Narrative to Accompany Notice of Intent Application
337 Berkshire Trail, Cummington, MA
January 22, 2018

1. Introduction

The site is a previously developed 7.82± acre parcel located on the south side of Berkshire Trail (Route 9), with frontage on both Fairgrounds Road and Berkshire Trail (Route 9). The parcel is denoted as Lot 4 on Assessor's Map 23D. The site currently contains a one-story building with paved and gravel parking areas with access from Berkshire Trail (Route 9) and Fairgrounds Road. The existing development is located on the northernmost portion of the site proximate to the intersection of Berkshire Trail and Fairgrounds Road. The proposed development portion of the parcel is similarly located on the northernmost portion of the parcel and is bordered by Berkshire Trail (Route 9) to the north, Fairgrounds Road to the west, a residential property to the east, and a wetland area located on the subject parcel to the south. There is an unnamed and unmapped perennial stream located proximate to the center of the developed portion of the site, which is collected within a 48" culvert on the subject site and conveyed to the north side of Berkshire Trail (Route 9). Please see Section 2 of this narrative for more information relative to on-site resource areas.

The project proposes to remove the existing building and associated parking areas and utilize the northwest portion of the parcel for the construction of a 9,100± square foot retail store and associated site improvements. The project proposes twenty-eight (28) parking spaces. Existing driveway connections to Berkshire Trail (Route 9) and Fairgrounds Road are proposed to be removed and replaced with a single full access driveway onto Berkshire Trail (Route 9). The project proposes to result in a net decrease of building and parking surfaces on-site, reducing the amount of impervious surfaces on-site by approximately 2,136± square feet, and also proposes to increase minimum setbacks from parking areas and building to resource areas.

A stormwater management system has been designed in accordance with both the Town of Cummington requirements and the standards described in the Massachusetts Stormwater Handbook and Stormwater Standards. In general, stormwater runoff generated as a result of the project is designed to be collected, treated, and attenuated through a combination of Best Management Practices (BMPs), including a bioretention area and subsurface infiltration basin. Stormwater BMPs have been selected per consultation with the Town and their consultants. The proposed stormwater system represents a significant improvement to existing conditions, as no stormwater system currently exists on-site to mitigate and treat runoff from existing impervious surfaces. Please refer to the enclosed Drainage Report for more information.

The project is filing the enclosed Notice of Intent (NOI) application per the Massachusetts Wetlands Protection Act for work proposed within the one-hundred (100) feet jurisdictional buffer zone to a Bordering Vegetated Wetland (BVW), within Bordering Land Subject to Flooding (BLSF), and within a 200-foot Riverfront Area, in accordance with the Wetlands Protection Act (310 CMR 10.00).

2. Resource Areas

2.1 Bordering Vegetated Wetland & Buffer Zone

The development portion of the site is bordered to the south by a Bordering Vegetated Wetland, a portion of which extends northerly towards Berkshire Trail proximate to the center of the site. On-site Bordering Vegetated Wetland was delineated by Matthew S. Marro Environmental Consulting with on-site consultation by the Conservation Commission's wetland consultant, Stockman Associates LLC. The limit of bordering vegetated wetland as reviewed by the Town's wetland consultant is reflected within the enclosed Site Development Plans and the Wetland Delineation Report (Appendix D). No disturbance of Bordering Vegetated Wetlands is proposed.

Work within the one-hundred (100) foot wetland buffer zone limit includes removal of the existing building, gravel parking area, sewage disposal area, and associated existing site features. Under existing conditions, paved surfaces are located within approximately six (6) feet from the edge of wetland and the existing building is located approximately twenty-one (21) feet from the edge of wetland. The project proposes to construct portions of the proposed building, parking area, stormwater management system, sewage disposal system, utilities, and landscaping within the one-hundred (100) foot wetland buffer zone limit. Minimum setbacks of the proposed parking areas and building are located further from the resource area than existing conditions, approximately ten (10) feet and forty-seven (47) feet, respectively. The project also proposes a net decrease of impervious surfaces on the subject parcel of approximately 2,136± square feet. The project proposes to restore previously existing impervious areas to a more natural condition with a conservation/wildlife seed mix. Additionally, the project is proposed with a stormwater management system in compliance with the MassDEP Stormwater Management Handbook where none exists for existing impervious surfaces, representing a substantial improvement.

The project proposes construction period Best Management Practices (BMPs) to mitigate proposed disturbances, including but not limited to siltation fences barriers, temporary sediment basins, stockpile areas, and a construction entrance. Construction period erosion and sediment control measures are reflected within the enclosed Site Development Plans. Additionally, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared prior to construction in conjunction with the requisite Construction General Permit filing with the Environmental Protection Agency (EPA).

2.2 100-Year Floodplain / Bordering Land Subject to Flooding

The northeast portion of the parcel is located within a mapped 100-year floodplain (Zone "A") as reflected on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 250159 0008B. Work within the mapped Bordering Lands Subject to Flooding (BLSF) includes only the removal of the existing building, replacement of the existing septic system, and creation of floodplain compensatory storage areas.

For the purposes of the subject Notice of Intent application, a more conservative limit of Bordering Land Subject to Flooding is established upon consultation with the Cummington Conservation Commission and their wetland consultant, Stockman Associates LLC. Per

coordination with the Conservation Commission and their wetland consultant, and as previously established on a record plan entitled "Site Plan" prepared by Hill Engineers, dated 3/26/2015, the limit of BLSF is established at elevation 998.1 on the proposed project's vertical datum (NAVD 1988), which equivalent to an elevation of 998.6 on the vertical datum on the Hill Engineers Plan (NGVD 1929). In accordance with 310 CMR 10.57(2)(3), this elevation represents the maximum lateral extent of flood water which has been observed as previously indicated by the Cummington Conservation Commission and their wetland consultant.

In consideration of on-site BLSF, the project proposes to provide compensatory floodplain storage areas exceeding the existing floodplain storage on-site, as reflected in Appendix E of this application package. The project is calculated to provide approximately 21,970 cubic feet of compensatory floodplain storage, exceeding the requirement of approximately 11,773 cubic feet by 10,198 cubic feet, or 187%.

Additionally, the project proposes to provide a reduction of impervious surfaces on-site and to provide a stormwater management system where none exists today. As a result, the project proposes a reduction of peak rates of runoff from the subject site for all storms analyzed and increase groundwater recharge, which is anticipated to result in further reduction in off-site flooding.

2.3 Rare Species and Habitats

The subject parcel is located within mapped Estimated Habitat of Rare Wetlands Wildlife and Priority Habitats of Rare Species as mapped by the Natural Heritage and Endangered Species Program (NHESP), see enclosed mapped within Appendix C for more information. NHESP has been previously consulted relative to the subject project, and NHESP has indicated that limited impact is anticipated to rare species and habitats with an anticipated condition relative to construction start dates. A Massachusetts Endandered Species Act (MESA) application was filed concurrent with the Notice of Intent application.

2.4 Redevelopment Within Previously Developed Riverfront Areas

Majority of the existing development and proposed project is located within the 200-foot Riverfront Area associated with unnamed perennial stream as depicted within the enclosed NOI package. Based upon correspondence from MassDEP and additional StreamStats analysis by Tom Maguire of MassDEP, the site has a tributary drainage area that exceeds 0.5 Square miles and experiences a predicted flow rate greater or equal to 0.01 cubic feet per second therefore, classifying the stream as a perennial (Refer to Wetlands Protection Act 10.58(c)(i)). On-site riverfront area has been previously disturbed with an existing one-story brick building with associated parking areas.

The proposed project represents a net improvement to the protection of Riverfront Area through the reduction of existing degraded surface and additional on-site measures. In accordance with 310 CMR 10.58(5), *previously degraded riverfront area shall consist of all impervious surfaces in existence prior to August 7, 1996.* Accordingly, the project proposes to reduce the amount of impervious surfaces within the Riverfront Area and further proposes to significantly reduce the amount of impervious surfaces within the 100-foot Riverfront Area as further detailed in the table below.

	0-100 Foot Riverfront	0-200 Foot Riverfront
Existing Degraded Surface	18,075± SF	26,080± SF
Proposed Degraded Surface	6,335± SF	25,890± SF

As noted in the table above, the project proposed to reduce the amount of degraded area within the 200-foot Riverfront Area and to significantly decrease the amount of degraded area within the 100-foot Riverfront Area. Overall, the project limit of work within the 200-foot Riverfront Area contains approximately 1.5± acres, inclusive of proposed impervious surfaces, existing degraded area to be restored, and areas proposed to be maintained in a similar condition as existing. The project proposes approximately 15,662± square feet of impervious surfaces within the Riverfront Area outside of existing degraded areas, locating proposed impervious surfaces further from resource areas and restoring existing degraded areas more proximate to the resource areas. As previously noted, the project proposes to reduce degraded areas within the 200-foot Riverfront Area, and proposes to significantly decrease degraded areas within the 100-foot Riverfront Area by generally locating the proposed development further from the resource areas than existing conditions.

Additionally, the project proposes to provide a stormwater management system in compliance with the MassDEP Stormwater Management Handbook, where no system currently exists for existing parking areas. Runoff proposed to be treated and attenuated by a combination of deep sump hooded catch basins, sediment forebays, a bioretention area, and a subsurface infiltration bed.

In consideration of the reduction of degraded areas, the location of impervious surfaces further from the resource areas, and the implementation of a proposed stormwater management system, the project represents a substantial improvement to existing conditions.

2.4.1 Restoration Plan

As previously noted, the project proposes a net decrease of impervious surfaces within the riverfront area and proposes to restore degraded areas to a naturalized condition. Previously degraded areas to be restored are proposed to be seeded with a New England Conservation and Wildlife Mix over a layer of topsoil. This mix provides a permanent cover of grasses, wildflowers, and legumes and is anticipated to be good for both erosion control and wildlife habitat value.

2.4.2 Riverfront Scope of Alternatives

Given that the unnamed perennial stream bisects the subject site and that the Riverfront Area encompasses the majority the lot, the property could not be utilized for a reasonable use outside of the Riverfront Area. The proposed redevelopment project has been designed to provide a net improvement to the interests associated with Riverfront Area through locating impervious surfaces further from the resource areas and reducing the amount of degraded area within the Riverfront Area. The project proposes to restore existing degraded surfaces outside of the project area to a more natural condition.

2.4.3 MassDEP Riverfront Standards

The proposed project has been designed in accordance with 310 CMR 10.58(5) *Redevelopment Within Previously Developed Riverfront Areas; Restoration and Mitigation*:

a) *Proposed work shall result in an improvement over existing conditions of the capacity of the riverfront area.*

   The proposed redevelopment project is anticipated to represent a net improvement compared to existing conditions relative to the interests of the Wetlands Protection Act. The project proposes to decrease impervious surfaces on-site and increase the setback of same from resource areas. Stormwater management infrastructure and LID measures have been incorporated into the design to provide water quality treatment and decrease peak rates of runoff, where no stormwater management system exists for existing impervious surfaces.

b) *Stormwater management is in accordance with MassDEP.*

   The proposed stormwater management system has been designed in accordance with the MassDEP Stormwater Handbook. Additionally, the project meets or exceeds the MassDEP Stormwater Management Standards, as described in the enclosed Drainage Report.

c) *Proposed work shall not be located closer to the river than existing conditions or 100 feet whichever is less. No work shall exist within 25-foot riverfront areas.*

   The project proposes to locate proposed impervious surfaces further from the unnamed perennial stream than existing conditions and to restore existing impervious surfaces to a natural state.

d) *Proposed work, including expansion of existing structures, shall be located outside the riverfront area or toward the riverfront area boundary and away from the river.*

   The project proposes to locate proposed impervious surfaces further from the unnamed perennial stream than existing conditions and to restore existing impervious surfaces to a natural state. The project proposes to significant decrease the amount of impervious surfaces within the 100-foot Riverfront Area, with proposed impervious areas located further from the unnamed perennial stream.

e) *The area proposed work shall no exceed the amount of degraded area. Provided that the proposed work may alter up to 10% if the degraded area is less than 10% of the riverfront area.*

   As previously noted herein, the project proposed a net decrease of degraded area within the Riverfront Area.

f) *On site riverfront restoration shall be 1:1 ratio.*

Not applicable, the project proposed to decrease the amount of degraded area within the Riverfront Area.

g) *Riverfront mitigation may include off-site riverfront restoration projects.*

Not applicable, the project proposed to decrease the amount of degraded area within the Riverfront Area.

4. Summary

The proposed site development has been designed in accordance with the standards set forth within the Wetlands Protection Act and is anticipated to represent an improvement when compared to existing conditions. The project proposes to decrease impervious surfaces on-site and increase the setback of same from resource areas. The project also proposes to substantially increase available compensatory floodplain area on-site. Stormwater management infrastructure and LID measure has been incorporated into the design to provide water quality treatment and decrease peak rates of runoff, where no stormwater management system exists for existing impervious surfaces. Erosion control measures have been implemented into the design. Accordingly, no adverse effects to the resource area and surrounding areas are anticipated as a result of the proposed site improvements.