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.* The project is a combination of new development and redevelopment. However, under the bylaw, the development does not qualify as redevelopment and therefore must be designed to conform to the requirements of new development.

**EROSION AND SEDIMENT CONTROLS (STANDARD NUMBER 8):** *Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.* As the project proposes to disturb greater than one acre of land, it will be required to file a Notice of Intent with EPA and develop a Stormwater Pollution Prevention Plan (SWPPP). Erosion control measures are depicted on the plans include perimeter erosion controls, inlet protection, and stabilized construction entrance. A draft SWPPP has been provided.

SW13. Provide sequence of construction (§153-12.M).

SW14. The applicant is reminded that a Stormwater permit from the Franklin DPW is required based upon the size of the disturbance.

SW15. BETA recommends that the stockpile area upgradient of Basin #2 be moved so it cannot impact the basins.

SW16. Additional erosion control measures should be provided adjacent to the proposed retaining walls around the basins.

SW17. Provide means of protecting proposed stormwater BMPs from construction-period sediment.

SW18. Provide means of maintaining existing flow patterns following the removal of the existing closed drainage system but prior to installation of the proposed system.

**OPERATIONS/MAINTENANCE PLAN (STANDARD NUMBER 9):** *A Long-Term Operation and Maintenance Plan shall be developed and implemented to ensure that stormwater management systems function as designed.* A Stormwater Operation and Maintenance Manual was provided with the Stormwater Management Report.

SW20. Provide owner signature (§153-18.B(5)).

SW21. Include provision requiring a documentation submittal to the DPW confirming when maintenance has been satisfactory completed (§153-18.B(6)).

SW22. Indicate how future property owners will be notified of the presence of the stormwater management system and the need for maintenance.

SW23. Provide estimated operations and maintenance budget.

**ILLICIT DISCHARGES (STANDARD NUMBER 10):** *All illicit discharges to the stormwater management system are prohibited.* An Illicit Discharge Compliance Statement has been provided.

SW24. Provide owner's signature.

## **WETLANDS PROTECTION**

The Project does not propose any work within the jurisdictional limit of the Conservation Commission.

Mr. Gregory Rondeau, Chairman

May 13, 2024

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If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,

BETA Group, Inc.



Gary D. James

Senior Project Engineer

cc: Amy Love, Town Planner