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August 15, 2017

Michael Kulesza, Chairman
Town of Norfolk Zoning Board of Appeals
One Liberty Lane
Norfolk, MA 02056

RE: The Preserve at Abbyville and Abbyville Commons
State and Town of Norfolk Stormwater Standards

Dear Mr. Kulesza and Board Members,

On behalf of the Applicants, Abbyville Development LLC, and Abbyville Residential LLC, the following is a summary of the work prepared by the Applicants which demonstrates compliance with both the stormwater standards as adopted by the Commonwealth of Massachusetts DEP, as well the Town of Norfolk local stormwater management regulations.

Background

In April, 2008, the Massachusetts Department of Environmental Protection adopted a new Stormwater Management Policy and related technical guidance (the Policy) to address non-point pollution discharges. The Policy prescribes specific stormwater management standards for the development of projects, including urban pollutant removal criteria for projects that may impact environmental resource areas. Compliance is achieved through the implementation of "Best Management Practices" (BMP's) in the design, and is required in order to comply with the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and the Wetlands Protection Act, M.G.L. c. 131, § 40 and regulations at 310 CMR 10.000. In accordance with the State Wetlands Regulations, 310 CMR 10.05(6)(b), Conservation Commissions and MassDEP issue Final Orders of Conditions that require that stormwater be managed in accordance with the Stormwater Management Standards.

The Town of Norfolk Planning Board has also adopted stormwater regulations which can be found in the Rules and Regulations for Subdivision of Land and Site Plan Approval & Special Permit Rules and Regulations. As most recently amended on September 16, 2010 (referred to herein as the Subdivision/Site Plan Regulations). Section 4.19.1 of the Subdivision/Site Plan Regulations requires that the stormwater management system shall collect, convey, treat, and recharge stormwater in a manner which will ensure protection of property, preservation of water resources, minimization of environmental impacts, and protection of public and environmental health by providing adequate protection against pollution, flooding, siltation and other problems caused by poor drainage. The Stormwater Standards of the Subdivision/Site Plan Regulations essentially mirror and require compliance with "the current edition of the Massachusetts Department of Environmental Protection's 'Massachusetts Stormwater Handbook.'" To comply with the above requirements, the following 10 performance standards shall be addressed.

Although the technical demonstration of how both projects comply with these standards are incorporated into the site plans entitled 'The Preserve at Abbyville' and 'Abbyville Commons', Norfolk, Massachusetts Site Plan

Sets, prepared by United Consultants, Inc. dated March 15, 2017; the Preliminary Drainage Report entitled "Technical Supplement – Drainage Calculations The Preserve at Abbyville and Abbyville Commons, Lawrence Street, Norfolk, MA' dated May 2017; and, and Post Development Watershed Maps, dated March 15, 2017, as the same will be amended and adjusted based upon the final layouts of both projects (collectively, the Stormwater Management Report") previously filed with the Board, and as adjusted by the Applicants and peer reviewed by the BETA Group, we have outlined the specific standards from both the MassDEP Standards and Town of Norfolk regulations noted above, and have described how the standards have either been addressed or are not applicable to the proposed projects.

Stormwater Standards

Standard 1 - No new Storm-water Conveyances may discharge untreated storm-water directly to or cause erosion in wetlands or water of the Town of Norfolk. Although both projects do not have any discharges of stormwater to wetlands or "Waters of the Town of Norfolk," it should be noted that the stormwater system includes a treatment train which consists of deep sump hooded catch basins, sediment fore-bays and infiltration basins which provide the required treatment for the collected stormwater runoff. The infiltration basins contain the stormwater and allow for infiltration into the ground, and there is no stormwater discharge from any basin to the wetlands. The containment of stormwater within the basins will ensure that there will not be any erosion in the wetlands.

Standard 2 – Stormwater management systems shall be designed so that post development peak discharge rates do not exceed pre-development peak discharge rates. The stormwater collection system will discharge the treated stormwater to three infiltration basins which have been designed to infiltrate the entire collected stormwater. Based on the design of both Projects, there will not be any increase in the post-development peak discharge from the collected stormwater as compared to the pre-development peak discharge rates.

Standard 3 – Loss of annual recharge to ground water shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, storm-water best management practices and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from the pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Management Handbook. The storm-water system has been designed to infiltrate the required stormwater volume, as described in more detail in the Stormwater Management Report.

Standard 4 – Stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS). This standard is met when: a. suitable practices for source control and pollution prevention are identified in long-term pollution prevention plan and thereafter are implemented and maintained; and, b. structural stormwater best management practices are sized to capture the required water quality volume determined in accordance with the Massachusetts Stormwater Handbook. The operation and maintenance plan contained within the Stormwater Management Report provides suitable practice which shall be utilized for compliance with this standard. The stormwater system design includes calculations which confirm compliance with the water quality sizing requirements. The above referenced plan and calculations can be found in the drainage report contained within the Stormwater Management Report.

Standard 5 – For land uses with higher potential pollutant loads, source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable. If through source control and/or pollution prevention, all land uses with higher potential pollutant loads

cannot be completely protected from exposure to rain, snow, snow melt and storm-water runoff, the proponent shall use the specific structural storm-water BMPs as provided in the Massachusetts Stormwater Handbook. Stormwater discharges from land uses with higher potential pollutant loads shall also comply with the requirements of the Massachusetts Clean Waters Act M.G.L. C. 21, Sections 26 through 53, and the regulations promulgated thereunder at 314 CMR 3.00, 314 CMR 4.00 and 314 CMR 5.00. There are no land uses with Higher Potential Pollution Loads proposed within the development area. The site contains an AUL area which is located greater than ninety seven feet from a building lot, and which was prepared as a result of an extensive investigation and assessment leading to the recording of the AUL and closing out the site through the Massachusetts Contingency Plan regulatory program, but the existence of an AUL is not defined as a land use with Higher Potential Pollution Loads.

Standard 6 – Stormwater discharges within the Zone II or Interim Wellhead Protection Area of a public water supply and stormwater discharges near or to any other critical area require the use of the specific source control and pollution prevention measures and the specific structural stormwater best management practices determined by the Department to be suitable for managing discharges to such areas as provided in the Massachusetts Stormwater Handbook. A discharge is near a critical area if there is a strong likelihood of a significant impact occurring to said area, taking into account site-specific factors. Stormwater discharges to Outstanding Resource Waters and Special Resource Waters shall be removed and set back from the receiving water or wetland and receive the highest and best practical method of treatment. A stormwater discharge” as defined in 314 CMR 3.04(2)(a)1, or (b), to an Outstanding Resource Water or Special Resource Water shall comply with 314 CMR 3.00 and 314 CMR 4.00. Stormwater discharges to a Zone I or Zone A are prohibited, unless essential to the operation of the public water supply. The site is located within the Zone II of two Town of Franklin wells. Based on the site being located within a Zone II, specific BMPs were incorporated into the design of the Projects to provide for the required stormwater treatment. The infiltration basins are not located within the 100 foot buffer zone to any wetland resource area or within the riverfront area to the Mill River. There is no Zone I or Zone A on the site. If a wellfield is developed in the open space area located on the property, the Projects have been designed to be located as far as practicable from any future proposed Zone I area, and associated future Zone II area.

Standard 7 – 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 stormwater 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 the existing conditions. The southerly portion of the site has been previously developed with existing mill buildings and access roadways. The northwest portion of the site was previously a gravel pit. The site design could have utilized these less stringent stormwater standards, but the Applicants did not utilize the provisions of the redevelopment standard as the site stormwater system was designed to meet all of the stormwater standards as if the entire site was a pristine site.

Standard 8 – A plan to include construction-related impacts including erosion. Sedimentation and other pollutant sources during construction and land disturbance activities (construction period erosion, sedimentation and pollution prevention plan) shall be developed and implemented. The site disturbance will exceed one acre and will therefore require the development and implementation of a detailed of a Stormwater Pollution Prevention Plan (SWPPP) meeting the U.S. EPA Regulations and standards as a part of a U.S. EPA Stormwater Construction General Permit Notice of Intent. The SWPPP will address the construction period erosion and sedimentation control as well as site stabilization methods during construction. This filing will be made with the U.S. EPA, and implementation of the SWPPP, will occur well in advance of the start of construction.

Standard 9 – A long-term operation and maintenance plan shall be developed and implemented to ensure that the stormwater management system functions as designed. A long term operation and maintenance plan (O & M Plan) will be implemented and managed by the entity in control of, and responsible for, the maintenance of the site storm-water systems. This O & M Plan will be completed prior to the start of construction.

Standard 10 – All illicit discharges to the stormwater management systems are prohibited. The property developer is charged with preparing an Illicit Discharge Compliance Statement, verifying that no illicit discharges exist on the site, prior to the start of construction. This Statement will be prepared by the Applicants prior to the start of construction.

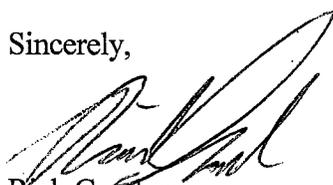
Separation from Groundwater

The Applicant has undertaken an extensive investigation of the site, including the advancement of borings in order to adequately characterize the soils and related depth to groundwater. The information below is based upon such data, and is provided to indicate the separation to groundwater from the three infiltration basins which exceed four feet as required by applicable laws and related technical guidance:

Infiltration Basin #	Groundwater Elevation at Basin Location	Bottom of Basin Elevation
1	166.50	172.0
2	164.30	170.0
3	160.58	166.0

Groundwater separation as described above meets both State Stormwater Management requirements, and applicable Town of Norfolk stormwater requirements. As a result, both Projects meet or exceed both State Stormwater Management requirements and Town of Norfolk Stormwater Management requirements.

Sincerely,



Rick Goodreau
Project Manager

RG/
Enclosures